Usenet Newsgroup Archive: rec.radio.amateur.misc

1994-01 - 1994-03

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Date span: 1994-01-01 through 1994-03-31

Source text: rec.radio.amateur.misc.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 3,565

Message records with no readable body available in the source text: 16

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: Looking for information

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 02:00:17 UTC
From: trier@odin.ins.cwru.edu
Message-ID: <2g2lfh$a5@usenet.INS.CWRU.Edu>
Source record: 272696
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The preceding article "Looking for information" is flame-bait. Maybe I am thinking wishfully, but it would be nice if we could keep responses in e-mail rather than watching another silly flame war erupt over nothing. Thanks...

Stephen

--
Stephen Trier KB8PWA
Work: trier@ins.cwru.edu
Home: sct@po.cwru.edu

2. Re: Ramsey kits not too good?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 02:48:35 UTC
From: duncan@ravel.ati.com
Message-ID: <192@ravel.ati.com>
Source record: 272698

In article <2fvl4d$1ul@chippewa.pd.tgi.plexus.com> markh@news.plexus.com (Mark Heimmermann) writes:
>Along this same lines, I was wondering what does the ham
>community think about Hamtronics Kits. We are considering
>them to build a repeater here.
>
My ham friends (Motorola addicts) think these are also junk. Indeed the UHF receiver strip I bought from Hamtronics was overpriced and was just a so-so performer. Hamtronics kits are much better than the Ramsey products, however.

--
K-FOX| w ["] | WA6MBV
94.5 |... |___|_____..duncan@ravel.ati.com | Jim Duncan
KUFX | H | 408.297.5977
******** _____I_____/ 37 3 10N/121 59 10W **********

3. Finally got my license in the mail!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 04:13:36 UTC
From: SUSEEA@MAINE.MAINE.EDU
Message-ID: <93365.231336SUSEEA@MAINE.MAINE.EDU>
Source record: 272699

Took the Tech test and 5wpm code on OCT. 20, 1993 and recieved
the license on Dec. 24, 1993. Nice Christmas present I thought.
Just thought some of you out there would like to know the waiting
time.
Alan
N1QWT

*** My son, 11 years old also passed his Tech with 5 wpm code. He
recieved his ticket the same day as me. N1QWV

Now there are 3 generations of HAMS in this family.

4. Daily Summary of Solar Geophysical Activity for 31 December

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 04:20:35 UTC
From: oler@rho.uleth.ca
Message-ID: <9401010420.AA02611@rho.uleth.ca>
Source record: 272702
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

31 DECEMBER, 1993

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(Based In-Part On SESC Observational Data)

** Best Wishes for a Happy and Pleasant 1994 **

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 31 DECEMBER, 1993

NOTE: Intense stratospheric warming is continuing over central and
northeastern Siberia, Alaska, and Northwestern Canada and the
Siberian and Canadian Arctic. Warming is spreading north and
northeastwards. Temperature gradient is reversed between 60N
and the pole at 10 HPA and upwards in the upper stratosphere.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 365, 12/31/93
10.7 FLUX=140.8 90-AVG=100 SSN=134 BKI=0344 3312 BAI=013
BGND-XRAY=B9.0 FLU1=3.1E+05 FLU10=1.1E+04 PKI=1355 3322 PAI=018
BOU-DEV=002,027,050,050,023,020,008,015 DEV-AVG=024 NT SWF=00:000
XRAY-MAX= C4.8 @ 0421UT XRAY-MIN= B7.1 @ 0130UT XRAY-AVG= C1.3
NEUTN-MAX= +003% @ 0445UT NEUTN-MIN= -002% @ 1510UT NEUTN-AVG= +0.1%
PCA-MAX= +0.1DB @ 1110UT PCA-MIN= -0.2DB @ 1700UT PCA-AVG= +0.0DB
BOUTF-MAX=55352NT @ 2359UT BOUTF-MIN=55323NT @ 0812UT BOUTF-AVG=55340NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+048,+000,+000
GOES6-MAX=P:+110NT@ 1815UT GOES6-MIN=N:-129NT@ 0819UT G6-AVG=+070,+034,-052
FLUXFCST=STD:140,135,130;SESC:140,135,130 BAI/PAI-FCST=010,010,010/015,012,012
KFCST=0123 4422 0123 4422 27DAY-AP=008,009 27DAY-KP=2222 2232 2123 3232
WARNINGS=*SWF;*MAJFLR
ALERTS=**245STRM:0726-1052UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 30 DEC 93 was 63.8.
The Full Kp Indices for 30 DEC 93 are: 1+ 0+ 2- 2- 2- 1+ 1- 0o

SYNOPSIS OF ACTIVITY

Solar activity was low. Intermittent C-class activity was
the order of the day, with the brunt of the flares originating
in or near the Region 7640 (N08W80) complex. Reports
characterize this area as being largely stable. Region 7645

(N11E43) in the opposite hemisphere had only a few small flares, but remains complex magnetically. One new region was born on the disk, 7647 (S15E34).

Solar activity forecast: solar activity is expected to be low to moderate. Regions 7640 and 7645 hold the best promise of an isolated M-class event.

The geomagnetic field was quiet early in the period, then experienced minor to major storm conditions at the midway point. This disturbance, thought to be related to a western hemisphere coronal hole, now seems to be weakening.

Geophysical activity forecast: the geomagnetic field is expected to be predominantly unsettled, with episodes of active conditions likely during local nighttimes.

Event probabilities 01 jan-03 jan

Class M 50/50/50
Class X 05/05/05
Proton 05/05/05
PCAF Green

Geomagnetic activity probabilities 01 jan-03 jan

A. Middle Latitudes
Active 25/15/20
Minor Storm 25/05/10
Major-Severe Storm 05/01/01

B. High Latitudes
Active 30/15/15
Minor Storm 30/05/25
Major-Severe Storm 15/01/01

HF propagation conditions were near-normal over the low and middle latitudes. Conditions were more unstable for the higher latitude paths due to periods of increased geomagnetic and auroral activity. Occasionally poor propagation conditions existed over the night-sector high latitude paths, particularly on transauroral circuits. Similar, if not improving, conditions are expected over the next 72 hours. Near-normal propagation should return to all regions by 02 or 03 January.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 31/2400Z DECEMBER

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7640 N08W80 207 0850 EKI 15 014 BETA-GAMMA-DELTA
7641 N05W75 202 0070 HSX 02 001 ALPHA
7644 N11W68 195 0080 DAO 07 008 BETA

7645 N11E43 084 0560 EKI 13 025 BETA-GAMMA-DELTA
7646 S09E42 085 0350 EKI 11 020 BETA
7647 S15E34 093 0010 BXO 04 006 BETA
7643 S18W23 150 PLAGE
REGIONS DUE TO RETURN 01 JANUARY TO 03 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 31 DECEMBER, 1993

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0041 0049 0051 7645 N13E49 C2.5 SF 640
0332 0332 0333 250
1115 1122 1126 7640 N09W62 C2.1 SF 140
1427 1428 1429 530

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 31 DECEMBER, 1993

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 30/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
55 S08W44 S12W47 N24W63 N24W63 186 ISO POS 012 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
30 Dec: 0027 0032 0054 SF 7640 N08W43
0149 0203 0214 C4.3
0310 0317 0319 C1.8
0344 0348 0353 C1.5
0528 0531 0536 C1.3
0617 0622 0626 C8.0 29 33 60
0704 0714 0718 C1.3
0747 0806 0812 C1.6
0914 0919 0928 C7.1
1140 1144 1150 C1.9
1159 1202 1205 C1.4
1211 1227 1242 SF 7644 N10W50
1220 1227 1305 SF 7645 N09E61
1251 1255 1257 C1.2 SF 7644 N09W51
1308 1314 1319 SF 7645 N10E62
1319 1323 1326 C1.2 SF 7645 N09E62
1347 1426 1509 SF 7645 N10E61
1357 1400 1418 SF 7644 N10W50
1509 1539 1600 SF 7645 N10E59
1530 1616 1629 C5.5 1N 7640 N12W57

1704 1713 1720 C7.7 SN 7645 N10E58 33
1740 1755 1818 SF 7640 N08W61
1820 1822 1843 SF 7645 N10E60
1848 1848 1904 SF 7645 N10E56
1912 1917 1921 C3.0 SN 7645 N09E58
2002 2018 2024 C1.6 SF 7645 N09E58
2104 2108 2112 C2.3
2115 2119 2124 C7.6 SN 7640 N11W61 58 30
2208 2211 2217 SF 7640 N08W67

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7640: 2 0 0 4 1 0 0 0 005 (16.7)
Region 7644: 1 0 0 3 0 0 0 0 003 (10.0)
Region 7645: 4 1 0 10 1 0 0 0 011 (36.7)
Uncorrellated: 11 0 0 0 0 0 0 0 011 (36.7)

Total Events: 030 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
30 Dec: 0027 0032 0054 SF 7640 N08W43 III
0149 0203 0214 C4.3 III
0344 0348 0353 C1.5 III
0540 0555 0606 M1.6 1N 7645 N10E70 III
0747 0806 0812 C1.6 III
0914 0919 0928 C7.1 III
1159 1202 1205 C1.4 III
1251 1255 1257 C1.2 SF 7644 N09W51 III
2104 2108 2112 C2.3 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,

Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

5. N8EMR_BBS_INFO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 06:00:28 UTC
From: root@n8emr.cmhnet.org
Message-ID: <1994Jan01.060028.5624@n8emr.cmhnet.org>
Source record: 272716
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,alt.bbs.ads

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The N8EMR Ham bbs is online to serve the needs of the
amateur radio operators..

HOW TO ACCESS THE N8EMR HAM RADIO TELEPHONE BBS !!!

System Name: N8EMR
Phone: 614-895-2553
Login: hbbs
Modems: TB2500 PEP/V.32 support
Times: 24hrs
IP Address: 44.70.0.1
Amateur radio annonymous ftp access is available via the ohio
netrom/ip network. CMHIP is the Netrom node Id and is known
by most of the nodes in ohio. (its slow but it works)
This is only via the ohio packet network. This sytem
is not available via the "INTERNET".

To access the system via the dialup, at the login prompt type hbbs
(lower case only), you will then enter the BBS program. Follow the
directions from the bbs prompts.

I attempt to keep the latest and greatest HAM software on-line, and
encourage all to upload Here is some of software that is available
for downloading.

NEWHAM area. Pick the tools you need to become a ham
AMSAT news and satellite keplerian elements
KA9Q TCP/IP Software for various computers,
ARRL related files
Latest packet bbs programs and utilitys.
Modifications for HAM Rigs and Scanners
DX and contesting programs
Many Packet related programs
Scanner, shortwave and TVRO files and messages.
NASA NEWS..
Online Callsign lookup.

Question or comments to

Gary W. Sanders (gws@n8emr.cmhnet.org), 72277,1325
N8EMR @ W8CQK (ip addr) 44.70.0.1 [Ohio AMPR address coordinator]
HAM BBS 614-895-2553
Voice: 614-895-2552 (eves/weekends)
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6. Email_Callbook_server

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 06:00:32 UTC
From: root@n8emr.cmhnet.org
Message-ID: <1994Jan01.060032.5652@n8emr.cmhnet.org>
Source record: 272715
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,alt.bbs.ads

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EMAIL CALLSIGN SERVER
US CALLS ONLY
(access interface changed..)

For those who do not have telnet access to marvin or one of the other
Internet callsign servers here is an alternative.

N8EMR's Ham BBS, 614-895-2553 has an email server up and running.
The Server is based on Buckmasters Fall 92 database.

------------------------ INTERNET AND CIS USERS -----------------------------

Mail should be addressed to
callbook@n8emr.cmhnet.org

You MUST use the reply line now.. To many people with bad
reply paths.. I got tired of seeing the errors bounced back to me.

There are two command line options. One is REPLY. This command
is used to specify the return path to use for the callbook request.
You can use internet @ or bang ! path format.

The second command is CALL. This command is used to specify a list of
callsigns. Each call sign is seperated by a white space. All other
lines and info are ignored.

E.G.
# mail callbook@n8emr.cmhnet.org
REPLY user@site.domain (your reply path, ! or @ format.)
CALL n8emr w5rrr (list of calls, space seperated)
^D
#

------------------------- PACKET RADIO ----------------------------------------

Mail should be sent to CBOOK@N8JYV.#CMH.OH.USA.NA
You MUST use both the REPLY and CALL option lines.
The REPLY line should be as follows n8jyv!HOME_BBS!CALL, where
HOME_BBS is your local packet bbs where you would normal pick up
your mail, CALL is your callsign.
You must include the n8jyv! in your reply path.. Packet mail will fail
without this.

E.g.
SP CBOOK@N8JYV.#CMH.OH.USA.NA
Subject ^M
REPLY n8jyv!w8cqk!n8emr
```

```
CALL n8emr w1aw
/EX
```

7. Re: RFI into telephones

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 06:51:56 UTC
From: julian@bongo.tele.com
Message-ID: <1994Jan1.065156.9636@bongo.tele.com>
Source record: 272701

In article <40.462.2426.0NE157F2@channel1.com> jack.treger@channel1.com (Jack Treger) writes:
> julian@bongo.tele.com posted:
>JU> Often the RFI can be whipped by treating the phone sets. The
>JU>standard Bell type 500 (rotary) and 2500 (touchtone) phones are
>JU>relatively immune to RFI. Should they be picking up RFI, they can
>JU>often be cured by placing 250 Volt 100nF or 10nF capacitors between
>JU>Tip and Ring. Tip and Ring is the name for the two wires that carry
>JU>the phone signal.
>
> Any particular reason why 250V?

That is the standard for such applications in the telephone industry. Why 250V and not say 90V? Well, first of all, telephone equipment is designed to withstand massive surges - 1,000V at 1,000A is a Bell System surge test. This is to withstand the sort of crud that is liable to be found on a phone line. These sort of surges can occur from power lines falling on telco lines and with induction from lightning strikes. Then the standard ringing voltage is between 40 and 150 Volts AC (Usually 20Hz). Don't forget the capacitor voltage rating is DC. A 250V capacitor will tend to survive these lab tests and survive in the field too. Often equipment is sold that is not built ruggedly enough - capacitors and semiconductors that work on a perfect line will fail any stormy day in Kansas.

In most telephone equipment, Polyester film (It's not just for leisure suits anymore) capicitors seem to be the best. If subjected to overvoltage, they will often "flash-over" and puncture the film but will not short or open after the event. The best polyester film capacitors for telco use are Rifa capacitors made by L. M. Ericsson.

For documents on signals and voltages telephones are subjected to see FCC Part 68 and Bell Pub 48005.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

8. Amateur Radio: Elmers List Info and Administrivia

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 12:00:09 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/admin-1-757425606@unomaha.edu>
Source record: 272704
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

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Posted-By: auto-faq 3.1.1.4
Archive-name: radio/ham-radio/elmers/admin
Revision: 1.6 12/26/93 15:45:09
Changes: Added new index file, Gopher, WWW, and WAIS entries

This administrivia file and the companion Amateur Radio Elmers Resource
Directory are intended for non-commercial distribution via Usenet. Any
other uses, please E-mail for permission.

A Brief Historical Overview:
++++++++++++++++++++++++++

If there is any one constant in the changing state of the communications
art, it is that "Hams" (Amateur Radio Operators) have always been on
the forefront of it. Rumors abound where the term "Ham" came from.
Some of the more amusing are described at the end of this article.

Regardless of origin of the name, a "Ham" is universally recognizable as
one who experiments in radio and communications.

Whether it be constructing a low-power CW radio with vacuum tubes, or
designing TCP/IP packet networks, such experimentation has historically
spilled over into the mainstream such as was the case with Edwin
Armstrong, who developed the regenerative oscillator and FM radio, or
General Curtis LeMay (W6EZV) who was instrumental in making Single-
Sideband the communications standard for the Strategic Air Command
(1947-1992, now reorganized into a joint command called USSTRATCOM) and
eventually the U.S. Air Force. Although packet-switching techniques
originated from DARPA (Defense Advanced Research Projects Agency) and
the ARPANet, no one can deny the tremendous influence that amateurs
have had in demonstrating the viability of TCP/IP and AX.25
communications via radio links. The efforts of AMSAT (the Amateur
Satellite Corporation), including the development of many ham satellites
and the low-orbiting Microsats (communications satellites no bigger than
a breadbox that use store-and forward packet techniques), have certainly
advanced the state-of-the-art in communications, one of the defined
purposes of the Amateur Radio Service, as recognized by international
treaty.

Since in many cases hams are writing "the book", there is often no
"book" or other established reference for a beginner to refer to.
Traditionally, information has been passed on from ham to ham via word-
of-mouth. Like many of the traditional crafts, a variation of the
Master-Apprentice system has emerged, the Elmer-Novice relationship.
Called "Elmers" because they are usually older and wiser, having the
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benefit of many years in the hobby, including several failed projects, and an electric shock or two, they have traditionally been the mainstay of amateur radio, and the source of many new hams, particularly those interested in working on emerging technologies.

Even more importantly, Elmers provided an outlet for the impatient newcomer who wanted "to know everything, and right away." Faced with such a request, a good Elmer will smile and proceed to lead the novice through some project or operating experience. Several hours, days, or weeks later, the novice would have his answers, but would have earned them. Even better, the sense of accomplishment would boost the novice's confidence and nudge him or her down the road to being a model, experienced ham operator.

Many present hams feel that such an experience is missing today. In today's hustle-bustle world, the response to such natural curiosity and desire to learn is, more often than not, "I'm too busy" or "RTFM." As a result, the quality of new hams declines and the knowledge and operating habits they develop in their first formative months and years leave much to be desired. And the very same hams who claim that they "can't understand the new generation" also, in almost the same breath, lament about the "decline of amateur radio."

What is an Elmer today?
++++++++++++++++++++++

An Elmer today is of any age, male or female, who has some expertise and is willing to share it with beginners. Elmers don't even need to be licensed amateurs, just people with knowledge in some area of electronics or communications technology.

What is a Usenet Elmer?
++++++++++++++++++++++

With the ever-widening scope of the Internet, and the amateur radio newsgroups on Usenet, the potential for Elmers to share their knowledge to a wide audience has never been greater. To that end, I have started to maintain a list of such Elmers. Volunteers need only send me their name, E-mail address, and area of expertise. I have set up an administrivia mailbox for this purpose (elmers-request@unomaha.edu, the default Reply-To: of this message).

Those desiring a more extensive list, or who need more specific assistance, are encouraged to contact Rosalie White, WA1STO, Educational Services Manager at the American Radio Relay League, 225 Main St., Newington, CT 06111 or via electronic mail addressed to rwhite@arrl.org.

How may I obtain the latest copy of the Elmers List?
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There are currently 7 ways of obtaining the Elmers List. Any site at least reachable by Internet E-mail can use options 3 or 4:

1. Usenet News: The latest copy of the list can be found in the companion posting to this message, "Amateur Radio: Elmers Resource Directory." Since the list is cross-posted to rec.radio.amateur.misc, rec.radio.info, rec.answers, and news.answers on the 1st of each month, with an expiration date 6 weeks into the future, there should always be a copy available at most news sites. Check your newsreader documentation for information about reading previously-read articles.

2. Anonymous FTP: If your site is directly connected to the Internet, you may retrieve the latest copy via File Transfer Protocol (FTP) from the following sites:

ftp.cs.buffalo.edu /pub/ham-radio/elmers*
rtfm.mit.edu /pub/usenet/news.answers/radio/ham-radio/elmers/*

3. Mailing-List: Since the list is cross-posted to rec.radio.info, the latest copy may be obtained from the mailing-list gateway for that newsgroup (along with many other informational articles about radio) when it is published each month. To subscribe, send E-mail to:

listserv@ucsd.edu

and in the BODY (not the Subject) of the message, write:

subscribe radio-info

The server may not be able to determine your return address. In that case write:

subscribe radio-info (your E-mail address)

You should get an acknowledgement very shortly.

4. Mail-Server: If you don't want to read through the entire gateway of rec.radio.info, or want a copy of the list right away, send E-mail to:

mail-server@rtfm.mit.edu

and in the BODY (not the Subject) of the message, write:

send usenet/news.answers/radio/ham-radio/elmers/admin
send usenet/news.answers/radio/ham-radio/elmers/index
send usenet/news.answers/radio/ham-radio/elmers/list
send usenet/news.answers/radio/ham-radio/elmers/diff

and the latest copy of the list should be sent to you E-mail within 24 hours (the mail-server uses batch priority to reduce system demand).

The last three services are experimental. I'm not terribly familiar with them, and cannot offer much technical support regarding their use. (I'd appreciate feedback on whether or not you find them useful, though.)

5. Internet Gopher: The latest copy of the list should be available from the following Gopher sites, all at standard port 70:

cc1.kuleuven.ac.be
jupiter.sun.csd.unb.ca
gopher.univ-lyon1.fr
ftp.win.tue.nl
gopher.win.tue.nl

see also comp.infosystems.gopher

6. World-Wide Web (WWW): The latest copy of the list should be available from the following WWW site:

URL: http://www.cis.ohio-state.edu:80/hypertext/faq/usenet

under pages:

radio/ham-radio/elmers/admin
radio/ham-radio/elmers/index
radio/ham-radio/elmers/list
radio/ham-radio/elmers/diff

see also comp.infosystems.www

7. Wide-Area Information Service (WAIS): The latest copy of the list should be available from the WAIS server at rtfm.mit.edu (standard port 210) in database "usenet."

see also comp.infosystems.wais

How may I contribute to the Elmers List?
++++++++++++++++++++++++++++++++++++++

By using this resource, you are benefitting the net by obtaining assistance in the fastest and most efficient way possible. By volunteering to appear on this list, you are contributing to the good reputation of the radio-related newsgroups.

Thanks to all the volunteer Elmers, as well as courteous list users, for making this service a success.

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)

* Possible origins of the word HAM:

The acronym "Home Amateur Mechanic" or...

from the Cockney pronunciation of "L'amateur" or...

the initials of the founder of the American Radio Relay League, Hiram Maxim, W1AW (his actual middle name being Percy apparently notwithstanding) or...

from the call letters of one of the first amateur stations at Harvard, H.A.M. (please, no flames from W1XM at MIT)

Dale Mosby, N7PEX, offers the explanation that HAM must stand for "Hardly Any Money," considering the investment one could make in the hobby.

Knowledgeable individuals from the American Radio Relay League (ARRL), and other radio historians, seem to agree that the terms "Ham" and "Lid" (an inept operator) both originated with landline telegraphy. A "Ham" was a show-off and a "Lid" was a telegraph operator so inexperienced, he had to use a pot or can lid to rest his telegraph sounder on to properly copy the code.

As an interesting historical footnote, early telegraph operators may have been the first to experience the infamous curse of our communications age, Repetitive Stress (or "Carpal Tunnel") Syndrome (called "Glass Arm" in those days, which encouraged the invention of the semi-automatic or "bug" key).

(Larry E. McDonald, N6ZMB, wrote to point out another plausible origin, which doesn't necessarily contradict the ARRL version. The term "ham" may have been derived from "ham-fisted" or "ham-handed" to describe poor telegraph operators who were hired from the ranks of radio operators. Or maybe "ham-fisted" and "ham-handed" are derived from "ham." Who knows?)

9. Amateur Radio: Elmers List Quick-Search Index

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 12:00:20 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/index-1-757425618@unomaha.edu>
Source record: 272703
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.1.1.4
Archive-name: radio/ham-radio/elmers/index

Quick Search Index by Subject:

(Note: This index is not necessarily all-inclusive and some Elmers are
listed more than once.)

AMATEUR RADIO EMERGENCY SERVICE MAILING LISTS
(ARES)/RADIO AMATEUR CIVIL
EMERGENCY SERVICE (RACES) Botterell (Networks in Emergency
Mangement)
Botterell (Networks in Emergency Engehausen, et al (AA4RE Packet
Management Mailing List) BBS)
Chilton (EMA Radio Officer) Dodell (Land-Mobile Radio)
Engehausen (RACES Bulletins) Freeman, M (ACC Equipment)
Humphries (ex-Asst. EC) Hurder (ARRL Field Organization)
Hurder (ARRL Field Services) Kluft (rec.radio.amateur
Magid Working Group)
Stader (EMAS SEC) Knapp, et al (Iowa State Elmers)
Wilson Prescott (Antique and Older
Tube Equipment)
AMATEUR TELEPRINTER OVER RADIO Meredith (F6FBB Packet BBS, PBBS
(AMTOR)/PACKET TELEPRINTER OVER Bulletin Forwarding)
RADIO (PACTOR)/RADIO TELETYPE (RTTY) Nerenberg (DX)
Schleck, et al (College Clubs)
Battles Walker, et al (QRP)
Doane
Feeney (PACTOR) MILITARY AFFILIATE RADIO SYSTEM
Freeman, J (AMTOR and PACTOR) (MARS)
Graham, P
Sayer (also decoding CHU's Doane (Navy)
ASCII time code) Miller (Air Force)
Monson (Army)
AMERICA ON-LINE Sargent (Army)
Taylor (Air Force)
Stader (Host, Welch, J (Navy/Marine Corps)
Ham Radio Club forum) Welch, V (Navy/Marine Corps,
list of MARS members on the
AMERICAN RADIO RELAY LEAGUE Internet, tentative BBS
(ARRL) conference)

Battles (QST Features Editor) MICROWAVE
Bloom (ARRL HQ Postmaster,
```

QEX Editor) Graham, P (1.2 Ghz repeaters)
Doane (CT SM) Hammill
Elmore (CO TC) Jahnke (SSB/CW SHF Contesting)
Hare (Laboratory Manager) Lau (Transverters up to
Hurder (Field Services Deputy 24 Ghz)
Manager) Sargent (3, 5, and 10 Ghz)
Jahnke (VEC Manager)
Lau (Technical Editor) MOBILE
Redding (Educational Advisor)
Stader (EMAS SEC) Carruth (FM and HT's)
Turner (Volunteer Counsel) Hare (RFI issues)
Wilson (SCV SM) Humphries
Keller (HF)
ANTENNAS Salmon (Maritime)
Sargent
Brewer (wire HF) Salyzyn (HF CW)
Billson (HF)
Brubaker (HF) NATIONAL TRAFFIC SYSTEM (NTS)
Elmore
Freeman, J (wire HF and 160m) Doane
Graham, J (wire HF for Elmore
apartments) Hurder (ARRL Field Services)
Halbert (simple designs) Salyzyn (Canada)
Humphries (VHF and multi-band Sargent
wire arrays) Zurn (Europe)
Myers (and transmission
lines) NOVICE/TECH INSTRUCTION
Ornitz (including computer
modelling) Billson
Potter Bono (AutoExam/AutoCW)
Rymell Carlson (Macintosh Hamstacks)
Salnick Chilton
Salyzyn Knapp, et al
Standerfer Larson
Stine (wire HF) Magid
Stockton Maia
Taylor Myers (including basic
Zurn (wire HF) electronics and communications
theory)
ANTIQUE AND OLDER EQUIPMENT Redding
Reeves
Brewer (40's-70's) Salmon
Keys (including HF and CW) Stader
Prescott (Mailing List)
Moore, T (VHF) PACKET
Standerfer
Turner (including Kenwood and Angus (TCP/IP, NOS, UUPC,
Ten-Tec) Tnet, and SNEWS, IP
Coordinator for CA - LA
APPLE MACINTOSH COMPUTER and SF Valley subnet)

Battles (AX.25 and TCP/IP)
Braun Bloom (IP Coordinator for
Carlson (Macintosh Hamstacks) Connecticut subnet)
Ehrlich (FTP archive) Braun (TCP/IP, Macintosh, IP
Stader (List of Macintosh Coordinator for WNY subnet)
Amateur Radio Software) Cole (TCP/IP and NOS)
Van Peursem (Savant) Dodell (IP Coordinator for
Arizona subnet)
BATTERIES Elmore (including TCP/IP)
Engehausen, et al (AA4RE Packet
Hammill (Sealed Lead-Acid) BBS and Mailing List)
Meyers Freeman, J (KAM, TCP/IP, NOS for
Stuart (including Ni-Cads) DOS and OS/2)
Graham, J (KAMterm)
CALLSIGN PROJECT/NATIONAL TECHNICAL Graham, P (VHF)
INFORMATION SERVICE (NTIS) Knapp, et al
Meredith (AZ Packet Coordinator,
Carruth F6FBB Packet BBS Mailing List,
Lloyd (including QRZ Ham-Radio PBBS Bulletin Forwarding Mailing
CD-ROM) List)
Salyzyn (Canadian)
CIVIL AIR PATROL (CAP) Sargent
Sayer (VHF)
Carlson Schallehn (Kantronics)
Moore, J Stader (TCP/IP and Macintosh)
Vail (TCP/IP, TAPR/9600, IP
COLLEGE CLUBS Coordinator for East/Central
Massachusetts subnet)
Edwards Van Peursem (Savant and
Knapp, et al Macintosh)
Schallehn
Schleck (et al, Mailing List) MEDIA (PUBLICATION/WRITING/
BROADCATING)
COMMERCIAL EQUIPMENT
Battles (QST)
Dodell (Mailing List) Bloom (QEX)
Lau (QST/QEX)
CW (MORSE CODE) Moore (Co-Host, Ham Radio and More)

Bono (AutoCW) PART-15 BROADCASTING
Elmore
Keys Ornitz
Rosenfeld
Salyzyn POWER SUPPLIES
Squicciarini
Stine Myers
Stockton Stuart
Tescher (Computer Programs)
Zurn (including European PRODUCT INFO/FEEDBACK
abbreviations)

Appell (Alinco and Yaesu)
DIGITAL SIGNAL PROCESSING (DSP) Freeman, M and Shirley (Advanced
Computer Controls - ACC)
Bloom
Edwards QRP (LOW POWER)

EQUIPMENT TESTING/TROUBLESHOOTING Billson
Halbert (HF)
Billson Sargent (VHF)
Brewer (Tube Gear) Stockton
Freeman, J (PC ISA Bus) Turner (including Ten-Tec
Hare (ARRL Laboratory Manager) Argonaut)
Myers Walker, et al (Mailing List)
Ornitz (Instrumentation) Zurn
Rymell (Electronics and Computer
Service Work) RADIO FREQUENCY INTERFERENCE (RFI)
Salnick
Salyzyn Elmore
Standerfer Graham, P (including PC's)
Stockton Hare (including Automotive)
Taylor Myers
Tescher Stockton
Witte (Instrumentation) Witte

FREQUENTLY ASKED QUESTIONS (FAQ's) RECIPROCAL LICENSING/FOREIGN OPERATION

Bloom (ARRL E-mail and Info Server) Andrews (New Zealand)
Cheeseman (Australia) Flaherty (South Pacific)
Jahnke (VE Exams Scheduled) Levine (Australia and Japan)
Kluft (General) Salmon
Salyzyn (Radio Amateurs on Usenet, Salyzyn (Canada)
rec.radio.info Moderator) Stockton (UK)
Stader (Macintosh Amateur Radio Zurn (Italy and Germany)
Software)
Watt (Packet and Digital Modes, REPEATERS
On-Line Repeater Directory)
Woods (Mail Order Electronics) Battles
Chilton
HANDICAPPED OPERATING De Armond
Graham, P (including 1.2 Ghz)
Billson Keller (220 Mhz)
Doane Knapp, et al
Hurder Schallehn (VHF/UHF)
Knapp, et al Witte

HIGH FREQUENCY (HF)/ SATELLITES
CONTESTING/DX
Bass (including low-cost, QRP
Battles Microsat stations)
Brubaker Feeney
Chilton Flaherty (including OSCAR)

Elmore
Knapp, et al SEMINARS/LECTURES
Nerenberg (DX Mailing List)
Rosenfeld (including practical Humphries
QSLing tips) Redding
Salmon (including DXpeditions) Stuart (Batteries and Power
Salnick Supplies)
Squicciarini
Tidd (DXCC Databases) TANDY COLOR COMPUTER AND OS-9
Zurn
Billson
HOMEBREWING/DO-IT-YOURSELF
TELEVISION, FAST-SCAN (ATV)
Billson (6809 uP)
Bloom (including DSP) Chilton
Carruth (Digital Design, Feeney
Software) Hammill
Chilton
De Armond TELEVISION, SLOW-SCAN (SSTV)
Edwards (including DSP)
Halbert (QRP) Langner
Keys (Junk Box projects)
Kohnen (Tubes) UNIX
Lau (Transverters, VHF/UHF,
Filters, repeatable projects) Carruth (System Administration)
Myers (Transmission Lines, Cole (including Linux)
Analog and Digital Design) Ehrlich
Moore, T (Junk Box projects) Freeman, J
Rymell (Electronics and Computers, Sayer (especially SunOS)
Low-Cost projects) Tescher
Salyzyn Van Peursem (HP-UX and System
Stine (Tube Amplifiers, Administration)
Receivers, and Exciters)
Stockton (including QRP) VERY HIGH FREQUENCY (VHF)/
Stuart (Batteries and Power ULTRA HIGH FREQUENCY (UHF)
Supplies)
Taylor (Tubes and Amplifiers) Battles
Tescher Carpenter (6 meters)
Flaherty (including Amplifiers)
IBM PERSONAL COMPUTER (PC) AND Graham, P (Commercial Rig
CLONES Conversions)
Hammill (including ATV and DX)
Angus Humphries (2m FM)
Bono (AutoExam, et al) Jahnke (CW/SSB Contesting and
Braun Weak Signal)
Cole Lau (CW/SSB to 222 Mhz)
Ehrlich Moore, T
Freeman, J (including OS/2 and Sargent (2 and 6 meter AM and
ISA bus) Contesting)
Keller Witte (including Portable

Tescher and Mountaintopping)

INTERNET SERVICES VOLUNTEER EXAMINER (VE) PROGRAM

Schleck Billson
Carlson (W5YI)
MAIL-SERVERS/ARCHIVES Jahnke (ARRL VEC Manager)
Kohnen (W5YI)
Bloom (ARRL Info Server) Maia (W5YI VEC)
Deignan (Buckmaster CD-ROM) Reeves
Ehrlich (Boston ARC FTP archive) Rosenfeld (W5YI)
Harding (Ham Server) Salmon (Sunnyvale)
Shirley (ACC Equipment) Sternitzke (W5YI Asst. VEC)

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)

10. Amateur Radio: Elmers Resource Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 12:00:31 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/list-1-757425626@unomaha.edu>
Source record: 272705
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.1.1.4
Archive-name: radio/ham-radio/elmers/list

More information about this list can be found in the companion posting
to this file, "Amateur Radio: Elmers List Info and Administrivia."

73, Paul, KD3FU

Amateur Radio Elmers Resource Directory (as of 01/01/94)
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David Andrews ZL2SX

andrews@kai.ee.cit.ac.nz

I have been involved with the Amateur Radio International Travel Host
scheme. I also chair the NZART Frequency Management and Technical
Advisory Group, which is responsible for all repeater coordination and
band-planning (LF, MF, HF, VHF, UHF, and above) in New Zealand. I would
be pleased to answer any queries with regard to reciprocal licensing or
frequency coordination that may arise.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++

Jeff Angus WA6FWI

jangus@skyld.tele.com

I run NOS as a tcp/ip <--> AX.25 mail bbs gateway. I also run a few nodes,
soon to replace with Tnet-x1g on one and a PC NOS-switch on the other.
And, I have successfully installed UUPC/extended 1.11k and SNEWS for those
MS-DOS afficionados out there.

ampr.org IP Coordinator for California - Los Angeles and San Fernando
Valley subnet (44.016.xxx.xxx)

"We're here to help, we don't loan tools" (Just kidding....put me on the
list). Monday-Thursday 8 AM to 9 PM Pacific time, Friday 8 am to 5 pm.

--
netcom!bongo!jangus@skyld.tele.com "Als ik Kan", Gustav Stickley
US Mail: PO Box 4425 Carson, CA 90749-4425 1 (310) 324-6080

++++++++++++++++++++++++++++++++++++++++++++++++++++++++

Jay Appell --> KA1SNA
```

1976-1978 FCC Personal Users Radio Advisory Committee
Task force for rules Rewrite Citizens Radio Service
Rules Interpretation

1988-Present Stratus Computer/ Technical Support Engineer

I am CEO of Creative Media Productions a multimedia consulting
company.

Address: Jay_Appell@cac.stratus.com
Telephone: 1-508-478-6969 X200 at Creative Media Productions
1-508-478-1429 24 Hour Ham radio BBS and other topics

I enjoy SCA reception and multimedia use in Amateur Radio. If anyone would
like to reach me by modem, 508-478-1429 (24 Hr) BBS 14,400.

I have been referred to as the ham responsible for digital users manuals
in amateur radio. The first manual was the DJ-590 and subsequent manuals
included the 560,580 and 600 for Alinco. My contacts in the amateur radio
community have helped other amateurs to know more about products, hidden
features and new product offerings. The BBS will now included the latest
info on YEASU and ALINCO products. If you have a product that you wish to
have evaluated for the general amateur community, please contact before
sending.

If you have questions with regard to customer service at these
companies, please forward to me and they will be passed to the company
contacts.

++

Ken Bass K4EVH

bassanco@access.digex.net

Licensed since 1959.

Experience in presently mostly Microsats, but I have experience on Modes A,
B, J, and Oscars. I have concentrated on "cheap" and low-power setups, like
my Microsat setup using in-the-attic homebrew/Radio Shack omnidirectional
antennas.

++

"""
Brian Battles, WS1O I Tel 203-666-1541, x222 I
QST Features Editor I Fax 203-665-7531 I "Stamp out sex:
ARRL HQ I Internet bbattles@arrl.org I Get married!"
Newington, CT USA I Amprnet ws1o@ws1o.ampr.org I
"""

VHF packet (AX.25 and TCP/IP)
HF SSB and RTTY
FM/repeaters
Clubs/activities
Public relations

Writing (for newsletters and ARRL publications)

++

Bob Billson, KC2WZ Internet: bob@kc2wz.bubble.org
21 Bates Way UUCP: ...!uunet!kc2wz!bob
Westfield, NJ 07090
908-232-2603 (evenings)

Advanced (since 1975) Troubleshooting
Homebrewing C and 6809 uP programming
Antennas (particularly HF) Volunteer Examiner
Digital Communications QRP

OS-9 operating system (UUCP is run on my Tandy Color Computer 3 :-))

10m is my favorite band even when it is "dead".

Member of Handi-Hams. Work as an Interpreter for the Deaf (I am hearing).

Interested in helping *any* would-be ham get their ticket. Ham Radio is a
great(!) hobby and should not kept a secret!

++

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League | Justice is being allowed to do whatever
225 Main St. | I like. Injustice is whatever prevents
Newington, CT 06111 | my doing so. -- Samuel Johnson

Postmaster, ARRL HQ (arrl.org)
QEX Editor
Digital Signal Processing (DSP)
ampr.org IP Coordinator for Connecticut subnet (44.088.xxx.xxx)

Collecting information for the next annual ARRL Computer Networking
Conference.

For information about the ARRL info server, send E-mail to info@arrl.org
with the word "HELP" in the message body.

++

/**\
* Rich Bono IMRICH UUCP:rbono@necis.ma.nec.com *
* (508) 635-6300 NM1D AMPR: nm1d@nm1d.nh.usa.noam *
**/

Author of the following MS-DOS ham programs:

AutoExam - Examination simulator and study aid
AutoCW - Morse Code practice program
DOSGATE - allows users to run programs on your PC remotely (AutoExam
compatible)
AutoCall - Allows use of the Buckmaster HAMCALL CD-ROM online callbook

with DOSGATE
AutoFax - Allows reception of weather fax using Kantronics TNC's
SeeSats - Real time satellite tracking (text only), DOSGATE compatible

Most of these programs are available from wuarchive.wustl.edu under
/mirrors/msdos/hamradio or write me at:

7 Red Field Circle
Derry, NH 03038

and enclose:

A FORMATTED high density diskette (either 1.44 MB or 1.2 MB; 3.5" or 5.25").
A Self Addressed STAMPED return diskette mailer.
A note explaining that you want a copy of AutoExam and/or AutoCW
(or one of the other programs).

I am always receptive to individuals interested in maintenance,
enhancements, and non-commercial distribution for these shareware
programs.

++

NETWORKS IN EMERGENCY MANAGEMENT ("Nets") DIGEST

"Networks In Emergency Management" is a moderated forum on the
use of computer networks and networked computers in the practice of
emergency management.

To join the "nets" mailing list, please send e-mail to
"nets-request@oes.ca.gov" with the word "subscribe" in the text
of the message. To remove yourself from the list, send mail to
that same address with the word "unsubscribe" in the text.

- Art Botterell
acb@oes.ca.gov
(916) 262-1600 (in emergencies)
California Office of Emergency Services

++

Curtis Braun (curtis@computronics.com) (N2HKD)
Computronics, POBOX 1002 Fairport,NY 14450
Guest@Digital Telstar,Network Operations Center Kodak

Apple Macintosh, IBM-PC, and Sun Computers

I have extensive knowledge on Appletalk protocol down to the bit level.
I have also worked with various iterations of MacTCP applications.
(Routers, hubs, gateways, Ethernet, Localtalk, etc)

I am also familiar with the look and feel of the Mac OS, (Ver. 6 & 7),
and its associated troubleshooting. I have some application
experience with numerous programs. (including ARAP Apple remote
dial-in stuff).

ampr.org IP Coordinator for Western New York subnet (44.069.xxx.xxx)

(There is a readdressing plan which I will gladly mail to anyone
who requests it.)

++

John Brewer WB5OAU

brewer@anarky.enet.dec.com

Wire antennas, restoration, operation and parts/tubes supplies
for most 40's-70's vintage gear.

++

Alan Brubaker, K6XO
alan@dsd.es.com

HF Antenna Systems
Contest Operating
General HF Operations
Propagation

++

Diana L. (Syriac) Carlson
Hudson, NH
dls@genrad.com
KC1SP

QSL Bureaus (how to use them)
Volunteer Examiner Service (how to become one)
Macintosh Hamstacks (available from uxc.cso.uiuc.edu
under /pub/ham-radio)
Civil Air Patrol

++

Robert (Bob) Carpenter W3OTC

rc@cmr.ncsl.nist.gov
w3otc@amsat.org

6 meter SSB DX
Central States VHF Society

"2m FM isn't ham radio, but it's a good way to contact radio amateurs."

Disclaimer: Opinions expressed are those of the sender
and do not reflect NIST policy or agreement.

++

73 de Rusty Carruth, N7IKQ P.O. Box 27001, Tempe, AZ 85285
(602) 870-3330 !'s:{ames!ncar!noao!asuvax,mcdphx}!anasaz!rusty
@'s: rusty@anasazi.com LastResort: rusty%anasaz.UUCP@asuvax.eas.asu.edu

Join the Usenet Un-Net: 1700-1900Z Saturdays, 28.410 or 28.390 MHz

I'm willing to act as a reference for anyone wanting info on getting
tapes (especially Callsign tapes) from the Department of Commerce
National Technical Information Service (NTIS) or wanting other info on
callsign-project related stuff.

One of these days I'll actually be around for the un-net! I promise, really!

My job is currently System Administrator for a large Unix site so I know a
little bit about day-to-day Unix operations and Unix installation :-)
I also have much experience with constructing email paths that will work
rather than bounce.

I also have a fair amount of experience in hardware/software interfacing
and machine control.

++

Mark Cheeseman VK2XGK

cheese@asstdc.oz.au

Maintainer of the aus.radio FAQ

A copy of the FAQ may be obtained via anonymous FTP from
grivel.une.edu.au under /pub/ham-radio/aus.radio/faq/australia.

Please direct all feedback, submissions and administrivia to my E-mail
address above.

++

Ken Chilton
KA1TIH, Advanced Class
53 Alan Road
Marlborough, MA 01752
chilton@emc.com
Design Engineer

Amateur Qualifications:
Trustee of the Algonquin Amateur Radio Club Repeaters:
446.675 -- 223.86 -- 53.47
Assistant Radio Officer for the City of Marlborough
Emergency Management Agency
NESMC Region 440 MHz frequency coordinator
Trained in Electronics Engineering, Electrical Engineering,
Computer Sciences, Computer Programming, and Management
Knowledgeable in Rules, Regs, and interpretations

Areas I am also interested:
Homebrewing
Repeater Hardware, Control, Operation
Packet (AX.25)
Net Control Operations

Electromagnetics and EMP
HF SSB and CW operating
Satellite and Shuttle operation
Amateur Television
Elmering new HAMs

++

Derrick C. Cole KC4WEJ

cole@concert.net

Anything having to do with PC's, DOS, Unix, Linux, C, NOS, TCP/IP et al
is fair game. I'm not much help in the electrical/circuit department (but
I am learning/applying, though! :) If you feel such information could be
useful, I would of course offer any/all help I could provide.

++

John De Armond WD4OQC

jgd@dixie.com

Marietta, GA

Construction techniques, telemetry, repeater design and maintenance,
most aspects of circuit design.

++

Rev. Michael P. Deignan KD1HZ

A new ham-radio archive site and callsign server center has been set up
on the Internet.

The Buckmaster CD-ROM callsign database (which includes international
calls) and all the Buckmaster CD-ROM public domain files are available
for retrieval!

To access the Buckmaster callsign server

rlogin/telnet: 155.212.2.2 (or, ns.risc.net)
login as: hamradio (no password)

To access the file archives:

ftp to: 155.212.2.2
login as: ftp / anonymous
password: your email address

Please direct all feedback and administrivia regarding this service to
root@ns.risc.net.

++

Betsey Doane, K1EIC

Doane@CCSUA.CTStateU.Edu

I am Section Manager for CT and would be happy to help folks on
packet operation (AX.25), NTS procedures, Amtor, General Field
Organization, ARRL and Navy MARS. My real loyalty is to NTS! I am
also a blind amateur radio op having been on the air for 31 years and
can probably give a hand with regards to equipment or referrals to
somebody if needed.

++

David Dodell WB7TPY

Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15
Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na

ampr.org IP Coordinator for Arizona subnet (44.124.xxx.xxx)

Owner of the Land-Mobile-Radio Mailing List

To Add Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

subscribe land-mobile-radio

++

Thomas Edwards N3HAU

tedwards@eng.umd.edu

Technopagan Priest
Member, University of Maryland ARA - W3EAX

Digital Signal Processing (DSP)
Electrical and Electronics Engineering

The UMARA is running a World-Wide Web hypertext page at:

URL: http://w3eax.umd.edu/w3eax.html

Give it a try!

++

Kim Elmore, N5OP
1103 South Gay Drive
Longmont, CO 80501

elmore@brightband.rap.ucar.edu
n5op@n5op.ampr.org

I'm the Technical Coordinator for the Colorado Section.
Areas of expertise:

RFI/EMI
Antennas
DX'ing
Contesting
HF propagation
CW

Areas where I have enough knowledge to be dangerous:
Troubleshooting
Traffic Handling
Homebrewing and construction practices

++

Roy Engehausen AA4RE

enge@almaden.ibm.com

AA4RE Packet BBS

Poster of RACES Bulletins

Thanks to Chris Spell <spell@seq.uncwil.edu>, there is now a mailing
list for AA4RE BBS program sysops. I hope all will subscribe. It
should be very helpful to all of us.

To send a message to the mailing list send it to:

aa4re@matsci2.uncwil.edu

To subscribe to the mailing list a user needs to send a message to:

aa4re-request@matsci2.uncwil.edu

With the following in the body of the message:

subscribe aa4re your_account_name@your.address.whereever

To unsubscribe one would send this text in the message:

unsubscribe aa4re your_account_name@your.address.whereever

++

```
==========================================================================
| Scott Ehrlich Internet: wy1z@neu.edu |
| Amateur Radio: WY1Z AX.25: wy1z@wa1phy.#ema.ma.usa.na |
|------------------------------------------------------------------------|
| Know your weaknesses, show your strengths - Anonymous |
==========================================================================
```

Maintainer of the Boston ARC FTP area on world.std.com - check it out!
(Featuring amateur radio software for the Macintosh and ARRL files from
info@arrl.org)

I've been playing with most models of Macs from the 512 on up for a number of years now. I'm also great with DOS, UNIX, and my VMS isn't too bad, either. :)

++

F. Kevin Feeney WB2EMS
Network Video Engineer
172 Caldwell Hall
Cornell University
Ithaca, NY 14853-2602
Phone - (607) 255-5186
FAX - (607) 255-5771
EMAIL - fkf1@cornell.edu

Pactor, Satellites, and Amateur Television

I'd like to hear from people with Pactor experience, maybe even make a sched with someone for a maiden Pactor QSO.

++

Reciprocal Licensing (South Pacific)
VHF (Propagation, Power Amplifiers)
Satellites (Project Oscar)

--
-=Paul Flaherty, N9FZX/5W1JX |"The enemy of the good is the better."
->paulf@Stanford.EDU | -- William "Wild Bill" Donovan

++

++
+ Jay Freeman, WT9S Packet: wt9s@w9yci.il.usa.noam +
+ internet: freeman@eagle.sangamon.edu +
++

I can assist anyone with most PC installation/troubleshooting problems. I have a good deal of experience installing and configuring OS/2, have a good grasp of Unix (not a wizard yet though :), and a thorough familiarity with the ISA bus and the cards that go in it.

On the radio side of things, I like digital modes and experimenting with antennas, specifically:

- PACTOR and AMTOR
- Configuring Kantronics All-Mode (KAM) TNC's for proper operation
- Over a decade of packet experience, including setting up both DOS and OS/2 versions of KA9Q NOS
- HF wire antennas, including 160m full-wave delta loops

++

Monte Freeman KC4GPW

Operations Department / Information Technology
Georgia Institute of Technology, Atlanta Georgia, 30332
Internet: ccoprfm@prism.gatech.edu
Bitnet: ccoprfm@gitvm1.bitnet

I am the list owner of a mailing list for people who have/are interested in products produced by Advanced Computer Controls Inc. (ACC). For those who might not know what ACC does; they produce products (mostly for the amateur radio service) such as repeater controllers, digital voice recorders, remote base control units, etc.

To join the ACC (Advanced Computer Controls) equipment discussion mailing-list, send E-mail to listserv@gtri01.gatech.edu with "subscribe acc-l your-name" in the body of the message. An acknowledgement and welcome message will follow. Administrivia, policy questions, or other queries may be directed to me.

(see also Mike Shirley WB6WUI)

++

Jim Graham

#include <std_disclaimer.h> 73 DE N5IAL (/4)

INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W
AMATEUR RADIO: n5ial@w4zbb (Ft. Walton Beach, FL) AMTOR SELCAL: NIAL

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

KAMterm is a host mode terminal program for Kantronics TNCs that I wrote and released as shareware.

My professional field is telecom (data communications is my key area of expertise).

I also have experience with wire HF antennas for apartments and other small spaces.

++

KJ6NN
Philip Graham
723 Berkshire Place
Milpitas, CA 95035

EMAIL: phil@ncd.com

My skills are listed below in no special order
- PC RFI reduction (Wrote a chapter for the new ARRL RFI BOOK)
- Repeaters (How to put one up)
- Repeaters (How to use one, without making others mad)
- 1.2 GHz (My repeater is on this band)
- VHF packet only (I hate HF packet)
- HF DX

- HF AMTOR, RTTY, ASCII
- Putting up a tower and/or HF beam

++

Dan Halbert, KB1RT
halbert@crl.dec.com

QTH: West Newton, MA, near Boston.

Building homebrew QRP gear.
Information about QRP-NE Club.
Advice on simple antennas.

++

Brian Hammill, KD4BFJ | brianh@dante.exide.com
Software Engineer | Exide Electronics - Small Systems Group
Raleigh, NC | "Powering Your Network with Intelligent Solutions"

I am especially interested in VHF/UHF and microwave amateur bands as well as Amateur television. I am treasurer and a founding member of the newly-formed Triangle Amateur Television Association in Raleigh-Durham-Chapel Hill, NC. I am willing to share my expertise in the following areas:

ATV - Getting started, starting local activity, repeaters.
VHF/UHF - Propagation, what you need to get started, operating portable, contesting, DX.

Sealed Lead Acid Batteries - How to take care of them.

++

Steve Harding KA6ETB

steveh@grafex.Cupertino.CA.US 408.252.0578 alternate: harding@nas.nasa.gov
For amateur radio related information, send a message to:
ham-server@grafex.Cupertino.CA.US
Place HELP and GET INDEX on separate lines in the text.

HAM-server has over 10-megs of amateur radio related information on-line, with more being continually added.

++

Ed Hare, KA1CV | ehare@arrl.org
American Radio Relay League |
225 Main St. |
Newington, CT 06111 |
(203) 666-1541 - voice
(203) 665-7531 - FAX
ARRL Laboratory Engineer

Radio Frequency Interference (RFI) matters
Equipment Testing

I want stories about automotive EMI problems, dealings with dealers,
and, if possible, solutions. I plan to forward these to my contact at
the Society of Automotive Engineers (SAE).

If anyone knows the *right* people at any particular company, I want
to know. I am also pursuing (via the SAE) more official channels.

EMI/RFI Resource List and RFI Tips package available. A business
SASE with 98 cents postage is appreciated. Electronic versions
available soon. Please specify the desired documents in your
correspondence.

Many amateur radio informational documents (including EMI/RFI files) are
also available from the ARRL info server. Send E-mail to info@arrl.org
with the word "HELP" in the message body.

++

Ed Humphries Hewlett-Packard NARC Atlanta GA
N5RCK Internet edh@hpuerca.atl.hp.com

Past President, Williamson County (TX) ARC
Former Assistant Emergency Coordinator for
Williamson County ARES/RACES

2-meter FM, VHF Antennas, Mobile Installations
Organizing Amateur Radio Seminars and Programs
Multiband wire antennas, Field Day Activities
and general WeatherNet & public service enthusiast

++

| | | Deputy Manager, Field Services, ARRL.
| |___| The ARRL Amateur Radio Emergency Service, the ARRL
| uck | |urder National Traffic System, The Amateur Auxiliary to
------ | | the FCC's Field Operations Bureau, the ARRL
KY1T Field Organization and the ARRL Monitoring System.
---
lhurder@arrl.org Prodigy - MGTS39A, BIX - ARRL,
MCI Mail - RPALM, MCI Mail - "ARRL", America On Line - "ARRL HQ"
Compuserve - 70007,3373 (ARRL HQ) -- Genie ARRL.HQ

Matters relating to the ARRL field organization, including
emergency communications, traffic handling, referrals to
local Technical Coordinators, the Amateur Auxiliary to the
FCC's Field Operations Bureau, ARRL Volunteer Counsels, Public
Information Coordinators, etc.

Matters relating to Amateur Radio and the disabled/handicapped.
Suggestions on how computers and Amateur Radio can be easily
and very inexpensively) combined to assist the disabled.

At the very least, I can be a forwarding point to the others here at
ARRL HQ who CAN answer specific questions that are not covered above.

FIELDORG is an electronic mail reflector dedicated to hams interested
in any and all types of ARRL Field Organization matters. To subscribe,
send an E-mail message to FIELDORG-REQUEST@world.std.com.

++

Bart J. Jahnke, KB9NM | USENET: bjahnke@arrl.org
Manager, ARRL Volunteer |
Examiner Program | BIX: ARRL
ARRL VEC Dept. | PRODIGY: MGTS39A (c/o Luck Hurder)
225 Main St | MCI ID: 215-5052
Newington, CT 06111 | CompuServe: 70007,3373
Voice (203) 666-1541 | America On-Line: ARRL HQ
FAX (203) 665-7531 |
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* Listings of Examination Opportunities -- bi-weekly postings
* Volunteer Examining procedures - ARRL VE Manual
* Support and Instruction for Volunteer Examiners - Coordinating Exams
* Member, National Conference of VECs Question Pool Committee
* Information on what's required to become an Amateur Radio licensee
* Contributing Editor - QST Magazine - Exam Info column
* On-the-air interests: VHF/UHF/SHF SSB/CW Weak Signal Operating and Contests

++

Michael S. Keller AB5EL

mkeller@flp.mhs.compuserve.com (work)
71620.447@compuserve.com (personal, checked far less often)

Areas of particular knowledge:

PC-style computers
Mobile installations (rearranging mobile HF right now)
Repeaters (after a fashion--building a 1.25m repeater)

++

R.D. Keys

Dept. of Crop Science
NCSU
Raleigh, NC 27695-7620

rdkeys@csemail.cropsci.ncsu.edu

de NA4G, "Boat Anchor Bob", an ol' cw fart .....

If I can be of assistance in older equipment, junk-boxing
your way to hamdom, the cheapskate's approach, let me
know.

22 yrs a ham, extra class, mostly cw, mostly boat anchors
and radio in the traditional sense.

{Telegraphy has been in my family for almost 100 years!}

++

Ian Kluft KD6EUI PP-ASEL
ikluft@thunder.sbay.org (home) ikluft@uts.amdahl.com (work) Santa Clara, CA

Maintainer of rec.radio.amateur.misc and rec.radio.cb FAQ lists

Please direct all FAQ submissions, feedback, and administrivia to
hamradio-faq@kluft.com or cb-faq@kluft.com.

A mailing list for rec.radio.amateur.* FAQ and Netiquette posting
maintainers, as well as anyone with a sincere interest in helping
keep the rec.radio.amateur.* newsgroups the friendly and useful
forums they are today, is now available. To subscribe, send E-mail
to rra-wg-request@amdahl.com.

++

Steven M. Knapp KA9QOA Computer Engineering Senior
sknapp@iastate.edu Vice President Cyclone Amateur Radio Club
Iowa State University; Ames, IA Durham Center Operations Staff

A few members of our ham radio club were interested in helping out.
Since our turnover is usually 4 years or so (graduation is a horrible
thing), I thought it may be difficult for us to keep the list up to
date. I thought that by creating a local mailing list called
"elmers@iastate.edu" we could add or remove people as need be. There
would always be at least one person receiving mail on that list,
usually more! Even after I graduate, this list will be maintained
allowing ISU hams to easily help others.

Currently we have people with packet experience, some HF experience,
much repeater experience, in addition to a considerable background in
theory, as many here are electrical engineering or computer engineering
students. If a question can not be answered by the readers of the list,
there are many other local hams that could be prodded for the info.

Our local ham radio club has been especially interested in helping local
disabled hams (or hams to be) get on the air. But anyone local who
needed help would find a group at their door ready to work.

++

I'll be glad to help out with tube circuits and VE testing.
(W5YI VE# 3182)

73,
Louis J. Kohnen K2ANC
Penfield, NY near Rochester

K2ANC.Wbst128@xerox.com

++

John Langner WB2OSZ
115 Stedman St.
Chelmsford, MA 01824-1823
(508) 256 6907 (home - civilized times only please)
johnl@avs.com

Slow-Scan Television

++

Alan Larson WA6AZP

larson@net.com
larson@w6yx.stanford.edu

My areas are fairly general, and I teach classes
(Novice, with code, and upgrade sessions) at W6YX. My
main audience is to the Stanford (University)
community.

++

Zack Lau KH6CP/1 Expertise: Design of SSB/CW amateur transceivers
c/o ARRL Lab : up to 222 MHz. Design of transverters
Newington CT 06111 : up to 10.5 GHz. Basic lossy filter
(203)-666-1541 : design. Developing repeatable projects
zlau@arrl.org : using cheap, easy to get parts.

I'm now starting to look into 24 GHz SSB/CW gear using 10 Ghz as a
convenient IF.

Especially looking to help anyone wanting to be a QST/QEX
author--I can't write it all myself!

++

Bob Levine KD1GG, VK2GYN, 7J1AIS

bob_levine@jericho.mc.com

Amateur radio licensing in Australia and Japan

++

[Fred Lloyd, AA7BQ Fred.Lloyd@West.Sun.COM]
[Sun Microsystems, Southwest Area Solaris Transition Manager]
[Phoenix, AZ (602) 275-4242]

Co-Coordinator, "Callsign Project" (see also Carruth)

The QRZ Ham Radio CDROM is here! For ordering information, call
Walnut Creek at +1 800 786-9907 (overseas +1 510 674-0783).

++

Joel Magid WU1F

magid@wrksys.enet.com

ARES/RACES
Novice Instruction
General Theory

++

Fred O. Maia, W5YI

3511297@mcimail.com

P.O. Box 565101
Dallas, TX 75356

1-(800)-669-9594

Volunteer Examiner Coordinator
The W5YI Report
License Exam Study Materials
VE Exam Schedules Nationwide

++

Daniel J. Meredith N7MRP
Arizona Packet Coordinator
Voice/Data = (602) 956-2566
Ax.25 = n7mrp@n7mrp.az.usa.na
Internet = dan@aznet.stat.com

Owner of the F6FBB Packet Bulletin Board System Mailing List.

The purpose of this list is to provide both sysops and networkers
with tricks/tips/help as well as software updates for the F6FBB
packet bulletin board system.

To subscribe, send E-mail to listserv@stat.com, and in the body of
the message, write:

subscribe f6fbb-list

An acknowledgement/welcome message should follow very shortly.

Owner of the PBBS Bulletin Forwarding Mailing List

The purpose of this list is to provide Sysops and Networkers a server in
which to forward bulletins and also discuss forwarding problems and obtain
forwarding partners. This server is also for the exchange of general
information relevant to all Amateur Related PBBS software packages available
today.

To Add Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

subscribe bull-fwd

As The First Line of Your Message.

++

John Monson WB0PLW, AAA9EC

johnm@is.sprint.com
816-854-3015, Work hours (Missouri, Central Time)

Army MARS (Chief Staff Emergency Coordinator)

++

Bob Myers KC0EW
Hewlett-Packard Co.
Ft. Collins, CO

myers@fc.hp.com

Antennas, Novice/Tech instruction, batteries, power supplies, RFI, equip. testing/troubleshooting, FAQs, homebrewing. Basic theory questions also welcome.

My particular interest is in antennas and transmission lines, but I'm also more than willing to answer whatever I can in general radio theory, propagation, analog and digital electronics, etc.. (I'm a display engineer in "real life", have done my share of digital design, and have taught communication electronics at the local community college. I'm also active in some display and television standards activities.)

++

Jeffrey C. Miller, NH6ZW/N8, AFA1HE | The Air Force is
AFIT School of Engineering | paying me to be a
Wright-Patterson AFB, OH | student, not write this
jmiller@afit.af.mil | or any other opinion!

USAF MARS

++

John Moore 7525 Clearwater Pkwy, Scottsdale, AZ 85253 USA
john@anasazi.com Amateur call:NJ7E Civil Air Patrol:Thunderbird 381
Voice: day or eve:(602) 951-9326 FAX:602-861-7642 (by prior arrangement)

Civil Air Patrol

Co-Host - Ham Radio and More

Ham Radio and More is available for free to any AM station that is willing to run it with national ads intact. If you want there to be a nationwide amateur radio talk show, call your local station and ask them to get the program. They don't have to be part of the Talk America

network. They can call KFNN in Phoenix (602-241-1510) or Talk America at
508-460-0588.

++

Tom Moore K1KAY

[no E-mail address at this time]

home phone: (508) 840-6843

QSX: Fitchburg 145.45 MHz
Harvard 145.41 MHz
6m AM 50.40 MHz

Junque-box specialties
old conversions vhf-oriented
shoulder to cry (or laugh) on

++

Lyndon Nerenberg VE6TCP/VE6BBM

lyndon@unbc.edu

To subscribe to the DX mailing list, send an E-mail request to:

dx-REQUEST@unbc.edu

asking to be added. A short introductory message will promptly
follow.

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| ___ ________ | Dr. Barry L. Ornitz WA4VZQ
| | / / | | Eastman Kodak Company
| | / / | | Eastman Chemical Company Research Laboratories
| |< < K O D A K| | Process Instrumentation Research Laboratory
| | \ \ | | P. O. Box 1972, Building 167B
| |__\ \________| | Kingsport, TN 37662 615/229-4904
| | INTERNET: ornitz@kodak.com
-----------------
```

Part 15 Low-Power Broadcasting

Antennas (including expertise in computer modelling using MININEC and
NIST modelling programs)

Instrumentation (my profession)

++

Dave Potter, K1MBO

potter@think.com

electronics theory, regulations, antennas and
transmission lines, operating practices.

++

There is an active mailing list for fans of hollow state
(i.e. tube) radio equipment. Send a subscription request to:

boatanchors-request@gnu.ai.mit.edu

and you will be added to the group!

An additional note: You can save the list owner (me!) a lot of trouble
by including your email address in the text of your subscription requests.
boatanchors is a mail alias, not an automated listserv. Thanks!

Paul Prescott
N1AAC
regnad@gnu.ai.mit.edu

++

Terrence R. (Terry) Redding WB5LMJ

DOMAIN: terry%red@lawton.lonestar.org
UUCP: . . . !rwsys!lawton!red!terry
PACKET: WB5LMJ @ WB5MJS.OK.USA.NA
Voice 405 536-8822, Ben's Place (Benjamin Franklin) BBS 536-6988 9p to 6a
PhD candidate, University of Oklahoma in Adult and Higher Education
Educational Advisor, American Radio Relay League
221 SW Crystal Hills Drive, Lawton, Oklahoma 73505

I am primarily an adult educator conducting research in self-directed
learning. I have been involved in the following activities:

- Teach licensing classes, since 1974.
- Organize clubs, Stuttgart Amateur Radio Club, Panama Canal Astronomy
Club, Lawton Astronomy Club.
- Public speaking and publish on growth in volunteer organizations,
marketing adult and higher education and teaching amateur radio
courses.
- Research in adult learning theory, adult motivation and organizational
theory.
- Conducted a SAREX activity that involve seven communities, 21 schools
and 3,000 children.

I am primarily interested in assisting amateur radio clubs grow.

++

Tony Reeves
KK6XC
QTH Beach Area of So. Los Angeles
Torrance, Redondo Beach, Hermosa Beach, Manhattan beach

tony@hacgate.scg.hac.com

Novice training, local VE for Novice-Tech tests,
General questions

++

_________ _________ The
Scott Rosenfeld \ / Long Original
ham@wam.umd.edu Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 109 QSLed on dipoles _________| Dipoles! Antenna!

Contact VE, University of Maryland ARA (W5YI VEC)

CW, HF DX, and QSLing

I'm by no means a QSL expert, and I don't even get the GO-list or have a
packet setup to get into the local packetcluster - but I'm always glad to
help out with practical QSLing tips. I still haven't been able to get
any cards out of ex-Soviet Asia, and I don't know that I ever will, to be
honest. Oh well, I'll just keep trying.

++

John Rymell N3PFF
ryme@bloomu.edu
Bloomsburg University
Bloomsburg, PA

Have over 25 years in electronic/computer service work, antennas, SWL,
and a love of building just about anything from next to nothing (:^)!
Glad to help those in need.

++

Stephen R. Salmon E-mail: steve@carlyle.com
Carlyle Systems, Inc. Phone: 415-345-2500
2000 Alameda de las Pulgas Fax: 415-349-3874
San Mateo, CA 94403

DXing - not Honor Roll, but about 200.

DXpeditioning (some) - did a single-handed one to North Cooks and Palmyra
in 1990

Marine operation

I'm a VE (Sunnyvale VEC) and help administer the tests about every two months
at the Berkeley Yacht Club. I also teach a novice class there every year or
two.

Reciprocal Licensing/Foreign Operation

(I've done some foreign operation, and plan to do more. I'm getting ready
for a circumnavigation/worldwide DXpedition).

73, Steve, AA6LF

++

Bob Salnick, Spokane,WA | USENET: oliveb!isc-br!tau-ceti!DejaVu!salnick
Amiga 1000, WB 1.3 | INTERNET: salnick@DejaVu.spk.wa.us
WA9BVE |

I can help people with HF stuff, cheap antennas, and am willing to help troubleshoot problems with rigs.

I believe that one of the pillars of ham radio - construction/ understanding at the burn-your-hand-with-a-soldering-iron level - is drifting out of ham radio. With Japanese radios which cost so much, fewer and fewer hams are willing to risk their warranty to service their own equipment. I would like to see a turn-around here...

++

Mark Salyzyn, VE6MGS mark@ve6mgs.ampr.ab.ca

Qualifications:

Repair Technician
Electrical Engineer (11+ years)
Advanced Amateur (Canadian) since 1988

Advice of value:

HF + VHF construction, homebrew, repair, circuitry, programming and mods
Operating Mobile
Packet Radio (Radio, TNC, AX.25, TCP/IP)
NTS (Net Control for 80m CW Alberta Traffic Net for 3 1/2 years)
Canadian Tests, Rules and Regulations
Antennas, Design and Installation
General Electronics, Repair, Diagnosis and Design
CW training
Having fun with Amateur Radio communications

Maintainer of Radio Amateurs on Usenet E-mail address directory

Please direct all Radio Amateurs on Usenet E-mail address feedback, submissions, and administrivia to hams-on-usenet@ve6mgs.ampr.ab.ca.

Moderator of rec.radio.info newsgroup

Please direct all rec.radio.info submissions to rec-radio-info@ve6mgs.ampr.ab.ca and all feedback and administrivia to rec-radio-request@ve6mgs.ampr.ab.ca.

++

Andrew Sargent N8OFS, AAN5HJT

andrews@fms.com
andrews@telemax.com

My primary interests include: 6M AM, 10GHz, 5.65-5.925 GHz, 3.3-3.5 GHz, the fact of being a No-Code is not a crime, 2M AM, 2M FM QRP SIMP,

packet radio experimentation, mobile operations, NTS, VHF Contesting,
and of course... Army Mars.

If your interested in Army MARS, e-mail me. If your interested in Air
Force or Navy MARS, e-mail me and I will send you a list of those
members which I have compiled. Try to decide, then let me know.

++

Nick Sayer <mrapple@quack.kfu.com> |
N6QQQ @ N0ARY.#NOCAL.CA.USA.NOAM | "Don't make me come in there..."
+1 408 249 9630, log in as 'guest' |
PGP 2.1 public key via finger | -- Powdered Toast Man

HF RTTY/AMTOR, Decoding CHU
VHF Packet
Unix, especially SunOS
Network Time Protocol (NTP)

(MC68HC11 Mailing List has moved, mc68hc11-request@elden.cse.nau.edu
is now the place to write to get connected.)

++

Steve Schallehn, KB0AGD | Internet : steve@matt.ksu.ksu.edu
Kansas State University | UUCP : ..!rutgers!ksuvax1!ksuvm.bitnet!steve
Manhattan, Kansas 66506 | Bitnet : STEVE@KSUVM
Packet: KB0AGD @ K0VAY.#NEKS.KS.USA.NA

A contact for people with question about Kantronics packet
equipment. I am not affiliated with Kantronics, but know quite
a bit about them.

University Clubs (Member of Kansas State ARC, W0QQQ)

VHF/UHF Repeaters

++

Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Internet Services (Finding FAQ's, using Usenet, FTP, telnet,
Archie, FTP mail-servers, mailing lists, etc., etc.)

Also willing to provide newsreader kill/select file help to anyone
interested in customizing their presentation of the rec.radio.*
newsgroups

College Clubs

Ham-Univ mailing list for college clubs has found yet another new
home at the New Jersey Institute of Technology. E-mail for
subscription information.

Maintainer of this list

Please direct all Elmers List submissions, feedback, and administrivia
to elmers-request@unomaha.edu.

++

Mike Shirley - WB6WUI mikey@slic.cts.com GEnie: SLIC
PO Box 460 Lakeside, CA 92040 USA PGP v2.1 Public Key Available

For archival information about ACC equipment, send E-mail to
acc-l-archives@slic.cts.com with "help" in the body of the message
or try my BBS at +1 619 390-7542 (390-SLIC).

(see also Monte Freeman KC4GPW)

++

Marty Squicciarini NR3Z

skitch@nadc.navy.mil

DX and Contesting
QSL'ing

++

Terry Stader - KA8SCP/1, America Online Ham Radio Club Host

Internet: tstader@aol.com _or_ p00489@psilink.com
(Files/messages larger than 27K, please send to "p00489@psilink.com")

KA8SCP@WA1PHY.#EMA.MA.USA.NOAM _or_
ka8scp@ka8scp.ampr.org [44.56.4.82]

- registered ARRL Instructor (teaching for the last 6 years Novice/Tech
classes with an 87% pass rate)
- Host of the America Online Ham Radio Club (like CompuServe only a LITTLE
smaller!)
- President for 5 consecutive years of an ARRL Special Service Club (The
Police Amateur Radio Team of Westford, MA - WB1GOF)
- ARRL Section Emergency Coordinator (SEC) for EMAS section
- Area 1 Communications Officer for the Massachusetts Emergency Management
Agency (formerly Mass. Civil Defense Agency)
- Expertise with Apple // and Macintosh computers. (I have over 80 MB
of Mac ham radio software available.) and ham-related
- Operate TCP/IP with Macintosh
- plus all around source of information about communications

Maintainer of Macintosh Amateur Radio Software List

++

Bill Standerfer * Hewlett-Packard Company
CFI-A, IA, ME * VXI Systems Division
bills@lvld.hp.com * Loveland, CO 80539
Baron N222AB - KF0DJ - Pikes Peak 253 * 303-679-2378

I'm certainly willing to be an Elmer if there's a need. I hope I've learned a few things in 27 years on the air. :-) Here's a list of subjects I might be able to help with:

Antennas
General Operating Practices
Older (Tube) Equipment
Test Equipment and Measurements

++

Steve Sternitzke, NS5I

sds@sat.datapoint.com

I work with the W5YI-VEC organization ("official" title - assistant VEC) and I write the VE manuals for W5YI. Add my name to the list of people who are available to answer questions about volunteer exams, FCC policies (as related to hams), the licensing question pools, etc.

++

Dave Stine WA2JTA/6

My areas of expertise are:

- vacuum tube amps, receivers, exciters
- CW operating tips
- wire antenna tips, hints & kinks

++

David Stockton, GM4ZNX

dstock@hpqmola.sqf.hp.com

SWL since 1960
Licensed since 1984 (UK full class A)
Degrees in electronics&comms and digital techniques etc.
Currently senior design engineer doing RF design

Fairly broad interest in amateur radio (but not contests!)

Antennas, Transmission lines,filters from fundamental theory to practice
Receiver structures and circuits from simple to state of the art.
Transmitters, ATUs
Test equipment
Wide experience of troubleshooting/repairing equipment.
Professional experience of EMC/RFI
QRP
UK Operation and Licensing

My morse is flaky, but I keep working on it
No interest in contests
No interest in packet radio or in fixing computers

++

Ken Stuart, W3VVN
48 Johnson Road
Pasadena, Md. 21122
401-437-1758 (home)

kstuart@oasys.dt.navy.mil

via packet: W3VVN @ N3ETI.MD.USA

Have been licensed since '53, currently Advanced class. ARRL Technical Advisor since '80 on Batteries and Power Supplies. You may have seen my article in the Feb. '91 issue of QST on NiCads. Authored the rewrite of the power supply chapter of the ARRL handbook in '85 when the new format was generated (large page, versus the old small size). Most of the stuff is still unmodified. Currently lecturing on battery care and feeding to clubs in the Baltimore/Annapolis area.

I have been employed as a power supply design engineer for about the last 25 years.

++

Roger H. Taylor, PE rtaylor@ux1.cso.uiuc.edu
1106 Rayburn Ct. K9ALD AFA3WG
Mahomet, IL 61853 Outdoor writer (Fishing)
217-586-4958 Skamania Reign Supreme!
Manager, Network systems, OIM, University of Illinois

Help on antennas, Air Force MARS, components, Tube circuits, linear amplifiers, troubleshooting.

++

Ren J. Tescher N0PVI Resume~
ren@ncar.ucar.edu AAS, Electronic Technology
Electronic Technician/Sysop AAS, Computer Systems Technology
Research Applications Program (RAP) 4 years consumer electronics repair
National Center for 2 years calibration lab and repair
Atmospheric Research (NCAR) 2 year unix sysop
Rm 2078 Bldg 2, 3450 Mitchell Ln. ethernet and serial cable
PO Box 3000, phased-array radar
Boulder, CO 80307 (303)497-8407 doppler weather radar
FAX (303)497-8401 PC's
He knows enough to be dangerous. non-freon appliance repair
dona nobis pacem strung interior phone lines, too!
I will email at your request, morse code programs for the Sun, IBM Basica, and SCO which I've saved off the net.

++

Bob Tidd KJ6CS

inp@violet.berkeley.edu

Computerized DXCC databases and query software (written in
BSD-Unix compatible C) available on request. Would welcome ports
to IBM-PC or Macintosh.

++

Clark Savage Turner, Graduate Student Researcher
Safety Critical Software Group home:
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717 Irvine, CA. 92715
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526
HHH WAS #489

Admitted to practice law in California, Massachusetts, and New York.
ARRL Volunteer Counsel

I would (have been doing it by default) be happy to be an Elmer in the
area of older HF gear, especially QRP operation with Ten Tec Argonauts
(and Power Mites, etc.). Also have experience with other 10-20 year-old
economy HF rigs, particularly the Kenwood TS-520.

++

_____
| | Johnathan Vail vail@tegra.com (508) 663-7435
|Tegra| jv@n1dxg.ampr.org N1DXG@448.625-(WorldNet)
----- MEMBER: League for Programming Freedom (league@prep.ai.mit.edu)

ampr.org IP Coordinator for East/Central Massachusetts subnet
(44.056.xxx.xxx)

TAPR/9600 modem (putting some stuff together for a local repeater)

++

Jim Van Peursem - KE0PH

jvp@iastate.edu

Author of Savant, the packet radio communications program for the
Apple Macintosh. For more information, consult Terry Stader's List
of Macintosh Amateur Radio Software.

Also have a few years experience in Unix (especially HP-UX) and system
administration.

++

--Bruce Walker WT1M (bruce@think.com)
Chuck Adams K5FO (adams@chuck.dallas.sgi.com)

The QRP Internet mailing list is open to all topics relating to low-power
amateur radio operation. Example topics: portable operation, equipment
design and construction, solar and battery power, QRPp, contesting, ...

The mailing list address is QRP@Think.COM; mail to that address will be
sent to everyone on the list without human intervention. There is also an
administrative address QRP-Request@Think.COM which will be monitored by the
list maintainer(s); please use that for such requests as adding or removing
yourself from the list, questions about the FTP access, etc.

++

Steve Watt KD6GGD Packet: KD6GGD @ N0ARY.#NOCAL.CA.USA.NA
ICBM: 121W 56' 53.1" / 37N 20' 16.7" Internet: steve@wattres.SJ.CA.US
"A person reveals his character by nothing so clearly as the joke he resents."
-- G. C. Lichtenberg

Maintainer of rec.radio.amateur.digital.misc FAQ

Please direct all FAQ submissions, feedback, and administrivia to
digital-faq@wattres.sj.ca.us. If you think you have some valuable
insights into non-packet digital modes, PLEASE contact me through
that address. You might get added to the list... No, that's not
a threat. ;)

Maintainer of On-Line Repeater Directory

For more information about this service, send E-mail to
repeaters@wattres.sj.ca.us with the word "help" in the message body.

++

John Welch N9JZW, NNN0WYZ
jjw@seastar.org

Navy/Marine Corps (NMC) MARS

++

Vikki Welch WV9K, NNN0AEE
vikki@seastar.org

Navy/Marine Corps (NMC) MARS
Region Four ECOMM Planning Officer: NNN0ASG TWO

There are other NMCMARS Members on the Internet and I'll be compiling a
list, if anyone is interested. I'd also welcome any correspondence
with other members of MARS. We are currently considering a MARS
conference on a dial-up BBS.

++

Areas of Interest: ARES/RACES, Emergency Comm, and ARRL
Field Organization.

73's de Steve Wilson, KA6S

SCV Section Manager
813 Berryessa St.
Milpitas, Ca 95035

Hm (408)946-7410 Wk (408)473-2580
stevew@netcom.com

++

Bob Witte HP Colorado Springs Division
bobw@col.hp.com P.O. Box 2197
Phone:(719) 590-3230 Colorado Springs, CO 80901
Radio: KB0CY
"There is no such thing as ground."

Mobile
RFI
Equipment Testing (instrumentation)
Repeaters
VHF/UHF (including mountaintopping/portable operation)

++

John F. Woods WB7EEL

jfw@ksr.com

Maintainer of My List of Mail Order Electronics Companies

Available via anonymous FTP from ftp.cs.buffalo.edu under /pub/ham-radio
or rtfm.mit.edu under /pub/usenet/rec.radio.amateur.misc

++

Martin A. Zurn IK2RMZ, DL1GBZ

Home QTH: v. Fermi 10, 21027 Ispra (VA) Italy
(Northern Italy near Swiss Border)
Position: Lat 45d49m N Long 8d38m E WW-Loc: JN45ht
On air: CW only, 160 thru 10 incl. WARC, wire ant only

Work QTH: TP 680, Centro CCR, 21020 Ispra (VA) Italy
E-mail at work: martin.zurn@jrc.it

Expertise:

Technical: Elbugs (incl. features like dot/dash memories, squeezing,
touch sensors, auto spacing) Antennas used: Windom, Delta Loop, Trap
Dipole, Marconi wire.

Operational: CW Operator since 1981, QRP Operation, Traffic
handling nets (NTS, Swedish QTC nets) CW operating in several West
European languages (Ham radio shorts, use of foreign CW characters in
Italian, German, French, Spanish, and Swedish). QSLing (How to design a
QSL that satisfies award hunters and operators of the QSL buro)

Club life: Mbr of AGCW, UFT, GQRP, HSC, VHSC, SMHSC, SCAG,...

Admin: License Regulations in Italy and Germany

Mathematics: Spherical Trigonometry, beam headings, calculation of
sunset/sunrise times, etc.

++

End of Directory

11. Amateur Radio: Changes to Elmers Resource Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 12:00:41 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/diff-1-757425638@unomaha.edu>
Source record: 272706
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.1.1.4
Archive-name: radio/ham-radio/elmers/diff

(Note: This diff file is taken from the list body only.)

/usr/bin/diff -c (last month's) (this month's)

*** /u3/pschleck/faq/elmers/list.body.old Wed Dec 1 06:03:34 1993
--- /u3/pschleck/faq/elmers/list.body.new Sat Jan 1 06:00:03 1994
***************
*** 1,4 ****
! Amateur Radio Elmers Resource Directory (as of 12/01/93)
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++

David Andrews ZL2SX
--- 1,4 ----
! Amateur Radio Elmers Resource Directory (as of 01/01/94)
+++++++++++++++++++++++++++++++++++++++++++++++++++++++++

David Andrews ZL2SX
***************
*** 69,74 ****
--- 69,87 ----

+++++++++++++++++++++++++++++++++++++++++++++++++++++++++

+ Ken Bass K4EVH
+
+ bassanco@access.digex.net
+
+ Licensed since 1959.
+
+ Experience in presently mostly Microsats, but I have experience on Modes A,
+ B, J, and Oscars. I have concentrated on "cheap" and low-power setups, like
+ my Microsat setup using in-the-attic homebrew/Radio Shack omnidirectional
+ antennas.
+
+ +++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+
"""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""""
Brian Battles, WS1O I Tel 203-666-1541, x222 I
QST Features Editor I Fax 203-665-7531 I "Stamp out sex:
***************
*** 159,164 ****
--- 172,195 ----
```

++

+ NETWORKS IN EMERGENCY MANAGEMENT ("Nets") DIGEST
+
+ "Networks In Emergency Management" is a moderated forum on the
+ use of computer networks and networked computers in the practice of
+ emergency management.
+
+ To join the "nets" mailing list, please send e-mail to
+ "nets-request@oes.ca.gov" with the word "subscribe" in the text
+ of the message. To remove yourself from the list, send mail to
+ that same address with the word "unsubscribe" in the text.
+
+ - Art Botterell
+ acb@oes.ca.gov
+ (916) 262-1600 (in emergencies)
+ California Office of Emergency Services
+
+ ++
+
Curtis Braun (curtis@computronics.com) (N2HKD)
Computronics, POBOX 1002 Fairport,NY 14450
Guest@Digital Telstar,Network Operations Center Kodak
****
*** 232,238 ****
(602) 870-3330 !'s:{ames!ncar!noao!asuvax,mcdphx}!anasaz!rusty
@'s: rusty@anasazi.com LastResort: rusty%anasaz.UUCP@asuvax.eas.asu.edu
Join the Usenet Un-Net: 1700-1900Z Saturdays, 28.410 or 28.390 MHz
- EEK! The 1992 Summer Callsign Project lives! Details: Fred.Lloyd@West.Sun.COM

I'm willing to act as a reference for anyone wanting info on getting
tapes (especially Callsign tapes) from the Department of Commerce
--- 263,268 ----
****
*** 385,390 ****
--- 415,426 ----
Digital Signal Processing (DSP)
Electrical and Electronics Engineering

+ The UMARA is running a World-Wide Web hypertext page at:
+
+ URL: http://w3eax.umd.edu/w3eax.html
+
+ Give it a try!
+
++

Kim Elmore, N5OP
****
*** 457,462 ****
--- 493,514 ----

++

+ F. Kevin Feeney WB2EMS
+ Network Video Engineer
+ 172 Caldwell Hall
+ Cornell University
+ Ithaca, NY 14853-2602
+ Phone - (607) 255-5186
+ FAX - (607) 255-5771
+ EMAIL - fkf1@cornell.edu
+
+ Pactor, Satellites, and Amateur Television
+
+ I'd like to hear from people with Pactor experience, maybe even make a
+ sched with someone for a maiden Pactor QSO.
+
+ ++
+
Reciprocal Licensing (South Pacific)
VHF (Propagation, Power Amplifiers)
Satellites (Project Oscar)
****
*** 661,667 ****

FIELDORG is an electronic mail reflector dedicated to hams interested
in any and all types of ARRL Field Organization matters. To subscribe,
! send an E-mail message to my address above.

++

--- 713,719 ----

FIELDORG is an electronic mail reflector dedicated to hams interested
in any and all types of ARRL Field Organization matters. To subscribe,
! send an E-mail message to FIELDORG-REQUEST@world.std.com.

++

****
*** 734,739 ****
--- 786,816 ----

++

+ Steven M. Knapp KA9QOA Computer Engineering Senior
+ sknapp@iastate.edu Vice President Cyclone Amateur Radio Club
+ Iowa State University; Ames, IA Durham Center Operations Staff
+
+ A few members of our ham radio club were interested in helping out.
+ Since our turnover is usually 4 years or so (graduation is a horrible
+ thing), I thought it may be difficult for us to keep the list up to
+ date. I thought that by creating a local mailing list called
+ "elmers@iastate.edu" we could add or remove people as need be. There
+ would always be at least one person receiving mail on that list,
+ usually more! Even after I graduate, this list will be maintained
+ allowing ISU hams to easily help others.

+
+ Currently we have people with packet experience, some HF experience,
+ much repeater experience, in addition to a considerable background in
+ theory, as many here are electrical engineering or computer engineering
+ students. If a question can not be answered by the readers of the list,
+ there are many other local hams that could be prodded for the info.
+
+ Our local ham radio club has been especially interested in helping local
+ disabled hams (or hams to be) get on the air. But anyone local who
+ needed help would find a group at their door ready to work.
+
+ ++
+
I'll be glad to help out with tube circuits and VE testing.
(W5YI VE# 3182)

****
*** 845,850 ****
--- 922,945 ----

An acknowledgement/welcome message should follow very shortly.

+ Owner of the PBBS Bulletin Forwarding Mailing List
+
+ The purpose of this list is to provide Sysops and Networkers a server in
+ which to forward bulletins and also discuss forwarding problems and obtain
+ forwarding partners. This server is also for the exchange of general
+ information relevant to all Amateur Related PBBS software packages available
+ today.
+
+ To Add Yourself To This List, Please Send Electronic Mail To:
+
+ listserv@stat.com
+
+ And Include The Command:
+
+ subscribe bull-fwd
+
+ As The First Line of Your Message.
+
++

John Monson WB0PLW, AAA9EC
****
*** 890,895 ****
--- 985,999 ----

Civil Air Patrol

+ Co-Host - Ham Radio and More
+
+ Ham Radio and More is available for free to any AM station that is

```
+ willing to run it with national ads intact. If you want there to be a
+ nationwide amateur radio talk show, call your local station and ask
+ them to get the program. They don't have to be part of the Talk America
+ network. They can call KFNN in Phoenix (602-241-1510) or Talk America at
+ 508-460-0588.
+
++++++++++++++++++++++++++++++++++++++++++++++++++++++++

Tom Moore K1KAY
***************
*** 1221,1226 ****
--- 1325,1346 ----
- plus all around source of information about communications

Maintainer of Macintosh Amateur Radio Software List
+
+ ++++++++++++++++++++++++++++++++++++++++++++++++++++++
+
+ Bill Standerfer * Hewlett-Packard Company
+ CFI-A, IA, ME * VXI Systems Division
+ bills@lvld.hp.com * Loveland, CO 80539
+ Baron N222AB - KF0DJ - Pikes Peak 253 * 303-679-2378
+
+ I'm certainly willing to be an Elmer if there's a need. I hope I've learned a
+ few things in 27 years on the air. :-) Here's a list of subjects I might be
+ able to help with:
+
+ Antennas
+ General Operating Practices
+ Older (Tube) Equipment
+ Test Equipment and Measurements

++++++++++++++++++++++++++++++++++++++++++++++++++++++++

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)
```

12. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 13:06:46 UTC
From: jreese@NeoSoft.com
Message-ID: <CIyCFB.CBI@sugar.NeoSoft.COM>
Source record: 272707

In article <21870055@hplvec.LVLD.HP.COM> scott@hplvec.LVLD.HP.COM (Scott Turner) writes:

>How do I stay away from these things if I don't know where they are?
>Look, this hiding of links and such-like strikes me as being just a bit
>silly. If I really want to mess with a link, I'm going to figure out
>where it is and mess with it.

I don't think the intent is to "hide" the link data from the casual user, but
that it is not relevent to the intended market of the ARRL Repeater Directory.

>
>Most amateurs *want* to cooperate on the band, and will use more
>information to help them do so. I'm doing a lot more simplex these days,
>especially on 2 meters, and soon on 450, and the band plan listed in the
>ARRL repeater directory strikes me as inadequate to help guide me to
>open simplex frequencies.

Not to mention the fact that the ARRL "band plan" printed in the directory
is NOT USED in much of the country. Please join your local coordination
group and help them to make a reasonable band plan. That's what is really
needed.

--
Jim Reese, WD5IYT | "Reality is for those with no imagination."
jreese@sugar.neosoft.com | --Jim McClellan

13. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 17:20:08 UTC
From: mjr@crl.com
Message-ID: <2g4bc8$aeu@crl.crl.com>
Source record: 272708

In article <CIyCFB.CBI@sugar.NeoSoft.COM> jreese@NeoSoft.com (Jim Reese) writes:

>I don't think the intent is to "hide" the link data from the casual user, but
>that it is not relevent to the intended market of the ARRL Repeater Directory.

Never-the-less in the context of the "repeater database" that was the subject
of this thread, Scott's call for such information to be published makes perfect
sense. I would hope the database would have uses the ARRL directory does not
try to address.

Happy New Year everyone...

--
matthew rapaport Philosopher/Programmer at large KD6KVH
CIS: 70271,255 Internet: mjr@crl.com

14. Re: Looking for information

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 17:25:14 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2g4blqINNs9j@network.ucsd.edu>
Source record: 272709

No, Jeff, most hams don't go to libraries or read books.
Few of the public do either, whether hams or not.
I believe this is primarily because reading is too painful for them.

Judging by the quality of the English most hams write (just examine the
typical packet radio message), the written word has become a lost art.

That's probably why so many manufacturers are now offering instructions
on video - too many customers can't read the old-style instruction sheets.

Sad, isn't it?
- Brian

There are no extra apostrophes in this message.

15. Re: Finally got my license in the mail!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 18:17:04 UTC
From: tofi@krksun.krk.fi
Message-ID: <1994Jan1.181704.6495@krk.fi>
Source record: 272723

SUSEEA@MAINE.MAINE.EDU wrote:
: Took the Tech test and 5wpm code on OCT. 20, 1993 and recieved
: the license on Dec. 24, 1993. Nice Christmas present I thought.
: Just thought some of you out there would like to know the waiting
: time.
: Alan
: N1QWT

: *** My son, 11 years old also passed his Tech with 5 wpm code. He
: recieved his ticket the same day as me. N1QWV

: Now there are 3 generations of HAMS in this family.

Congrats!!!!

de OH2KWH

-Kristoffer H¿ggstr|m

16. RACES Bulletin #307

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 19:54:52 UTC
From: enge@almaden.ibm.COM
Message-ID: <199401011955.LAA28514@ucsd.edu>
Source record: 272710

Bid : $RACESBUL.307

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES (W6SIG@WA6NWE.CA)
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832 916-262-1600
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.307 RELEASE DATE: January 3, 1994
SUBJECT: MGT - Observations - Part 3/3
The Radio officers said that their programs suceeded because:
1. It is clearly established that the county official is in
charge -- not an outside organization.
2. They train in and perform some duties other than two-way radio
because that is what is needed by and useful to the local government.
3. The radio officer is accepted as regular staff and attends
staff meetings, goes to the agency office regularly, and actively
seeks new and expanded ways in which the volunteers can serve the
agency and local government. In other words, the RACES (or by whatever
name) is not a declared disaster-only operation. Unfortunately, that
last interpretation of the RACES is still widely misunderstood and
propagated by those with a different agenda.
A few reported that their packet bulletin board did not carry the
RACES Bulletins and that the reason was unknown. I suggested they
contact their BBS sysop to work backward through the delivery system
to identify the drop out. The RACES Bulletins are by and for all
communications volunteers in government service --- and not just hams,
either.

Some disaster management officials with whom I spoke said they
have a fine RACES group but never heard of and saw the RACES
Bulletins. I pointed out that the RACES Bulletins are addressed to the
official and not the messenger (recipient station). If the official
claims to have a fine group but isn't getting the mail because it's
not being forwarded -- well, there seems to be a problem with the
messenger, does it not?
We solicit your comments, views, input, suggestions, ideas and
reports.
--- Stan Harter, CA State Office of Emergency Services
EOM

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races
and can be retrieved using FTP.

17. ** New England Ham - Electronic Fleamarket Dates ** 1 Jan ** Update

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 20:07:49 UTC
From: w1gsl@ATHENA.MIT.EDU
Message-ID: <2g4l6l$9cm@senator-bedfellow.MIT.EDU>
Source record: 272711
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics,ne.forsale

```
New England Area Ham - Electronic Flea Market *** DATES *** 1994 P 1 of 2
All events are Ham Radio/ Electronic related except ~_____~
*******************************************************************************
1994 Contact Source
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
15 Jan Marathon NY SkylineARC @ Civic C 7A $2B $5Sell

16 Jan Mattapoisett MA @KoC B$1 S$10 Ken 508 993 3993 F

16 Jan Yonkers NY Metro70 @Lincoln HS $15@7 $5@9 Otto WB2SLQ 914 969 1053 F

22 Jan Nashua NH NE Antique RC $5@9 $1@10 @ Res Ctr Church Ray 508 865 1290

12 Feb Goshen NY OrangeCoARC James WB2WLN 914 564 2707 A

19 Feb Marlborough MA Algonquin ARC @MS $2@10 $12@8 Ann KA1PON 508 481 4988 F

20 Feb Mattapoisett MA @KoC B$1 S$10 Ken 508 993 3993 F

26 Feb Milton VT @HS 8AM $3 tables free ti 145.47- Joe N1DMP 802 893 6458 F+

27 Feb Westford MA Boston Antique RC John 508 371 0512 T

27 Feb New Hyde Park NY LIMARC @Nassau PAL s@7 b$6@9 Neil WE2V 516 462 5549

5 March Lewiston ME AARC @Multi P CTR $3@8 $5/T@7:30 Sal W1CUW 207 998 2853 F

6 March Northampton MA MtTomARA @Smth VoT $12@8 $3@9 Jim K1MEA 413 527 3199 +

6 March Braintree MA SSARA @ DAV $12/T@10:30 $2@9 Thaire KA1MJR 508 230 2248 +

13 March Bristol CT ICRC @Eastern HS b$4 s$10/t Chuck K1DFS 203 747 6377 +

20 March Mattapoisett MA @KoC B$1 S$10 Ken 508 993 3993 F

20 March Westboro MA MMRA @HS $2@10A sell @8AM Walter N1HBR 508 481 0994 T+

20 March Yonkers NY WECAfest @Raceway $5@9 $10tg-$20/table@6 914 962 9666 +

26,27 March Baltimore MD Hamboree @Timonium 8A- $5 Sell $5/10+ 800 HAM FEST

26 March Portland ME @UofSME gym Ron KA1FI 207 846 9090 +

26 March Upper Saddle R NJ CRRC @SrHS Jack W2EHD 201 768 8360 +

10 April Framingham MA @ HS $14@8 $5@9 $2@10 Barry WN1N 508 877 4947 F

10 April Southington CT SARA @HS? N1GCV 203 621 6191 D
```

17 April Cambridge MA FLEA at MIT Nick 617 253 3776 F
buy $2@9A sellers $10/sp@7A $8in adv $35/sp "Season Pass"
3rd Sunday Each Month April thru October

23 April Nashua NH NE Antique RC $5@9 $1@10 @Res Ctr Church Ray 508 865 1290

23,24 April Waltham MA Photographica 10-5 $5 ~photo~ (bef 9PM) 617 965 0807 F

29,30 April 1 May Dayton OH F
~~~~~~
LAST UPDATE 12-30-93 de W1GSL P 1 of 2
****
Additions/ Corrections via Internet w1gsl@athena.mit.edu
TCPIP w1gsl@gw.w1mx.ampr.org
AX.25 w1gsl@wa1phy.#ema.ma.usa
US Mail W1GSL POB 82 MIT Br Cambridge MA 02139
SASE for updated copy as issued.

P 2 of 2
~~~~~~
1994 Contact Source
~~~~~~
6,7 May Rochester NH Hoss Traders @FG ex13 off rt 16 $5 noon fri Joe K1RQG

15 May Cambridge MA FLEA at MIT Nick 617 253 3776 F
buy $2@9A sellers $10/sp@7A $8in adv $35/sp "Season Pass"
3rd Sunday Each Month April thru October

15 May Poughkeepsie NY Mt B ARC @Arl HS $10@6 $5@8 Ken KL7JCQ 914 485 9617 +

20,22 May Rochester NY NYS ARRL Conv Harold K2HC 716 424 7184 A

21 May Forestdale RI RIFMRS @VFW 8A Rick K1KYI 401 725 7507

30 May Whitman MA WARC @Rt 14+18 sell@$10/sp (monday) 617 447 1277 F

5 June Newington CT @HS Flea + ARRL HQ OH Al N1JWF 203 747 1925 T

19 June Cambridge MA FLEA at MIT Nick 617 253 3776 F

17 July Cambridge MA FLEA at MIT Nick 617 253 3776 F

23 July Nashua NH NE Antique RC $5@9 $1@10 @ Res Ctr Church Ray 508 865 1290

7 Aug Wellesley MA WARS @Babson Trim Hall Barbara N1ICQ 617 329 2628

13 Aug Charlotte VT @Old Lantern CG 8A- $5 su 3P Fri Dave N1ERD 802 893 7660 T

21 Aug Cambridge MA FLEA at MIT Nick 617 253 3776 F

27 Aug Gardner MA MARC @Drive-in $5@6 $2@8 Bill WJ1Y 508 939 2643 T

10 Sept Berlin VT CVTARC Robert McCorkle 802 433 6172 A

17 Sept Forestdale RI RIFMRS @VFW 8A Rick K1KYI 401 725 7507

18 Sept Cambridge MA FLEA at MIT Nick 617 253 3776 F
~~~~~~

21-24 Sept Rochester NY Antique WA Conf Joyce 607 739 5443 +

25 Sept Framingham MA @ HS $14@8 $5@9 $2@10 Barry WN1N 508 877 4947 F

1,2 Oct Boxboro MA NE Div Conv. Gene W1VRK 617 631 7388 A

8,9 Oct Durham CT Nutmeg @FG Opens 4PM sat $5-25 Jim N1IZF 203 349 3353 F

16 Oct Cambridge MA FLEA at MIT Nick 617 253 3776 F

~~~~~~
LAST UPDATE 12-30-93 de W1GSL P 2 of 2
Source F= Flyer J= John Roberts list A= ARRL list WR NV 73 CQ QST = Mags
T= tentative early info D= W1DL + = new info this month
This list has been compiled from many sources. While we believe the info to
be accurate the author can not be responsible for changes or errors.
Check with the sponsoring organizations for more details. This list will be
posted monthly to USENET. Mailed copies are sent when additions are made.
****
Additions/ Corrections via Internet w1gsl@athena.mit.edu
TCPIP w1gsl@gw.w1mx.ampr.org
AX.25 w1gsl@wa1phy.#ema.ma.usa
US Mail W1GSL POB 82 MIT Br Cambridge MA 02139
SASE for updated copy as issued.

Page 3 Electronic version only This page has the overflow if any from P3
the paper version.
~~~~~~
1994 Contact Source
~~~~~~
22,23 Oct Waltham MA Photographica 10-5 $5 ~photo~ (bef 9PM) 617 965 0807 T

29 Oct Nashua NH NE Antique RC $5@9 $1@10 @ Res Ctr Church Ray 508 865 1290

13 Nov Branford CT SCARA @intrm sch Brad WA1TAS 203 265 9983 T
~~~~~~
LAST UPDATE 12-30-93 de W1GSL P 3
****
Additions/ Corrections via Internet w1gsl@athena.mit.edu
TCPIP w1gsl@gw.w1mx.ampr.org
AX.25 w1gsl@wa1phy.#ema.ma.usa
US Mail W1GSL POB 82 MIT Br Cambridge MA 02139
SASE for updated copy as issued.

18. Re: Looking for information

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 22:22:39 UTC
From: julian@bongo.tele.com
Message-ID: <1994Jan1.222239.629@bongo.tele.com>
Source record: 272717

In article <2g4blqINNs9j@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:
>No, Jeff, most hams don't go to libraries or read books.
>Few of the public do either, whether hams or not.

I once heard that 3% of the population had library cards. Then
I read the 5% of the public buys books.

I wonder what perecentage have VCRs and video rental cards.

I know that many homes I visit have few or no books. I am alos
stunned by the number of radio amateurs that do not have any manuals
or handbooks on their favourite hobby.

Could the lack of literacy be related to the falling numbers
involved in participatory activities?

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

19. Re: TOYOTAS AND MOBILE RIGS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 22:55:19 UTC
From: dkingma@vt.edu
Message-ID: <dkingma.26.0016ECBB@vt.edu>
Source record: 272722

>I SEEM TO RECALL A FLURRY OF INFO A FEW YEARS BACK ABOUT TOYOTAS AND MOBILE RIG>S. ANYONE OUT THERE RECALL THE BASIC SCOOP? TNX ES 73, BRIAN, WY2G

I bought a '92 Camry and about a month after installing a 50W 2m rig, I read that someone blew one of the car computers while running 100W on HF and was forced to pay for the $1000 computer because, buried in some service manual at the dealer somewhere, they state that you cannot run more than 10 W in the car. I asked my dealer about this and he agrees with this finding, but has no suggestions about where to route cables to minimize such problems... heck, he couldn't even tell me where the computers were exaclty. He said they were everywhere. I have been running 5W with no problems with an occasional bump up to 25 W. However, I usually turn the car off and park it before I crank it up to 50 W which is very rarely needed. So far, no problems! Knock on wood..

Dave
dkingma@vt.edu

20. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 23:34:42 UTC
From: morris@grian.cps.altadena.ca.us
Message-ID: <1994Jan1.233442.21012@grian.cps.altadena.ca.us>
Source record: 272719

bwilkins@iat.holonet.net (Bob Wilkins n6fri) writes:
>mkb@cs.cmu.edu (Mike Blackwell) after my editing writes:
>:
>: Suppose I write a geographical database with a really whizzy graphical
>: front end, searching and planning capabilities, made to run on a
>: laptop or PDA. It includes the ARRL repeater directory database. Just
>: what I want while travelling,
>:
>: Feedback is appreciated, before I waste too much time...
>:
>: Mike Blackwell -- ke3ig -- mkb@cs.cmu.edu

>You don't propose any thing different than already exists...in the paper
>edition. Lets make this a new and real product.

>I really don't care where the repeater is located...I want to know the
>geographic areas that I can reliably communicate either on my
>handy-scratchy or my 30 watt mobile. Sinse you are offering a graphic
>interface you could show coverage maps of repeaters overlaid on a good
>highway map.

Knowing where the repeater is can be valuble, because a standard 3
second topo data base is available that when given the lat/long of the
repeater and the antenna pattern info can predict the coverage. Note
that coverage can be different depending on the frequency involved - 6m
has very different coverage from 2m even from the same site and power.
Ditto 2m/220, 220/440, 440/1200. If the coverage maps were to be
developed from repeater locations, then a knowledgeble user could
simply plug in a new repeater himself, and not have to wait for a
vendor update. A method of copying the info from an existing repeater
at the same site would be a good interim method.

I have seen two differnt windows based highway map products. The one
that I can remember the name of is Del Orme, is CD based, and I think
is available from Egghead. I don't remember the other name.

> An interface to gps could enhance your product.

There is a standard 1200 baud interface for most GPS rx's that gives
latitude, longitude and time of day. Crosshairs and a clock in a corner
would be a nice feature. Esp. if it self adjusted for Daylight time and
time zone.

>How about a
>descripter file of the type of use , times of local nets and news broadcasts.

I'd like to see that - for example one wide area machine near me has a 30 second timer. Every local knows it, every visitor times it out. A text comment block for W6FNO could warn the visitors, and let them know about the Tues night 7pm roll call.

>Your listing of the 250 repeaters in the San Francisco Bay Area is
>meaningless if it just reflects what is in the ARRL Directory. Many of the
>local repeaters are listed as closed but are in fact quite open to the
>travelling amateur. Some repeaters are low level 25 mile coverage machines
>that can be quite popular. Other repeaters are high level 150 mile
>repeaters that have no usage at all. I have seen repeaters go from vary
>active to next to nothing in a matter of months. In essence we do not have
>the user base to support 250 repeaters in this area.

Also list the cross band systems and linked systems somehow. Look up the ZIA connection in AZ & NM. 8 (I think) systems - what goes in on one comes out on all. Ditto the Condor 220 system in CA. Perhaps clicking on one would show the coverage of the one, plus a zoom-back icon when clicked woudl show the coverage of the network (just OR the coverage zones, then zoom to fit the display).

>When ever I travel I scan the bands for activity and key words so I know
>that I can add something to the discussion. Maybe you could add the voice
>recognician feature as well as the active scan feature to your interface.

I don't think there is a standard voice recognition system except the Windows Sound system, and it's recognition doesn't work very well with the limited audio bandwidth (300-3khz) from the average handy scratchy. The idea is nice, but not as valuable as the info block or the GPS feature.

>With out the added features I think your product would only appeal to
>statistitions and wanabe repeater coordinators...certainly not to any of
>us that want to find a good QSO on the bands or make an emergency call.

When can I buy one? Preferrably with the current ARRL directory as the included data base.
--
Mike Morris WA6ILQ | This space intentionally left blank.
PO Box 1130 |
Arcadia, CA. 91077 | All opinions must be my own since nobody pays
818-447-7052 evenings | me enough to be their mouthpiece...

21. ANS Bulletin 001.02

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-01 23:38:22 UTC
From: 70323.2750@CompuServe.COM
Message-ID: <940101233821_70323.2750_CHV79-1@CompuServe.COM>
Source record: 272718

HR AMSAT NEWS SERVICE BULLETIN 001.02 FROM AMSAT HQ
SILVER SPRING, MD January 1, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-001.02

RV3DR, QSL manager for MIR contacts, advises that on December 24, 1993, December 31, 1993 and January 6, 1994 the MIR space station will be transmitting special digitized voice messages on its normal frequency of 145.55 MHz. The message repeats every tow minutes. Sergey says that the developer of this equipment is DL2MDE.

ANS thanks RV3DR for the information that went into this bulletin and James Mollica N2NRD for relaying it to us.

/EX

22. Re: DEP May Impose Fees On YOU!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 00:46:39 UTC
From: wb6w@netcom.com
Message-ID: <wb6wCIz8tr.Cuu@netcom.com>
Source record: 272721

John Magliacane (magliaco@pilot.njin.net) wrote:

: SB NJHAM @ ALLUSA $DEPE1
: DEP May Impose Fees on YOU!
:
: The Department of Environmental Protection and Energy in New Jersey is
: proposing a fee pertaining to owners of RF generating devices. In summary,

(snip)

This has the potential for leading to an interesting court case. In the early 1920's, the US Supreme Court held that ALL radio communications were in fact interstate commerece. The US Constitution reserves the authority to regulate interstate commerece to the federal government. Any tax or fee imposed on the basis suggested in this note is a direct attempt by a state to regulate interstate commerece - and may be voided in federal court if anyone bothers to spend the $$$$ to fight it.

That the state has an interest in protecting the health of its citizens is undeniable. What has not been shown is that the level of exposure to RF from many of the sources listed are in any way harmful. Based on the scanner law contoversy in NJ, one is tempted to think that there is someone of influence in NJ who just doesn't like Amateur Radio!

73 de Glenn Thomas wb6w@netcom.com

23. TS-850 & ICOM SM-8

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 01:06:00 UTC
From: COLERK%snypotvx.BITNET@CUNYVM.CUNY.EDU
Message-ID: <6A231941C0E00911@snypotvx.bitnet>
Source record: 272720

Greetings....I've been using the SM-8 microphone with my 850 for some time now and really like how well it works..however, they "up/down" feature does not work. I can get it to either go Up or Down but not both...cany anyone help me? Keep it simple please, I'm no technician but I haven't blown my self up yet either. 73....Roger

24. VK2WI Weekly News, 2nd January, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 05:17:40 UTC
From: dave@eram.esi.com.au
Message-ID: <5076@eram.esi.com.au>
Source record: 272725
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

VK2WI BROADCAST, 2nd January, 1994

Welcome to the first morning/evening broadcast for 1994, and we trust that all our listeners survived the celebrations. We still have several dead transmitters, so there will be no broadcast on 160m AM, 10m SSB, 6m SSB and 2m SSB. These transmitters will be repaired when personnel become available.

The major news items this week include:

A New Year Broadcast
Council meeting in Wollongong
Annual General Meeting
FM-828 Bonanza
Packet Users meeting
NTAC Chairman resigns

Divisional News

A New Year Broadcast

As mentioned, this is the first "live" VK2 Broadcast for the new year. We believe that some Divisions will not commence their Broadcast until later on in the month, so in the meantime those Members and listeners bereft of a local Broadcast are invited to tune in to VK2 instead. The regular evening Broadcasts will also re-commence tonight, and call-backs on most frequencies will be taken.

Council meeting in Wollongong

There will be a meeting of the Divisional Council held in Wollongong, at the Illawarra SES headquarters in Montague St, starting at 7.30pm. The meeting was requested by John Simon VK2XGJ. The purpose of the meeting is to consider urgent NTAC business, set a date for the EGM as requested in a petition to consider a Motion of No Confidence in Council, and to continue with business left over from the previous meeting to consider a Motion of No Confidence in the Divisional Secretary. The next Council meeting at Parramatta will be on Friday 21st January.

Office hours

Following a well-deserved break, the Divisional Office will be open as usual from Monday 10th January, at the usual hours of

11am to 2pm Monday to Friday, and 7pm to 9pm on Wednesday nights. Thank you Margaret, and we hope your in-tray will not be too full!

Annual General Meeting

Don't forget that the AGM has been set for Sunday 10th April. The closing date for agenda items and nominations is Monday 28th February.

FM-828 Bonanza

Members and Clubs may be interested to know the the Division has obtained over five hundred "FM-828 high-band" VHF radios, for subsequent disposal. They were donated by a large telecommunications company in a ceremony attended by the President, Vice-President and Secretary. There will be further details in a later Broadcast.

Trash and Treasure Sale

The next Divisional Trash and Treasure is scheduled to be held at Amateur Radio House, Parramatta, on Sunday 23rd January.

Packet Users meeting

Listeners interested in the development of packet radio in the Sydney area are invited to an informal meeting at Amateur Radio House, 109 Wigram St, Parramatta, on Sunday 23rd January, starting at 2pm. Please contact Darryl VK2TDS for more details.

NTAC Chairman resigns

Cesar VK2TCM, the Chairman of NTAC (the NSW Technical Advsiory Committee) has resigned from that position, effective immediately. Cesar claims that the Committee cannot function effectively, as there is too much control imposed by the Council, and the long delays in approvals are causing much ill-will amongst the Clubs.

Vanity Callsigns in USA

Listeners may be aware that the USA regulatory body, the FCC does not charge for Amateur licences, and as a result there are no resources avauilable to permit Amateurs to pick their own call sign. This could soon change. The FCC has released its Notice of Proposed Rule Making, in PR Docket 93-305, to permit amateurs to choose a ``vanity'' call sign. Individuals as well as trustees of club stations would be eligible to request an available call sign from the block assigned to their licence class or a lower licence class.

A fee would be required. The Communications Act specifies a fee of 7 dollars per year for amateur service vanity call signs, and allows the Commission to require payment of small fees in advance

for a number of years not to exceed the relevant licence term. Fee issues would be resolved under a separate FCC rule making proceeding, and a vanity call sign system would not be started until then.

The applicant would provide a list of up to 10 total call signs desired. The FCC would assign the first available requested call sign from the applicant's list. If none of the desired call signs was available, the applicant's current call sign would be reassigned. Call signs of lapsed or deceased licensees would not be available for reassignment for two years. A call sign relinquished under the vanity call sign program would be available for reassignment immediately.

-- From the ARRL Bulletin

WICEN News

This is a quiet time for WICEN, barring the usual unforeseen emergencies that seem to happen at this time of the year, so this is an appropriate time to overhaul the Sydney WICEN repeater system on 7150/8275. A dual-band high-gain antenna has been borrowed, and it will be placed in service, replacing the current temporary antenna, as soon as practicable. Casual users of this repeater system are reminded that except during net times and other activations, there is a 30-second timeout; you will soon get used to keeping your overs short to avoid getting the dreaded raspberry.

The next major exercise is the annual Bungonia Cave Rescue, on the weekend of 19-20th March. Further details will be provided in a later broadcast. The next Committee meeting will be on Saturday 12th February.

The Sydney WICEN net, normally held every Thursday at 9.30pm on repeater 7150, is in recess and will re-commence later on in the month. In the meantime, this would be a good opportunity to brush up on your communication skills, and ensure all your equipment is in working order for that sudden activation.

-- Dave VK2KFU, WICEN (NSW) Publicity Officer

Broadcast Summary

Summarising the articles in this news broadcast so far:

We note the passing of Reg VK2YL last month.

The VK2 Broadcasts are now "live" again, every Sunday morning and evening, and callbacks will be taken. The office re-opens on Monday week, the 10th January.

There will be a meeting of the Divisional Council held at the Illawarra SES headquarters in Wollongong, starting at 7.30pm.

The purpose of the meeting is to consider urgent NTAC business, set a date for the EGM as requested in a petition to consider a Motion of No Confidence in Council, and to continue with business left over from the previous meeting to consider a Motion of No Confidence in the Divisional Secretary.

The AGM has been set for Sunday 10th April. The closing date for agenda items and nominations is Monday 28th February.

Over five hundred "FM-828 high-band" VHF radios will soon become available from the Division.

Listeners interested in the development of packet radio in the Sydney area are invited to an informal meeting at Amateur Radio House, 109 Wigram St, Parramatta, on Sunday 23rd January, starting at 2pm. Please contact Darryl VK2TDS for more details.

Cesar VK2TCM, the Chairman of NTAC (the NSW Technical Advsiory Committee) has resigned from that position, effective immediately, claiming that the Committee cannot function effectively.

Club News

Central Coast Amateur Radio Club

Amateur radio operators, their families, friends and those interested in amateur radio are invited to attend the 1994 GOSFORD - CENTRAL COAST FIELD DAY which will be held on Sunday 27th February 1994 at the prestige venue, the WYONG RACECOURSE. Gates open at 9:00am. TRADING AND ALL ACTIVITIES WILL COMMENCE AT THE NEW TIME OF 9:00AM.

Registration is $8 for adults, with children under 12 free, $5 for Seniors and Pensioners. Special group concessions are available on application. The usual attractions will be available, and there will be seminars and workshop sessions. Please listen to future broadcasts for further information.

-- From a packet bulletin by David VK2UDT

Coming Events

Divisional Council meeting in Wollongong . . . TUESDAY
VK2 Divisional office reopens . . . . 10th January
Divisional Council meeting at Parramatta . . 21st January
Divisional Trash and Treasure Sale . . . 23rd January
Packet Radio users meeting at Amateur Radio House . 23rd January
WICEN (NSW) Committee meeting . . . . . 12th February
AATC meeting . . . . . 13th February
Central Coast Field Day at WYONG . . . . 27th February
Closing date for AGM . . . . . 28th February
Daylight Saving ends . . . . . 6th March
Bungonia Cave Rescue (WICEN) . . . . . 19-20th March
AATC Workshop . . . . . 20th March

VK2WI Broadcast, 2nd January, 1994. Copyright 1994 WIA (NSW) & contributors.

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

25. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 05:29:12 UTC
From: matt@efn.org
Message-ID: <CIzLwp.7zJ@efn.org>
Source record: 272585
Cross-posted to: rec.video,rec.radio.amateur.misc

In <2fta02$92e@crl2.crl.com> lreeves@crl.com (Les Reeves) writes:

>Okay.

>3.5795454545 MegaHertz is the colorburst frequency. It was defined in the
>original design for "compatable color" and is cast in stone.

>So:

>3.5795454545 megaHertz / 455 = 7.867132866 kHz / 262.5 = 29.97003

I find it interesting that this colourburst frequency of 3.5795
MHz is right smack in the amateur radio 80 meter band. It seems
that any and all ham operators can legally send morse code at that
frequency at the legal power limit of 1 killowat output and screw up all of
the colour tvs in the cities. How come this doesn't appear to be
such a problem?

matt@efn.org n0gth

26. Re: CW WAIVERS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 06:05:49 UTC
From: zap@hacktic.nl
Message-ID: <2g5o8bINNjts@xs4all.hacktic.nl>
Source record: 272727

Well, maybe we could let people choose for the kind of examn to get their HF license.
1) CW examn
2) A very tough theoratical examn (much tougher than for those who'll do the CW). Followed by a practical test, in which they show their ability as a correct radio-operator.

Hence you get a system in which both categories have proven their knowledge, and you'll get good operators (and the bands still don't get that crowded).

-martin-
(choosing for 1)
--

```
-------------------------------------------------------------------------
| | Name : Martin Heffels |
| Smile, it's contagious | e-mail : zap@hacktic.nl |
| | air mail: pe1eec@pi8jop.nld.eu |
-------------------------------------------------------------------------
```

27. Re: UK scanner & Cops

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 06:14:39 UTC
From: Ed Ellers <EDELLERS@delphi.com>
Message-ID: <940102.04479.EDELLERS@delphi.com>
Source record: 272726

"It's illegal to sell drugs, but the police do it. It's illegal to buy stolen goods, but the police do it."

But they do NOT actually do those things as such; they're trying to arrest the people on the other side of those "transactions," and as long as those are people who intended to commit crimes (buying dope, selling stolen goods) I have no problem with it.

"It's illegal to speed, but police do it without the required emergency signals."

Excellent point there. There was a case a while back where a woman got fed up with sheriff's deputies' speeding and actually pulled some of them over and tried to make citizen's arrests on them; she ended up being arrested herself for speeding (in trying to overtake them), and the court ruled that while she DID have authority under the law to make the citizen's arrests she had NO authority to break the law in trying to do so.

"It's illegal to serve a warrant for a technical tax violation with concussion grenades..."

No argument there.

-- Ed Ellers, KD4AWQ

28. Re: Info sought on KLM Echo-70 432 ssb rig

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 08:02:32 UTC
From: stevej@pillock.moron.vware.mn.org
Message-ID: <XumiFc1w164w@pillock.moron.vware.mn.org>
Source record: 272605

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

> In article <2fvl4s$qe0@hpchase.rose.hp.com> stan@hprstw.rose.hp.com (Stan Wit
> >Does anyone know much about the above rig. A local ham has one for $150.
> >Physically it's in great shape but I don't kow how good a radio it is.
> >It appears to cover 432.0 to 432.5 and 435.0 to 435.5 from examing the
> >dial. Is it useable for satellite and dometic work? Does it drift much?
>
> This is a very old rig, one of the first, if not the first, solid state
> 70cm SSB rigs. It came out in time for the early amateur satellites. It's
> not a great radio by today's standards. It does drift, and the front end
> isn't that good either. Still, at $150, or less if you can talk him down,
> it can serve for mode B. I don't think it would be too good for mode J or L,
> but might be usable with a good preamp.
>
Gary is being very kind to this radio. I have one and when I bought it I
knew just what to expect from it. I use it mainly for terrestrial ssb/cw
contacts and contests. The thing in its stock form is DEAF! But with a
20dB low noise preamp mounted inside the radio, it is very usable. I paid
$85.00 for mine and I personally knew the person from whom I bought it.
It had been realigned so that you could work above and below 432.100 without
switching channels and had also been tweeked to the nth degree before I
built and put in the preamp. It does drift which is ok for contests buif
you are ragchewing, you end up turning the vxo as the other person is
talking. I personally think that $150.00 is a bit high. The 3 or 4 of them
that have changed hands up here have sold between $85 and $125. Of course
this is relative to what's available in your area and the size of your
finances. $150.00 is not an awful price but it is not a great price
either unless the preamp is included.

Steve KA0VYB

Microwavers do it with higher frequency

29. Re: VK2WI Weekly News, 2nd January, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 11:30:58 UTC
From: dave@eram.esi.com.au
Message-ID: <5079@eram.esi.com.au>
Source record: 272578
Cross-posted to: aus.radio,rec.radio.amateur.misc

And as an apparent result of this and two previous alleged illegal broadcasts, the NSW Divisional Council has closed down, until further notice, the Divisional repeaters and packet stations VK2RWI. The locks have apparently been changed (again) to ensure no further transmissions are made from VK2WI and VK2RWI.

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

30. rsgb gb2rs news 26th dec 1993

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 12:48:02 UTC
From: ted@tedb.demon.co.uk
Message-ID: <757514882snz@tedb.demon.co.uk>
Source record: 272580

Good morning and a very Merry Christmas. It's Sunday the 26th of December and here is the GB2RS news broadcast, prepared by the Radio Society of Great Britain.

First the headlines: The new RSGB President is to be installed in January, RSGB Headquarters is open during the Christmas holiday and we bring you our traditional Review of the Year.

The RSGB's 1994 President Ian Suart, GM4AUP, will be officially installed at an evening reception and dinner in Glasgow on Saturday the 15th of January. Any RSGB member wishing to attend should contact RSGB HQ without delay.

For those needing to call at RSGB Headquarters or make a telephone enquiry during the holiday period, HQ will be open this Wednesday, Thursday and Friday.

The Swindon 70cm Repeater GB3TD returned to service on Saturday the 18th of December, after a site and channel change. The new channel is RB3 so the repeater can be heard on 433.075MHz. Reports would be welcomed by the Repeater Keeper G4XUT, from whom further details can be obtained. His address is correct in the RSGB Call Book.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO. From Ascension Island, ZD8M will be very QRV on the low bands especially 160 metres, from today, Sunday the 26th. From Martinique, F3WC is signing FM5WC until Saturday the 5th of February. From Mozambique, SM6DRM is active as C91BH from now until the end of January 1994, on 10 - 20 metres, including the WARC bands, on CW and SSB.

There's one item of HF contest news:

The first RSGB LF Cumulative 3.5MHz Contest takes place next Sunday the 2nd of January from 1600 - 1800 UTC. The rules can be found in the December edition of Radio Communication.

And now our review of the year as brought to you by the RSGB's GB2RS News Service. We are very grateful to newsreader Vic Kusin, GM4HCO, for researching and compiling the review.

This week we deal with January to June, and next week July to December.

On Saturday the 2nd of January 1993, nearly a hundred people attended a dinner to see Peter Chadwick, G3RZP, formally installed as the 59th President of the Radio Society of Great Britain. One of his first tasks as President was to present a certificate to Britain's astronaut Helen Sharman OBE, marking her election as an Honorary Member of the Society.

The Pentland South Pole Expedition was well under way. Explorers Ranulph Fiennes and Mike Stroud had already walked over 1,000 miles and crossed the South Pole at the beginning of January. Their progress was reported by Lawrence Howell, GM4DMA, whose wife Morag, who was using the callsign GB4MSS/VP8 from Patriot Base in Antarctica. The aim of the expedition was to be the first to cross the Antarctic continent on foot and at the same time raise two million pounds for research into Multiple Sclerosis.

The chairman of the RSGB VHF Committee, Peter Burden, G3UBX, reported that the United Kingdom, along with other European countries, had agreed to the use of 433.050 to 434.790MHz for 'low power devices' limited to 10 milliwatts. Following representations from the RSGB, the Radiocommunications Agency had undertaken to defend the amateur service in the event of problems being experienced. It was stressed that this allocation should not in any way affect the present or future status of the amateur service on the band.

At the end of January, the RSGB introduced a premium phone line, carrying a recording of GB2RS news bulletins, mainly intended for those who were not able to receive the regular broadcasts. The number is 0336 407394 and calls are charged at 36 pence per minute cheap rate and 48 pence per minute at all other times. A proportion of the proceeds goes to the RSGB.

On Sunday the 31st of January, Charlie Suckling, G3WDG, and his XYL, Petra, G4KGC, made two contacts on the 10GHz band via moon-bounce. These were the first 10GHz Earth-Moon-Earth contacts made from Britain and were with WA7CJO in Phoenix, Arizona. Charlie Suckling was at time the RSGB's Microwave Manager.

In February, the Radiocommunications Agency announced the completion of its review of the amateur radio Novice Licence Scheme. The allocations to Novices in the 3.5 and 28MHz bands were increased to enable the use of the accepted low power frequencies. Also increased was the 50MHz allocation, allowing Novices the use of Morse, telephony and data. The 70cm band allocation was extended to include 432 to 440MHz, which allowed the use of SSB telephony, slow scan and fast scan television.

An excellent tropo event started on Thursday the 4th of February and carried on into Saturday. GJ4ICD reported that during this period many long distance stations were worked on 432 and 1296MHz. Of special note was the first Jersey to Czechoslovakia QSO on 1296MHz. This was between GJ4ICD and OK1FFD. Conditions were believed to have been the best for many years.

Meanwhile, Sir Ranulph Fiennes and Dr Mike Stroud became the first men to have crossed the continent of Antarctica on foot, entirely unsupported. Not content with this, and despite failing health, they decided to continue walking to their final destination, Scott Base, a further 350 miles. The expedition's communications officers, Morag, GM0MUV, and Lawrence, GM4DMA, were featured in the national media, explaining the trials of the two explorers. Later in the year, Sir Ranulph Fiennes and Dr Mike Stroud were both awarded OBEs in the Queen's Birthday Honours List for their achievement in the fields of 'Human Endeavour and Charitable Services'.

The Radio Society of Great Britain presented a cheque for just over 4,500 to MENCAP, the Royal Society for Mentally Handicapped Children and Adults. The presentation was made by RSGB President Peter Chadwick, G3RZP, to MENCAP's Chairman, Lord Rix, G2DQU, at a ceremony held at RSGB Headquarters on the 19th of February. The money had been raised by RSGB members and staff during 1992.

For several days at the end of February, a special event station, GB0OSH, was operating at the 'Radio GOSH' studio at Great Ormond Street Hospital in London. Attending the opening ceremony was His Royal Highness Prince Philip who is Patron of the RSGB. He was introduced to the event organiser Justin Johnson, G0KSC; RSGB President Peter Chadwick, G3RZP and RSGB General Manager Peter Kirby. Prince Philip used a VHF transceiver to talk to a surprised G4IGK in Aylesbury. Two HF stations were operational during the event and a number of young patients were able to use the hospital's internal telephone system to connect with the amateur radio stations and pass greetings messages over the air.

Amateur radio was in the national news again at the beginning of March. Radio amateurs provided the sole means of communication between the beleaguered villages in Bosnia and the United Nations relief agencies. A week later, the news media continued to give favourable reports of amateur radio being used inside Yugoslavia to assist the United Nations in their humanitarian relief efforts. The RSGB heard of one UK amateur who also managed to help - Jim Atherfold, G0FZB, of Shoreham-by-Sea, Sussex, was called on 20m by YU1ADJ, requesting medicine which was urgently needed to save the life of a young man in a Belgrade Hospital. He was able to pass this message to the Red Cross for further action. This was followed by a very favourable newspaper report which praised amateur radio.

At an RSGB Council Meeting held on the 12th of March, an application from RAEN Limited for Affiliation was discussed, and considered at some length. Council decided that the Society was able to affiliate RAEN Ltd as the Management Committee, but not the individual Groups associated with RAEN Limited. However, the Society saw no reason why individual Groups should not seek affiliation.

The RSGB's Project YEAR Co-ordinator, Hilary Claytonsmith, G4JKS, was awarded the title 'Amateur of the Year' by the magazine Ham Radio Today. The announcement was made at the London Amateur Radio Show on the 14th of March. Hilary is a member of the RSGB Council and her work in the fields of EMC, HF Contests and recruiting young people into amateur radio is well known to members.

On the 1st of April, the Radiocommunications Agency announced additional frequencies for radio amateurs for unattended digital communications, as well as the removal of restrictions on amateur radio transmissions on 70cm in the North East of England. The additional frequencies followed a request from the RSGB to extend the frequencies available for packet radio in order to enhance access to packet radio mailboxes.

The RSGB's Monitoring System, otherwise known as the Intruder Watch, had four successes which benefited all radio amateurs. An Argentinean fax, a naval data transmission and two diplomatic stations had been removed from the 18MHz band

with the assistance of the RA. The Co-ordinator of the Intruder Watch is David Owen, G0OES, and details of the role of the Monitoring System can be found in the RSGB Call Book.

The Royal Grammar School of Guildford became the first school outside America to have a direct colour TV link to the space shuttle Discovery. In addition to the video link, there was two-way voice contact between the shuttle and pupils during two orbits on the 9th of April, using the callsign GB6STS. Deputy Head of Science Frank Bell, G7CND, said that the equipment worked well and there was an interference-free six-minute radio contact. When the slow-scan TV image was sent, KB5AWP on the Discovery reported receiving a good clear picture. G7CND organised the school's radio equipment for the contact, but it was the pupils themselves who controlled almost all of the voice and TV exchanges.

In May, the Arfon Repeater Group announced that, for the first time in the UK, a 2m and a 70cm repeater were to be cross-linked. Under a special licence granted to the group issued following negotiations between the RSGB and the RA, GB3AR on R4 could be linked with GB3AN on RB4 by means of DTMF tones, with the result that the two repeaters operate as one. The Repeater Group pointed out that the set-up was experimental and invited everyone to make good use of the linking system and to report results, good or bad to Brian Davies, GW4KAZ.

On Saturday the 19th of June the RSGB held an Open Day at its Headquarters in Potters Bar. Over 200 members attended, many bringing with them their families and friends. They were treated to a guided tour of the RSGB's offices, had a chance to operate in the GB3RS shack and to visit the QSL Bureau, Library and Museum. Also at the Open Day was a team from the BBC's Arena programme who were researching for a feature on amateur radio.

One of the best known radio amateurs in the world is King Hussein of Jordan, who is frequently active as JY1. In an interview given exclusively to the RSGB's Radio Communication magazine, His Majesty revealed his wish to promote amateur radio in Jordan. He also explained how he became interested in the hobby and his belief that amateur radio contacts provide a wonderful way to make friends.

And that concludes our review of the first half of 1993, as reported by GB2RS.

And now the solar factual data:

This week due to GB2RS being prepared early we are short of data. For the period 13th to 16th solar activity has declined to very quiet levels; this was not expected. There have been no flares reported. The spot indices have declined and meaned at only 29. The solar flux has also declined and averaged only 85 units. The geomagnetic activity was quiet up to the 16th, when a magnetic storm was reported affecting mainly the higher latitudes. The period averaged an Ap of 10.7 units. However the indices rose from 3 on the 14th up to 28 by the 16th. This is believed to be due to the passage of a coronal hole. The state has been 'nil, nothing to report'. The radio quality indices have been at normal levels all the period, there being no very good or bad paths on any circuit. We do not have the aa indices to hand. The X-Ray Flux averaged B1.0, about the level it has been since last October. However,

completely unexpectedly it collapsed on the 16th to only A4.5 units the lowest level since this data has been given on GB2RS. Bartells rotation 2191 begins on December 30th.

Now the ionospheric data for Central France:

The F2 daytime critical frequencies at Poitiers, as reported by Meudon, averaged 8.7MHz. The daily highs are now occurring around 12.00 hours. The darkness hour lows are almost steady and averaged 2.7MHz. There have been periods of Spread F, blanketing E and other phenomena but only lasting for around 2 hours daily.

Now the ionospheric data for the north:

The F2 daytime critical frequencies at Ekaterinberg have been affected by whatever magnetic activity was about, and levels have been depressed averaging only 5.5MHz. The darkness hour lows were also down and averaged only 2.2MHz. At last the seasonal changes in IF2 critical frequencies can now be seen; if a mean line is drawn through the data, levels have risen from about 7.5MHz last June up to 8.25MHz at present. This is lower than expected; last year at this time levels were up to 11MHz.

And lastly the solar forecast:

This week, the more active side of the sun will be looking our way, and solar flux levels are expected to be about 100. The geomagnetic activity is expected to be very unsettled, possibly up to sub storm on the 28th to 30th then declining to quiet levels. The Ionospheric Radio Quality Indices are expected to decline down to poor by the 29th.

And that is the end of the solar information.

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

Next, the local news.

NEWS FOR THE SOUTH EAST

Meeting for Monday the 27th of December:

Basingstoke Amateur Radio Club has a Two Metre Direction Finding Competition 'The Turkey Settler' Map OS-185(SE) with Alan, G8FMH as the Fox. Further details by telephoning 0256 25517. NEWS FOR SOUTH WEST

Meeting for Wednesday the 29th of December:

South Bristol Amateur Radio Club has 'Greetings to old Friends on 2m and 70cm from the Club station'. For further information tel: 0275 834282.

NEWS FOR THE MIDLANDS

Meeting for today Sunday the 26th of December:

Charnwood Amateur Radio Contest Club has a Club Net. For further information telephone 0509 232927.

Meeting for Wednesday 29th of December:

Telford and District Amateur Radio Society will hold an 'On the Air, Christmas Time Net' on 144.600MHz, starting at 8pm. Contact Dave, G4EIX, on 0952 588878 for details.

NEWS FOR THE NORTH OF ENGLAND

Meeting for Monday the 27th of December:

Goole Radio and Electronics Society has a Video - a look back at 1993, hosted by Jim, 2E1BHL. Further details from Steve, G8VHL on 0405 769130.

Meeting for Tuesday the 28th of December:

Liverpool and District Amateur Radio Society has an Open Night. Further details from Ian, G4WWX who is QTHR.

And that's the end of this week's GB2RS news broadcast, which was prepared by the Radio Society of Great Britain.

31. rsgb gb2rs news 2nd jan 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 12:49:12 UTC
From: ted@tedb.demon.co.uk
Message-ID: <757514952snz@tedb.demon.co.uk>
Source record: 272579

Good morning and a Happy New Year. It's Sunday the 2nd of January and here is the GB2RS news broadcast, prepared by the Radio Society of Great Britain.

First the headlines:- G3RZP is the new LAC Chairman; the 1994 LF Cumulative contests start this week and we have the second part of our review of the year, including a propagation review.

The RSGB's Licensing Advisory Committee has a new chairman. He is Peter Chadwick, G3RZP, the RSGB's Immediate Past President. He takes over from John Bazley, G3HCT, who will be the committee's Secretary.

The RSGB's 1994 President will be officially installed at an evening reception and dinner in Glasgow on Saturday the 15th of January. Any RSGB member wishing to attend should contact RSGB HQ without delay.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO. From Svalbard (Hopen Island), LA5EBA will sign JW5EBA from now until July 1994, on all bands, using various modes. And from Thailand, K3ZO will be active as HS0ZAR from mid-January for four weeks.

We have no rally news for you this week as the next event notified to us is not until Sunday the 23rd of January 1994.

HF contest news now:

The first RSGB LF Cumulative 3.5MHz Contest takes place today, Sunday the 2nd of January. Another one takes place on Saturday the 8th of January. Both are from 1600 - 1800 UTC. The first LF Cumulative 1.8MHz Contest takes place tomorrow, Monday the 3rd of January from 2000 - 2200 UTC. December's RadCom, page 84, gives detailed information on all the LF Cumulative Contests. The RSGB AFS Team CW Contest takes place next Sunday the 9th of January from 1300 - 1700 UTC on 3.510 - 3.590MHz, with the 3.570 - 3.590MHz reserved for slower-speed contacts (the QRS Corral).

Next some VHF contest news:

The RSGB 144MHz CW Single Operator Fixed & All Others Contest takes place on Sunday the 16th of January, from 1000 to 1600 UTC. There are three sections:- Fixed station single operator, Open and Listeners. See December's RadCom, page 83 for details.

And now for the second part of our traditional Review of the Year. We are very grateful to newsreader Vic Kusin, GM4HCO, for researching and compiling it.

In July, the RSGB announced the first ever RSGB 50MHz Certificate to go to the holder of a UK Novice Licence. This was issued to Pat Williams, 2E1AFN, when she claimed the 50MHz, 10 Countries two-way Award. Congratulations also went to Geoff Brown, GJ4ICD, who was issued with the first certificate for having

the grand total of 450 locator squares confirmed on 50MHz.

Once again the RSGB was in the forefront of publicising amateur radio in the media. Broadcast on the 24th of August was a BBC World Service programme called Waveguide, which featured amateur radio and the RSGB's role for the previous eighty years. The following week, the programme looked at a typical amateur radio station. 'Waveguide' was transmitted world-wide and provided excellent international publicity for amateur radio

The RSGB Standard Distance Award for 24GHz was awarded to Bill James, G6XM, for a contact from his portable site on Dartmoor with G3GNR/P on Exmoor at a distance of 43km. Bill, who is a lifetime member of the RSGB, has been collecting the Society's awards since November 1979 when he received Supreme Award number 29 in recognition of his activities on the 144, 432 and 1296MHz bands. He is the only person to hold an RSGB Supreme Award together with distance awards for 10 and 24GHz.

Two hundred thousand members of the public had a chance to see amateur radio in action at London's Olympia in September. The RSGB put on a stand at the five-day spectacular LIVE '93 exhibition. A very large number of people visited the stand, many expressing interest in amateur radio. There were many questions on licensing, and about such things as packet and slow scan. Three stations were operational: HF, VHF and UHF packet, and the data communications demonstration proved to be the most popular.

The RSGB made a donation of 1,000 to the UK's amateur satellite organisation AMSAT-UK in support the Phase 3D project. At a ceremony at RSGB Headquarters, RSGB President Peter Chadwick, G3RZP, handed over the cheque to AMSAT-UK Secretary Ron Broadbent, G3AAJ.

An RSGB delegation, comprising experts on all aspects of amateur radio, attended the International Amateur Radio Union Region I Conference at de Haan in Belgium. A number of changes were made to our band plans, concerning data frequencies on HF and priorities on the Microwave bands. The HF RTTY allocations were renamed 'Digimode' to cover all digital modes, including RTTY, AMTOR, PACTOR, Clover and Packet. In some cases the allocation was increased in size. On the microwave bands a number of sub-bands were agreed on an international basis in order to counter increasing pressure from commercial concerns. IARU Region I covers all of Europe and Africa as well as the former Soviet Union.

On Sunday the 26th of September, four more amateur radio micro-satellites were successfully put into orbit, including two built at the University of Surrey. They were KITSAT-2, ITAMSAT, EYE-Sat and POSAT-1.

This year's Young Amateur of the Year Award ceremony was on the 9th of October. The principal guest was Roger Louth, Director of Mobile Services at the Radiocommunications Agency. Also in attendance was RSGB President Peter Chadwick, G3RZP. The Young Amateur of the Year was fifteen-year-old Tim Munn, G7OTO, from the Isle of Wight. He was selected from a list of nominees after interviews by the Radiocommunications Agency and the RSGB. Tim has become an RSGB Novice Instructor and his courses have had a 100% pass rate so far. The

runner-up was Simon Kahn, who became G0STU on his 14th birthday, having passed the RAE aged 11. He was one of the first Novice licensees, holding the callsign 2E1AAB.

The RSGB's 1993 HF and IOTA Convention took place at Old Windsor in Berkshire. This was a convention in the traditional style, with an opportunity to meet friends, socialise and attend a range of lectures and presentations. The programme comprised 25 items, all DX or contest related, and all were well attended with some lecture rooms packed to capacity. More than 180 people attended the DX Dinner. Amongst the presentations made was the award of the Calcutta Key to Hans Berg, DJ6TJ, for his services to amateur radio through the International Amateur Radio Union.

On Thursday the 14th of October the Society was represented at the funeral of Arthur Milne, G2MI, who passed away after a long illness. He was responsible for the RSGB QSL Bureau for over 40 years. Arthur became RSGB President in 1954 and was the senior GB2RS News Reader for many years until just before his death.

The weekend of the 16th and 17th of October saw the 36th Jamboree on the Air. For 24 hours Scouts and Guides all over the world used amateur radio to celebrate their shared interest.

The 1st of December marked the inauguration of a new 10GHz beacon, GB3KBQ, built by the Mendip Repeater Group to commemorate the life of John Moxham, G8KBQ. John, who died in 1989, had a fascination for microwave technology and was always willing to give advice and a helping hand. The beacon runs 60mW on 10,368.87MHz from Taunton.

The Society's Annual Meeting took place in Manchester on the 4th of December. The Honorary Treasurer, Richard Horton, G4AOJ, reported that the Society has been very successful in its aim to balance income and expenditure. The Ostermeyer Trophy for the best construction article in RadCom was presented to G3VML for his VHF transceiver project. The Wortley-Talbot Trophy for outstanding experimental work was presented to G3WDG and G4KGC for their 10GHz activities. The Fraser Shepherd Award for research into microwaves went to G4JNT, and the Pilot Officer Norman Keith Adams Prize for the most original article in Radcom went to G4FHU for 'How Big is a Bad SWR?'

And that concludes our review of the year 1993, as reported by GB2RS.

And now the solar factual data, starting with a brief forecast for this week, followed by a review of the year's propagation: These have been compiled, as they are each week, by Charlie Newton, G2FKZ, who is the Chairman of the RSGB's Propagation Studies Committee.

This week the more active side of the sun will rotate away with solar flux levels declining to be about the 95s. The Ionospheric Radio Quality Indices is expected to be about normal or slightly below. Geomagnetic activity is expected to be mainly quiet.

Next our review of 1993's propagation:

1993 has, to say the least, been an eventful year. Solar cycle 22 is still full of surprises. The rise in sunspot indices was the fastest ever recorded, which led to forecasts that it would be a record cycle. Alas it was not to turn out that way. We are now seeing a decline in spot indices, again is so rapid that cycle 22 is puzzling all the experts. Having had their fingers burned on the way up they are now all very quiet about when the minimum might be, and forecasts are now for only one year ahead, with December 1994 having a spot index of about 32. World-wide the interest in the ionosphere is continuing to decline, so data sources are declining as well. This makes ionospheric forecasting more difficult. However it is not all gloom. We hope to have a new ionosonde installed at the Rutherford Appleton Laboratories at Chilton which should give us data early in the New Year. Spot minimum times have in the past been very good for sporadic E and 1993 was no exception. During June there was one of the greatest sporadic E events almost anyone can remember, with openings particularly on 6 metres to many parts of north America by stations only using very low power. As for the HF bands, the radio quality indices were above normal for 113 days, just normal for 125 days, and well below normal for 108. The worst period was during May with the 6th to 15th being the worst for many years. The best times were possible during late April and most of October, but the good times do not last long. Though ionospheric and solar data is declining, the geomagnetic data sources are now growing by the day. It is now possible to obtain geomagnetic data from around the world via Intermagnet and the Geomagnetism Information and Forecast Service. At present 30 observatories send data to the British Geological Survey at Edinburgh and within 2 years it is expected to enlarge to about 100. For those who belive the 6 metre band is dead, reports have been received that the sporadic E season in Australia is in full swing, and this seems to be following the pattern that we had last June, with contacts to JA being plentiful. VK3OT states that, on 50MHz, F layer contacts to Europe have been made every year since 1988 on the 24th of December. We would like to know how you got on this year - reports please to G2FKZ whose address is correct in the RSGB Call Book.

And that is the end of the solar information.

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

Next, the local news.

NEWS FOR THE SOUTH EAST

Meetings for Monday the 3rd of January:

Braintree and District Amateur Radio Society has a talk entitled 'Widgets 2' and a discussion on 'The Club Open Day'. Further details from John, G1WQQ on 0787 60947.

Surrey Radio Contact Club has a talk on 'Oscilloscopes for Amateurs' by Phil, G0OHI and Peter, G3ZPB. Details from Bernard, G8TB on 081 660 7517.

Meeting for Tuesday the 4th of January:

Stevenage and District Amateur Radio Society has a Welcome Back evening with a Discussion, VHF/UHF on Air and CW Practice with Frank, G4ISO. Contact Neil, 2E1ASZ on 0438 350882 for details.

Meetings for Wednesday the 5th of January:

Chesham and District Amateur Radio Society has its '1994 Club Programme Meetings' session. Details from Ian, G0RTF on 0494 676391.

Dover Radio Club has a Novice Evening. For further details telephone 0304 825030.

Worthing and District Amateur Radio Club has a talk entitled 'Surveying in Malta'. Details G4GPX on 0903 753893.

Meetings for Thursday the 6th of January:

East Kent Radio Society has a talk entitled 'Packet Radio' by G3EMU. Further information from Paul, G3VJF on 0227 364606.

Horndean and District Amateur Radio Club has a talk by Keith Ridley, Deputy Editor, 'The News' a Portsmouth area local newspaper. Further details from Stuart, G0FYX, tel: 0705 472846.

Horsham Amateur Radio Club has a talk entitled on 'The Story of Wireless' by John, G0GNA. Details from Peter, G8SUI on 073784 2150.

Shefford and District Amateur Radio Society has a Welcome-back Meeting. Contact Paul, G1GSN on 0462 700618 for further details.

Vange Amateur Radio Society has a Junk Sale. Contact Doris on 0268 552606 for further information.

Meetings for Friday the 7th of January:

Loughton and District Amateur Radio Society has a talk on 'Word Processing' by John, G1DJI. Further details from John Tel: 081 508 3434.

Medway Amateur Receiving and Transmitting Society meets for 'The VIP Quiz' by John, G6IVP. Further details from Gloria, G7OVI on 0634 710023.

NEWS FOR SOUTH WEST

Meeting for Tuesday the 4th of January:

Salisbury Radio and Electronic Society has a talk by Emma, 2E0 who has applied for DXCC. Details from David on 0722 330971.

Meeting for Wednesday the 5th of January:

Exmouth Amateur Radio Club has a Junk Sale. Phone 0395 279574 for further details.

Meeting for Thursday the 6th of November:

Yeovil Amateur Radio Club has a Practical evening - 'VHF FM Hand Rig Deviation checks' by G3AIK. Contact Cedric, G4JBL on 0258 473845 for further

information.

Meetings for Friday the 7th of January:

Axe Vale Amateur Radio Club has a talk entitled 'Radio in Shanghai' by Graham, G0GTR. For further details contact Pat, G0GHH on 0297 33756.

Shirehampton Amateur Radio Club has its Club shack clear-out evening. For further information contact Ron, G4GTD on 0272 770504.

NEWS FOR EAST ANGLIA

Meetings for Tuesday the 4th of January:

The Amateur Radio Club of Fakenham has a talk on 'Microwaves' by John, G4BYV. Contact Dave, G4DCJ on 0485 528633 for further details.

Sudbury and District Radio Amateurs has a talk on 'Computers, with Hardware' by Nigel, G0ORI. Contact Tony, G8LTY on 0787 313212 for further details.

Meetings for Wednesday the 5th of January:

Martlesham Radio Society has a talk entitled 'Packet BBS, Past, Present and Future'. Contact Darren, G7BKO on 0473 227332, during office hours only for entry ticket details and for further information.

Norfolk Amateur Radio Club has a Quiz evening. For further details contact Sheila, G0KWP on 0603 618810.

Meeting for Friday the 7th of January:

Cambridge and District Amateur Radio Club has a Video evening. Contact John, G0TIL on 0763 243570 for details.

NEWS FOR THE MIDLANDS

Meeting for today Sunday the 2nd of January:

Charnwood Amateur Radio Contest Club has its New Year meeting. For further information telephone 0509 232927.

Meeting for Monday the 3rd of January:

Stourbridge and District Amateur Radio Society has a Discussion and an "On Air" night. Further information from James, G7HEZ on 0384 374354.

Meetings for Tuesday the 4th of January:

Loughborough and District Amateur Radio Club meets for a discussion "Ideas for 1994". For further details contact G8SNF by telephoning 0509 218259.

Grantham Radio Club has a talk on 'Intruder Watch' by Dave, G4MQM. For further details contact John, G8WWJ on 0476 65743.

Meetings for Wednesday 5th of January:

Derby and District Amateur Radio Society has its New Year Surplus Sale. Contact Hayley, G7PXA on 0773 856904 for further information.

Telford and District Amateur Radio Society has the club Equipment availability check. For further details contact Dave, G4EIX, on 0952 588878.

Meeting for Thursday the 6th of January:

Cannock Chase Amateur Radio Society has a talk on 'Heraldry' by J M Sanders, MBE. For further details telephone 0543 262495.

Meeting for Friday the 7th of January:

South Notts Amateur Radio Club meets for its Annual General Meeting. For further details contact Julie, G0SOU on 0602 216342.

NEWS FOR THE NORTH OF ENGLAND

Meeting for Tuesday the 4th of January:

Liverpool and District Amateur Radio Society has a Quiz evening. Further details from Ian, G4WWX who is QTHR.

Meetings for Wednesday the 5th of January:

Denby Dale and District Amateur Radio Society has a talk entitled 'Why you should make a Will, and how to do it' by Ian, G6TSW. Further details from Ivan, G0SBR on 0484 429238.

Wirral Amateur Radio Society has a visit to Atlantic House. For further details contact G3FOO, tel: 051 644 6094.

Meeting for Thursday the 6th of January:

Trafford Amateur Radio Club has a talk entitled 'HMS Bronnington, G0TON' by Peter, G3XGE. For details contact Malcolm Collis on 061 748 8046.

Meetings for Friday the 7th of January:

Goole Radio and Electronics Society is holding a Repeater Report, hosted by Steve, G8VHL. For further details contact Steve, G8VHL on 0405 769130.

South Manchester Radio Club has a Mini Lecture Contest evening. For further details contact Edward, G7FQY, tel: 061 969 1964.

NEWS FOR WALES

Meetings for Thursday the 6th of January:

Meirion Amateur Radio Society has its Annual General Meeting at the Royal Ship Hotel, Dolgellau. The meeting opens at 7.30pm for an 8pm start. Contact Maurice, GW3GKZ on 0341 422447 for further details.

Dragon Amateur Radio Club has an 'Evening Together to Greet 1994'. Details from Tony, GW0FMQ, tel: 0248 600963.

NEWS FOR NORTHERN IRELAND

Meeting for Friday the 7th of January:

Bangor and District Amateur Radio Society has a Quiz Night, starting at 8pm in the Winston Hotel, Queens Parade. Details from Keith, GI0SSA on 0247 883315.

And that's the end of this week's GB2RS news broadcast, which was prepared by the Radio Society of Great Britain.

32. Daily Summary of Solar Geophysical Activity for 01 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 17:08:05 UTC
From: oler@rho.uleth.ca
Message-ID: <9401021708.AA07837@rho.uleth.ca>
Source record: 272586
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

01 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 01 JANUARY, 1994

NOTE: Intense stratospheric warming is persisting over central and
northeastern Siberia, Alaska, and the Siberian and Canadian Arctic.
Warming is slowly weakening. Temperature gradient is reversed
between 60N and the pole in the middle and upper stratosphere from
30 HPA upwards.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 001, 01/01/94
10.7 FLUX=148.3 90-AVG=100 SSN=130 BKI=3234 3311 BAI=012
BGND-XRAY=B7.9 FLU1=3.0E+05 FLU10=1.1E+04 PKI=3345 4322 PAI=022
BOU-DEV=038,019,035,054,023,028,008,009 DEV-AVG=026 NT SWF=00:000
XRAY-MAX= C4.4 @ 1745UT XRAY-MIN= B6.4 @ 1210UT XRAY-AVG= C1.1
NEUTN-MAX= +002% @ 2335UT NEUTN-MIN= -002% @ 2340UT NEUTN-AVG= +0.0%
PCA-MAX= +0.1DB @ 0850UT PCA-MIN= -0.9DB @ 2255UT PCA-AVG= -0.2DB
BOUTF-MAX=55352NT @ 0003UT BOUTF-MIN=55326NT @ 1044UT BOUTF-AVG=55341NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+042,+000,+000
GOES6-MAX=P:+120NT@ 1527UT GOES6-MIN=N:-105NT@ 0647UT G6-AVG=+068,+035,-043
FLUXFCST=STD:145,140,135;SESC:145,140,135 BAI/PAI-FCST=010,010,005/012,012,008
KFCST=0223 4322 1223 4321 27DAY-AP=009,006 27DAY-KP=2123 3232 2112 2221
WARNINGS=*SWF;*MAJFLR
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 31 DEC 93 is not available.
The Full Kp Indices for 31 DEC 93 are: 1o 3o 5o 5- 3- 3- 2- 2+

SYNOPSIS OF ACTIVITY

Solar activity was low. Small flares and weak surging
accompanied the limb transit of Region 7640 (N10W93).
Occasional C-class flares occurred from Regions 7645 (N13E30),
7646 (S08E27), and 7647 (S14E20), as the focus of activity now
shifts to the eastern hemisphere. Region 7645 is the largest

and most complex spot group on the disk.

Solar activity forecast: solar activity is expected to be
low to moderate.

The geomagnetic field was predominantly unsettled at mid-
latitudes. High latitudes had stints of minor storm conditions
during local nighttime hours.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled to mildly active the next 48 hours.
Quiet to unsettled conditions should end the interval.

Event probabilities 02 jan-04 jan

Class M 50/50/50
Class X 05/05/05
Proton 05/05/05
PCAF Green

Geomagnetic activity probabilities 02 jan-04 jan

A. Middle Latitudes
Active 20/25/20
Minor Storm 20/10/10
Major-Severe Storm 01/01/01

B. High Latitudes
Active 20/20/20
Minor Storm 30/30/20
Major-Severe Storm 01/01/01

HF propagation conditions were near-normal to slightly
below-normal for the first 3/4 of the UTC day over the low and
middle latitude regions. Minor signal degradation was observed
during the local night hours due to enhanced geomagnetic and
auroral activity. Conditions were poor to occasionally very
poor over the high and polar latitude paths, again attributed
to the elevated levels of geophysical activity. Conditions
over all regions recovered relatively quickly when geomagnetic
and auroral activity subsided to quieter levels by the end of
the day. Near-normal conditions should return to all regions
on 02 and 03 January, with above-normal propagation possible
over the lower and some middle latitude regions. Openings on
higher bands near (or above) 10 meters should be observed for
greater periods of time as the current level of solar flux
continues to strengthen the ionosphere.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 01/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE

7640 N10W93 207 0400 EKI 14 008 BETA-GAMMA
7641 N06W88 202 0050 HSX 02 001 ALPHA
7644 N12W83 197 0070 DSO 07 003 BETA
7645 N13E30 084 0720 EKI 15 030 BETA-GAMMA-DELTA
7646 S08E27 087 0430 DKI 10 022 BETA
7647 S14E20 094 0080 CSO 06 006 BETA
REGIONS DUE TO RETURN 02 JANUARY TO 04 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 01 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1834 1834 1835 110

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 01 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
01/ 0016 0158 0208 LDE C2.8 112
01/ 1540 1609 1649 LDE C2.0 69

INFERRED CORONAL HOLES. LOCATIONS VALID AT 01/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
31 Dec: 0041 0049 0051 C2.5 SF 7645 N13E49
0145 0149 0152 SF 7646 S09E55
0223 0229 0235 C2.1
0402 0407 0414 SF 7645 N11E45
0415 0420 0423 C4.8
0440 0449 0451 C4.0 1N 7645 N11E45
0515 0538 0551 C2.8 SF 7640 N08W70
0526 0536 0559 SF 7644 N12W54
0621 0626 0629 C3.2 SF 7645 N11E52
0632 0647 0653 C4.1 SF 7644 N12W55
0633 0638 0646 SF 7640 N07W70
0818 0820 0827 SF 7645 N12E47
0903 0905 0911 SF 7646 S08E50
1115 1122 1126 C2.1 SF 7640 N09W62
1138 1139 1146 SF 7645 N12E44
1439 1443 1445 C2.0 SF 7640 N09W69
1802 1804 1807 SF 7646 S10E44
1933 1939 1946 C1.7 SF 7640 N09W78
2232 2236 2238 C1.8 SF 7645 N12E40
2311 2311 2313 SF 7644 N10W81

2312 2313 A2325 SF 7640 N10W80

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7640: 4 0 0 6 0 0 0 0 006 (28.6)
Region 7644: 1 0 0 3 0 0 0 0 003 (14.3)
Region 7645: 4 0 0 6 1 0 0 0 007 (33.3)
Region 7646: 0 0 0 3 0 0 0 0 003 (14.3)
Uncorrellated: 2 0 0 0 0 0 0 0 002 (9.5)

Total Events: 021 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
31 Dec: 0041 0049 0051 C2.5 SF 7645 N13E49 III
1115 1122 1126 C2.1 SF 7640 N09W62 Continuum

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

33. Re: cw waivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 17:20:51 UTC
From: aragorn@info-gw.mese.com
Message-ID: <gPcJFc1w165w@info-gw.mese.com>
Source record: 272581

> |>
> |>
> |>
> |> Thanks & 73 |"Get your facts first, and then you can
> |> Tom WI3P | distort them as much as you please."
> |> collinst@esvax.dnet.dupont.com| Mark Twain
> |> *** MY EMPLOYER DOESN'T SPEAK FOR ME NOR I FOR THEM ****
>
> Actually since W is not needed and it not any kind fo a reliable indicator of
> technical or operating comptetance I say hurray. CW as a requirement should b
> eliminated. It is an outmoded method of communication and is wrothwhile only
> fun test of a particular skill. TI has no relavanve whatsoever to competance
> any other phase of the hobby. I say that it is jsut taking up too much of the
> bands. MUCH more space should be allocated to the efficient digital modes suc
> pactor and more communication could be carried out. Even hf packet would be m
> better if all were not forced to operate on a very narrow range of frequencie
> Come out of the dark ages and into the light.
>
>
> gilbaronw0mn@delphi.com for e mail
> "Bailar es vivir"
>
> RAISING FLAME SHIELDS NOW

So, what are you suggesting?? That there be no test at all??? If so, just
go to CB and use it. 11 meters is HF after all! I'm not about to tell you
that allocating more space to efficent digital methods is a bad
suggestion, actually that's the only constructive piece I saw in your
message, but doing away with testing would destroy amateur radio once and
for all.
Chris Craig
KD4HDE
\s

Information Gateway - Public Access Usenet and Email - +1 404-928-7873
Please reply to: aragorn@info-gw.mese.com
aragorn@info-gw.dragon.com

34. TS-850 & ICOM SM-8

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 17:40:50 UTC
From: jangus@skyld.tele.com
Message-ID: <757532450snx@skyld.tele.com>
Source record: 272583

In article <6A231941C0E00911@snypotvx.bitnet> COLERK%snypotvx.BITNET@CUNYVM.CUNY.EDU writes:

> Greetings....I've been using the SM-8 microphone with my 850 for some time
> now and really like how well it works..however, they "up/down" feature does
> not work. I can get it to either go Up or Down but not both...cany anyone
> help me? Keep it simple please, I'm no technician but I haven't blown my
> self up yet either. 73....Roger

Call Icom on the phone and request the schematic to the SM-8. This will show you the pin connections on the 8-pin connectors and the up/down buttons.

Call Kenwood on the phone and request the schematic for their Microphone. This will show you how the Up/Down function is implimented on their radio.

I assume you are asking because you do not have any documentation on either the radio or the microphone.

The Operators Manual for the TS-850 will cost about $25. This beats the repair bill that will result from killing something inside the radio.

The Icom achieves up/down by pulling a single pin on the mic. connector either to ground or to ground hrough a 470 ohm resistor. The Kenwood uses 2 separate pins to select up or down.

73 es GM from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

35. Re: Looking for information

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 17:42:20 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan2.174220.12943@ke4zv.atl.ga.us>
Source record: 272582

In article <1994Jan1.222239.629@bongo.tele.com> julian@bongo.tele.com (Julian Macassey) writes:
>In article <2g4blqINNs9j@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:
>>No, Jeff, most hams don't go to libraries or read books.
>>Few of the public do either, whether hams or not.
>
> I once heard that 3% of the population had library cards. Then
>I read the 5% of the public buys books.

By and large they aren't the same people. Harold Robbins, Howard Stern, and Madonna capture most of the book buyers who aren't science fiction readers (the largest book purchase category). BTW the newspaper with the highest circulation isn't McPaper (USA Today), it's the National Enquirer. In essence, you can't underestimate the intelligence of the average reader; you can't imagine IQ numbers that low. But we know they can read, we can see their lips moving in the checkout line.

> I wonder what perecentage have VCRs and video rental cards.

Most of them have a VCR, but it always flashes 12:00, 12:00, 12:00 unless they have a child in the house who can set it for them. Thus we have VCR+ where you have to input an arbitrary sequence of digits instead of simply inputting that you want to record Ch 2 at 8pm. Not that it's going to work anyway, unless that child cabled it up for them.

> I know that many homes I visit have few or no books. I am alos
>stunned by the number of radio amateurs that do not have any manuals
>or handbooks on their favourite hobby.

Ah, you just hang out with the wrong class of people. Why I know *several* Hell's Angels with great (comic) book collections, and tons of motorcycle magazines. It must be true that radio amateurs don't read much, however, since QST, 73, and CQ don't have circulation figures of more than a fraction of licensed amateurs.

> Could the lack of literacy be related to the falling numbers
>involved in participatory activities?

I don't know, can bowlers read?

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

36. Re: UK scanner listeners arrested; called

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 20:52:34 UTC
From: twright@freenet2.scri.fsu.edu
Message-ID: <2g7c6i$j8m@mailer.fsu.edu>
Source record: 272584

jmaynard@nyx10.cs.du.edu (Jay Maynard) writes:
> In article <1993Dec29.131133.17917@hemlock.cray.com>,
> David Adams <dadams@cray.com> wrote:
> >There is something in all this that really bothers me about a system that
> >would allow it's police force, those we hire to enforce laws dealing with
> >honesty, to lie, to commit fraud, to do what ever beyond the law, in order
> >to catch criminals,
>
> I don't have a problem with luring a fugitive in with whatever means, fair or
> foul, they can come up with. Otherwise, we simply allow someone to evade
> capture.
>
> > or even to pursuade people to commit a crime so that
> >they can be arrested.
>
> This is entrapment, and I have real problems with that.
>
> >Sourdough and Ham AA0PV
> > Cray Research Inc. packet: kg0io@tcman.#msp.mn.usa.noam
>
> Congratulations on the new call...now, shouldn't you reprogram your TNC? :-)
> --
> Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
> jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
> "A good flame is fuel to warm the soul." -- Karl Denninger

Folks, its called a STING operation. No one told those people to show
up.

Tim Wright KD4OVM
MSU Police
--

37. ANS Bulletin 001.01

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 21:02:34 UTC
From: 70323.2750@CompuServe.COM
Message-ID: <940102210233_70323.2750_CHV57-1@CompuServe.COM>
Source record: 272587

HR AMSAT NEWS SERVICE BULLETIN 001.01 FROM AMSAT HQ
SILVER SPRING, MD January 1, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-001.01

A number of messages have recently been posted to the AMSAT BBS concerning the schedules for the various satellites and how they are arrived at. In the case of OSCAR-13, the schedule is determined by the AO-13 Command Team consisting of James Miller G3RUH, Peter Guelzow DB2OS and Graham Ratcliff VK5AGR. As to how these volunteers determine the schedule, a very fine set of comments was posted by Paul Beckmann WA0RSE Internet address wa0rse@amsat.org. The AMSAT News Service thanks Paul for his well-put comments and has taken the liberty of extracting them for this bulletin.

Paul begins by asking himself: What determines the mode schedule for a satellite? He says thae he found an answer in the very clearly written piece in the 1993 Space Symposium Proceedings by, you guessed it, James, G3RUH.

In his attempt to put the article by James in terms that may not be obvious to new to satellites as well as many not so new "bird-watchers", Paul offers a list of some of the important considerations:

1. All modern satellites are battery-powered with solar cell recharging systems. In order to work, the batteries must stay charged.

2. Most satellites do not have solar cells covering their entire surface. This means the attitude of the satellite with relation to the sun must be managed to keep the batteries charged.

3. The antennas are fixed to the satellite, not steerable, and necessarily "go along for the ride" when accomplishing Item 2.)

4. Each mode involves a receiver, a transmitter, and a pair of antennas. The receivers vary in sensitivity, the transmitters in power, and the antennas in gain and beamwidth.

5. Because of Item 3, the characteristics of item 4 allow transponder operation only in particular modes, when the distances and spacecraft attitudes are within certain limits. For example, a narrowbeam antenna pointing away from the Earth will not support communications. If a particular mode requires the use of that antenna, it would not do any good to place the satellite in that

mode, no matter how badly it was desired. To change the attitude of the spacecraft to point the antenna at the Earth could very well compromise solar cell illumination, hence battery charge, hence spacecraft operation - and possibly even its life expectancy.

6. Because some modes draw more power than others, the battery power must be budgeted. This also constrains how long the satellite can operate in any particular mode.

Paul admits to possibly missing some other major points, but he believes that these demonstrate to him, at least, that the mode schedule on AO-13, or any other bird, is not a self-serving decision made by some "elite superclass" who treat the bird as a "toy", but are considered decisions, constrained by the physics of the orbit, solar cells, batteries, equipment aboard, antennas, etc., designed to offer the best long-term schedule of transponder operation and to further the state-of-the-art for the next birds' designs.

WA0RSE strongly suggests reading the article by James in the Proceedings. He says that he was amazed at the number of specialized programs that had been written, complete with graphical output, to aid in the decision-making process to keep the AO-13 satellite operational. He expressed his opinion that James, and others like him, should be thanked for bringing clear explanations like these to the rest of us and for fostering experimentation in modes that have proven to provide better two-way satellite communications for our fellow hams across the globe.

Paul sums up his message by saying that we need everyone interested in AMSAT, with their opinions, tempers, passions, talents, and good humor. He also wishes all a Happy New Year. Peace on Earth. Good will toward all.

Information on ordering a copy of the Space Symposium Proceedings, which contains James Miller's article can be found on page 12 of the Nov/Dec AMSAT Journal.

/EX

38. Re: Finally got my license in the mail!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 21:35:50 UTC
From: twright@freenet2.scri.fsu.edu
Message-ID: <2g7enm$kgl@mailer.fsu.edu>
Source record: 272588

<SUSEEA@MAINE.MAINE.EDU> writes:
> Took the Tech test and 5wpm code on OCT. 20, 1993 and recieved
> the license on Dec. 24, 1993. Nice Christmas present I thought.
> Just thought some of you out there would like to know the waiting
> time.
> Alan
> N1QWT
>
> *** My son, 11 years old also passed his Tech with 5 wpm code. He
> recieved his ticket the same day as me. N1QWV
>
> Now there are 3 generations of HAMS in this family.
Man, that sure is a lot of bacon. 8-)
Congrats to you and the Kid.

Tim Wright KD4OVM
--

39. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 21:39:22 UTC
From: kludge@grissom.larc.nasa.gov
Message-ID: <2g7eua$epl@reznor.larc.nasa.gov>
Source record: 272589
Cross-posted to: rec.video,rec.radio.amateur.misc

In article <CIzLwp.7zJ@efn.org> matt@efn.org (M G Laubach) writes:
>>3.5795454545 megaHertz / 455 = 7.867132866 kHz / 262.5 = 29.97003
>
>I find it interesting that this colourburst frequency of 3.5795
>MHz is right smack in the amateur radio 80 meter band. It seems
>that any and all ham operators can legally send morse code at that
>frequency at the legal power limit of 1 killowat output and screw up all of
>the colour tvs in the cities. How come this doesn't appear to be
>such a problem?

Primarily because there are so many TV sets spewing garbage out on that
frequency that nobody would ever be heard if they were to use it. The
advantage, though, is that you can tear the colorburst oscillator out of
a TV set, and skew it a little bit up or down the band and have a nice
QRP rig.
--scott
--
"C'est un Nagra. C'est suisse, et tres, tres precis."

40. DX Bulletin 141

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 22:11:00 UTC
From: pat.wilson@pplace.com
Message-ID: <5c.10855.23.0N179C7F@pplace.com>
Source record: 272591

Message-ID: <9401022238.AA26887@eeyore.INS.CWRU.Edu>

SB DX @ ALLBBS $OPDX.141
Ohio/Penn DX Bulletin No. 141

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 141
BID: $OPDX.141
January 1, 1993
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio
Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, DF4RD, DL7VEE & DXNL, OZ1FJB, AD1C, K4CEF & Southeastern Cluster Group, KJ4VH, WA4JQS, AC4CS, K8YSE and KE9A for the following DX information.

1B, NORTHERN CYPRUS. The DX Advisory Committe was advised by Cliff Watson, KR4M, to table his petition for Turkish Republic of Northern Cyprus. No definite reason was given, but there are negotiations going on
between both Greek Cypriot and Turkish Cypriot to resolve intercommunal differences and to create a new federal system of government. SPECIAL NOTE (from the Editor): The OPDXB has been accused of promoting the "1B operations" which is WRONG! OPDXB does not promote or take sides, but it is a "DX news service", and like all the other DX news publications, it reports on activites and events on the air.

3Y, PETER I ISLANDS (ALMOST CALLED OFF!). The entire DXpedition was almost aborted when it was discovered the icebreaker that was scheduled to pick up the DXpedition team from the island for the return trip, would
not be able to schedule a stop for the pickup. The team has been working feverishly behind the scenes for weeks to change this situation. It has involved lots of liason work, telephone calls and visits into Russia in order to solve the problem. They now have a Russian ship that will make the pickup. There are very few ships in the world that can make such a pickup and are equipped to have helicopters to bring the gear off the island. Thanks to a lot of perserverance by the entire team, and within just a few days of the drop-dead date for aborting the DXpedition, the Russians magically came through with an offer of help. So the DXpedition is now back on track again. However, the team had to spent over $2000 in telephone calls, plus plane tickets for some of the Scandinavian team to fly into the Russia to solve the problem. This is a very expensive DXpedition and if you would like to help contribute to this operation,

send contributions to KA6V. The team will be departing in mid-January for Port Stanley in the Falkland Islands. The landing date for Peter I is February 1st. The DX-team is made up of the following: Ralph/K0IR (Team Leader), Tony/WA4JQS, Terry/W6MKB, Bob/N4GCK, Peter/ON6TT, Bob/KK6EK, Luis/XE1L, Willy/HB9AHL and MR. Martin Tosseyn/Researcher. Also read VP8 below. Special Note: Tony, WA4JQS, has stated he has been working the past few months on plans for a DXpedition to Heard Island with an operation to Kerguelen Island afterwards.

4U1ITU, ITU HQ (on RTTY). Wolfgang, DK7UY, will be active from January 3rd to 7th, in Geneva to test some DX-pedition equipment from the ITU-Headquater station 4U1ITU. He will operate mainly on RTTY on 15, 17 and 20 meters, but also some CW and SSB operations will take place on all the other bands. QSL's for this activity ONLY via bureau to DK7UY.

4Z85TA, ISRAEL (SPECIAL EVENT STATION). From January 1st through April 30th this station will be on all bands and modes (RTTY, PACKET, SSTV, AMTOR, PACTOR, CW and SSB) to celebrate the 85th anniversary of the founding of the city of Tel-Aviv. A special QSL will be sent to everyone contacting the station. Also, a special award certificate signed by the mayor of Tel-Aviv will be available (listen for details). Award and QSL manager for 4Z85TA goes to 4X6LM, Shlomo Mussali, P.O.Box 8225, Tel Aviv 61081 Israel.

9K, KUWAIT. Bob, N6BFM, has signed up for another year in Kuwait as 9K2ZZ. Currently he is home in Atlanta, but will be active from Kuwait in another week. He is taking back a 40 meter beam with him which was donated by some W8's in Michigan. Bob's QSL manager is Ray, W8CNL. It has also been announced that Ray's son, Derek, KC4ELO, has now become the QSL manager for Tom, 9K2ZC, and his XYL, Donna, 9K2YY. Address for both W8CNL and KC4ELO is 674 Crestlyn Dr., North Augusta, SC 29841.

BV0ARL/BV9P, PRATAS ISLAND. There was a glimmer of hope for this operation
to take place the day after Christmas, but a FAX sent by Martti Laine, OH2BH/VR2BH, and received by Ron, K6OZL, states it was called off at the last minute to allocate space for officers heading to Pratas and for more
valuable cargo. The next tentative scheduled try is for late February or early March. FROM THE RUMOR MILL (Just before going to print!): From a conversation that was overheard on 75 meters Sunday morning. The rumor now circulating states that two phone calls from a BV operator to some K7 stations informed them that there may be a short operation from BV9P on Jan 5, 1994 for 4.5 hours only (from 0300-0730 UTC). Frequencies to watch are reported to be 14020, 14260, 21020, 21260 and two frequencies on 17 meters which were missed in copying the info. Antennas that will be used are a sloper and dipoles. The rumor says that the opertors will be several BV ops and Martti. There is supposed to be a follow up operation which will be a much bigger effort in March. All of this is band-chatter at this point, but may be good dope. WFWL. This information from AC4CS.

HK0, MALPELO & GORGOLA ISLANDS. Rumors have been circulating that IT2RAO/HK0 will be operational from Malpelo January 4-7, and from Gorgola Island (in the Valle/Cauca Division group) January 12-15. Very little information is available on either of these operations, but the operator has mentioned that the IOTA numbers are: SA-007 for Malpelo and SA-017 for Gorgola. So you might keep an eye on the IOTA freqs. This is a surprising operation. Malpelo has been a restricted area and authorites
only authorize DXpeditions about once every 7 years.

HUANGYAN DAO (SCARBOROUGH REEF). Hans, DK9KX, has sent a petition to the DXAC for DXCC Country status for this one. Hans feels that Huangyan Dao qualifies under Point 2 (a) of the DXCC Countries Criteria. Huangyan Dao,
a possession of the Peoples Republic of China (PRC), is an uninhabitated island situated in the South Chinese Sea. The petition states that the island is in excess of 225 statute miles from the nearest point of the PRC, with nothing between it and the mainland. (15 deg 7'N, 117 deg 51'E)

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41. Ohio/Penn DX Bulletin #141

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 22:16:17 UTC
From: kb8nw@barf80.nshore.org
Message-ID: <$opdx.141.1994@ampr.org>
Source record: 272596
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ALLBBS $OPDX.141
Ohio/Penn DX Bulletin No. 141

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 141
BID: $OPDX.141
January 1, 1993
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio
Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, DF4RD, DL7VEE & DXNL, OZ1FJB, AD1C, K4CEF & Southeastern Cluster Group, KJ4VH, WA4JQS, AC4CS, K8YSE and KE9A for the following DX information.

1B, NORTHERN CYPRUS. The DX Advisory Committe was advised by Cliff Watson, KR4M, to table his petition for Turkish Republic of Northern Cyprus. No definite reason was given, but there are negotiations going on between both Greek Cypriot and Turkish Cypriot to resolve intercommunal differences and to create a new federal system of government. SPECIAL NOTE (from the Editor): The OPDXB has been accused of promoting the "1B operations" which is WRONG! OPDXB does not promote or take sides, but it is a "DX news service", and like all the other DX news publications, it reports on activites and events on the air.

3Y, PETER I ISLANDS (ALMOST CALLED OFF!). The entire DXpedition was almost aborted when it was discovered the icebreaker that was scheduled to pick up the DXpedition team from the island for the return trip, would not be able to schedule a stop for the pickup. The team has been working feverishly behind the scenes for weeks to change this situation. It has involved lots of liason work, telephone calls and visits into Russia in order to solve the problem. They now have a Russian ship that will make the pickup. There are very few ships in the world that can make such a pickup and are equipped to have helicopters to bring the gear off the island. Thanks to a lot of perserverance by the entire team, and within just a few days of the drop-dead date for aborting the DXpedition, the Russians magically came through with an offer of help. So the DXpedition is now back on track again. However, the team had to spent over $2000 in telephone calls, plus plane tickets for some of the Scandinavian team to fly into the Russia to solve the problem. This is a very expensive DXpedition and if you would like to help contribute to this operation, send contributions to KA6V. The team will be departing in mid-January for Port Stanley in the Falkland Islands. The landing date for Peter I

is February 1st. The DX-team is made up of the following: Ralph/K0IR (Team Leader), Tony/WA4JQS, Terry/W6MKB, Bob/N4GCK, Peter/ON6TT, Bob/KK6EK, Luis/XE1L, Willy/HB9AHL and MR. Martin Tosseyn/Researcher. Also read VP8 below. Special Note: Tony, WA4JQS, has stated he has been working the past few months on plans for a DXpedition to Heard Island with an operation to Kerguelen Island afterwards.

4U1ITU, ITU HQ (on RTTY). Wolfgang, DK7UY, will be active from January 3rd to 7th, in Geneva to test some DX-pedition equipment from the ITU-Headquater station 4U1ITU. He will operate mainly on RTTY on 15, 17 and 20 meters, but also some CW and SSB operations will take place on all the other bands. QSL's for this activity ONLY via bureau to DK7UY.

4Z85TA, ISRAEL (SPECIAL EVENT STATION). From January 1st through April 30th this station will be on all bands and modes (RTTY, PACKET, SSTV, AMTOR, PACTOR, CW and SSB) to celebrate the 85th anniversary of the founding of the city of Tel-Aviv. A special QSL will be sent to everyone contacting the station. Also, a special award certificate signed by the mayor of Tel-Aviv will be available (listen for details). Award and QSL manager for 4Z85TA goes to 4X6LM, Shlomo Mussali, P.O.Box 8225, Tel Aviv 61081 Israel.

9K, KUWAIT. Bob, N6BFM, has signed up for another year in Kuwait as 9K2ZZ. Currently he is home in Atlanta, but will be active from Kuwait in another week. He is taking back a 40 meter beam with him which was donated by some W8's in Michigan. Bob's QSL manager is Ray, W8CNL. It has also been announced that Ray's son, Derek, KC4ELO, has now become the QSL manager for Tom, 9K2ZC, and his XYL, Donna, 9K2YY. Address for both W8CNL and KC4ELO is 674 Crestlyn Dr., North Augusta, SC 29841.

BV0ARL/BV9P, PRATAS ISLAND. There was a glimmer of hope for this operation to take place the day after Christmas, but a FAX sent by Martti Laine, OH2BH/VR2BH, and received by Ron, K6OZL, states it was called off at the last minute to allocate space for officers heading to Pratas and for more valuable cargo. The next tentative scheduled try is for late February or early March. FROM THE RUMOR MILL (Just before going to print!): From a conversation that was overheard on 75 meters Sunday morning. The rumor now circulating states that two phone calls from a BV operator to some K7 stations informed them that there may be a short operation from BV9P on Jan 5, 1994 for 4.5 hours only (from 0300-0730 UTC). Frequencies to watch are reported to be 14020, 14260, 21020, 21260 and two frequencies on 17 meters which were missed in copying the info. Antennas that will be used are a sloper and dipoles. The rumor says that the opertors will be several BV ops and Martti. There is supposed to be a follow up operation which will be a much bigger effort in March. All of this is band-chatter at this point, but may be good dope. WFWL. This information from AC4CS.

HK0, MALPELO & GORGOLA ISLANDS. Rumors have been circulating that IT2RAO/HK0 will be operational from Malpelo January 4-7, and from Gorgola Island (in the Valle/Cauca Division group) January 12-15. Very little information is available on either of these operations, but the

operator has mentioned that the IOTA numbers are: SA-007 for Malpelo and SA-017 for Gorgola. So you might keep an eye on the IOTA freqs. This is a surprising operation. Malpelo has been a restricted area and authorites only authorize DXpeditions about once every 7 years.

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/EX

42. OPDX/NODXA 1993 DX Survey

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-02 22:43:57 UTC
From: aq474@cleveland.Freenet.Edu
Message-ID: <$opdxnodxa.2.1994@ampr.org>
Source record: 272597
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
SB ALL @ ALLBBS $OPDXNODXA.2
OPDX/NODXA 1993 DX Survey

THE THIRD ANNUAL OPDX/NODXA DX SURVEY.
Here is your chance to be counted. Deadline will be January 31, 1994,
with results in February. The questions of the survey will deal with:

1) The DXer of the year. This is a DXer who you thought was outstanding
in operating and handling the pile-ups from their DXpedition.
2) DXpedition of the Year (Group and Indivdual). Choose the best and most
well organized DXpedition that met the needs of the DX community.
3) The 30 Most Wanted Countries. Choose your 30 most wanted countries.
4) OPTION: Your personal comments about DXing in 1993.

Please use the ballot below. Votes will only be accepted in the
following format below.

-------------------------------------------------------------------
Your | DXer of the Year| DXpedition of the| DXpedition of the
Callsign | (Person) | Year by a person | Year by a group
and QTH | | |
-------------------------------------------------------------------
CHOOSE YOUR MOST WANTED COUNTRIES. (Please list only 30 of your most
wanted countries. List CW and SSB modes separately.
CW - AB,CD,EF
SSB - GH,IJ
-------------------------------------------------------------------
Comments on DXing in 1993: (Text Any Length)
-------------------------------------------------------------------

* Just Fill-in The Blanks And Send It To One Of The Three Address:
"Packet Radio" - KB8NW @ WA8BXN.OH.USA.NA
"InterNet" - aq474@cleveland.freenet.edu
"PRODIGY" - DFJH48A

OPDX/NODXA DX Survey

Example Ballot:

-------------------------------------------------------------------
| | |
| | |
-------------------------------------------------------------------
CHOOSE YOUR MOST WANTED COUNTRIES. (Please list only 30 of your most
wanted countries. List CW and SSB modes separately.
CW -
```

SSB -

Comments: (Text Any Length)
I think DXing in 1993 was.....

/EX

43. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 00:33:42 UTC
From: lreeves@crl.com
Message-ID: <2g7p56$9s9@crl2.crl.com>
Source record: 272590
Cross-posted to: rec.video,rec.radio.amateur.misc

Scott Dorsey (kludge@grissom.larc.nasa.gov) wrote:
: In article <CIzLwp.7zJ@efn.org> matt@efn.org (M G Laubach) writes:
: >>3.5795454545 megaHertz / 455 = 7.867132866 kHz / 262.5 = 29.97003
: >
: >I find it interesting that this colourburst frequency of 3.5795
: >MHz is right smack in the amateur radio 80 meter band. It seems
: >that any and all ham operators can legally send morse code at that
: >frequency at the legal power limit of 1 killowat output and screw up all of
: >the colour tvs in the cities. How come this doesn't appear to be
: >such a problem?

: Primarily because there are so many TV sets spewing garbage out on that
: frequency that nobody would ever be heard if they were to use it. The
: advantage, though, is that you can tear the colorburst oscillator out of
: a TV set, and skew it a little bit up or down the band and have a nice
: QRP rig.

Actually, I have found just the opposite to be true.

The colorburst frequency is not only cast in stone-it is extremely accurate.
It is more accurate as a frequency reference than WWV. This is provided
that you are tuned to a network-supplied program.

If you try to receive 3.57954545 mHz near a TV, you will hear almost nothing.
In fact, the only way to take advantge of the precision of the colorburst is
to lock an oscillator to the 7.867 kHz signal radiated by the very strong
magnetic deflection circuit.

I know about this first hand. I wish their *were* a bit of 3.57954545 mHz
leakage from a TV; it would make calibrating a lot easier.

44. Re: who sells good HT battery replacements?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 00:40:20 UTC
From: clmorgan@miavx3.mid.muohio.edu
Message-ID: <1994Jan2.194020.1697@miavx3.mid.muohio.edu>
Source record: 272592

In article <holland-281293104826@right.dom.uab.edu>, holland@gasmac.dom.uab.edu (Steve Holland) writes:
> MY HT power pack no longer will hold a charge over a reasonable time
> and I am planning on replacing it. What mail order venders makes
> reliable battery packs that offer good value? I am looking for
> something that will fit an ALINCO DJ500T HT.
>
> Steve Holland

Try Alexander Batteries ..... 800-247-1821. They've
done well for me.

73 >< Carl
K8NHE

45. WHERE ARE ALL THE YOU

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 01:36:01 UTC
From: steven.rosenberg@support.com
Message-ID: <9401030136.A0177wk@support.com>
Source record: 272606

wolfman@p-cove.UUCP (Aaron Smith) writes:

> I got my first radio for christmas (yesterday) (a mobile), and a power supply
for it.
> The radio wasn't already wired up to the power supply, so I had to do it.
> I also got a KPC-3 TNC along with it, but no power supply.. So all day
> christmas I didn't know if I could wire in the TNC and the radio to the
> same power supply (I didn't pay much attention during the classes because
> of my cockyness and erogance).. I was going to wire it up after I did
> some calculations, but I thought I would hold off untill the day after,
> and it was a good thing I did.

Am I missing something here? is there a reason why a TNC and a VHF/UHF
radio can't share the same 12v power supply?

steven.rosenberg@support.com

KC6FYL

46. FT-530 Receive Problems

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 01:57:40 UTC
From: leber@panther.warm.inmet.com
Message-ID: <CJ16s5.Mr3@inmet.camb.inmet.com>
Source record: 272593

In recent digests, I found mention of at least 2 people who had experienced
a 'clicking' sort of interference in their Yaesu FT-530's, along with
statements that this was a known problem with a factory fix. Unfortunately,
the 'from' lines in the digests do not seem to indicate the actual originator
of the message, but rather the news gateway (or something like that, anyway),
so I can't contact the posters directly.

Can anyone describe the symptoms more specifically? I have a new 530,
and the only problem I have is with interference that does sound a bit
like ignition noise. It does not appear all across the 2m band, but rather
seems concentrated in patches around 145.130 (at least that's the only
placed I noticed it so far).

Also, can this problem be fixed by authorized Yaesu service techs at
dealers, or does it have to go back to Yaesu?

Normally, I would just ignore this, but it happens to lie smack on top
of one of my club's repeater frequencies, so I'd like to resolve it,
if possible.

Thanks,
Tom
--

Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
"One step ahead, one step behind...Pretty soon you gotta' run to stay even."

47. Re: Finally got my license in the mail!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 03:22:14 UTC
From: ncc2001@cwis.unomaha.edu
Message-ID: <1994Jan3.032214.6820@news.unomaha.edu>
Source record: 272595

Congratulations on the Tech+! It took me 13 weeks earlier this year to get my
Tech No-code in the mail. Then on October 30th I passed my 5wpm and missed t
General theory by 2 questions (without ever seeing the question pool I
may add). I am now enjoying 10M ssb so much, I am going to go for the General
so I can play with voice on the other bands.

Anyway, good job and welcome to the hobby.

73 de N0YBC Michael

--
Michael Fortner N0YBC	"What do you want for Christmas,
ncc2001@cwis.unomaha.edu	Crow?"
N0YBC @ WB0BLR.#SWIA.IA.USA.NA	"I want to decide who lives and who
	dies!" - MST3K

48. Strange Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 03:36:49 UTC
From: ep208@garnet.berkeley.edu
Message-ID: <2g83sh$8p2@agate.berkeley.edu>
Source record: 272594
Cross-posted to: sci.electronics,rec.radio.amateur.misc

A few minutes ago I observed a Mercedes with what appeared to me to be a strange antenna on it. The antenna was just above the rear window, in a location where celular phone antennas are often found. The antenna looked like a loop about 3 cm in diameter, and there was a second loop the same size at 90 degrees to the first one.

Can someone tell me what it is for?

49. help with antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 04:12:57 UTC
From: gdlee@bsu-cs.bsu.edu
Message-ID: <5403@bsu-cs.bsu.edu>
Source record: 272598
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.misc

I would like to put up a random (long) wire antenna for listening
to shortwave and ham broadcasts. However, all the books and articles
I have seen on the subject of antennas have lots of pictures and not
enough words. This is a problem as I am totally blind. Could
anyone give me some advice about the following questions?

1. Should I go with a long wire or a dipole or inverted V type
antenna?

2. If I go with a long wire, how should I arrange it to be
as omnidirectional as possible, or just put up two, oriented
at right angles?

3. Whatever I put up, I would like to put it in my atic to
avoid climbing around on my roof and maybe up into trees.

4. How do I get the best ground withoug knocking holes in the
walls of the house?

5. Whatever I put up, I would like to share the signal
between 3 different receivers in three different rooms of the
house. What is the best way to do this?

Thanks for any and all replies. Please be as wordy as you
need to be. Also, please don't send those diagrams made of
"|" and "-". I wouldn't be able to see them anyway.
Thanks again for any help.

50. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 04:25:41 UTC
From: jeh@cmkrnl.com
Message-ID: <1994Jan2.212541.3319@cmkrnl>
Source record: 272601
Cross-posted to: rec.video,rec.radio.amateur.misc

In article <2g7p56$9s9@crl2.crl.com>, lreeves@crl.com (Les Reeves) writes:
> The colorburst frequency is not only cast in stone-it is extremely accurate.
> It is more accurate as a frequency reference than WWV. This is provided
> that you are tuned to a network-supplied program.

Is this still true?

I have no direct knowledge, but... many years ago (mid-70's if I remember right) one of the hobby electronics mags (I think it was Radio-Electronics) had an article for a frequency standard derived from a color tv. Soon afterward a letter appeared in the letter column (where else :-), written by an engineer at one of the better-equipped stations in L.A. He stated that even network-supplied programs taken from a live feed usually go through a time-base corrector at the local station, and that this breaks the "chain of traceability" back to the network's precision frequency standard.

(of course, anything that the local taped from a satellite feed for broadcast later is completely divorced from any standards at the network.)

Also, at that time it was stated that the networks used rubidium-clock frequency standards, which are secondary standards: They're awfully good but they still have to be calibrated against something better. NIST (the folks who run WWV) uses cesium-beam clocks, which are primary standards, needing no calibration for frequency. Have the networks since upgraded to cesium-beam clocks? And, given that the local stations probably haven't, does it matter anyway? Even if they have, they're still "only" as good as NIST's clocks, so why should one over-the-air signal be better than another? (propagation changes on shortwave, maybe?)

--- Jamie Hanrahan, Kernel Mode Systems, San Diego CA
Internet: jeh@cmkrnl.com (JH645) Uucp: uunet!cmkrnl!jeh CIS: 74140,2055

51. Amateur Radio Newsline #855 31 Dec 93

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 04:38:36 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <C5w9jGG8yvYOyarn@dorsai.dorsai.org>
Source record: 272602
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

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Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #105 - POSTED 01/01/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newsline is posted on this CBBS twice monthly. For current information updates, please call

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Seattle.......................... (206) 281-8455
Tacoma........................... (206) 927-7373
Louisville....................... (502) 894-8559
Dayton........................... (513) 275-9991
Chicago.......................... (708) 289-0423
New York City.................... (718) 353-2801
Melbourne, FL.................... (407) 259-4479
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For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

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For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

****

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[855]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not for *
* air. Repeat, not for broadcast. This is just a reminder *
* that the address for the Newsline Support Fund is Newsline, *
* in care of Dr. Norm Chalfin, K6PGX, Post Office Box 463, *
* Pasadena, California 91102. Again, and as always, we thank *
* you. That ends the closed circuit with Newsline report 855 *
* for release on New Years Eve, Friday, December 31, 1993. *
* *
* *

* *
* *
* The following is a QST *
* *
* New Jersey says it wants to tax every radio transmitter *
* in the state and some hams may try to grab 10 1/2 meters *
* from the freebanders. *
* *
* *

NEW JERSEY RF FEE

New Jersey, the state that two years ago tried to jail hams who had rigs in their cars and more recently tried to force Radio Shack to stop selling scanners with cellular coverage now wants to put a tax on every radio transmitter in the state! The New Jersey Department of Environmental Protection and Energy is proposing a fee on owners of almost all RF generating device. Transmitters that are both commercially and privately owned.
The proposed rule will require the owners of any source of radio frequency and microwave radiation between the frequencies of 300 KHz and 100 GHz and which have the potential of exposing either workers or the general public to radiation levels in excess of the regulatory limits to register those sources with the Department within 60 calendar days after the effective date of this rule. The owners of all units that are subject to this rule shall be assessed an initial registration fee and will be required to provide technical information on each piece of equipment to the Department. After the first year of the program, the owners of registered units will be assessed an annual renewal fee. The amounts of the proposed fee are based on the services to be performed by the Department. As a reference, the median fee for commercial users will be approximately $500 per antenna per year if this proposal is passed.
Radio frequency sources definitely falling under the proposed legislation include AM and FM radio stations, television stations, commercial microwave ovens, cellular telephone systems, radar installations, microwave point-to-point links, ground-to-satellite telecommunications links, and other communications services. Radio frequency and microwave sources are also widely used in industrial heating and sealing operations and will be included as well. Although fees are not yet outlined for Amateur Stations, ham radio is mentioned in several sections of the proposal as being a significant source of radio frequency radiation. A source that the state says poses health risks to the general public.
A hearing to discuss the rule will be held on January 11th in the Department's Public Hearing Room in Trenton, New Jersey. The Department will accept comments on the proposed regulations until January 20th. Comments should be addressed to Janis E. Hoagland, Esq., Administrative Practice Officer, New Jersey Department of Environmental Protection and Energy, Office of Legal Affairs, C N 402, Trenton, New Jersey, 08625-0402.
Those outside New Jersey aren't out of the clear on this issue. If this proposal passes into law, it could be justification for other states to take similar action. It might even lead to a national ruling on radio frequency radiation that could seriously damage the ability of Amateur Radio to fulfill the basis and purpose that it was created to serve. Newsline will keep you updated on this one.

*****
TAKE BACK 11 METERS

If you are not on packet then you may not be aware that a growing number hams around the nation are sounding a call to arms. A call with the aim of taking part 11 meters back from Citizens Radio and turning it over to Novice and no-code Technician class hams.

No, its not a joke. In fact, those involved seem very serious and are looking to do it the right way. The political way by petitioning the FCC to make the change.

The debate on this issue started a few weeks ago on packet when Tom Saluti, N1KIO of New Durham New Hampshire posted an All United States bulletin dealing with the subject. If you are active on packet then you are aware of the high level of support that Tom's idea has. For those of you who are not packeteers, heres the story.

In his posting, N1KIO called the 11 meter band -- more accurately the 10 1/2 meter Freeband as being -- and we quote -- a wasteland that even the government can't use. This Tom says is because operators have taken it over from 26.000 to 28.000 MHz and sometimes even make excursions into the 10 meter ham band.

He went on to note that with the FCC having taken away some frequencies from Amateur Radio that it might be time for them to give some spectrum back. This by abandoning their own efforts to handle the 10 1/2 meter problem and turn 27.500 to 28.000 over to the Amateur Radio service. He says that radio amateurs can easily solve the mess by permitting Novices and Techs to run CW and data from 27.500 to 27.700 and voice operation from 27.700 to 28.000 MHz.

Since its posting, the N1KIO bulletin has been highly controversial. Not over the idea of running the illegal operators off of 11 meters and getting it reassigned as a ham radio band. Almost every commenter wants to see that happen. The problem seems to be on how to do it.

Many hams appear have a high level animosity toward the Freeband illegals but a number question how to get the FCC to take the request seriously. One responses gaining a lot of support suggests that a petition be circulated by packet radio where signatures and call signs could be added. Then, after a few months a final print out can be sent to the Private Radio Bureau as a rule making request.

No matter what the outcome of the discussion going on packet, one thing is certain. A fire is being fanned by a desire of no-code hams to have access to the high frequency bands. It is growing, and the illegal operators on 10 1/2 meters may soon find hot cinders falling in their self proclaimed Freeband as radio amateurs take a political route to oust the current crop of illegal operators and open 10 1/2 meters to ham radio. Stay tuned.

*****

PARAMOUNT FINED

Much of the FCC's staff is away on vacation, so there is nothing new in the case of alleged violations of Amateur Radio testing rules by a number of Southern California Volunteer Examiners. But before the commission went into recess, it did levi a big fine against a Houston, Texas television station.
The Federal Communications Commission has fined Paramount Communications television station KTXH-TV in Houston, Texas $80,000 for violating a law limiting the number of commercials a TV station may air during children's programming hours.
The fine represents the largest punishment ever handed out to a TV station since Congress passed a 1990 law requiring broadcasters to meet the educational needs of children. An appeal by Paramount is expected.

*****
RADIATION PROOF IC's NEEDED

Keith Baker, KB1SF of AMSAT North America says that the Phase 3D satellite development team has identified an urgent need for some radiation hardened, low power CMOS type 1802 microprocessor chips. These are not the standard off the shelf variety of 1802's, but rather the type that have been certified for operation in a spacecraft environment. If any of our listeners has source or pricing information on these components, please drop a note to Dick Jansson WD4FAB at his callbook address or fax him at 407-644-9782. These IC's are needed to make the new Phase 3D satellite fly!

*****
NO 222 - 222.150 MHZ LISTINGS

When the next issue of the ARRL's Repeater Directory premieres in April, there will be no listings of repeaters that may still be operating between 222 and 222.150 MHz. Newsline has learned that the decision to drop the listing of repeaters operating in that 150 Khz window is based on a recent FCC rules change. A change that reserves that spectrum for weak signal operations by barring any and all relay operation from it.
Once implemented, any repeater or remote base venturing into the band between 222 and 222.150 MHz will be in violation of the FCC rules. The operators of such systems will be subject to severe penalties if they are caught. Apparently the ARRL does not to be viewed as fostering pirate repeater operations. The decision to drop these systems from public listing seems to be its way to make this position known.

*****
THIS WEEK IN AMATEUR RADIO RETURNS

A satellite delivered ham radio program is returning to the air after being homeless for just over a month. Producers of "This Week in Amateur Radio" say they're back, but on a different satellite.

Community Video Associates, which produces the program, says it has reached an agreement to get the show back on the air starting January 1st. This Week In Amateur Radio began airing in March. It lasted till late November when the program lost its satellite air time. George Bowen, N2LQS is the CVA's President. He says the program will air on the Galaxy III satellite under an agreement with the new Omega Radio Network. Air times will be Saturday at 7:30pm EST. Bowen says the network is donating the satellite time as a service to the amateur radio community. This Week In Amateur Radio carries a variety of ham programing including Amateur Radio Newsline. The show is free and available for rebroadcast on local amateur radio repeaters.
If you'd like to listen to This Week in Amateur Radio, here's more information on the Galaxy III satellite. Tune in transponder 19, 5.8 MHz wideband audio. Galaxy III is located at 93.5 degrees west longitude. Again, air times are Saturdays, starting at 7:30 p.m., Eastern time. Welcome back!

*****
NEW RAIN DIAL UP SERVICE PHONE NUMBER

Chicago's popular Rain Dial Up Service has changed its telephone number. As of Thursday December the 30th, the new number is area code (708) 827-7246. The Rain dial up provides repeaters and other bulletin stations with in depth reports on subjects of contemporary interest to the ham community. Again the new number is area code (708) 827-7246 or simply (708) 827-RAIN.

*****
AMATEUR RADIO INDUSTRY GROUP TO HOLD FIRST MEETING OF '94

The Amateur Radio Industry Group will hold its first formal planing meeting of 1994 on Friday evening, February 4, at the Miami Airport Mariott Hotel, Miami, Florida in conjunction with the 34th annual Tropical Hamboree. All manufacturers, publishers, importers and dealers serving the ham radio marketplace are invited to attend. The Meeting room number will be posted in the hotel lobby and circulated among all exhibitors at the Hamboree. Sorry, this meeting is not open to the general public. For more information or to arrange to make a presentation at the meeting please contact John Dorr, K1AR, Chairman of the Amateur Radio Industry Group, at CQ Communications, 76 North Broadway, Hicksville, New York 11801. John can be reached by telephone at area code (516) 681-2922 or you can Fax him at (516) 681-2926.

*****
CZECH OPERATION

In DX, word that a station signing OL1A and claiming to be operating in the Czech Republic had been rumored to be a pirate.

Now comes word from W9GSB who says that's definitely not the case. Lou reports that he has received a card for the operation. OL1A turned out to be a special contest station operated by OK1DFP and several others. If you also made the contact, QSL via OK1DWX.

*****
DXCC UPDATE

The ARRL has announced that A61AF cards are acceptable for DXCC credit, but only for QSO dates after August 3rd, 1993. The League says that all operations prior to that date were unauthorized, and not good for DXCC. If you were among the many who submitted an A61AF card prior to November 16th, 1993 you are going to have to resubmit. This is because all prior A61AF credits have been removed from the League's DXCC database.

*****
ARRL RTTY CONTEST

A reminder that the annual ARRL RTTY Roundup takes place next weekend from 18:00 UTC on January 8th to 24:00 UTC on January the 9th. According to W1FB there were two date announcements made for the contest. The official notice in QST listed the correct date while the announcement in CQ Magazine that the competition would be held New Years weekend was wrong.

*****
ORIGINAL MARCONI KITES DISCOVERED

Joe Chamberlin, VE3ABG reports via packet that some of the original kites used in the early 1900's by radio pioneer Guigliermo Marconi have been found. The kites were discovered during a recent Marconi plant clean-up in Montreal. Plans are to donate some of the kites to the Marconi Museum in St. John's, Newfoundland. This is where early trans-Atlantic transmissions took place from Signal Hill. VE3ABG also says that contrary to rumors going around, the Marconi company officials do not plan on offering them up for public auction.

*****

For this year, that's all from the Amateur Radio Newsline. You can write to us at Post Office Box 463 in Pasadena, CA 91102.

From Bill Pasternak, WA6ITF at our editors desk, and all the rest of the Newsline staff around the world, we wish you a great 1994.

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52. Daily Summary of Solar Geophysical Activity for 02 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 04:45:45 UTC
From: oler@rho.uleth.ca
Message-ID: <9401030445.AA11641@rho.uleth.ca>
Source record: 272603
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

02 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 02 JANUARY, 1994

NOTE: Intense stratospheric warming continues over central and northeastern
Siberia, Alaska, Northern Canada and the Siberian and Canadian Arctic.
Temperature gradient is reversed between 60N and the pole from 50 HPA
upwards into the upper stratosphere.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 002, 01/02/94
10.7 FLUX=146 90-AVG=100 SSN=094 BKI=1343 4312 BAI=014
BGND-XRAY=B6.0 FLU1=1.0E+06 FLU10=1.1E+04 PKI=2343 4332 PAI=016
BOU-DEV=008,025,045,030,062,021,007,013 DEV-AVG=026 NT SWF=01:015
XRAY-MAX= M6.5 @ 2256UT XRAY-MIN= B5.4 @ 1554UT XRAY-AVG= C1.2
NEUTN-MAX= +003% @ 0155UT NEUTN-MIN= -004% @ 0305UT NEUTN-AVG= +0.0%
PCA-MAX= +0.1DB @ 0920UT PCA-MIN= -0.8DB @ 0130UT PCA-AVG= -0.2DB
BOUTF-MAX=55350NT @ 0507UT BOUTF-MIN=55324NT @ 1852UT BOUTF-AVG=55338NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+053,+000,+000
GOES6-MAX=P:+111NT@ 1835UT GOES6-MIN=N:-067NT@ 0726UT G6-AVG=+077,+028,-038
FLUXFCST=STD:140,135,130;SESC:140,135,130 BAI/PAI-FCST=010,005,005/012,008,008
KFCST=1223 4321 0123 4221 27DAY-AP=006,015 27DAY-KP=2112 2221 3112 5434
WARNINGS=*MAJFLR;*SWF
ALERTS=**MAJFLR:M6.5/SN@2256,N13E15(7645)
!!END-DATA!!

NOTE: The Effective Sunspot Number for 01 JAN 94 was 67.0.
The Full Kp Indices for 01 JAN 94 are: 3+ 3+ 4o 5+ 4o 3o 2- 2+

SYNOPSIS OF ACTIVITY

Solar activity was low. Only a few C-class subflares
occurred. Regions 7645 (N12E18) and 7646 (S09E14), both about
600 millionths in area, have been stable. Little else of
significance was reported.

STD: A relatively insignificant major M6.5/SN flare erupted out
of Region 7645 at 02/2256Z. The flare was rather impulsive and

was not associated with any notable radio emissions.
Additional M-class flares are possible from this region, with
an outside chance for an isolated X-class event. It continues
to show a fairly complex magnetic structure. A delta
configuration is also still quite evident within the region.

Solar activity forecast: solar activity is expected to be
low.

The geomagnetic field was at quiet to active levels.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled throughout the period.

Event probabilities 03 jan-05 jan

Class M 25/25/25
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 03 jan-05 jan

A. Middle Latitudes
Active 30/20/20
Minor Storm 10/10/10
Major-Severe Storm 01/01/01

B. High Latitudes
Active 20/20/20
Minor Storm 30/30/20
Major-Severe Storm 01/01/01

HF propagation conditions were normal over all regions.
Ionospheric strengthening is evident. Openings on 6 meters are
becoming increasingly possible over some middle and many lower
latitude regions. High latitudes are also observing somewhat
better propagation conditions, although some night-sector
signal instabilities are persisting. The major M6.5/SF flare
had only a minor ionospheric impact on daylit paths. The
short duration of the flare prevented a strong and lasting SWF.
Similar conditions are expected over all regions during the
next 3 days. Additional sudden ionospheric disturbances (SIDs)
are possible over the next week.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 02/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7645 N12E18 082 0600 FKI 16 032 BETA-GAMMA-DELTA
7646 S09E14 086 0580 DKI 10 023 BETA
7647 S15E06 094 0120 DAO 07 009 BETA

REGIONS DUE TO RETURN 03 JANUARY TO 05 JANUARY
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 02 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0229 0236 0240 C1.5 360
1139 1149 1155 C1.1 110
2248 2256 2303 7645 N13E15 M6.5 SN 100

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 02 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 02/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
55 S10W73 S10W73 N20W83 N20W83 184 ISO POS 008 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
01 Jan: 0016 0158 0208 C2.8
0120 0120 0123 SF 7640 N08W78
0156 0158 0202 SF 7640 N08W79
0157 0158 0216 SF 7646 S09E39
0323 0326 0329 C1.8 SF 7645 N13E35
0335 0341 0350 C2.4
0550 0555 0603 C2.0 SF 7640 N06W77
0557 0600 0606 SF 7646 S09E37
0750 0754 0758 C1.2
1219 1223 1226 C1.5 SF 7645 N10E36 51 94
1254 1259 1302 C1.6
1341 1348 1353 C1.7
1540 1609 1649 C2.0
1735 1745 1800 C4.4 SF 7647 S15E27
2311 2315 2319 C1.3 34 140 350

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7640: 1 0 0 3 0 0 0 0 003 (20.0)
Region 7645: 2 0 0 2 0 0 0 0 002 (13.3)
Region 7646: 0 0 0 2 0 0 0 0 002 (13.3)
Region 7647: 1 0 0 1 0 0 0 0 001 (6.7)
Uncorrellated: 7 0 0 0 0 0 0 0 007 (46.7)

Total Events: 015 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
01 Jan: 2311 2315 2319 C1.3 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

53. Re: Strange Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 05:08:29 UTC
From: wtm@uhura.neoucom.edu
Message-ID: <1994Jan03.050829.9814@uhura.neoucom.edu>
Source record: 272600
Cross-posted to: sci.electronics,rec.radio.amateur.misc

In article <2g83sh$8p2@agate.berkeley.edu> ep208@garnet.berkeley.edu (Charles Woodson) writes:
>The antenna looked like a loop about 3 cm in diameter, and there was
>a second loop the same size at 90 degrees to the first one.

That sounds like a cellular antenna to me. The last time I dropped by my cellular carrier's office to pick up a quick charger for my Moto hand-held unit, I noticed some antennae on display. One of those was a very short stalk with two vertical loops perpendicular to each other, passing though the axix of the stalk.

Tehre wasn't really anthing on the display that would suggest that said antenna was any better than any of the others, just different. In fact, it was not the most expensive on display. The most costly was a hinged model that mounts on the trun lip. When not in use, it could be folded out of sight under the trunk lid. It was pretty large and looked more CB-like than cellular. Still, not a bad idea.

--
Bill Mayhew NEOUCOM Computer Services Department
Rootstown, OH 44272-9995 USA phone: 216-325-2511
wtm@uhura.neoucom.edu amateur radio 146.58: N8WED

54. Re: Strange Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 07:37:42 UTC
From: pckwong@hkuxb.hku.hk
Message-ID: <CJ1MIv.w7@hkuxb.hku.hk>
Source record: 272604
Cross-posted to: sci.electronics,rec.radio.amateur.misc

Charles Woodson (ep208@garnet.berkeley.edu) wrote:
: The antenna looked like a loop about 3 cm in diameter, and there was
: a second loop the same size at 90 degrees to the first one.

For cellulars! Not hardly found such antennas in HK!!
73,
-Philips Wong, VS6XVI

55. Re: FFTMORSE

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 11:26:29 UTC
From: n4hy@growler.ccr-p.ida.org
Message-ID: <N4HY.94Jan3112629@growler.ccr-p.ida.org>
Source record: 272616

It does NOT work as it comes with SB, SB PRO, or SB16. It needed a complete rewrite of that section. I am communicating these to the author.

Bob

--
Robert W. McGwier | n4hy@ccr-p.ida.org Interests: ham radio,
Center for Communications Research | scouts, astronomy, golf (o yea, & math!)
Princeton, N.J. 08520 | ASM Troop 5700, ACM Pack 53 Hightstown
(609)-279-6240(v) (609)-924-3061(f)| I used to be a Buffalo . . . NE III-120

56. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 13:16:08 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan3.131608.16191@ke4zv.atl.ga.us>
Source record: 272624
Cross-posted to: rec.video,rec.radio.amateur.misc

In article <1994Jan2.212541.3319@cmkrnl> jeh@cmkrnl.com (Jamie Hanrahan, Kernel Mode Systems) writes:
>In article <2g7p56$9s9@crl2.crl.com>, lreeves@crl.com (Les Reeves) writes:
>> The colorburst frequency is not only cast in stone-it is extremely accurate.
>> It is more accurate as a frequency reference than WWV. This is provided
>> that you are tuned to a network-supplied program.
>
>Is this still true?

No, and it never was except in some very special cases. Because of the
way the terrestrial telco microwave distribution was done, the reference
phase changed during the course of the day.

>I have no direct knowledge, but... many years ago (mid-70's if I remember
>right) one of the hobby electronics mags (I think it was Radio-Electronics) had
>an article for a frequency standard derived from a color tv. Soon afterward a
>letter appeared in the letter column (where else :-), written by an engineer at
>one of the better-equipped stations in L.A. He stated that even network-
>supplied programs taken from a live feed usually go through a time-base
>corrector at the local station, and that this breaks the "chain of
>traceability" back to the network's precision frequency standard.

That's correct, though the device is actually called a frame synchronizer.
The broadcast subcarrier is referenced to the station master sync generator,
and that's usually a simple crystal controlled oscillator. The FCC tolerance
on subcarrier is +/- 10 Hz so a crystal reference is good enough.

>(of course, anything that the local taped from a satellite feed for broadcast
>later is completely divorced from any standards at the network.)
>
>Also, at that time it was stated that the networks used rubidium-clock
>frequency standards, which are secondary standards: They're awfully good but
>they still have to be calibrated against something better. NIST (the folks who
>run WWV) uses cesium-beam clocks, which are primary standards, needing no
>calibration for frequency. Have the networks since upgraded to cesium-beam
>clocks? And, given that the local stations probably haven't, does it matter
>anyway? Even if they have, they're still "only" as good as NIST's clocks, so
>why should one over-the-air signal be better than another? (propagation
>changes on shortwave, maybe?)

The networks have abandoned the rubidium references and use crystal
oscillators today, just like the local stations. With the change from
telco microwave distribution to satellite distribution, there is enough
doppler that a tight reference is worthless anyway. Geosync satellites
really aren't precisely geosync. They describe small figure 8s in their

position boxes, and this introduces enough phase variation through path length changes, and enough frequency error through doppler, that you can watch the subcarrier vector rotate one way then the other if you reference the vectorscope to the uplink signal while watching the downlink signal. There's a several Hertz +/- error that varies over the course of the day.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

57. Re: QSLROUTE ftp address?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 13:37:05 UTC
From: tom@systemtechnik.tu-ilmenau.de
Message-ID: <2g9721$7gg@prakinf2.PrakInf.TU-Ilmenau.DE>
Source record: 272607

In article <19931230190929CSMSCST@MVS.OAC.UCLA.EDU>, CSMSCST@MVS.OAC.UCLA.EDU (Chris Thomas) writes:
|> Could someone tell me the name or IP address of the German
|> site from which it is possible to FTP "QSLROUTE" updates.
|> Thanks.
|> -- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)
up to June 1993 the service is on ftp.tu-ilmenau.de path pub/msdos/ham/qslroutes
Since then this service is not supported by the editors.
Please read the following README file from this path.

---------- begin README ----------

This directory contains the supplements of "QSL Routes - World Annual of QSL Managers."
1993 ff.
It is edited by Theuberger Verlag, Box 73, D-10122 Berlin, Germany.

Remarks: (18.08.93)

This update services is not longer supported than to June 93 via ftp.
Owners of the Book get the updates by mail.

If you want to get a free of charge test of "QSL-ROUTES"
2nd edition 1992 + supplements 1992 (or 1993 edition if
92 is no longer available)
you can write a letter to:

Theuberger Verlag GmbH
P.O.Box 73
D-10122 Berlin
Germany

You should include 2 US$ or 3 IRC or 3 DM (stamps) at least
for surface mail and an address label.
---------- end README ----------

Remarks at the end:

I have checked the ftp-logs and watched that a lot of hams
downloaded that files. But never one emailed me...
I would provide this service for you in the future but...
...the editor told me that he doesnt want to support that
service by ftp up to the time I will tell him the email adresses
of a serious number of peoples (hams & netters) who are owner of a book
"QSL-ROUTES" and those hams express their interest in getting
the updates by email, maillist, ftp?....
So: if you are interested in this service email me or mail
to the editor for a free test.

--
Thomas Planke DL5ATP Planke@Systemtechnik.TU-Ilmenau.DE
Technical University of Ilmenau Phone: +49 3677/69-1465

58. Re: cw waivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 13:51:35 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan3.135135.16513@ke4zv.atl.ga.us>
Source record: 272623

Note: followups directed to policy.

In article <gPcJFc1w165w@info-gw.mese.com> aragorn@info-gw.mese.com (Chris Craig) writes:
>> Actually since W is not needed and it not any kind fo a reliable indicator of
>> technical or operating comptetance I say hurray. CW as a requirement should b
>> eliminated. It is an outmoded method of communication and is wrothwhile only
>> fun test of a particular skill. TI has no relavanve whatsoever to competance
>> any other phase of the hobby. I say that it is jsut taking up too much of the
>> bands. MUCH more space should be allocated to the efficient digital modes suc
>> pactor and more communication could be carried out. Even hf packet would be m
>> better if all were not forced to operate on a very narrow range of frequencie
>> Come out of the dark ages and into the light.
>>
>> gilbaronw0mn@delphi.com
>
>So, what are you suggesting?? That there be no test at all??? If so, just
>go to CB and use it. 11 meters is HF after all! I'm not about to tell you
>that allocating more space to efficent digital methods is a bad
>suggestion, actually that's the only constructive piece I saw in your
>message, but doing away with testing would destroy amateur radio once and
>for all.
> Chris Craig
> KD4HDE

That's not what I read into his statement at all. (Though it would be
nice if it were formated correctly and spell checked :-)) He's saying
we should eliminate the irrelevant Morse test. I won't go into whether
Morse is useful/useless here, my position is well known, but the *test*
is useless since Morse users must know Morse to use it, by definition.
So if access is granted to spectrum where Morse is permitted, the operator
is going to have to gain competence in Morse to use it. Whether there's a
government test or not is irrelevant since the relevant test is on the air
operation.

Simply put, those who don't know Morse will do no Morse until/unless
they learn Morse.

Obviously, the Morse test is not the *only* test required of an amateur.
So he's not advocating eliminating testing in general. (At least that's
my interpretation of what he's saying.) Now you may or may not agree with
me on the following, but I think the current written exams are totally
inadequate to serve their intended purpose. That purpose is to make sure
the applicant knows enough to avoid injury to himself or others, knows
enough to detect, and possibly correct, transmitter faults that could
cause interference to other services (opening the envelope and finding

the pink ticket isn't adequate for this purpose), and knows enough to operate within the other amateur regulations. That's the sole legitimate function of government testing. Since the Morse test doesn't fall under that category, it's not a legitimate interest of government.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

59. Re: "Renewal" batteries -- a note

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 14:19:38 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-030194091938@k4dii.ksc.nasa.gov>
Source record: 272608

In article <1993Dec25.211737.4849@gsm001.mendelson.com>,
gsmlrn@gsm001.mendelson.com (Geoffrey S. Mendelson) wrote:
> As for the reverse charging, try placing a diode in series with the 4.5 volt
> pack.

Geoff-

The reverse-charging problem is caused by normal forward current, once one or more cells have reached zero voltage. Therefore, the series-diode method won't work. You must determine that the total battery voltage has dropped by the amount of one cell's voltage, and stop draining the battery when that occurs. (On the other hand, a parallel schotky diode might help?)

A problem with the idea of replacing NiCds with the new alkalines, is that it is necessary to recharge the alkalines relatively early, in order to realize the long life they are claimed to have. By not recharging until they reach zero volts, the number of times they can be recharged is reduced.

This is opposite of NiCds, which maintain a longer charge-life, when you don't recharge until they are nearly exhausted.

73, Fred, K4DII

60. Re: TOYOTAS AND MOBILE RIGS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 14:24:41 UTC
From: "kevin.jessup" <kevin.jessup@mixcom.mixcom.com>
Message-ID: <1994Jan3.142441.22655@mixcom.mixcom.com>
Source record: 272611

I wrote to Toyota Customer Service in California and they sent me
a "technical application note" (that's what the local dealer called it)
that was specifically written for radio amateurs.

It was a tiny one-page document with very little of anything technical.
Mostly a politically-correct disclaimer stating that Toyota does not want
to ignore the importance of the amateur radio community. They then go on
to say (in effect): tough shit boys, your on your own! They state that
all warranties are basically void if you use anything with more power than
a CB and that if you DO choose to install an amateur radio, it should
be done by an authorized Toyota service facility!! Like they know any-
thing about it! There were no comments as to the warranties then being
good if Toyota installed the rig. Big surprise. ;-)

They did give some obvious (to radio amateurs) advice...

Keep all feed lines at least 10 inches away from any automotive wiring.

If you must cross over automotive wiring, do so at a right-angle.

Mount the antenna at the rear of the car or on the roof.

Run the radios 12VDC supply cable directly to the battery terminals.
(Fuse the cable at the battery terminals.) Do NOT use any of the
existing electrical system.

I own a 1991 Toyota Tercel. The Engine Control Unit (ECU) is directly
behind the AM/FM Radio/Cassette behind the center console. So much
for mounting the radio up front! :-(The best bet is to get a radio
with a remote head and mount the main unit in the trunk and the
antenna using a mag-mount or trunk-lip mount.

Note: I got the same impression regarding Honda and Ford/Mazda when I
enquired with the service manager. They did not know of any available
"application notes".

Regardless of the make of the car, I think if you keep all the
electronics in the rear of the car, you should be OK.

One final anecdote..

A fellow radio amateur has a late-model Ford pick-up. He has a Yaesu
FT5200 (with the remote head) mounted in the rear of the truck (he
has a cap on the back). The antenna is on the roof above the cab.
He says that at high-way speeds, he notices that the truck looses
speed and runs very rough when he transmits at 50 Watts!

--
/`-_ kevin.jessup@mixcom.com |
{ }/ Marquette Electronics, Inc | I suport publick skools! ;-)
\ / Milwaukee, Wisconsin, USA |
|__*| N9SQB, ARRL, Amateur Radio |

61. MFJ vertical

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 15:00:57 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2g9bv9$gk6@vixen.cso.uiuc.edu>
Source record: 272609

iDoes anybody have experiences with MFJ 10 ft 2m-40m vertical? In particular, what is its bandwith on 40m and how efficient is it? I know it can't be too efficient but vertical design and lack of radials can somewhat compensate for reduced size. I just don't know how much.
Ignacy Misztal, NO9E

62. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 15:16:47 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2g9csv$7ss@news.acns.nwu.edu>
Source record: 272610
Cross-posted to: rec.video,rec.radio.amateur.misc

In a discussion of use of color burst signal as a timebase, Jamie Hanrahan <jeh@cmkrnl.com> wrote:

>
>Also, at that time it was stated that the networks used rubidium-clock
>frequency standards, which are secondary standards: They're awfully good but
>they still have to be calibrated against something better. NIST (the folks who
>run WWV) uses cesium-beam clocks, which are primary standards, needing no
>calibration for frequency. Have the networks since upgraded to cesium-beam
>clocks? And, given that the local stations probably haven't, does it matter
>anyway? Even if they have, they're still "only" as good as NIST's clocks, so
>why should one over-the-air signal be better than another? (propagation
>changes on shortwave, maybe?)

From what I remember, a Rubidium clock has better short term accuracy than a Cesium clock. The Cesium one is more accurate in the long term. So a Rubidium clock that is compared with a cesium one, say using phase comparison with wwvb, is as accurate as these clocks get - about 1 part in 10^12.

Rajiv
aa9ch
r-dewan@nwu.edu

63. re: atomic clocks in TV networks

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 15:55:41 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseCJ29Kt.132@netcom.com>
Source record: 272615

From what I have heard from people in the broadcast TV industry, they no longer use the rubidium(sp) or cisium(sp) atomic clocks for a master system clock. Nowdays, your local TV station passes the network feed thru a frame synchronizer (a box that stores and delays the incomming signal a fraction of a frame, that fraction determined by the phase relationship of the TV station's house sync and the network sync. So, nowdays, the frequency of the local TV station's colorburst is just a crystal in a (probably) Tektronix 1910 generator.

Better use WWV.

64. Re: Strange Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 15:58:14 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2g9famINNsnk@network.ucsd.edu>
Source record: 272612
Cross-posted to: sci.electronics,rec.radio.amateur.misc

It's a cell-phone antenna. Why does it look like that? Well, it doesn't get snagged in the car wash brush quite so easily, and it doesn't get ripped off by the garage door quite so easily, and it looks space age and is less efficient.
- Brian

65. Re: Strange Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 16:11:52 UTC
From: jmaynard@nyx10.cs.du.edu
Message-ID: <1994Jan3.161152.3413@mnemosyne.cs.du.edu>
Source record: 272617
Cross-posted to: sci.electronics,rec.radio.amateur.misc

In article <2g9famINNsnk@network.ucsd.edu>,
Brian Kantor <brian@nothing.ucsd.edu> wrote:
>It's a cell-phone antenna. Why does it look like that? Well, it
>doesn't get snagged in the car wash brush quite so easily, and it
>doesn't get ripped off by the garage door quite so easily, and it
>looks space age and is less efficient.

We're using those on our ambulances for both the cellphone and the 800 MHz
trunk radio; in addition to the pluses Brian mentions, it doesn't get caught
in overhanging tree branches and pulled off of the roof.
--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"A good flame is fuel to warm the soul." -- Karl Denninger

66. Re: Ramsey kits not too good?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 16:13:37 UTC
From: lapin@casbah.acns.nwu.edu
Message-ID: <2g9g7h$92t@news.acns.nwu.edu>
Source record: 272613

In article <757263689snx@skyld.tele.com>,
Jeffrey D. Angus <jangus@skyld.tele.com> wrote:
> Gee, it never fails to amaze me.

Attitudes like your's never fail to amaze me, Jeff.
If we continue to accept garbage, you can be sure that garbage is what we will get, at any price.

> "Why doesn't this kit I paid $15.00 for not perform like the
> $400.00 thing I should have bought instead?"

Check the prices for Ramsey kits. Not too many out there for $15. In fact, many of the kits cost little less than an assembled radio.

> Ask a repair shop to show you the innards of a hand held and
> then see if there is only 2 ics and a dozen parts in there.
>
> Look inside a KAM or PK-232 and count the parts.
>
> Even the commercially assembled BAYCOM modems by TigerTronics
> at least have quality parts, pc boards and were soldered properly.

Have you ever used a TigerTronics packet modem? Mine did not work with my computer's original COM port because it was driving an RS232 port with TTL levels. It was also terribly sensitive to rfi from the computer and eventually glitched and burned out the RS232 driver chip on my COM port. The packet modem that I homebrewed far outperforms my old TigerTronics.

> Ramsey Kits (and others) are for the entertainment value of playing
> with something on the bench. They are NOT a substitue/alternative to
> paying for a quality item that works properly.

This is an attitude that will turn hams into appliance operators PDQ. Building kits is not supposed to be just entertainment but should also teach some electronics. There is no reason why they should work poorly.

> Yeah, I can hear the old farts now, "What about HeathKit?" I bought them
> and built them myself. They worked. Some of them worked pretty good. None
> of them was a direct replacement for a expensive commercial product.

First of all, Jeff, you are older than I am. Yet, most of the contacts that I used for DXCC were with Heathkits. Sure, they were no Collins S-line but they outperformed other ham gear that cost twice as much. The Heathkits, in general, were fine radios and had the added benefit of teaching some electronics, too.

> If you're buying a Ramsey kit to play with, fine. Beats hacking around
> inside an expensive radio. If you're buying a kit to substitute for an
> expensive radio, you get what you pay for.

No one is asking for kits like Ramsey's to be the top of the line.
However, it is not too much to expect that the design be viable and the
proper parts be there. Stories that I have heard include basic design
flaws, missing parts, and lousy customer service.

One of the raisons d'etre of ham radio is to help train technically
competent people. Attitudes like this and kits like Ramsey's, that
discourage potential kit builders, are contrary to this. How can you argue
that ham radio should exist as you keep chipping away at its basic
premises?

> Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
>Internet: jangus@skyld.tele.com | universe run by a single omni-
> US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
> Phone: 1 (310) 324-6080 | badly run corporation."

Greg Lapin KD9AZ
glapin@nwu.edu

67. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 16:17:02 UTC
From: lreeves@crl.com
Message-ID: <2g9gdu$7ed@crl2.crl.com>
Source record: 272614
Cross-posted to: rec.video,rec.radio.amateur.misc

Jamie Hanrahan, Kernel Mode Systems (jeh@cmkrnl.com) wrote:
: In article <2g7p56$9s9@crl2.crl.com>, lreeves@crl.com (Les Reeves) writes:
: > The colorburst frequency is not only cast in stone-it is extremely accurate.
: > It is more accurate as a frequency reference than WWV. This is provided
: > that you are tuned to a network-supplied program.

: Is this still true?

: I have no direct knowledge, but... many years ago (mid-70's if I remember
: right) one of the hobby electronics mags (I think it was Radio-Electronics) had
: an article for a frequency standard derived from a color tv. Soon afterward a
: letter appeared in the letter column (where else :-), written by an engineer at
: one of the better-equipped stations in L.A. He stated that even network-
: supplied programs taken from a live feed usually go through a time-base
: corrector at the local station, and that this breaks the "chain of
: traceability" back to the network's precision frequency standard.

: (of course, anything that the local taped from a satellite feed for broadcast
: later is completely divorced from any standards at the network.)

: Also, at that time it was stated that the networks used rubidium-clock
: frequency standards, which are secondary standards: They're awfully good but
: they still have to be calibrated against something better. NIST (the folks who
: run WWV) uses cesium-beam clocks, which are primary standards, needing no
: calibration for frequency. Have the networks since upgraded to cesium-beam
: clocks? And, given that the local stations probably haven't, does it matter
: anyway? Even if they have, they're still "only" as good as NIST's clocks, so
: why should one over-the-air signal be better than another? (propagation
: changes on shortwave, maybe?)

I received E-Mail from larson@net.com (reply bounced) stating pretty much
the same thing you stated above. He mentioned things like TBC/frame synch.
processors in the loop *and* the effect of doppler from satellite.
If this is the case, I doubt it matters whether we are talking rubidium or
cesium-beam; the color burst on a network program would be traceable to
an inexpensive quartz reference at the local TV station.

The article in Radio Electronics appeared 3-5 years ago, if I remember
correctly.

68. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 16:33:06 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2g9hc2$51n@hpscit.sc.hp.com>
Source record: 272618
Cross-posted to: rec.video,rec.radio.amateur.misc

Jamie Hanrahan, Kernel Mode Systems, San Diego CA writes:

> rticle for a frequency standard derived from a color tv. Soon afterward a
> letter appeared in the letter column, written by an engineer at
> one of the better-equipped stations in L.A. He stated that even network-
> supplied programs taken from a live feed usually go through a time-base
> corrector at the local station, and that this breaks the "chain of
> traceability" back to the network's precision frequency standard.
>

Correct. TV stations are not locked to atomic time.

Rajiv AA9CH writes:

> From what I remember, a Rubidium clock has better short term accuracy than
> a Cesium clock. The Cesium one is more accurate in the long term. So a
> Rubidium clock that is compared with a cesium one, say using phase
> comparison with wwvb, is as accurate as these clocks get - about 1
> part in 10^12.

A really *good* Rubidium clock like the HP 5065 *does* have better short term stability (1 to 100 seconds averaging time) than even the best Cesium standard (the HP5071). However, it will drift about a part in 1E11 per month. On the other hand, low cost "mini" Rubidium standards do not have such great short term stability and they may drift a part in 1E10 or more per month. The accuracy of a Rubidium depends on when was the last time it was calibrated against a Cesium standard or GPS.

People who want even better short term stability (like JPL) use a Hydrogen maser locked to a Cesium. H Masers have 100's of times better short term stability than the best Rubidium, but they have long term drift due to the teflon container aging.

By the way, there is no requirement for the colorburst frequency to have extremely high absolute accuracy. It is merely necessary for it to have exactly the right *ratio* to the sound carrier to avoid interference. The fact that they couldn't move the frequency of the sound carrier (because of the backward compatibility requirement) is why the field rate had to be lowered by .1%. (The color burst also must have a certain ratio to the field rate, as was previously stated).

The network rubidium clocks never had anything to do with this problem. They were used to allow switching between feeds without a *phase* jump. They could have run the whole network 1PPM high, for example, without a problem, as long as the whole network was the same.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

69. Re: Strange Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 17:50:27 UTC
From: marcus@guitar.demon.co.uk
Message-ID: <757619427snz@guitar.demon.co.uk>
Source record: 272620
Cross-posted to: sci.electronics,rec.radio.amateur.misc

In article <2g83sh$8p2@agate.berkeley.edu>
ep208@garnet.berkeley.edu "Charles Woodson" writes:

> A few minutes ago I observed a Mercedes with what appeared to me to
> be a strange antenna on it. The antenna was just above the rear
> window, in a location where celular phone antennas are often found.
> The antenna looked like a loop about 3 cm in diameter, and there was
> a second loop the same size at 90 degrees to the first one.

Yes, it definitely is a cellular aerial. I have found them in the Maplin
Electronics catalogue (UK). Height 40mm, freq range 800-1000MHz, so it is
a broadband quarter wave antenna.

Also, according to this catalogue, the longer aerials (9-10") with the funny
coil at the bottom provide an extra 4dB gain over the quarter wave ones.

--
|---|
| Marcus Bainbridge | If I had a dollar every time I changed my .sig, |
marcus@guitar.demon.co.uk	I wouldn't have to pay the commission charge...

70. Bad Ham Company

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 18:05:53 UTC
From: ag821@yfn.ysu.edu
Message-ID: <2g9mq1$jdj@news.ysu.edu>
Source record: 272619

Boy am I upset.. had my first bad experience with a ham company.

I purchased the Cmos superkeyer II from R&R associates. Had it working and then put it away. took it out about 3 weeks later for a contest. The keyer went crazy. I checked the circuit.. nothing wrong.. finally got the chip out of my Idiom Press version and stuck it in the circuit..worked fine.. seemed it was definetly the chip.

Wrote a long letter and sent the chip back to R&R. Dick had chip for a long time. .got it back today.. he told me to send it back to Bud Southard.. no address or anything.. told me to check for a bad soldering joint.. also gave me the address of Innovative Electronics and told me to deal with them .. because that is where he gets the chips from..

I bought the kit from R&R.. think they should have done something.

Anyone have a phone # for R&R or know who Bud Southard is.

I think this Dick, is definelty a real .....

Jeff, AC4HF
--
Jeff M. Gold, AC4HF
Manager, Academic Computing Support
Tennessee Technological University

71. QST, JAN.94 P.9 "IT SEEMS TO US ..." K1ZZ COLUMN

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 18:39:09 UTC
From: wr1r@anomaly.sbs.com
Message-ID: <2g9ood$qgj@paperboy.ids.net>
Source record: 272621
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

From the latest issue of QST:

PART ONE (1):
INSTANT LICENSING
Every radio amateur has had to endure a period of anxious , watchful waiting aft
er taking an examination .
ter taking an examination. just as the watched pot never boils, the watched
mailbox never disgorges the desired news from gettysburg. when WILL that
license finally arrive? for a new enthusiast it can never be soon enough.

Last summer, licensing delays got pretty bad. for awhile it was taking three
months or more from the time an exam was passed untill the license hit the
mailbox [although at this writing, the turnaround time is down to about six
weeks]. No one thinks such long delays are acceptable.

Heres how the process works. Typically, local teams of the volunteer
examiners return the exam results to the volunteer examiner coordinator [vec]
in just a couple of days. The vec's are obligated to turn the sessions
around in 10 days, and usually take a lot less time than that. The ARRL/VEC
then uses overnight delivery to get the session results to the FCC's processors
in gettysburg. There ,work tends to back up because of limited staff and an
obsolete computer system.

Delay begets delay. when the licenses dont cone after a resonable time,
applicants want to make sure their paperwork hasn't been lost, or held up
because they filled something out wrong. So, they get on the phone th the VEC
and the FCC. you can't blame them for wanting to know, but this pulls people
away from processing and adds even further to the backlog.
There has to be a better way.

In November , the fcc proposed what it apparently thought was a better way.
The scheme ,as outlined in a Notice of Proposed Rule Making in PR Docket93-267,
is to grant temporary operating authority for up to 120 days t o anyone who
has earned a Certificate of Successful Completion of Examination [CSCE] by
passing the examination elements required for a license. Those with a history
of non compliance with FCC Amateur Radio Service rules would be ineligible,
and the temporary authorary could be modified or cancelled at any time.

The timing of the Commission's proposal was a bit curious, because the problem
already was being addressed in another way . In October 1992, in Public Law
102-538, Congress authorized the FCC to implement electronic filing of
applications by allowing them to be signed "in any manner or form including
by electronic means, as the Commission may prscribe by regulation." In April
1993, the Fcc adopted the necessary amendments to its Private Radio Service
rules; at the time it noted that the amateur rules, Part97, required no

amendment because there are no specific provisions regarding signatures in Part 97.

Now,more than a year after Congress acted, new eletronic filing procedures still remaim to be implemented . At the time the Commission said, "Electronic filing will expedite the licensing process by eliminating the need for manual entry of application data into the Commission's data base .
PLEASE LOOK FOR THE SECOND PART OF THIS MESSAGE . TNXS
SUBJECT: QST, JAN.94, P9 "IT SEEMS TO US...." K1ZZ COLUMN.

PART TWO (2).

INSTANT LICENSING:

THE ARRL AND OTHER VECs HAVE EMPHASIZED A WILLINGNESS TO SUBMIT APPLICATIONS ELECTRONICALLY, THUS ELIMINATING THE DELAYS AT GETTYSBURG THAT RESULT FROM EVERYTHING HAVING TO WAIT TO BE ENTERED MANUALLY. OUR BUDGET PLANNING INCLUDES ADEQUATE PROVISIONS FOR IMPLEMENTING ELECTRONIC FILING AS SOON AS THE FCC GIVES US THE GO-AHEAD. COUPLED WITH A NEW COMPUTER SYSTEM THE COMMISSION IS ALREADY WORKING ON, THIS SHOULD RESULT IN TYPICAL TURN-AROUND TIMES DROPPING TO JUST A COUPLE OF WEEKS - A DRAMATIC IMPROVEMENT OVER PAST AND PRESENT PERFORMANCE.

JUDGING FROM THE COMMENTS WE'RE HEARING, THE AMATEUR COMMUNITY THINKS THIS WOULD BE SUFFICIENT AND IS UNPERSUADED THAT THE ADDITIONAL ADVANTAGES TO BE GAINED FROM "INSTANT LICENSING" OUTWEIGH THE RISKS.

MOSTLY, THE CONCERNS ARE WITH THE PROPOSED SYSTEM FOR ON-THE-AIR IDENTIFICATION. THE CALL SIGNS BEING PROPOSED WOULD NOT IN ALL CASES CONFORM TO THE ITU REGULATIONS; AN EVEN BIGGER PROBLEM, HOWEVER, IS THAT THEY WOULD BE SELF-ASSIGNED, WITH NO MEANS FOR LOCAL AMATEURS TO CHECK ON THE VALIDITY OF A SUSPICIOUS OPERATOR. IN ITS NOTICE, THE COMMISSION DOESN'T EVEN DISCUSS THE NEED FOR SAFEGUARDS AGAINST SUCH ABUSE. ALSO PUZZLING IS THAT THE COMMISSION DETERMINED JUST A FEW YEARS AGO THAT IT LACKED THE AUTHORITY TO IMPLEMENT A SIMILAR TEMPORARY-LICENSING PROPOSAL; THE BASIS FOR ITS NOW HAVING COME TO THE OPPOSITE CONCLUSION IS UNKNOWN, EVEN THOUGH THE LEAGUE RAISED THE POINT AT AN EARLIER STAGE IN THE PROCEEDING.

IF YOU ARE AMONG THE MANY WHO HAVE MISGIVINGS ABOUT THE PROPOSAL, REST ASSURED THAT THE ARRL BOARD SHARES YOUR CONCERNS. THE LEAGUE IS ON RECORD AS FAVORING AN EARLY IMPLEMENTATION OF ELECTRONIC FILING AS A BETTER WAY OF GETTING NEW AMATEURS ON THE AIR FASTER. WHETHER YOU AGREE OR NOT, FEEL FREE TO SHARE YOUR THOUGHTS BY WRITING YOUR ELECTED ARRL DIRECTOR; THEY HOLD THE OFFICE BECAUSE THEY'RE INTERESTED IN YOUR OPINION. YOU MAY ALSO WANT TO LET THE FCC KNOW WHAT YOU THINK. FRANKLY, BECAUSE THE COMMISSION WENT AHEAD AND PROPOSED SOMETHING WE'D ALREADY TOLD THEM WAS FLAWED, WE WOULDN'T MIND A BIT (AND IT MIGHT BE VERY USEFUL) IF YOU WOULD JUST TELL THEM YOU SUPPORT THE ARRL POSITION ON PR DOCKET 93-267, AND THAT THEY SHOULD GET MOVING ON ELECTRONIC FILING INSTEAD.

SEND AN ORIGINAL AND FOUR COPIES OF YOUR COMMENTS TO THE SECRETARY, FCC, WASHINGTON,DC, 20554. AT THE TOP PUT "IN THE MATTER OF PR DOCKET 93-267."

MAKE SURE YOUR COMMENTS ARRIVE BY JANUARY 10,1994. WE AND YOUR DIRECTOR, WOULD BE PLEASED IF YOU'D FAVOR US WITH A COPY.- DAVID SUMMER, K1ZZ
========== END==========END==========
PARTS ONE (1) AND TWO (2) RETYPED FROM JANUARY 1994 QST. PAGE 9.
"IT SEEMS TO US..." COLUMN REGARDING INSTANT LICENSING.
==========
DECEMBER 27, 1993

MR. SUMNER;

I AM WRITING TO YOU IN REGARDS TO YOUR MOST RECENT EDITORIAL IN QST (JAN.94) ON "INSTANT LICENSING". IN THE FIRST PARAGRAPH YOU EXPLAINED THE JORRORS OF HAVING TO "ENDURE A PERIOD OF ANXIOUS, WATCHFUL WAITING AFTER TAKING THE EXAMINATION" AND HOW "FOR THE NEW ENTHUSIAST, IT CAN NEVER BE SOON ENOUGH."

YES, I CAN ENPATHIZE WITH THE NEW ENTHUSIAST, BUT WHY DOES YOUR EDITORIAL START IN A MOOD OF DOOM AND GLOOM ? WHY DO YOU FAIL TO POINT OUT THE POSTIVE ASPECTS OF HAVING TO WAIT REGARDLESS OF THE ACTUAL TIME, BE IT 12 WEEKS OR 6 WEEKS ? AGAIN, IF YOUR REFERING TO THE NEW ENTHUSIAST BE IT THE NOVICE OR NO CODE TECH. THIS WOULD BE THE TIME WELL SPENT WITH HIS/HER ELMER, PREHAPS CONSTRUCTING YOUR HF STATION OR THE NEW NO CODER LISTENING AROUND ON THE LOCAL REPEATERS TO SEE "HOW IT'S DONE IN ROME". THIS TIME IS VERY CRITICAL IN MANY WAYS TO BETTER MANNERS AND OPERATING PRACTICES AND PROCEDURES, NOT TO MENTION TECHNOLOGICAL INVESTIGATIONS AND THE LIKE.

WHY DOES THE LEAGUE TAKE A DRAMATIC REVERSAL ON IT'S OPINION RELATED TO LICENSING WAIT TIMES, WHEN IN NOVEMBER 1988 ISSUE OF QST, ON PAGE 43 IN THE ARTICLE "NOVICE NOTES: BEFORE YOUR TICKET ARRIVES", THE OPINION STATED WAS "THE TIME BETWEEN THE NOVICE TEST AND THE ARRIVAL OF YOUR LICENSE CAN BE ONE OF THE MOST VALUABLE TIMES IN YOUR HAM CAREER, IF YOU USE IT WISELY." ? THE ARTICLE GOES ON TO SAY THE HAM IN-WAITING SHOULD DIRECT HIS OR HER EFFORTS TOWARDS CONTINUING THEIR LEARNING PROCESS, CONSTRUCTING THEIR SHACK, AND DECIDING ON WHAT TYPE OF ANTENNAS TO ERECT.

I CAN ALSO SYMPATHIZE WITH THE "LICENSING DELAYS TAKING 3 MONTHS" AS YOU STATED IN THE SECOND PARAGRAPH. ALL I CAN SAY IS THAT WE ALL HAD TO AT ONE TIME OR ANOTHER IN OUR LIVES 'WAIT FOR GOOD THINGS TO COME'. COULD YOU CONCEDE POSSIBLY THAT THE LICENSE ITSELF MAY CARRY MORE VALIDITY AFTER THE INITIAL PERIOD OF WAITING, STATION CONSTRUCTION, AND TRANSMISSION MONORTING?

I KNOW THAT MYSELF AND MANY OTHER HAMS HAD TOP WAIT OFTEN MORE THAN THE AVERAGE 6 WEEK PERIOD. ARE WE ANY WORST OFF TODAY ? I THINK NOT.

PARAGRAPHS 3 AND 4 I COULD ALMOST AGREE WITH, EXCEPT FOR A FEW MINOR POINTS.

YOU STATE THAT "YOU CAN'T BLAME THEM (THE NEW ENTHUSIAST) FOR WANTING TO KNOW" IN REGARDS TO CALLING THE VEC/FCC INQUIRING AS TO THE STATUS OF THEIR LICENSE, AND HOW THIS " PULLS PEOPLE AWAY FROM PROCESSING AND ADDS FURTHER TO THE BACK-LOG WHERE THE WORK TENDS TO BACK UP BECAUSE OF LIMITED STAFF AND AN OBSOLETE COMPUTER SYSTEM.

WHAT IS SO PREPLEXING TO ME IS THAT THERE ARE MANY WAYS TO REMEDY THIS PROBLEM, SUCH AS CUTTING THE VEC FILING DAYS FROM 10 TO 5, AND PREHAPS HAVE THE VEC MAIL A CARD TO LICENSE APPLICANT AT THE SAME TIME HIS/HER PAPER WORK IS MAILED TO THE FCC, THUS THE APPLICANT "KNOWS" THAT HIS/HER PAPER WORK HASN'T BEEN "LOST", AND IS JUST FLOUNDERING THRU THE NORMAL US GOVERMENT BUREAUCRATIC PROCESSING ENGINE.

I HAVE ALWAYS FOUND THE PROCESSING DELAYS TO BE WITH THE INEFFICIENT VEC SYSTEM, RATHER THAN THE FCC ITSELF. FOR INSTANCE, IN MAY 1993, A FRIENDS WIFE TOOK HER NOVICE EXAM ON MAY 21ST. AND HER PAPER WORK WAS MAILED TO THE FCC IN GETTYSBURG ON MAY 27TH. ON JUNE 23RD. SHE HAD HER LICENSE, PROCESSED AND DATED BY THE FCC IN MID-JUNE. A "TOTAL" PROCESSING TIME OF LESS THAN 4 WEEKS, FROM MAILBOX TO MAILBOX. SO, ONE YOU SPEAK OF 6 OR 12 WEEK DELAYS, OBVIOUSLY THEY ARE CAUSED BY AN INEFFICENT VEC SYSTEM. PREHAPS THE LEAGUE SHOULD ATTEMPT TO REVAMP THE VEC SYSTEM SO THAT THE TURN-AROUND TIME IS BETTER.

EVEN IF THE BACK LOG IS AT THE FCC, ISN'T THE PROBLEM BETTER ADDRESED BY HIRING AN ADDITIONAL STAFFER ? AND, AS YOU YOURSELF KNOW, PUT THE NEW COMPUTER SYSTEM THE FCC IS WORKING ON, ON LINE. IN FACT, IF THIS NEW COMPUTER SYSTEM IS GOING TO BE UP AND RUNNING THAN AS YOU STATE "THIS SHOULD RESULT IN TYPICAL TURN AROUND TIMES DROPPING TO JUST A COUPLE OF WEEKS-A DRAMATIC IMPROVMENT OVER PAST AND PRESENT PREFORMANCE" THEN I CAN'T EVEN UNDERSTAND WHY THE BIG CONCERN OVER HOW LONG IT TAKES FOR A TICKET TO ARRIVE.

I AM FAR MORE DISTURBED AND ALARMED AT THE NEXT FEW PARAGARAPHS WHERE YOU ACKNOWLEDGE THAT YOU ARE AWARE OF THE MAJORITY IN "THE HAM COMMUNITY THINKS THIS WOULD BE SUFFICI-ENT AND IS UNDERSTANDING THAT THE ADDITIONAL ADVANTAGES TO BE GAINED FROM INSTANT LICENSING OUTWEIGHS THE RISKS." HOWEVER, IN RETROSPECT, I CAN RECALL WHEN THE LEAGUE KNEW THAT THE MAJORITY OF MEMBERS DID NOT WANT THE NO CODE LICENSE PLAN (25 TO 1, ACCORDING TO "HAPPENINMGS: NO CODE REPLY COMMENTS , ARRL", QST, OCTOBER 1983, PG.58), AND THE LEAUGE TOOK A POSTION OF "NO CODE! NO WAY!"(QST, SEPTEMBER 1983, PG.61). NOW, FOR THE "BETTERMENT" OF THE HOBBY, WE HAVE A NO CODE LICENSE, SUPPORTED BY THE ARRL, IN DRASTIC CONTRAST TO WHAT IT'S OWN MEMBERS CLEARLY WANTED.

TOWARD THE END OF THE ARTICLE YOU STATED THAT THE FCC "IN IT'S NOTICE DOESN'T EVEN DISCUSS THE NEED FOR SAFEGUARDS AGAINST ABUSE". I WOULD SAY IF THE LEAUGE IS WELL AWARE OF THE "LACK OF SAFE GUARDS AGAINST ABUSE" AND MORE TO THE POINT, THE FACT THAT THE FCC "DOES'NT EVEN DISCUSS THE ISSUE OF SUCH SAFE GUARDS" THAT THIS IS THE PLACE TO START INSTEAD OF ASKING LEAUGE MEMBERS TO SUPPORT PR DOCKET 93-267(ASKING THE FCC"TO GET MOVING ON ELECTRONIC FILING"). LET'S NOT PUT THE CART (ELECTRONIC FILING) BEFORE THE HORSE (ENFORCEMENT) AND STOP WORRING ABOUT HOW FAST SOME ONE CAN BE GRADIFIED WITH AN INSTANT OR "QUICKY" LICENSE, BUT RATHER WITH THE PRESERVATION OF THE REPUTATION OF THE AMATEUR SERVICE.

LAST BUT NOT LEAST I WOULD LIKE A LOT MORE ASSURANCE ON THIS ISSUE THAN "REST ASSURED THAT THE ARRL BOARD SHARES YOUR CONCERNS". GIVEN THE TRACK RECORD AND 180 DEGREES TURNAROUND ON THE ISSUE OF THE NO CODE LICENSE FROM YOUR OWN EDITORIAL "NO TIME FOR NO CODE" (QST,NOVEMBER 1982,PG.9) TO "CODLESS LICENSE...THE TIME HAS COME" (QST,SEPTEMBER 1989,PG9) THAT YOU ALSO PENNED, I THINK A MORE DEFINITIVE STATMENT FROM THE LEAGUE SHOULD BE FORTH COMING.

DON'T MISUNDERSTAND ME, I AM GLAD THE LEAGUE IS IN FAVOR OF ELECTRONIC FILING. THAT'S FINE, BUT THE LEAGUE NEEDS TO UNEQUIVOCALLY STATE IN PRINT THAT IT IS ****NOT**** IN FAVOR OF ANY INSTANT LICENSING PLAN. WE HAVE WITNESSED WHAT THE NO CODE HAS DONE FOR THE HOBBY AS WELL AS TO THE NOVICE AND ELMER PART OF THE LICENSING STRUCTURE. LET'S NOT OPEN A PANDORA'S BOX OF PROBLEMS WITH INSTANT LICENSING.

SINCERELY,
FRANK ALMEIDA III/ WR1R

P.S.: BY THE WAY I FIND IT IRONIC THAT YOUR ARTICLE SPEAKS ABOUT INSTANT LICENSING AND ON PG.52 OF JANUARY 94 QST. IN THE ARTICLE "WHERE ARE THE NOVICES" I QUOTE "THE JULY 1993 EDITORIAL ARRL EXECUTIVE VICE PRESIDENT DAVE SUMNER, K1ZZ, OPENED A CAN OF WORMS BY PENNING "WHERE ARE THE NOVICES?"

I CAN TELL YOU WHERE THEY WENT.......THEY FOLLOWED THEIR ELMER.......AND GOT ON THE........NO CODE EXPRESS....73'S

72. Re: MFJ vertical

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 18:43:50 UTC
From: Jim_Sollows@mindlink.bc.ca
Message-ID: <35668@mindlink.bc.ca>
Source record: 272622

>Does anybody have experiences with MFJ 10 ft 2m-40m >vertical? In
>particular, what is its bandwith on 40m and how efficient is it? I know
>it can't be too efficient but vertical design and lack of radials can
>somewhat compensate for reduced size. I just don't know how much.
>Ignacy Misztal, NO9E

I purchased the MFJ vertical several months ago. The bandwidth on 40M
is fairly narrow as one would immagine so a tuner will help. Without the
tuner you will get about 40KHz. The antenna performance was disappointing.
I was able to do an A/B comparision with a dipole and they are comparable
except that the MFJ (being a vertical) has alot more noise. I encountered
another problem with the MFJ in that the SWR on 20M goes through the roof
whenever it rains. I called MFJ about this and they said they are aware of
the problem and have since sent me some little plastic end caps for the
loading coils...whether this will solve the problem or not...I don't know.
If I were you I would suggest you may want to look at the Cushcraft R5 or
R7 (for 40M). I havn't tried these but they should be considered. If you
really want the MFJ...I have one for sale :)

Jim VE7JLS

--
****
Jim Sollows Internet: JIM_SOLLOWS@MINDLINK.BC.CA
Agape Data Solutions Packet: VE7JLS@VE7KIT.#VANC.BC.CAN
****

73. ASAPS & IONCAP

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 18:54:35 UTC
From: rbloom@netcom.com
Message-ID: <rbloomCJ2Hv0.E69@netcom.com>
Source record: 272625

any opinions on these HF propagation codes?
one is austrailian and the other american -- government-lab-developed.

are they worth $300.00? and if so: to whom?

rb.
WA6MQC

74. Re: Disability Waivers for CW scam

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 19:48:50 UTC
From: alanb@sr.hp.com
Message-ID: <CJ2KDE.Cvu@srgenprp.sr.hp.com>
Source record: 272626

William J Turner (wjturner@iastate.edu) wrote:

: That's all they need? A "severe handicap"?
: Anybody seen anyone with a CW waiver because they are paralyzed from the waist
: down? Maybe I should be the first and use it for my 20wpm...
: <HI> <HI>

Darn, all that studying CW for nothing. (Does paralyzed from the neck up
count?)

AL N1AL :=)

75. Where to Start?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-03 20:11:11 UTC
From: tony.blake@stpaul.ncr.com
Message-ID: <tony.blake.17.2D287BDF@stpaul.ncr.com>
Source record: 272627

Hi Gang,

I hope I'm posting in the right area. I'm currently waiting for the FCC to issue my license. I'm using this waiting period to decide on my first rig. When I started studying for my ticket, I thought I would start out on the HF bands. However, during the course of my studies, satellite communications sounded really appealing. And of course, there is the local 2m and 70 cm FM traffic as well.

I am looking for those satellite operators who would like to recommend radio/antenna combinations for working the satellites. I'm am currently leaning more towards the VHF bands for my first radio, mainly due to the sizes of the antennas. (Which is sort of ironic considering I decided to get my amateur license to DX on the HF bands). From what I can tell, you can't use a dual band FM transceiver to work most of the satellites because they require SSB and CW modes. Any recommendations concerning equipment necessary for sat work would be greatly appreciated.

I'm not sure i'll be running any packet radio. I work on data communications software all day, and I'd like my hobby to revolve around something else. I have two locations I'll be operating from, my home in a very urban setting, and our cabin in a very rural setting. My guess is I'll run most of my HF traffic at the cabin where I can put up a fairly good sized antenna farm and no one will care considering the remoteness of the property, and run the VHF traffic back home in the city. Sound reasonable?

I realize that amateur radio has a wide range of interests and opportunities. Right now I'm interrested in HF, 2m FM repeater, and satellite. Although I have a good sized budget, it looks as though I can't get into HF and satellite right away. Any opions as to which would be better to start out in would be greatly appreciated.

73's

Tony

==========

Tony Blake DoD#9045 NCR Corporation
tony.blake@ccmsmtp.stpaul.ncr.com Network Products Division
(612) 638-7259 voice 2700 Snelling Avenue North
(612) 638-8173 fax St Paul, MN 55113-1784

Disclaimer: The smelling pistakes are all my own.
==========

76. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-06 15:53:12 UTC
From: clifto@indep1.UUCP
Message-ID: <2606@indep1.UUCP>
Source record: 272481

In article <1994Jan5.125300.21517@mnemosyne.cs.du.edu> jmaynard@nyx10.cs.du.edu (Jay Maynard) writes:
>It's real simple: lat/lon/haat information is enough to walk up to the tower
>or building the repeater is on, and therefore enough to get the repeater
>stolen, or for someone to talk to the site owner and get the repeater kicked
>off of the site. Sites are very, very hard to get unless you're willing to pay

Giving lat/long without HAAT in degrees and minutes (without seconds) would enable travelers to use the information while not allowing thieves/vandals/disgruntled persons from causing trouble; degrees and minutes are just enough to locate something within an area somewhat over a square mile, useful for those with good intent and as useless as the current repeater directories for those with malicious intent. (A minute of latitude is about 6080 feet and change; slightly less, I think, for a minute of longitude.)
I don't know about you, but I would find it no easier to precisely locate a repeater by lat/long than by approximate town; a traveler would, however, find it easier to locate nearby repeaters.
You mention Texas; I pulled out the repeater directory and the atlas and looked for the first two repeaters in "North Texas", in Alto and Archer City. They're about 240 air miles apart. If I'd just passed out of range of the Texarkana repeater(s), I'm sure I couldn't hit either one from my car. If I had lat/long info, though, I could bypass them quickly and find a repeater I _could_ hit (or know there were no likely candidates) without an extensive map search. But I'd bet a vandal wouldn't find it difficult to locate the repeater in Archer City quickly, even without lat/long to help.
HAAT, on the other hand, provides clues that might be better left unpublished...

--
+---+
| Cliff Sharp | clifto@indep1.chi.il.us |
| WA9PDM | clifto@indep1.UUCP never works |
+---+

77. Re: Peltier Diodes - HELP!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-07 15:14:30 UTC
From: clifto@indep1.UUCP
Message-ID: <2608@indep1.UUCP>
Source record: 272482

In article <CJ7yEI.HGD@news.iastate.edu> S1.RSW@ISUMVS.IASTATE.EDU (R.S. Wallace) writes:
>honestly, my ulterior motive is in the construction of a
>cool-chamber in which to store my homebrew beers!! As a ham with a

Unfortunately, it's been enough years that I couldn't tell you where to
look for information.
There's a commercial unit for cars for this purpose; last I saw it it
was about $129.95. Last I investigated making my own, it would have
cost me about $300 for the Peltier devices alone.
Peltier junction devices are quite expensive and probably not a good
choice for this. Get a small refrigerator instead.

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+---+
| Cliff Sharp | clifto@indep1.chi.il.us |
| WA9PDM | clifto@indep1.UUCP never works |
+---+

78. Daily Summary of Solar Geophysical Activity for 06 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-07 17:41:13 UTC
From: oler@rho.uleth.ca
Message-ID: <9401071741.AA00194@rho.uleth.ca>
Source record: 272532
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

06 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 06 JANUARY, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 006, 01/06/94
10.7 FLUX=132.1 90-AVG=101 SSN=144 BKI=2233 3202 BAI=009
BGND-XRAY=B4.9 FLU1=2.9E+05 FLU10=1.2E+04 PKI=3333 3312 PAI=011
BOU-DEV=018,014,025,028,023,018,004,017 DEV-AVG=018 NT SWF=00:000
XRAY-MAX= C6.2 @ 0619UT XRAY-MIN= B3.1 @ 2034UT XRAY-AVG= B8.2
NEUTN-MAX= +001% @ 2355UT NEUTN-MIN= -003% @ 0040UT NEUTN-AVG= -0.2%
PCA-MAX= +0.1DB @ 2355UT PCA-MIN= -0.8DB @ 0005UT PCA-AVG= +0.0DB
BOUTF-MAX=55352NT @ 1434UT BOUTF-MIN=55328NT @ 1916UT BOUTF-AVG=55340NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+054,+000,+000
GOES6-MAX=P:+117NT@ 1802UT GOES6-MIN=N:-078NT@ 0620UT G6-AVG=+077,+025,-033
FLUXFCST=STD:130,125,120;SESC:130,125,120 BAI/PAI-FCST=010,015,010/015,022,012
KFCST=0003 5000 0003 5000 27DAY-AP=007,008 27DAY-KP=2223 3221 2232 2212
WARNINGS=*SWF;*MAJFLR
ALERTS=**SWEEP:II=2@0621-0629UTC;**SWEEP:II=2@0647-0710UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 05 JAN 94 was 63.7.
The Full Kp Indices for 05 JAN 94 are: 1o 1o 1+ 2- 2o 2- 1o 2o

SYNOPSIS OF ACTIVITY

Solar activity was low. Region 7646 (S08W39) generated
the majority of the days C-class flares, accounting for six.
The largest flare of the day was an optically uncorrelated C6
with an associated Type II radio sweep at 06/0619Z. A new
Region was assigned: Region 7650 (N04E41).

Solar activity forecast: solar activity is expected to be
low to moderate.

The geomagnetic field has been at quiet to unsettled
levels for the past 24 hours.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled due to numerous small flares.

Event probabilities 07 jan-09 jan

Class M 50/50/50
Class X 05/05/05
Proton 05/05/05
PCAF Yellow

Geomagnetic activity probabilities 07 jan-09 jan

A. Middle Latitudes
Active 20/20/20
Minor Storm 10/10/10
Major-Severe Storm 01/01/01

B. High Latitudes
Active 20/20/20
Minor Storm 10/10/10
Major-Severe Storm 01/01/01

HF propagation conditions were near-normal over all
regions. Minor signal degradation may be sporadically observed
on high-latitude circuits over the next several days, but
particularly on 08 January. Otherwise, near-normal conditions
should persist throughout the next 72 hours.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 06/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7645 N12W35 083 0140 FSI 18 023 BETA-GAMMA
7646 S09W38 086 0520 EKI 11 036 BETA-GAMMA
7647 S16W48 096 0030 ESO 12 003 BETA
7648 N06E29 019 0510 DKI 10 028 BETA
7650 N04E41 007 0020 BXO 05 004 BETA
7649 S12W27 075 PLAGE
REGIONS DUE TO RETURN 07 JANUARY TO 09 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 06 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0607 0619 0624 C6.2 170 35 II
0645 0654 0701 C1.4 II
0809 0809 0809 400

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 06 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV

06/0621 0629 RSP C6.2 17 2
06/0647 0710 RSP C1.4 16 2

INFERRED CORONAL HOLES: LOCATIONS VALID AT 06/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
55 S24E53 S40E47 S30E17 S20E30 022 ISO NEG 008 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
05 Jan: 0010 0024 0032 B8.3 SF 7645 N15W04
B0105 U0115 A0126 SF 7645 N16W04
0350 0402 0407 C1.4
0549 0553 0557 B7.0
0725 0725 0735 SF 7645 N14W05
0743 0743 0746 SF 7646 S09W15
0823 0828 0838 C2.8 SF 7645 N17W08
0858 0903 0909 C1.9 SF 7646 S11W21
1023 1026 1033 C1.5
1155 1158 1216 B9.4
1321 1329 1332 C1.8 SF 7648 N04E49
1359 1407 1420 C1.9 SF 7645 N16W11 38
1450 1453 1458 SF 7646 S09W27
B1505 U1512 A1515 SF 7645 N13W14
1524 1531 1534 C1.4
1541 1545 1548 C1.7 SN 7648 N03E47
1631 1634 1636 C1.8 SF 7646 S11W26
1645 1647 1651 SF 7646 S17W29
1656 1657 1702 SF 7648 N02E47
1702 1704 1711 SF 7645 N14W09
1718 1722 1724 C1.7 SF 7646 S11W24
1754 1801 1803 C2.8 1N 7646 S10W24
1819 1822 1824 C1.3 SF 7646 S06W26
1840 1845 1849 C1.5
1929 1933 1935 C1.1
1943 1946 1950 C2.4 SF 7646 S05W26
2339 2343 2346 B9.8

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7645: 2 0 0 7 0 0 0 0 007 (25.0)
Region 7646: 6 0 0 8 1 0 0 0 009 (32.1)
Region 7647: 0 1 0 0 1 0 0 0 001 (3.6)
Region 7648: 2 0 0 3 0 0 0 0 003 (10.7)
Uncorrellated: 5 0 0 0 0 0 0 0 008 (28.6)

Total Events: 028 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
05 Jan: 0010 0024 0032 B8.3 SF 7645 N15W04 III
0350 0402 0407 C1.4 III
0645 0704 0725 M1.0 1N 7647 S13W23 II,III,V
0725 0725 0735 SF 7645 N14W05 III,V
0743 0743 0746 SF 7646 S09W15 III
0823 0828 0838 C2.8 SF 7645 N17W08 III
1155 1158 1216 B9.4 III
1359 1407 1420 C1.9 SF 7645 N16W11 III,V
B1505 U1512 A1515 SF 7645 N13W14 III
1656 1657 1702 SF 7648 N02E47 III
2339 2343 2346 B9.8 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

79. rsgb gb2rs news 9th jan

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-07 18:08:48 UTC
From: ted@tedb.demon.co.uk
Message-ID: <757966128snz@tedb.demon.co.uk>
Source record: 272533
Cross-posted to: rec.radio.amateur.misc,uk.radio.amateur

Good morning. It's Sunday the 9th of January and here is the GB2RS news broadcast, prepared by the Radio Society of Great Britain.

First the headlines:- RSGB Member, Professor Les Barclay receives an OBE; Last chance to attend the Presidential Installation of Ian Suart, GM4AUP, in Glasgow; UHF Repeater stolen from site; New RLOs for Bedfordshire, Hereford and Worcester.

Congratulations to RSGB Member Professor Les W Barclay, G3HTF, who received an OBE in the 1994 New Years Honours list in recognition of his work in the field of propagation. Professor Barclay is a member of the Propagation Studies Group.

The RSGB's 1994 President will be officially installed at an evening reception and dinner in Glasgow next Saturday the 15th of January. Any RSGB member wishing to attend should contact Belinda Gannon at RSGB headquarters without delay.

The UHF Repeater GB3GF, operated by the Guildford UHF Repeater Group was completely stripped and stolen from its site at Guildford, Surrey sometime between 0030 and 0815UTC on Thursday the 30th of December. The whole installation was neatly and skilfully dismantled with tools during its time of least usage, and a fifty foot high tower was scaled on a wet night to remove the antennas. Most of the items removed have GB3GF stamped on them. The repeater is crystal controlled for receive on 433.300MHz and for transmit on 434.900MHz. Also the transmitter automatically identifies in Morse code with GB3GF every 15 minutes. Anyone who is offered for sale or modification a Pye F9U a wall-mounted base station, Cavity filter tubes (a home brew copper and brass item), a Pye AE450F cavity filter, a Hexalator (circular) or comes across any unusual transmissions on RB12, especially if interspersed with GB3GF identification in Morse, is asked to please contact immediately PC 1284 Clarke at Guildford Police on 0483 31111 extension 3128.

{Newsreaders: This item can be deleted if your broadcast does not cover the Bedfordshire, Hereford and Worcester or Northumberland areas}

Attention RSGB members in Bedfordshire and Hereford and Worcester area. Two new RSGB Liaison Officers (RLO) have been appointed, one for each county. The RLO for Bedfordshire is Geoff Linssen, G0PIZ. His address is 401 Dallow Road, Luton, Beds, LU1 1UL and his telephone number is 0582 415576. For Hereford and Worcester, the RLO is John Marks, G0OWT. His address is 61 Sebright Road, Wolvesley, Kidderminster, Worcs DY11 5UA and his telephone number is 0562 850061.

Next attention RSGB Members in Northumberland. The RSGB Liaison Officer (RLO) for Northumberland is Jack Swayne, G3BLE and his address is 12 The Haven, Beadnell, Chathill, Northumberland, NE67 5AW. His fax or telephone number is 0665 720601. RLOs hold a wide range of information and they are available to help any RSGB member seeking advice.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO. From Ogasawara, JD1AMA will be active today, Sunday the 9th, during the Japanese International CW LF Contest looking for European contacts from 1900 - 2200 UTC. See January RadCom, page 19 for further details. From Madagascar, JE8XRF will sign 5R8DM from now until Sunday the 16th of January. Operation will be on 10 - 80 metres mainly SSB with some CW, plus 160m if possible. From Aruba, NW1J, W1HL and AA1M will sign P4/W1EKT from tomorrow, Monday the 10th until Monday the 17th of January on all bands 10 - 160 metres using CW, SSB and RTTY. And from Bahrain, ex ZC4DG is now active as A92FV for the next four months on all bands using CW. He may also use A92C the club station callsign.

Rally news:

We have no rally news for you this week as the next event notified to us is not until Sunday the 23rd of January 1994.

However, here are some dates for your diary:

The 1994 RSGB VHF Convention is to be held at its usual venue at Sandown Race Course in Surrey on Sunday the 20th of February. See January's RadCom page 24 for full details of the comprehensive lecture programme.

The 1994 RSGB London Amateur Radio and Computer Show is to be held during Saturday the 12th and Sunday the 13th of March, at the Lee Valley Leisure Centre, (formerly Picketts Lock), Picketts Lock Lane, Edmonton, London. Full details of the comprehensive lecture programme will appear in February's RadCom.

HF contest news now:

The RSGB AFS Team CW Contest takes place today, Sunday the 9th from 1300 - 1700 UTC on 3.510 - 3.590MHz, with the 3.570 - 3.590MHz reserved for slower-speed contacts (the QRS Corral). See November RadCom page 84 for further details. The RSGB LF Cumulative 1.8MHz Contest takes place next Tuesday the 11th of January from 2000 - 2200UTC. The RSGB AFS Team SSB Contest takes place next Saturday the 15th of January from 1300 - 1700UTC on 3.600 - 3.750MHz. See November RadCom page 84 for further details. The RSGB LF Cumulative 7.0MHz Contest takes place next Sunday the 16th of January from 1000 - 1200UTC, followed by the LF Cumulative 3.5MHz Contest from 1600 - 1800 UTC. See December's RadCom, page 84, for detailed information on all the LF Cumulative Contests. Also the HA DX CW Contest and the AGCW-DL QRP Contest are scheduled for next weekend, Saturday the 15th and Sunday the 16th of January.

Next some VHF contest news:

The RSGB 144MHz CW Single Operator Fixed & All Others Contest takes place next Sunday the 16th of January, from 1000 to 1600 UTC. There are three sections:-

Fixed station single operator, Open and Listeners. The first RSGB 70MHz Cumulatives Contest takes place on Sunday the 23rd of January from 1000 - 1200UTC. See December's RadCom, page 83 for details for both the VHF events.

And now the solar factual data:

Due to the holidays, we have an extended period covering the 17th to the 26th of December. We will catch up with the rest next week. Solar activity was reasonably quiet up to the 22nd when a series of M flares erupted lasting through to the 26th. They ranged from an M1.1/1N up to M1.5/1N and it was the most active period since last June. The sunspot indices rose every day from 26 on the 17th up to 131 by the 25th and gave a mean of about 69. Not surprisingly solar flux levels also rose from 84 on the 17th up to 125 by the 26th and averaged 100 for the period. The geomagnetic activity started very disturbed with Ap indices up to 25 units on the 18th but slowly declined to just unsettled levels of 12 by the 26th, giving an average of 13.5 units. The state has been warnings of high latitude magnetic storms due to the flare activity, and of a massive stratwarm over Siberia with temperature increases of 40 degrees centigrade at the 10HPA level. The radio quality indices have improved every day, from below normal up to the 21st and were just above normal by the 26th. The aa indices for the 14th to the 27th December have been just unsettled and the daily indices averaged 22.4 nanoTeslas about K3, with little variation day to day. The X-Ray flux has increased considerably from A8.2 on the 19th up to B5.9 by the 25th, the highest level since last June. The period averaged B2.8 units. The 10 and 6 meter bands have been very active with widespread sporadic E during the past 2 weeks.

Now the ionospheric data for Central France:

The F2 day-time critical frequencies at Poitiers as reported by Meudon for the period 17th to the 26th of December averaged 7.8MHz. The peak times are now around 10am to mid-day but the highs are not lasting very long, only four or five hours. The darkness hour lows are averaging 2.6MHz and are anywhere between 1800 hours down to 0600 hours. There has been spread F reported on many early mornings lasting up to five hours at times.

Now the ionospheric data for the north:

The F2 day-time critical frequencies at Ekaterinberg have suffered from the high latitude magstorms and averaged only 6.2MHz. The darkness hour lows averaged 2.4MHz.

And lastly the solar forecast:

This week, the quiet side of the sun will be looking our way. Solar flux levels are expected to be about the 95s, with geomagnetic levels possibly being very unsettled from today until the 15th due to the passage of coronal holes. The radio quality indices are expected to be normal, rising to above normal from the 16th. The 90 day smoothed solar flux is 98 units at present.

And that's the end of the solar information.

Finally in the main news, SSL has informed the Society that as of last Wednesday morning, the latest callsigns issued were in the G0 U I and G7 R N series, and Novice calls in the 2 0 A H and 2 1 C M series. .

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

Next, the local news.

NEWS FOR THE SOUTH EAST

Meeting for Monday the 10th of January:

Southdown Amateur Radio Society has its Annual General Meeting at the Chaseley Home for Disabled Ex-Servicemen, Southcliffe, Bolsover Road, Eastbourne. The meeting opens at 7.30pm for an 8 o'clock start. For more details contact Jan, G4XNL, tel: 0323 412699.

Meeting for Tuesday the 11th of January:

Stevenage and District Amateur Radio Society has a talk on 'Converting a DB27 CB Antenna to HF Mobile' by Rob, G2BZK. Contact Neil, 2E1ASZ on 0438 350882 for details.

Meetings for Wednesday the 12th of January:

Bracknell Amateur Radio Club meets for its Annual General Meeting. Details from Steve, G4AUC who is QTHR.

Chesham and District Amateur Radio Society has a technical topic entitled 'PSU Repairs' by G8KBV. Details from Ian, G0RTF on 0494 676391.

Cheshunt and District Amateur Radio Club has an Amateur TV Night by Adrian, G0OJY and John, G3WFM. Details from Roger, G4OAA on 0992 464795.

Dover Radio Club has a presentation of 'Kanga Kits' by G0BPS. For further details telephone 0304 825030.

Worthing and District Amateur Radio Club has a talk entitled 'Reminiscing' by G5CO. Details from G4GPX on 0903 753893.

Meetings for Thursday the 13th of January:

Colchester Radio Amateurs has a talk on 'UFOs and UFOlogy' by Trevor, G7OWC. Further details from Mike, G4YJN on 0206 738189.

Edgware and District Radio Society meets for its Annual General Meeting. Details from Rod, G0SQL, tel: 081 204 1868.

Shefford and District Amateur Radio Society has the G8EMJ Construction Contest. Contact Paul, G1GSN on 0462 700618 for further details.

Southgate Amateur Radio Club has a talk entitled 'An Overview of Cable TV'. Further information from Brian, G0MEE on 081 360 2453.

Vange Amateur Radio Society has a talk entitled 'Guns' by Bob, G3IUC. Contact Doris on 0268 552606 for further information.

Meetings for Friday the 14th of January:

Clifton Amateur Radio Society has a Computer evening. Further details from Keith, G4TJE on 081 859 7630.

Hilderstone Amateur Radio Society has a talk on 'The Novice Examination' by Martin, G0LGE. For further details telephone 0843 869812.

Itchen Valley Amateur Radio Club has a talk on 'Radio Scouting and Gilwell Park GB2GP' by Frank, G6OLK. Scouts and Cubs are welcome. Contact Les, G3ABA 0703 732997 for details.

Maidstone YMCA Amateur Radio Society has a talk entitled 'Computer Usage (Packet/Satellites) instructional evening' and CW as necessary. Contact G0RHO, QTHR for further details.

Meeting for Saturday the 15th of January:

Crystal Palace and District Radio Club has a talk 'QRP (Low Power) Homebuilt Radio Equipment' by Wayne, G0JJQ. Details from Wilf, G3DSC on 081 699 5732.

NEWS FOR SOUTH WEST

Meetings for Monday the 10th of January:

Exeter Amateur Radio Society has a talk on 'Welding Techniques' by Basil Bolt. Details from Ray, G3YBK on 0392 78710.

Wincanton Amateur Radio Club has a talk entitled 'Packet Radio' by G3CQE. Further details from Dave, G3ZXX on 0963 34360.

Meeting for Tuesday the 11th of January:

Salisbury Radio and Electronic Society meets for its Annual General Meeting. Details from David on 0722 330971.

Meeting for Wednesday the 12th of January:

South Bristol Amateur Radio Club has a Table Sale - A bring and sell anything. For more information tel: 0275 834282.

Meeting for Thursday the 13th of November:

Yeovil Amateur Radio Club has a Junk Sale. Contact Cedric, G4JBL on 0258 473845 for further information.

Meeting for Friday the 14th of January:

Shirehampton Amateur Radio Club has a 'Packet Radio Overview/Getting going evening' by G4FRO. For further information contact Ron, G4GTD on 0272 770504.

NEWS FOR EAST ANGLIA

Meeting for Monday the 10th of January:

Felixstowe and District Amateur Radio Society has a Discussion evening. For details contact Paul, G4YQC on 0394 273507 any evening.

Meeting for Wednesday the 12th of January:

Norfolk Amateur Radio Club has a 'Real Radio Evening'. For further details contact Sheila, G0KWP on 0603 618810.

Meeting for Thursday the 13th of January:

Yarmouth Radio Club has a 'Contest Plans for 1994' discussion. Details from Tony, G3NHU, on 0493 721173.

Meeting for Friday the 14th of January:

Cambridge and District Amateur Radio Club has a demonstration of the 'Shacklog' Software by Alan, G3PMR. Contact John, G0TIL on 0763 243570 for details.

NEWS FOR THE MIDLANDS

Meetings for Monday the 10th of January:

Mansfield Amateur Radio Society has a talk by Rob Mannion, G3XFD, Further information from Mary, G0NZA on 0623 755288.

Stratford upon Avon and District Radio Society meets for its New Year Social. Further details from Alan, G0CXJ, tel: 0608 682495.

Meeting for Tuesday the 11th of January:

Loughborough and District Amateur Radio Club has a talk by G8AYG. For further details contact G8SNF by telephoning 0509 218259.

Meetings for Wednesday 12th of January:

Bromsgrove Amateur Radio Society has a talk on 'Antenna Construction'. More information from Barry, G0TPG on 0527 542266.

Derby and District Amateur Radio Society has a Visit by SMC Chesterfield. Contact Hayley, G7PXA on 0773 856904 for further information.

South Birmingham Radio Society has a talk and slide show on 'Holes in the Ground' by a member of the Dudley Canal Trust. For further details contact Roy, G8ACR on 021 474 3784.

Telford and District Amateur Radio Society has a talk entitled 'Tuning Linears' by G8PAW. For further details contact Dave, G4EIX, on 0952 588878.

Meetings for Thursday the 13th of January:

Cannock Chase Amateur Radio Society has a venue and now meets at the Four Crosses Inn, Watling Street, Gailey-Cum-Hatherton. Contact Eric, G4ICE on 0543 502836 for further information.

Amateur Radio Club of Nottingham has a 'Bring your Gear Night'. Contact Simon, G0IEG on 0602 501733 for further details.

Salop Amateur Radio Society meets for an Extraordinary General Meeting, at the Beauchamp Hotel, Shrewsbury at 8pm. Contact G0SST on 0743 361935 for details.

Vale of Evesham Radio Amateurs' Club meets for its Annual General Meeting. The meeting starts at 8pm at the BBC Club, High Street. Details from Alasdair, tel: 0386 41508.

Meetings for Friday the 14th of January:

Bromsgrove and District Amateur Radio Club has a Visit from members of the Stourbridge Amateur Radio Society. Informal visitors welcome. Further details from Joe, G3MRC, tel: 0562 710010.

Spalding and District Amateur Radio Society meets for its Annual General Meeting. Details from G4OO, tel: 0775 750382.

South Notts Amateur Radio Club has a Construction plus HF/VHF On Air evening. For further details contact Julie, G0SOU on 0602 216342.

NEWS FOR THE NORTH OF ENGLAND

Meeting for Monday the 10th of January:

Sheffield Amateur Radio Club meets to prepare for the inter-Club Quiz. Further details from David, G0JJR Tel: 0742 446282.

Meetings for Tuesday the 11th of January:

Bury Radio Society has a talk entitled 'Introduction to Packet Radio' by G3RTU. For further details contact Mike, G4GSY on 061 761 5083.

Fylde Amateur Radio Society meets for its Annual General Meeting. Details from Rob, G7CUL, QTHR.

Liverpool and District Amateur Radio Society has a GX3AHD on the Air evening. Further details from Ian, G4WWX who is QTHR.

Wakefield and District Radio Society meets for a talk on 'Antennas' by David, G0DJA. Further details from Roy, G0TBY on 0924 893321.

Meetings for Wednesday the 12th of January:

Stockport Radio Society has a talk on 'Doublet Antennas' by G0HAL. For details telephone 061 439 4952.

Wirral and District Amateur Radio Club meets for its Annual General Meeting, starting at 8pm at Irby Cricket Club. Contact Paul, G0JZP, on 051 648 5892 for further details.

Meetings for Thursday the 13th of January:

Hambleton Amateur Radio Society has a Practical Night. Further details from Nigel, G0NHM on 0609 776608.

North Wakefield Radio Club meets for its Annual General Meeting. For further information contact John, G4RCG on 0924 362144.

Meetings for Friday the 14th of January:

North Ferriby United Amateur Radio Society has a 'Discussion Evening' with Ken, G4VKK. Further details from Frank, G3YCC, tel: 0482 650410.

South Manchester Radio Club has a talk on 'Baluns' by G0HAL. For further details contact Edward, G7FQY, tel: 061 969 1964.

Stockport Radio Society Computer Group has a talk entitled 'DOS/Batch Files' by G0NKM. For further details telephone 061 439 4952.

NEWS FOR SCOTLAND

Meeting for Tuesday the 11th of January:

Dundee Amateur Radio Club has a Construction Night. Details from GM4FSB who is QTHR.

Meeting for Thursday the 13th of January:

Lerwick Radio Club has a Film Evening with Video Tapes of DX-peditions and other radio related topics. The meeting starts at 7.30pm, in the Islesburgh Community Centre, Kings Harald Street, Lerwick. Details from Robert, GM4CAQ, who is QTHR.

Meeting for Friday the 14th of January:

Aberdeen Amateur Radio Society has its Presidential Address by the newly elected President, Don Travis, at Queen Mothers House starting at 8pm. Details from John, GM1TDU, tel: 0224 706619.

And that's the end of this week's GB2RS news broadcast, which was prepared by the Radio Society of Great Britain.

80. Re: Superpressure balloon info?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-07 19:25:21 UTC
From: tcline@hplvec.LVLD.HP.COM
Message-ID: <21870057@hplvec.LVLD.HP.COM>
Source record: 272557

> In rec.radio.amateur.misc, norton@joker.optics.rochester.edu (Scott Norton) writes:
>
> Does anyone have any info on the superpressure balloon that was launched
> from Utah? There was a post about it a week ago and it was to have been
> launched today.
>
> Thanx!
> PS. Could someone e-mail me info as well as posting it?
>
> Scott Norton
> norton@joker.optics.rochester.edu
> N2WQU

I am a member of the Edge of Space Sciences balloon group in Denver, CO.

Bill Brown WB8ELK and the payload was in Denver on Tuesday, Jan-4-94.
He said the launch was scheduled for 8:00 am MST on Thursday, Jan-6-84
(delayed from the 10:00 am MST on Jan-5-94 mentioned in the article).

Today is Friday. I haven't heard any more. I would not be surprised if
the launch has been delayed again due to equipment or weather.

73

Ted Cline, N0RQV Home: 3202 Spruce Drive
ted_cline@hpisla.lvld.hp.com Fort Collins, CO 80526-1044
Day: (303) 679-2352 (303) 493-1136

81. Weekly Solar Terrestrial Forecast & Review for 07 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-07 22:31:40 UTC
From: oler@rho.uleth.ca
Message-ID: <9401072231.AA02125@rho.uleth.ca>
Source record: 272535
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

```
--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
January 07 to January 16, 1994

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

---------

SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE
----------------------------------------------------

|10.7 cm|HF Propagation +/- CON|SID AU.BKSR DX| Mag| Aurora |
|SolrFlx|LO MI HI PO SWF %MUF %|ENH LO MI HI LO MI HI %|K Ap|LO MI HI|
--|-------|----------------------|------------------------|----|--------|
07| 125 | G G F F 40 +10 70| 40 NA NA NA 00 05 10 40|2 10|NV NV LO|
08| 120 | G G P P 35 00 65| 35 NA NA NA 02 10 20 30|3 18|NV LO MO|
09| 115 | G G F F 30 +05 65| 30 NA NA NA 01 10 20 30|3 14|NV NV MO|
10| 115 | G G F F 30 +10 70| 30 NA NA NA 01 05 15 35|2 10|NV NV LO|
11| 110 | G G F F 30 +10 70| 30 NA NA NA 01 05 15 35|2 12|NV NV LO|
12| 100 | G G P P 20 00 65| 20 NA NA NA 02 15 25 30|4 20|NV LO MO|
13| 100 | G G P P 20 00 65| 20 NA NA NA 02 15 25 30|4 20|NV LO MO|
14| 105 | G G F F 20 +05 65| 20 NA NA NA 02 10 20 30|3 15|NV NV LO|
15| 110 | G G F F 20 +05 65| 20 NA NA NA 02 10 15 30|2 10|NV NV LO|
16| 110 | G G F F 20 00 65| 20 NA NA NA 02 10 15 30|2 10|NV NV LO|

PEAK PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (07 JAN - 16 JAN)

_____________________________________________________________________________
| EXTREMELY SEVERE | | | | | | | | | | HIGH |
| VERY SEVERE STORM | | | | | | | | | | HIGH |
| SEVERE STORM | | | | | | | | | | MODERATE |
| MAJOR STORM | | | | | | | | | | LOW - MOD. |
| MINOR STORM | | | | | | | | | | LOW |
| VERY ACTIVE | | | | | | | | | | NONE |
| ACTIVE | | **|** | | | * | * | | | | NONE |
| UNSETTLED | * |***|***|** |***|***|***|***|** |** | NONE |
| QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
| VERY QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
|-------------------|---|---|---|---|---|---|---|---|---|---|------------|
| Geomagnetic Field |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| Anomaly |
| Conditions | Given in 8-hour UT intervals | Intensity |
|_____________________________________________________________________________|

CONFIDENCE LEVEL: 65%
```

NOTES:
Predicted geomagnetic activity is based heavily on recurrent
phenomena. Transient energetic solar events cannot be predicted reliably over
periods in excess of several days. Hence, there may be some deviations from
the predictions due to the unpredictable transient solar component.

60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACTIVITY

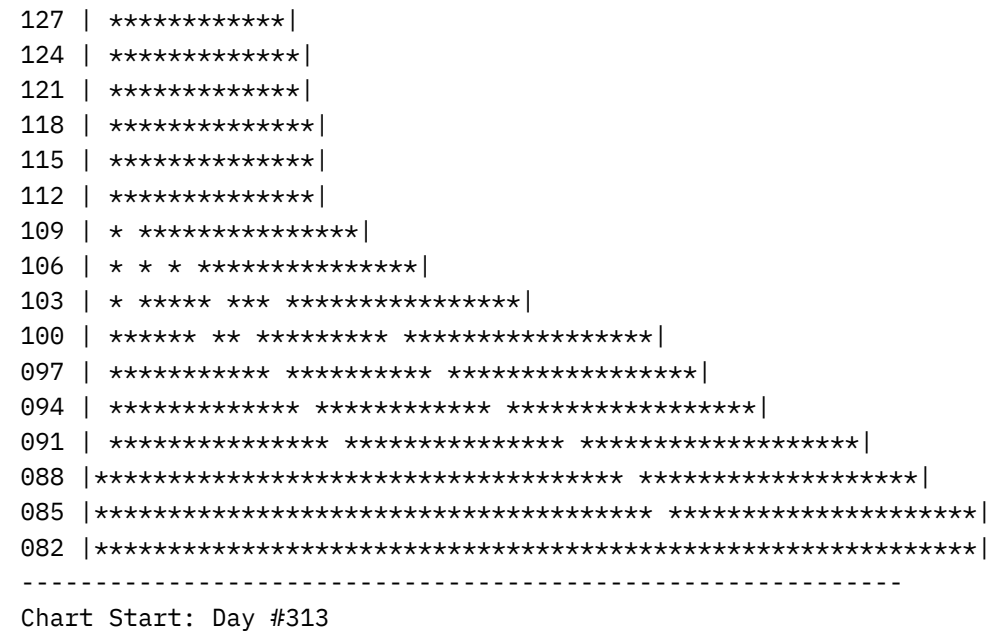
```
------------------------------------------------------------
51 | J |
48 | J |
46 | J |
43 | J |
41 | J |
38 | M J |
36 | MM J |
33 | MM J |
31 | MM J |
28 | MM J |
26 | MM J |
23 | MM J |
20 | AMM J A |
18 | AA AMM J A AAA |
15 | AA AMM AJ AA AAAA |
13 | AA AMM AJ AAU U AAAA |
10 | U U AA AMM AJ AAU U AAAAU U|
8 |UU UUUU AAU U U AMMUU AJ U UAAUUUUUUU AAAAU U|
5 |UUQ UUUUQAAU Q QU U AMMUUQAJQUUU UAAUUUUUUUUU AAAAUQ U|
3 |UUQQUUUUQAAUQQQQQUQQUQAMMUUQAJQUUUQQUAAUUUUUUUUUQQQQAAAAUQQU|
0 |UUQQUUUUQAAUQQQQQUQQUQAMMUUQAJQUUUQQUAAUUUUUUUUUQQQQAAAAUQQU|
------------------------------------------------------------
```

Chart Start Date: Day #313

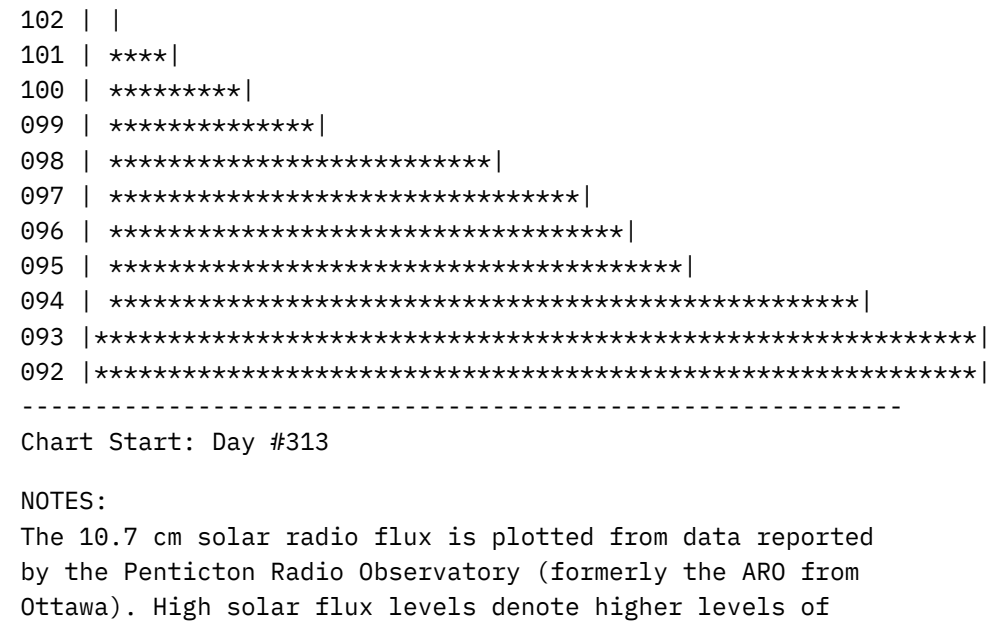
NOTES:
This graph is determined by plotting the greater of either the planetary
A-index or the Boulder A-index. Graph lines are labelled according
to the severity of the activity which occurred on each day. The left-
hand column represents the associated A-Index for that day.
Q = Quiet, U = Unsettled, A = Active, M = Minor Storm,
J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

```
------------------------------------------------------------
151 | |
148 | * |
145 | ** |
142 | * ** |
139 | * ***** |
136 | * ***** * |
133 | ** ****** * |
130 | ** ****** **|
```



GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX



NOTES:
The 10.7 cm solar radio flux is plotted from data reported by the Penticton Radio Observatory (formerly the ARO from Ottawa). High solar flux levels denote higher levels of activity and a greater number of sunspot groups on the Sun. The 90-day mean solar flux graph is charted from the 90-day mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS

```
140 | **|
133 | ** * **|
126 | *** ****|
119 | * *** ****|
112 | ** * *** ****|
105 | ** ******* ****|
098 | ** * * ** ******* ****|
091 | *** ** ** ***************|
084 | ********** ***************|
077 | * * ********** ***************|
070 | ** * ************ ****************|
063 | **** ************ ****************|
056 | ********* ************** *****************|
049 | ************************ * * *****************|
042 | ************************** ** ******************|
035 | ** ***************************** * ** ******************|
028 | ** ******************************* * *** ******************|
021 |*** ************************************************************|
014 |************************************************************|
------------------------------------------------------------
Chart Start: Day #313
```

NOTES:
The graphical chart of sunspot numbers is created from the
daily sunspot number counts as reported by the SESC.

HF RADIO SIGNAL PROPAGATION PREDICTIONS (07 JAN - 16 JAN)

High Latitude Paths

```
_____________________________________________________
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD | | | | | | | | | |
LEVEL | FAIR |***| **| **|***|***| **| **|***|***|***|
------- | POOR | |* |* | | |* |* | | | |
65% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------
```

Middle Latitude Paths

```
_____________________________________________________
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | * | | | * | * | | | * | * | * |
CONFIDENCE | GOOD |* *| **|***|* *|* *| **| **|* *|* *|* *|
LEVEL | FAIR | |* | | | |* |* | | | |
------- | POOR | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
```

```
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-------------------------------------------------------

Low Latitude Paths

_______________________________________________________
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | **| * | * | **| **| * | * | **| **| **|
CONFIDENCE | GOOD |* |* *|* *|* |* |* *|* *|* |* |* |
LEVEL | FAIR | | | | | | | | | |
------- | POOR | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-------------------------------------------------------
NOTES:
NORTHERN HEMISPHERE SOUTHERN HEMISPHERE
High latitudes >= 55 deg. N. | High latitudes >= 55 deg. S.
Middle latitudes >= 40 < 55 deg. N. | Middle latitudes >= 30 < 55 deg. S.
Low latitudes < 40 deg. N. | Low latitudes < 30 deg. S.

POTENTIAL VHF DX PROPAGATION PREDICTIONS (07 JAN - 16 JAN)
INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

HIGH LATITUDES

_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% | * | * | * | * | * | * | * | * | * | * | 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | | | | | | 60%| | | | | | | | | |
| 40% | **| * | * | **| **| * | * | **| **| **| 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| |*| | | |*|*| | | |
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

MIDDLE LATITUDES

```
_____________________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%|*|*|*|*|*|*|*|*|*|*|
| 60% |* *| *|* *|* *|* *| **| **|***|***|***| 60%| | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | * | | | * | * | | | | | 60%| | | | | | | | | |
| 40% |***| **|***|***|***| **| **|***|***|***| 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | | | |
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

LOW LATITUDES

```
_____________________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%|*|*|*|*|*|*|*|*|*|*|
| 60% |***|***|***|***|***|***|** |***|***|***| 60%| | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | **| **| **| **| **| **| * | **| **| **| 60%| | | | | | | | | |
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | | | |
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

NOTES:
These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACTIVITY PREDICTIONS (07 JAN - 16 JAN)

High Latitude Locations

```
_________________________________________________________
| EXTREMELY HIGH | | | | | | | | | |
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | * | * | | | * | * | | | | |
65% | LOW |***|***|***|***|***|***|***|***|***|***|
| NOT VISIBLE |***|***|***|***|***|***|***|***|***|***|
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INTENSITY | Eve.Twilight/Midnight/Morn.Twilight |
---------------------------------------------------------
```

Middle Latitude Locations

```
_________________________________________________________
| EXTREMELY HIGH | | | | | | | | | |
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | |
70% | LOW | | * | | | * | * | | | | |
| NOT VISIBLE |***|***|***|***|***|***|***|***|***|***|
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INTENSITY | Eve.Twilight/Midnight/Morn.Twilight |
---------------------------------------------------------
```

Low Latitude Locations

```
_________________________________________________________
| EXTREMELY HIGH | | | | | | | | | |
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | |
80% | LOW | | | | | | | | | |
| NOT VISIBLE |***|***|***|***|***|***|***|***|***|***|
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INTENSITY | Eve.Twilight/Midnight/Morn.Twilight |
---------------------------------------------------------
```

NOTE:
Version 2.00b of our Professional Dynamic Auroral Oval Simulation Software Package is now available. This professional software is particularly valuable to radio communicators, aurora photographers, educators, and astronomers. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "COler@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

** End of Report **

82. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-08 00:28:07 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <758033063.F00002@ocitor.fidonet>
Source record: 272531

```
The following files were processed Saturday 01-08-94:

HAMFILES [ HAM: Adm/Link Info/Applications/Uplinks to HDN ]
---------------------------------------------------------------------
HAMBBS.ZIP ( 7431 bytes) 1/94 edition of W3INK's HAM BBS
list

---------------------------------------------------------------------
7431 bytes in 1 file(s)

Total of 7431 bytes in 1 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - wa5eha
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)
```

83. Daily Summary of Solar Geophysical Activity for 07 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-08 05:01:43 UTC
From: oler@rho.uleth.ca
Message-ID: <9401080501.AA04654@rho.uleth.ca>
Source record: 272534
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

07 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 07 JANUARY, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 007, 01/07/94
10.7 FLUX=126.3 90-AVG=101 SSN=135 BKI=1001 2011 BAI=002
BGND-XRAY=B3.8 FLU1=5.8E+05 FLU10=1.2E+04 PKI=1113 3121 PAI=006
BOU-DEV=006,004,004,008,015,004,009,009 DEV-AVG=007 NT SWF=01:003
XRAY-MAX= M1.3 @ 0943UT XRAY-MIN= B2.9 @ 2034UT XRAY-AVG= B8.2
NEUTN-MAX= +002% @ 2135UT NEUTN-MIN= -001% @ 2335UT NEUTN-AVG= +0.0%
PCA-MAX= +0.1DB @ 2345UT PCA-MIN= -0.3DB @ 1335UT PCA-AVG= -0.0DB
BOUTF-MAX=55353NT @ 1520UT BOUTF-MIN=55332NT @ 1911UT BOUTF-AVG=55344NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+072,+000,+000
GOES6-MAX=P:+124NT@ 1716UT GOES6-MIN=N:-056NT@ 0907UT G6-AVG=+095,+025,-027
FLUXFCST=STD:120,115,110;SESC:120,115,110 BAI/PAI-FCST=015,010,005/022,012,010
KFCST=0003 5000 0003 5000 27DAY-AP=008,007 27DAY-KP=2232 2212 2124 2211
WARNINGS=*SWF;*MAJFLR
ALERTS=**MINFLR:M1.3/1N@0943UTC;**TENFLR:250SFU@1233UTC,DUR=4MIN
!!END-DATA!!

NOTE: The Effective Sunspot Number for 06 JAN 94 was 69.1.
The Full Kp Indices for 06 JAN 94 are: 3o 3- 3- 3o 3- 3- 1+ 2+

SYNOPSIS OF ACTIVITY

Solar activity was moderate. Region 7646 (S10W51)
produced an M1/1N flare at 07/0943Z and six C-class bursts.
Other regions on the disk remained stable.

Solar activity forecast: solar activity is expected to be
low to moderate.

The geomagnetic field has been at quiet levels for
the past 24 hours. High latitude stations reported active
conditions from 1200-1500Z.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled to active due to moderate flare
activity.

Event probabilities 08 jan-10 jan

Class M 30/30/30
Class X 05/05/05
Proton 05/05/05
PCAF Yellow

Geomagnetic activity probabilities 08 jan-10 jan

A. Middle Latitudes
Active 35/15/10
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 35/20/20
Minor Storm 10/10/10
Major-Severe Storm 01/01/01

HF propagation conditions were normal over all regions.
Conditions are expected to remain sporadically unstable over
the high and polar latitude paths during the next several days.
Several weak interplanetary disturbances may be observed from
the minor flare activity that has occurred over the last
several days. Otherwise, near-normal conditions will persist
if these disturbances fail to arrive.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 07/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7645 N13W49 084 0110 FAO 17 010 BETA-GAMMA
7646 S08W51 086 0400 EKI 11 021 BETA
7647 S15W61 096 0050 ESO 12 004 BETA
7648 N07E17 018 0440 EKI 11 029 BETA
7649 S17W46 081 0010 HRX 01 002 ALPHA
7650 N05E28 007 0040 CSO 07 009 BETA
REGIONS DUE TO RETURN 08 JANUARY TO 10 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 07 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0937 0943 0945 7646 S09W45 M1.3 1N 45
1231 1241 1257 7646 S04W44 C2.3 SF 250
2340 2340 2340 100

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 07 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
06/A2326 07/B1447 S24E12 DSF

INFERRED CORONAL HOLES: LOCATIONS VALID AT 07/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
55 S38E56 S38E56 S29E09 S19E13 008 ISO NEG 017 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
06 Jan: 0050 0053 0055 C1.3
0402 0407 0409 C4.9 200
0607 0619 0624 C6.2 35
0645 0654 0701 C1.4
0746 0759 0803 C4.6 SN 7646 S09W34 30
1003 1012 1028 C1.4 SF 7646 S09W32
1236 1240 1245 C4.2 SN 7646 S09W35 99 40
1428 1434 1444 C2.2 SF 7646 S11W37
1518 1521 1523 C1.4 SF 7646 S10W36
1658 1703 1706 B8.5 SF 7646 S09W38
1725 1738 1801 C1.1 SF 7646 S11W37
1855 1901 1903 C1.1 SF 7646 S09W39

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Region 7646: 7 0 0 8 0 0 0 0 008 (66.7)
Uncorrellated: 4 0 0 0 0 0 0 0 004 (33.3)

Total Events: 012 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
06 Jan: 0607 0619 0624 C6.2 II,III,V
0645 0654 0701 C1.4 II
0746 0759 0803 C4.6 SN 7646 S09W34 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the

optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

84. FTP sites wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-08 11:41:03 UTC
From: ronh@pacifier.rain.com
Message-ID: <CJB74G.3E3@pacifier.rain.com>
Source record: 272541

I'm looking for some good FTP sites for Ham related programs, and anything
in general for Radio, or antennas for the IBM PC. I am especially interested
in programs that use the PC to decode CW and Fax, etc. Please E-Mail me,
as my news server sometimes screws up, and I miss a day or 2. Thanks,
Ron Hays

85. Mobile antenna question

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-08 16:32:50 UTC
From: mbarts@vt.edu
Message-ID: <mbarts.1.00108C90@vt.edu>
Source record: 272530

A friend just recently purchased an Acura Integra and is trying to figure out how to mount a two meter antenna on it. He hasn't reconciled himself to getting out the big drill just yet and is considering a glass mount antenna on the hatch. The glass around the edges of the glass (where the antenna will mount) has black matte finish consisting of lots of small dots acting as a sunscreen. Does anybody know what this stuff is? Will it interfere with the glass mount, mechanically or electrically? Any suggestions or experience with this?

Mike, KB4NT

86. Re: RAMSEY KITS NOT TOO G

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-08 20:04:50 UTC
From: sehneg@austin.ibm.com
Message-ID: <CJBuG3.Bp6@hawnews.watson.ibm.com>
Source record: 272529

I've built several Ramsey kits, QRP receiver (40m) and several QRP XMTRS (40&20m)
plus keyer & FM stereo transmitter.

I'll concede that the early assembly manuals
were nothing more than a photocopy sheet, but they really redid their manuals
recently & they look close to the Heathkit quality.(XRAY drawings & tutorials)

I've batted 1.000 with their
kits, although I had to mess around with the 40m receiver a bit to stabilize
the thermal drift & make the receiver a little more selective. I've not had
a bad part in the bunch.
If you haven't tried them recently, you may be surprised.

I taught a ham class a few years back & we placed a quantity order with them
for the 40m receivers & lots of students built them while taking the class. We
helped them along, and got all of them working.(They give group discounts)

(standard disclaimers, my opinion & not that of anyone else), Gary N2KTY/QRP

87. Fixing loose BNC connectors on HT's

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-08 20:19:39 UTC
From: mjr@crl.com
Message-ID: <2gn4gr$46d@crl.crl.com>
Source record: 272528

Some months back (Oct. | Nov.) in MT there was a description of how to tighten up on BNC connectors that had gotten loose after many connect-disconnect cycles. The problem is that the V shaped inner connector becomes loose.

The article said to squeeze the ends of the inner connector together a little bit. It is not clear if you are supposed to take the connector *out* of the radio to do this. If so how? In my Alinco, this connector is seated very tightly in the plastic insulator. I could try to pry it out, but it seems as though I might be detaching it from what ever it is connected to if I do...

OTOH, I can not figure out what kind of tool I could use to squeeze together the ends while it is embedded in the insulator. I can get a fine needle between one side or the other and the insulator, but only one at a time. I have pushed a little this way, but it doesn't seem to make any difference. The finiest needle-nose pliers I can find are not nearly fine enough to get around both sides of the connector at the same time. How do you do this surgery?

Much Thanks

--
matthew rapaport Philosopher/Programmer at large KD6KVH
CIS: 70271,255 Internet: mjr@crl.com

88. Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-08 22:47:10 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199401082259.OAA22966@ucsd.edu>
Source record: 272536

>Want to know where our repeaters are now? NOYGDB!
> - Brian

in my part of Florida, a first cut at locating repeaters consists of getting on top of the house at night and look for all the tower lights. most of 'em you can drive right up to the tower in your conventional power train car (no 4WD needed) using the publicly paid for road system.

Phase 2 is all those tall buildings (also marked with lights) that have a large excess of "lightning rods" are suspects as well (although it would take a bit more work to actually be able to say you could walk right up to the access door in these cases...but probably nothing more than to be around during normal business hours, find the building folks and ask about what's going on....

sorry your stuff was taken, but even on the hard to drive to mountain top, you can fly there with a DF system on the plane (and we'll throw in a GPS just to make it easier to determine lat/long than reading position and distance to a VOR (oh heck, i know there must be *one* DCE-400 around here..let it do the hard work).

it's all just a matter of perserverence (sp?). but i certainly agree with locking the doors just to keep the honest people off the suspects list.

bill wb9ivr

89. How does it work?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-08 23:01:06 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199401082308.PAA23482@ucsd.edu>
Source record: 272537

So what are all those things you see at Wal-Mart? one of my co workers noticed them a while back...all the stores have them in this area.

they're located on the end of some shelves. they appear to be PVC about 3-4" thick and about 12-15" long with end caps on both ends (one with a hole).

the assembly is held onto the rack with tie wraps and is about 5 feet off the floor.

there seems to be no connections to it. the end caps seem to be permanently attached.

the store folks plead ignorance about them....and seemed to start wondering about them once we pointed them out...

bill wb9ivr

90. Vanity Callsign Notice of Propsed Rulemaking (PR93-305)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-08 23:13:07 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199401082320.PAA24261@ucsd.edu>
Source record: 272538

> 1. They are proposing to charge you $7.00 per year for the rest of your
>life for their having issued you a specific callsign. I'd feel a lot better
>about a one-time charge, even at my age.

ok, how about $70 every ten years? everyone was complaining here a while back
that the FCC doesn't pay attention to amateur problems because we don't pay
for our licenses. this ought to do it. (700,000 x $7 = 4.9 Million/year..)

> 2. If your list of ten specific callsigns is exhausted by the time
>your application makes it through the mill, your existing callsign becomes
>the eleventh choice and you will be charged $7.00 per year for the rest of
>your life for the privilege of continuing to use your old callsign.

consider it a penality for making choosing poorly..could also be the start of
putting fees back on amateur radio licenses (everyone remember when it was $9
to do anything to your license....anyone? anyone?)

> 3. Opinion: what does "vanity" have to do with requesting a specific
>callsign? Commercial broadcasters do it all the time.

if you aren't "vain" about how you appear, you won't care and will take what's
assigned when you get your ticket. it's also a painless way to collect more
money from everyone participating forever until they croak. like lotto.

73, bill wb9ivr

91. Re: Fixing loose BNC connectors on HT's

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 01:21:23 UTC
From: andy@clark.net
Message-ID: <2gnm6j$3f7@clarknet.clark.net>
Source record: 272539

Matthew Rapaport (mjr@crl.com) wrote:
: Some months back (Oct. | Nov.) in MT there was a description of how to
: tighten up on BNC connectors that had gotten loose after many
: connect-disconnect cycles. The problem is that the V shaped inner connector
: becomes loose.

: The article said to squeeze the ends of the inner connector together a little
: bit. It is not clear if you are supposed to take the connector *out* of
: the radio to do this. If so how? In my Alinco, this connector is seated
: very tightly in the plastic insulator. I could try to pry it out, but it
: seems as though I might be detaching it from what ever it is connected to if
: I do...

I have the same problem with my Alinco. From experience, the BNC
connector is the weakest link on the HT. I watched someone resolder the
inner connector...disassembling the radio to get to the BNC connectors
was not a pretty sight; it's pretty well buried.

But back to your problem... I used a tiny screwdriver; the kind you
tighten eyeglasses with; carefully inserted the screwdriver between the
metal and plastic, and pushed toward the center. Repeating for the other
piece of metal. That seemed to help. Nevertheless, I've seen better
quality BNC's than what's used in the Alinco.

andy/k4adl

92. U of Minnesota ARC

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 01:49:04 UTC
From: dwarkin@w3eax.umd.edu
Message-ID: <2gnnqg$juo@hecate.umd.edu>
Source record: 272540

Greetings. I am interested in contacting/corresponding with a student involved with the University of Minnesota (Mpls) Amateur Radio Club. I am a senior EE student at the University of Maryland. Thanks.

-Robert Dwarkin

Please respond to either address:
dwarkin@w3eax.umd.edu
dwarkin@eng.umd.edu

93. Vanity Callsign Notice Of Prposed Rulemaking (PR93-305)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 03:34:10 UTC
From: k1zat@bah.COM
Message-ID: <199401090334.WAA04709@booz.bah.com>
Source record: 272542

Bout time, but not quite enough. There should be provisions for:

-- Previous holders of a callsign to be able to request them
first, regardless of the geographical locale and mailing address
requirements. I.e.

94. Vanity Callsign Notice of Proposed Rulemaking (PR93-305)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 03:34:24 UTC
From: k1zat@bah.COM
Message-ID: <Pine.3.05.9401082224.A4711-b100000@booz.bah.com>
Source record: 272543

Several other things should be considered in the NPRM. For instance:

-- Previous holders of a specific callsign. They should have first choice of getting it back if they want, regardless of the geographical locale of the call or the mailing address. I.E., if someone held a W6 and gave it up for a N3 but wants that W6 back he should be able to "retrieve" it without having to re-establish a California address to do it.

-- There should be a "staging period", similiar to what was done in 75-77, i.e. those licensed 25 years or more get first crack to pick for the first three months, then the 15-25 year licensed, and so forth.

-- Bring back the secondary callsign with this NPRM. It could be used for the those who want to retain their current one and retrieve one that was given up earlier; or as the original program had it, one for the summer (winter) home.

Wonder if the program will allow for retrieval of the repeater callsigns for use as individual callsigns? Imagine signing WR5AMU and not being a repeater...

jd

95. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 03:34:40 UTC
From: steve@info.pgh.pa.us
Message-ID: <steve-080194223440@fuzbat.pgh.pa.us>
Source record: 272544

Having noted both the interest in getting better data on repeaters, and particularly, on-line data on repeaters, and the concern with theft, I offer the following observations.

1) If someone wants your repeater badly enough, they will simply fox-hunt it. If people can find 1 watt HTs, broadcasting once a minute for ten seconds, they can *certainly* find any repeater with decent coverage. I often spot out of town repeaters by using simple body DFing. I mean, this is a trivial challenge.

2) I still understand the wish to deter the casual thief. This precludes giving any precise locational information. I will offer, however, that the casual thief isn't going to be able to make heads or tails of 40.0135N 80.0121W. Even if he figures out that those are latitude and longitude numbers, he *still* has to go to the library or other map depository and *find* the bleeping thing.

3) Even if you want to deter *that* guy (who is probably going to resort to plan 1 if he gets the plan 2 numbers and doesn't have the maps), you can simply give the data with insufficient accuracy to pin-point it.

While the less accurate data is off a lower value to the radio amateur, the value of the data is still very high. I mean, knowing where a repeater is to within 2 miles is of interest, and is usefull data. Knowing where it is to within a half a mile is only slightly more usefull. I will offer that having the data to the nearest five feet is of little or no value if you already have the 1/2 mile data, unless you're fixin to steal the machine.

Thus I offer the following. People wishing to report locations precisely can do so, but those unwilling to offer precise data can give data to the nearest (or spoofest) 2 or 3 minutes. At most of the latitudes populated, that would equal 1.5-2 miles in longitude, and 2 to 3 miles in latitude. This is certainly close enough to be usefull for amateur purposes, but not close enough to be usefull for, err.., slime purposes.

Those who don't wish to show their hands can simply give false coordinates of a nearby mountaintop for their machine. Those who *really* don't want to take part (because of latent paranoia?) can simply offer no information.

Just my two cents. I commiserate (sp?) with those who have lost equipment to thieves/vandals, but don't think that closing the door entirely is the answer. Closing the door only serves to deny the amateur community of valuable information, while only detering the casual thief.

Steve
N3OIE

P.S. If the thieves had been *truly* tasteful, they would have left the guy wires and the GE equipment intact. In fact, they probably would have left RCA gear in place of the Motorola, so that you would be up for at least a week. Of cousre, that would be adding insult to injury.

96. Daily Summary of Solar Geophysical Activity for 08 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 04:19:59 UTC
From: oler@rho.uleth.ca
Message-ID: <9401090420.AA08966@rho.uleth.ca>
Source record: 272552
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

08 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 08 JANUARY, 1994

NOTE: Stratospheric warmings are moving southwards over Siberia, Bearing Sea, Canada, and southeastern Europe today. Temperature gradient is reversed between 60N and the pole only above 10 HPA in the upper stratosphere.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 008, 01/08/94
10.7 FLUX=122.9 90-AVG=101 SSN=119 BKI=0212 2201 BAI=004
BGND-XRAY=B3.2 FLU1=4.3E+05 FLU10=1.1E+04 PKI=1233 3221 PAI=008
BOU-DEV=004,019,006,017,010,013,003,008 DEV-AVG=010 NT SWF=00:000
XRAY-MAX= C2.4 @ 1032UT XRAY-MIN= B2.9 @ 2011UT XRAY-AVG= B5.5
NEUTN-MAX= +003% @ 2235UT NEUTN-MIN= -002% @ 0520UT NEUTN-AVG= +0.3%
PCA-MAX= +0.1DB @ 0750UT PCA-MIN= -0.8DB @ 0005UT PCA-AVG= -0.0DB
BOUTF-MAX=55351NT @ 1429UT BOUTF-MIN=55334NT @ 1847UT BOUTF-AVG=55343NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+068,+000,+000
GOES6-MAX=P:+122NT@ 1825UT GOES6-MIN=N:-062NT@ 0741UT G6-AVG=+091,+024,-026
FLUXFCST=STD:120,115,110;SESC:120,115,110 BAI/PAI-FCST=005,005,010/012,010,010
KFCST=1112 3111 1112 3111 27DAY-AP=007,004 27DAY-KP=2124 2211 1202 2111
WARNINGS=*MAJFLR;*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 07 JAN 94 was 62.1.
The Full Kp Indices for 07 JAN 94 are: 1+ 1- 1o 3- 3- 1+ 2- 1o

SYNOPSIS OF ACTIVITY

Solar activity was low. Only a few low-level C-class x-ray flares were observed. Most of these were from Region 7646 (S08W66) which appears to be declining. Region 7648 (N06E02) is the largest group on the disk but has a simple magnetic structure and was quiet.

Solar activity forecast: solar activity is expected to be
low. Regions 7646 and 7648 pose a slight threat for an isolated
M-class flare.

The geomagnetic field was quiet to unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to be predominantly quiet to unsettled for the next
three days. An increase to active is expected late on day three
due to coronal hole effects.

Event probabilities 09 jan-11 jan

Class M 20/20/15
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 09 jan-11 jan

A. Middle Latitudes
Active 10/10/40
Minor Storm 05/05/15
Major-Severe Storm 01/01/01

B. High Latitudes
Active 10/10/35
Minor Storm 05/05/15
Major-Severe Storm 01/01/05

Global HF propagation conditions were normal over the last
24 hours. Normal conditions should continue throughout the
next 72 hours. There is a slight chance high and polar
latitude paths could see occasional minor signal degradation
during the local night hours, although in general conditions
should remain near-normal through 11 January.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 08/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7645 N13W64 085 0040 CAO 14 005 BETA
7646 S09W66 087 0250 EAO 11 011 BETA
7647 S15W73 094 0020 BXO 11 005 BETA
7648 N06E03 018 0330 EAI 12 025 BETA
7649 S19W58 079 0000 AXX 01 002 ALPHA
7650 N05E14 007 0060 DAO 07 011 BETA
REGIONS DUE TO RETURN 09 JANUARY TO 11 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 08 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0331 0331 0332 610
0457 0457 0457 130
2348 2348 2348 170

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 08 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
08/B0018 B0410 S06W54 DSF

INFERRED CORONAL HOLES. LOCATIONS VALID AT 08/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
07 Jan: 0034 0042 0048 C1.5
0111 0123 0136 C2.3 SF 7646 S09W37
0217 0226 0238 C3.9 SF 7646 S11W40
0248 0303 0330 C3.1
0538 0605 0613 C1.3 SF 7646 S09W43
1013 1016 1018 C2.1
1124 1128 1130 C8.0 SN 7646 S11W49 39 35 33
1231 1241 1257 C2.3 SF 7646 S04W44 250 29
1520 1523 1528 B7.3 SF 7650 N06E32
1533 1556 1608 SF 7647 S16W55
1628 1630 1634 SF 7646 S09W46
1742 1745 1748 B5.3 SF 7646 S09W47
1812 1826 1833 C2.2 1F 7646 S10W49
1959 2002 2005 B5.8
2048 2052 2059 B4.8 SF 7646 S10W49
2123 2137 2144 B9.4 SF 7646 S10W55
2238 2245 2255 C1.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7646: 6 1 0 9 2 0 0 0 011 (61.1)
Region 7647: 0 0 0 1 0 0 0 0 001 (5.6)
Region 7650: 0 0 0 1 0 0 0 0 001 (5.6)
Uncorrellated: 4 0 0 0 0 0 0 0 005 (27.8)

Total Events: 018 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ----------------------------
07 Jan: 0248 0303 0330 C3.1 III
2238 2245 2255 C1.7 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

97. Re: Mobile antenna question

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 04:22:56 UTC
From: ez006683@othello.ucdavis.edu
Message-ID: <CJCHI8.Hyy@ucdavis.edu>
Source record: 272545

Michael Barts (mbarts@vt.edu) wrote:
: the hatch. The glass around the edges of the glass (where the antenna will
: mount) has black matte finish consisting of lots of small dots acting as a
: sunscreen. Does anybody know what this stuff is? Will it interfere with the
: glass mount, mechanically or electrically? Any suggestions or experience with
: this?

My Ford probe has the same finish on the rear window. I had a cellular
phone antenna on the rear for a while, until I returned to school and
quit my job. The finish didn't appear to make the glass mount work any
worse than they do on other cars. When I removed the antennathere was no
damage to the finish either. I used constant pressure prying the box off
and then used a blow drier to heat up the adhesive. I didn't use a razor
blade.

good luck,
Dan

--
---
* Daniel D. Todd Packet: KC6UUD@WA6RDH.#nocal.ca.usa *
* Internet: DDTODD@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
---
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
---

98. Re: Vanity Callsign Notice of Propsed Rulemaking (PR93-305)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 04:36:49 UTC
From: ez006683@othello.ucdavis.edu
Message-ID: <CJCI5D.In6@ucdavis.edu>
Source record: 272546

Hi All,
It sounds as if the NPRM , as written, will only allow you to
apply for one of the calls that have not yet been assigned. If this is
the case they won't be reissuing old calls. Is that the way everyone
else reads it or did I miss something?

Thanks,
Dan

--
---
* Daniel D. Todd Packet: KC6UUD@WA6RDH.#nocal.ca.usa *
* Internet: DDTODD@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
---
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
---

99. Re: Opening ICOM-R1

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 07:02:40 UTC
From: cscon0151@uoft02.utoledo.edu
Message-ID: <1994Jan9.020240.1@uoft02.utoledo.edu>
Source record: 272547
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave

In article <1994Jan8.015818.986@news.media.mit.edu>, minsky@media.mit.edu (Marvin Minsky) writes:
> Anyone know how to take bottom bqattery cover off an R1. Mine is
> "inert" so I suspect that the Nicad battery has expired. I removed
> all visible screws, and the case opens at the top, but the botton
> won't let go. Any ideas? There is a latch at the bottom that doesn't
> seem to do anything...

> I Guess you dont have or read your manual! :)
> The bottom cover SLIDES off! Move the latch up and slide off the cover
towards the right(looking at the radifrom the front).After you take the co
cover off,you can get it apart.I'm surprised you havent bought another
battery so you can listen a lot longer.Hope this help
Hope this helps!
> Barry Felstein
E-Mail care of Brad S.

100. RAMSEY KITS NOT TOO G

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 11:32:24 UTC
From: steven.rosenberg@support.com
Message-ID: <9401091132.A6377wk@support.com>
Source record: 272556

rohvm1.mah48d@rohmhaas.com (John E. Taylor III) writes:

> I built one of the Ramsey 40-m QRP transmitters--really simple, about half
> a dozen components. When it didn't work, I figured I'd done something
> wrong, and would trouble-shoot it when I got the chance. Haven't yet
> gotten the chance, but it sounds like the problem may not have been me.
> This discussion thread may provide me incentive to see just what was wrong
> (oscillator works, but not the final), but also to homebrew rather than
> buying another Ramsey kit.

YES! That's a better idea. Get one of Doug de Maw's QRP books and start collecting the parts. I didn't mention in my previous post about my non-working Ramsay 40m receiver that I had previously built three projects from the QRP notebook (1st edition) and they all worked great -- not to mention provided a ton of satisfaction.

The projects were, the Poor Man's QRP transmitter for 40m, the QRP antenna tuner and the 12v, 1 amp power supply -- All working GREAT, with great design and really cool surplus enclosures that I built myself. The transmitter is housed in a Planters peanut can -- what better for a peanut whistle? The power supply sits in the gutted housing of a dead auto battery charger -- with the labels changed to protect the ignorant, of course!

steven.rosenberg@support.com

KC6FYL

101. Re: Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 14:43:38 UTC
From: kenh@w8hd.org
Message-ID: <2gp56q$b92@w8hd.w8hd.org>
Source record: 272550

chrism@col.hp.com (Chris Magnuson) writes:

>I am going to Alaska again this year, and would like to investigate
>whether it is possible to make phone calls from way up high by radio
>(check on the kids, etc.). Is this possible to do via a portable
>radio? If so, can you give any pointers on how to get started...I
>have until May 27 to get this going.

Hi Chris,

Yes.

Use the phone in the plane. It is not only against most airline rules to
use your own radio equipment on a commercial aircraft, it is unsafe.

There is no safe method for you to insure that your equipment is not
interfering with the aircraft's communication and navigation equipment.

That's why, essentially, it is not allowed.

--
kenh@w8hd.org
Ken Hoehn - Teletech, Inc. Compuserve: 70007,2374
N8NYO P.O.Box 924 FAX: (313) 562-8612
Dearborn, MI 48121 VOICE: (313) 562-6873

102. Re: Theft/vandalism at radio sites (was Re: Repeater databas

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 14:58:14 UTC
From: dave@llondel.demon.co.uk
Message-ID: <758152694snx@llondel.demon.co.uk>
Source record: 272554

There have been several cases of remote-site amateur gear being stolen/vandalised in the UK. The first recorded case was the West London repeater some time ago, which vanished without trace until (several years later) they drained the water tower on which the repeater had been sited.... it was inside. A few packet nodes have been vandalised in the last year or so, and the Guildford voice repeater was stolen last month.

The best case was when someone tried to vandalise a repeater and got the wrong one.... as it belonged to the local police, the culprits got nicked fairly quickly!

What is bad about most of the cases reported is that the damage was almost certainly done by amateurs, or at least people with intimate knowledge of what they were doing, simply because of what was taken/broken and what wasn't.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

103. Re: Need U.K. Admin Address

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 15:00:18 UTC
From: dave@llondel.demon.co.uk
Message-ID: <758152818snx@llondel.demon.co.uk>
Source record: 272553

In article <CJA9zz.GC2@cix.compulink.co.uk> jnewgas@cix.compulink.co.uk ("John Newgas") writes:
>
>alternatively why not ask the RSGB (equvlt to ARRL)at
>Lambda House
>Cranbourne Road
>Potters Bar
>Herts, EN6 3JE
>Telephone: 0707 59015
>Fax: 0707 45105
>Telex: 9312130923 Ansback RSG
>
RSGB phone number has changed.... +44 707 659015, and fax +44 707 645105.

Dave
--

```
*****************************************************************************
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
*****************************************************************************
```

104. Montreal area Repeaters w/ municipalities

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 16:18:00 UTC
From: s_landi@pavo.concordia.ca
Message-ID: <9JAN199411184535@pavo.concordia.ca>
Source record: 272548

Hello everyone,
I'm looking for a listing of Repeaters in the Montreal area and
if possible the actual municipality in which they're found (NOT the address)
just the municipality. Any help on this subject would be greatly appreciated.
Please leave message here or e-mail me, it's as you wish thanks again

73

Stef :)

105. Re: rec.radio.amateur.misc Frequently Asked Questions (Part 2 of 3)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 16:39:17 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCJDFLH.Mxo@netcom.com>
Source record: 272549

```
In article <ham-radio-faq-2-757910580@kluft.com> hamradio-faq@kluft.com (Ham Radio FAQ
Coordinators) writes:
>Posted-By: auto-faq 3.1.1.4
>Archive-name: radio/ham-radio/faq/part2
>Revision: 3.1 1993/11/07 21:28:33
>
>Rec.radio.amateur.misc Frequently Asked Questions
>Part 2 - Amateur Radio Organizations, Services, and Information Sources
>------------------------------------------------------------------------------
>
>Questions discussed in Part 2: (dates indicate last modification)
>** Where can I find Ham Radio information with a computer? (11/92)
> * The rec.radio.* newsgroups (6/93)
> * The ARRL e-mail server (1/93)
> * The KA6ETB e-mail "HAM-server" (new 9/93)
> * The Internet File Transfer Protocol (FTP) (9/93)
> * Access to FTP archives via electronic mail (1/93)
> * The Ham-Radio mail list: rec.radio.amateur.misc by mail (9/93)
> * Telephone BBS's with Ham-related information (9/93)
> * Callsign servers and geographical name servers (11/92)
> * FTP access to FCC Part 97 and FCC Amateur Radio question pools (9/93)
> * Lists of radio modifications and extensions (11/92)
>
>--Rec.radio.amateur.misc Frequently-asked Questions------------------Part 2--
>
>** Where can I find Ham Radio information with a computer?
>
> * The ARRL e-mail server
>
> * The KA6ETB e-mail "HAM-server"
>
> * The Internet File Transfer Protocol (FTP)
>
> The following is a brief summary of major ham-related FTP sites and
> places where you can obtain a current copy of this FAQ:
>

world.std.com
This site contains many ham radio related programs and
documents. It also is the only FTP-able site containing
up-to-date copies of the files also available via e-mail
on the ARRL's information server.

> ftp.cs.buffalo.edu
> (submissions to this ftp site should be made to
```

> bowen@cs.buffalo.edu) - contains many ham radio files,
> including the FAQs, Elmer list, SWL and scanner info, Packet
> FAQ, examination opportunities, information on various
> regulations, information on commercial radios (i.e. GE or
> Motorola), SSTV (slow-scan TV), HTs (handheld transceivers)
> and the KA2UGQ worldwide BBS list. See ~pub/ham-radio. This
> FAQ is updated monthly here.
> grivel.une.edu.au
> This site contains a mirror of ftp.cs.buffalo.edu's Ham Radio
> archives. It provides a shorter distance if you're in
> Australia or if Australia is a shorter net.path for you than
> New York.
> nic.funet.fi
> This is one of the largest FTP sites in Europe and maybe the
> most popular. There are many directories of Ham-related files
> in /pub/ham. /pub/ham/info contains a mirror of Buffalo.
> Other topics available here include amiga, antenna, HF, packet,
> satellite, scanners, program sources, VHF and others.
> ftp.uu.net
> A large FTP site in the USA - UUNET contains sources and
> binaries for many different types of computers.
> wsmr-simtel20.army.mil
> Keith Peterson, W8SDZ, has apparently returned as the
> maintainer of this huge repository of ham-radio (software and
> modifications), MS-DOS, and CP/M files. To find out how
> to submit files to this archive, please read his informational
> posts to the comp.binaries.ibm.pc.archives newsgroup. If you
> cannot directly FTP from wsmr-simtel20, there is a mail server
> that can help. Send mail with the text "help" to
> listserv@vm.ecs.rpi.edu.
> wuarchive.wustl.edu
> A "mirror" of the files available on Simtel20, plus a *LOT*
> more. A more user-friendly Unix environment (plus a faster
> net connection) makes this site preferred over Simtel20.
> If you are on a Unix box locally, see if your system
> administrator will "NFS-mount" these files for faster/easier
> access.
> ucsd.edu
> The "home" site (with the most recent versions for the largest
> number of different computer platforms) of the KA9Q TCP/IP
> Network Operating System (NOS), other ham-related software,
> and the archives for the Info-Hams, Packet-Radio, Ham-Policy,
> Radio-Info and TCP-Group digests.
> uxc.cso.uiuc.edu
> cd pub/ham-radio - This site contains the HyperCard Hamstacks
> written by Diana Carlson as well as ASCII readable ham radio
> question pools.
> ftp.apple.com
> cd pub/ham-radio - Ham software and information, especially
> Macintosh software

> wolfen.cc.uow.edu.au
> athene.uni-paderborn.de
> ham radio files and software for the Amiga computer system
> rtfm.mit.edu
> cd pub/usenet/news.answers - all participating FAQs and
> periodic informational postings are archived here, including
> those from the rec.radio.* newsgroups which can be found in
> pub/usenet/news.answers/radio. Participating FAQs are
> automatically archived here when they are posted on UseNet.
> ftp.amdahl.com
> cd pub/radio/amateur - the most up-to-date copy of the FAQ
> (updated nightly when changes are made)
>
>
> * FTP access to FCC Part 97 and FCC Amateur Radio question pools
> Part 97 is part of the FCC regulations and only applies to the USA.
> Since the latest changes to it, there are no known FTP sites with
> a current copy.

An ASCII copy of Part 97 resides in three parts on world.std.com in the
directory: pub/hamradio/Part97

>
> An ASCII copy of the question pools are available by ftp from
> the ARRL e-mail server.
>
>
>** Where can I get ham radio software for my computer?
> See the information about Anonymous FTP, e-mail servers, and
> ham-related telephone BBS's above. For PC-clones, see the KA6ETB
> HAM-server. For Macintosh computers, see the file SOFTWARE-MAC on
> the ARRL e-mail server for locations to look.

Also, world.std.com has a large compilation of ham related software in the
directory: pub/hamradio/mac

--

==
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
the World - world.std.com pub/hamradio
==

106. Re: Vanity Callsign Notice of Propsed Rulemaking (PR93-305)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 19:02:54 UTC
From: root@jackatak.raider.net
Message-ID: <J4FwFc2w165w@jackatak.raider.net>
Source record: 272561

gdm@eieio.ualr.edu (G. Douglas Mauldin) writes:

[.... much other "stuff" deleted...]

> and my trying to get, say, K5EE, the shortest (in CW)
> callsign in the United States.

Pardon the flame-thrower.... but seems to me, Doug, EXTRA class
callsign and all that, that you ought to know ur cw well enuf to know
"N" is shorter than "K", and so is "A"... so AE5E and NE5E and N5EE
are *ALL* shorter than K5EE or the other permutations...

and we thought Extra Class was a safe haven from all that... ;^)
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

107. Re: Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 19:27:17 UTC
From: irvine@uxh.cso.uiuc.edu
Message-ID: <2gplql$p46@vixen.cso.uiuc.edu>
Source record: 272551

In article <2gp56q$b92@w8hd.w8hd.org> kenh@w8hd.org (Ken Hoehn) writes:
>chrism@col.hp.com (Chris Magnuson) writes:
>
>>I am going to Alaska again this year, and would like to investigate
>>whether it is possible to make phone calls from way up high by radio
>>(check on the kids, etc.). Is this possible to do via a portable
>>radio? If so, can you give any pointers on how to get started...I
>>have until May 27 to get this going.
>
>Hi Chris,
>
>Yes.
>
>Use the phone in the plane. It is not only against most airline rules to

ON a lot of planes the phone is in the seatback in front of you. Be
sure to use a credit card (scanners), and keep it short as the costs
can ring up (I racked up $15 talking to my wife for just a few minutes!).

>use your own radio equipment on a commercial aircraft, it is unsafe.

They even have walkmen and CD players turned off during takeoff and
landing (and I am not sure during the flight?).

>There is no safe method for you to insure that your equipment is not
>interfering with the aircraft's communication and navigation equipment.

I hadn't ridden a plane in 5 years until I went down to Melbourne, FL
for an interview. Whew, things on the plane had changed: seatback
phones and you had to turn off all the equipment!

>That's why, essentially, it is not allowed.

Isn't RFI WONDERFUL?
--
Brent Irvine callsign: n0rzu These personal opinions can
internet: b-irvine@uiuc.edu be yours for a modest licensing
aol: bearking@aol.com fee of $50.00

108. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 20:21:15 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <758146875snz@g8sjp.demon.co.uk>
Source record: 272555

In article <758152694snx@llondel.demon.co.uk> dave@llondel.demon.co.uk writes:

>There have been several cases of remote-site amateur gear being
>stolen/vandalised in the UK. The first recorded case was the West London
>repeater some time ago, which vanished without trace until (several years
>later) they drained the water tower on which the repeater had been sited....
>it was inside. A few packet nodes have been vandalised in the last year or
>so, and the Guildford voice repeater was stolen last month.
>

Dave,

I'd be interested in knowing which repreater this actually refers to, since
the West London repeaters have always been sited on a hospital!

Maybe the folklore is a bit disturbed. 'WL WAS stolen, and was, in fact, dug
up in some Berkshire (?) woodland several years afterwards.

--

Iain Philipps - InterNet StormTrooper
Telephone: +44 494 432144
EMail: ip@g8sjp.demon.co.uk
On VHF: G8SJP
On HF: G0RDI
On Contests: G(W)0RDI/P [JO01KJ and IO82JJ]
On Vacation: C30DLA
At Work: N2TLY
---

109. Ohio/Penn DX Bulletin #142

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-09 21:22:13 UTC
From: kb8nw@barf80.nshore.org
Message-ID: <$opdx.142.1994@ampr.org>
Source record: 272511
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ALLBBS $OPDX.142
Ohio/Penn DX Bulletin No. 142

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 142
BID: $OPDX.142
January 10, 1994
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio
Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, DF4RD, DL7VEE & DXNL, AD1C, N2PNG, K4CEF & Southeastern Cluster Group, K4MZU, K8BL and K8MBH for the following DX information.

1A0KM, S.M.O.M. Activity during the first part of the week was probably the work of a pirate. Usually the group that activates this station will announce when they will be on the air. SYGS! (Save Your Green Stamp)

9M2, WEST MALAYSIA. Just a reminder that Neville, G3NUG, will be active from three islands off the west coast of West Malaysia during January and February. His callsign will be 9M2/G3NUG and he prefers the frequencies 14260 and 18140 kHz (both +/- 5 kHz). Look for him on: Pangkor Is. (AS-072) from January 14-21, Langkawi Is. (AS-058) from January 22-28 and Penang Is. (AS-016) from January 29 to February 10. Neville mentions that there has been no activity from AS-072 and AS-058 for about three years. All direct QSL request will be cleared by the end February. QSL via CBA.

BV9P, PRATAS ISLAND. A group consisting of BV5AF, BV2AP, BV4AS, BV4OB and OH2BH were active from here on January 5th, for about 4 hours. It was reported that lots of VK and JA stations were heard calling the BV9P station on 14255 and 14260 kHz. There were no reports from anyone stateside that could not hear BV9P. Martti, OH2BH/VR2BH, was heard saying that another DXpedition would take place in March. Other reports also indicate that the BV9P group made about 630 QSOs with JA, BV and VK stations, and one single KH6 contact before going QRT.

EI4VRU CARDS. Barry, N2PNG, who has just returned from Ireland, states he made 1800 QSOs in the limited time he had to operate. There are two QSL routes available to use: N2PNG CBA or Barry Kennedy, POB 222, Austinburg, Ohio 44010.

HK0, MALPELO & GORGOLA ISLANDS. Ermanno was very active from Malpelo this past week as I2RAO/HK0 (not IT2RAO/HK0 as reported last week). He has gone QRT as of January 8th, but will returning on the air from Gorgola Island (in the Valle/Cauca Division group) January 12-15. It is unsure what this island will count for, so WFWL. There are many who hope his Malpelo operation will count (KYFC!).

HS, THAILAND. Fred, K3ZO, will be arriving in Thailand January 8th and returning on February 15th. During his time there, he will activate the club station HS0AC with his personal Thailand call, HS0ZAR. Fred plans to be very active on 40 meter CW, both morning and evening gray line paths. He states the bottom end of 40 meters is full of CB'ers from Indonesia on SSB, so look for him above 7015 kHz (sometimes even as high as 7030, but not down on the very low end of the band). In regards to 80 meters, it is not normally permitted for amateurs to operate in Thailand, but he has asked for special permission to use the band from 2200z, February 4th thru 1700z February 6th, CW only. If he gets this permission, ("Which is by no means assured," states Fred) look for him around 3513 KHz. There will be no skeds or nets!
Just a reminder that Reiner, DL2VK, is now active as HS0/DL2VK until January 31st. He will be active on all modes (mostly on CW) including PACTOR.

P5DTG INFORMATION. For the many stations that worked P5DTG back in November of 1992, here is some bad news. Responses are being received from Josef, OK1DTG, the QSL Manager and Operator stating that the P5DTG operation was an unlicensed operation. The information was printed on Josef's OK1DTG QSL card with the QSO information blank and lined-through and the operators call on it.

PY0, ST. PETER & ST. PAUL ROCKS. According to the son of PS7KM the planned three week DXpedition by four Brasilian operators to St. Peter & St. Paul Rocks that was to start January 10th, will be delayed until January 20th and will only be for two weeks. There were no reasons given for the delay. The group plans to have two stations working 24 hours a day from 160 to 6 meters on CW/SSB/RTTY/Packet. QSL SSB/RTTY/6m contacts to PS7KM and all CW contacts to PT7WA.

S2, BANGLADESH. K4MZU reports working Manju, S21AM, around 1240Z on 20 meters longpath. Manju is a Bangladesh national and is newly licensed. QSL to PO Box 4000, Dhaka 1000, Bangladesh.

DXCC HAPPENINGS. Another "Application For New DXCC Country" status was sent to the DXAC. Actually this application was a request to reinstate Aldabra Atoll to the DXCC Countries List. The application was filed by Kurt Bindschedler, HB9MX/S79MX, who was active from Aldabra November 1st and 2nd in 1993. Kurt believes Aldabra qualifies under the DXCC Criteria rule, "Point 1: by virtue of Governmnet." Aldabra was deleted from the DXCC List, June 28, 1976. All contacts now made June 29, 1976 and after with Aldabra counts towards Seychelles (S7). Kurt states, "the Seychelles government is the administrative authority for all outlying islands with the exception of Aldabra. Aldabra is administered by non-governmental, non-profit scientific and conservation organization

SIF (Seychelles Island Foundation). SIF consists of a board of trustees, the execxtive officer and several foreign well reputed personalities as members, with offices on Mahe and in London." Here are the coordinates: Longitude is 46 deg. 20 min. east / Latitude is 9 deg. 25 min. south.

KEEP THOSE BALLOTS COMING! (Only a 3 weeks to go!) Ballots for the Third Annual OPDX/NODXA DX Survey can be found in OPDX.137. Ballots can be sent to the following packet and online addresses listed below.

FAX YOUR DX INFORMATION NOW! Faxing is available Monday/Wednesday/Friday from 0430 to 2330z only. The number is 216-237-8208 and the FAX card is sharing the same phone line as BARF-80 BBS using a data/fax/phone switch.

Excerpts and distribution of The OPDX Bulletin are granted as long as OPDX/BARF80 receive credit. To contribute DX info, call BARF-80 BBS online at 216-237-8208 14400/9600/2400/1200/300 and leave a message with the Sysop or send InterNet Mail to: aq474@cleveland.freenet.edu or send BitNet Mail to: aq474%cleveland.freenet@cunyvm or send PRODIGY Mail to: DFJH48A or send a message via packet to KB8NW @ WA8BXN.OH.USA.NA

/EX

110. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 00:08:10 UTC
From: mjr@crl.com
Message-ID: <2gq69a$gj7@crl.crl.com>
Source record: 272558

Well I find myself sympathetic to both sides, so here is my $0.02, though this is getting off the subject of the database per se.

1) If repeater owners don't reveal link frequencies, then they must be prepared to suffer occasional interference. About the best a good ham *can* do is listen for a while (on an frequency they might want to use simplex), and having heard little, try it out, and see who (or if one) complains.

2) If repeater owners do reveal link frequencies, then they will probably suffer from deliberate interference from the *bad* hams, so take your pick.

3) I agree with Bob W. that location of a repeater is secondary to coverage information. Describing coverage succinctly is often a difficult thing to do. This is especially true in areas like N. CA. where you have a lot of mixed valley and mountain terrain. Some repeaters I know have very oddly shaped coverage patterns. Location, even accurate location, is therefore of limited help in determining coverage in many locations.

4) Any amount of information in a query-able database is better than nothing.

--
matthew rapaport Philosopher/Programmer at large KD6KVH
CIS: 70271,255 Internet: mjr@crl.com

111. ANS-008 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 00:21:44 UTC
From: cowdin@pogo.DEn.mmc.COM
Message-ID: <199401100024.QAA06684@AMSAT.Org>
Source record: 272559

SB SAT @ AMSAT $ANS-008.01
PoSAT-1 BBS TO OPEN

HR AMSAT NEWS SERVICE BULLETIN 008.01 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 8, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-008.01

PoSAT-1 Opens For Radio Amateur Use

As many of you may already know, PoSAT-1 was built at University of Surrey and is owned by a Portuguese Industrial Consortium. It carries a commercial and an Amateur Radio payload. The Amateur Service hasn't yet started operation because of some doubts about the use of PoSAT-1 were brought up because of the the possiblity of misuse of the Amateur Radio spectrum.

AMSAT-PO (the Portuguese AMSAT "branch") and others were very worried about this situation, and after a few setbacks and many meetings, a protocol was finally established between the PoSAT Industrial Consortium and AMSAT-PO on 6-DEC-93. The main concern of AMSAT-PO was always to protect the Amateur bands and the Amateur code and practice.

Jose Carlos (CT1ERC) has provided the main points of that agreement which are as follows:

* RAM memory allocated to the Amateur store-and-forward BBS: at least 6 MB out of a total of 16 MB;

* The operating schedule (between the commercial and Amateur service) will be valid for two years and may be re-negotiated every two years;

* The Amateur ground stations are allowed to download all the files related to the technical and scientific experiments onboard, but by imposition of the Consortium, the IMAGES TAKEN BY THE ONBOARD CCD CAMERAS WILL NOT BE MADE AVAILABLE TO THE AMATEUR RADIO SERVICE!!!

In a meeting held recently between AMSAT-PO officials and the PoSAT Consortium the schedule approved is as follows:

EVERY minute PoSAT will be 5 seconds in the commercial frequencies and the remaining 55 seconds in the amateur frequencies. The Consortium feels that they need at lest 5 seconds to download the images. The telemetry will be downloaded in the amateur frequencies as well. This schedule will be valid starting on 07-JAN-94.

Since the amateurs aren't allowed to download the image files from the onboard cameras, there are the two experiments that will, however, be quite interesting. The are the following:

1) The onboard GPS receiver: if everything goes as expected, the days of difficult tracking are over. Just wait the AOS and the satellite will tell you were it is and where to point your antennas, if you know your QTH position.

2) The possibility of operation at 38.4 Kbps provided through the DSP system, which is will allow the amateurs to develope the necessary RF and digital techniques to go beyond 9600 baud. Imagine receiving about 100 Kbytes file in just 5 seconds!

PoSAT-1 will benefit mostly the amateurs that have 9600 baud operational capability and since there are only two of 9600 baud capable stations at the present time in Portugal operating regularly using these birds, your suggestions and comments would be most appreciated and might help AMSAT-PO in their contacts and negotiations with the PoSAT Consortium through AMSAT-PO.

The following are the PoSAT-1 radio amateur frequencies:

PoSat-1 Transponder Frequencies

UPLINK 145.975 MHz 145.925 MHz (Secondary)
DONWLINK 435.075 MHz 435.050 MHz (Secondary)

BBSCALL: posat-11 posat-12

[The AMSAT News Service (ANS) would like to thank Jose Carlos (CT1ERC) for this bulletin item. CT1ERC can receive your inquiries and comments on the BBS of KO-23 or at his INTERNET mailbox address of: J_CARDOSO%utad.pt@nunes.uminho.pt]

/EX
SB SAT @ AMSAT $ANS-008.02
MIR GETS A NEW CREW

HR AMSAT NEWS SERVICE BULLETIN 008.02 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 8, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-008.02

New Cosmonauts To Begin Stay on MIR

Today, 08-JAN-94, a Soyuz TM-18 spacecraft was launched from Baikonur at 10:08 UTC with three cosmonauts aboard. The new cosmonauts are Victor Afanassiev (U9MIR), Yuri Usachov (R3MIR), and Valery Poliakov (U3MIR). The TM-18 spacecraft is scheduled to dock with the MIR space station on 10-JAN-94. The cosmonauts that are currently aboard MIR,Vassili Tsybliev and Alexander Serebrov (R0MIR), will return to earth on 14-JAN-94.

What is interesting to note about U3MIR is that he will attempt to break Musa Manarov record for remaining in space. U3MIR is a medical doctor and will remain aboard MIR until April '95.

The new MIR QSL Manager is Serge Samburov (RV3DR). He has held that position since January '93. To receive a QSL confirming your MIR contact,

send your QSL cards to his postal address of: P.O.BOX 73, Kaliningrad-10
City, Moscow Area, 141070, RUSSIA. Also, you can send your inquiries to
the following packet radio address: RV3DR#R#MIR or RV3DR@RK3KP.#MSK.RUS.EU.

[The AMSAT News Service (ANS) would like to thank RV3DR and LW2DTZ for this
for the information which went into this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-008.03
STS-60 SAREX MISSION INFO

HR AMSAT NEWS SERVICE BULLETIN 008.03 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 8, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-008.03

Next SAREX Mission: STS-60

The STS-60 flight of the Space Shuttle Discovery represents the next
Shuttle Amateur Radio Experiment (SAREX) mission. STS-60 is
currently scheduled for launch on February 3, 1994 at 12:10 UTC. The
primary payloads on-board STS-60 are the Wake Shield Facility and the
second flight of the Spacehab, a pressurized module installed in the
forward section of the Orbiter. The Spacehab science objectives are
primarily micro-gravity oriented with emphasis on materials and life
science.

The flight of STS-60 represents an historic first---the first joint
U.S.-Russian Space Shuttle flight. This will be the first of several
joint missions planned in preparation for the development of the
international Space Station. Cosmonaut Sergei Krikalev, U5MIR, was
chosen to be the first Russian to fly on the U.S. Space Shuttle.
During the 8 day flight, Cosmonaut Krikalev will support the science
operations on the Space Shuttle as Mission Specialist 4.

The SAREX operations on this flight include voice and packet.
Preliminary discussions between the astronauts and the SAREX working
group indicate that the Shuttle crew will be extremely busy with the
numerous payloads on this flight. This information is being provided
so the amateur community is aware that voice operations might be rare
on this flight. Packet radio operations are expected when the crew
is not engaged in voice operations. Please remember that this is a
preflight prediction. The astronauts and the SAREX working group
cannot guarantee this prediction. The following information sheet
gives more details on SAREX operations for STS-60.

STS-60 Shuttle Amateur Radio Experiment (SAREX)
Information Sheet

Mission:STS-60 Space Shuttle Discovery
Wake Shield Facility & Spacehab-2 Mission

Launch: February 3, 1994, 12:10 UTC

Orbit: 57 degree inclination

Mission Length:8 days (Nominal)

Amateur Radio Operators: Charlie Bolden (License Pending), Ron Sega
(License Pending), Sergei Krikalev, U5MIR

Modes:FM Voice
Prime callsign: To be provided once Commander Bolden's callsign is known

Packet Radio: Callsign W5RRR-1

Frequencies: All operations in split mode. Do not transmit on
the downlink frequency.

Voice Freqs: Downlink: 145.55 MHz (Worldwide)
Uplinks: 144.91, 144.93, 144.95, 144.97,
144.99 MHz (Except Europe)
144.70, 144.75, 144.80 MHz (Europe only)

Note: The crew will not favor any specific uplink frequency, so your ability to
work the crew will be the "luck of the draw."

Packet Freqs: Downlink: 145.55 MHz
Uplink: 144.49 MHz

Info: Goddard Amateur Radio Club, WA3NAN, Greenbelt Maryland,
SAREX Bulletins and Shuttle Retransmissions
3860 KHz, 7185 KHz, 14,295 KHz, 21,395 KHz, 28,650 KHz
and 147.45 MHz (FM)

Johnson Space Center ARC, W5RRR, Houston, Texas
SAREX Bulletins 7225 KHz, 14,280 KHz, 21,395 KHz, 28,650 KHz, (SSB)
and 146.64 MHz (FM)

ARRL Amateur Radio Station, W1AW, Newington, CT
SAREX News Bulletins: 3990, 7290, 14,290, 18,160, 21,390,
and 28,590 KHz and 147.555 MHz (FM)

Also, bulletins available on internet, via AMSAT ANS, Compuserve,
and your local PBSS.

School Group Participation: 5 school groups will participate in SAREX with
pre-scheduled direct and telebridge contacts.
These include 4 in the U.S., and one in Russia.

Prelaunch Keplerian Elements: The following Keplerian Elements are provided by
Gil Carman (WA5NOM) at the Johnson Space Center
ARC:

Satellite: STS-58
Catalog number: 00058
Epoch time: 94024.67747791 = (24-JAN-94 16:15:34.09 UTC)
Element set: 005
Inclination: 39.0114 deg
RA of node: 124.6663 deg Space Shuttle Flight STS-58

Eccentricity: .0007676 Prelaunch Element set JSC-005
Arg of perigee: 272.4217 deg Launch: 24-JAN-94 14:53 UTC
Mean anomaly: 87.5676 deg
Mean motion: 15.96123499 rev/day Gil Carman, WA5NOM
Decay rate: 1.19475e-03 rev/day*2 NASA Johnson Space Center
Epoch rev: 2
Checksum: 329

[The AMSAT News Service (ANS) would like to thank Frank Bauer (KA3HDO) for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-008.04
AO-13 TRANSPONDER SCHEDULES

HR AMSAT NEWS SERVICE BULLETIN 008.04 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 8, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-008.04

G3RUH Provides AO-13 "Provisional" Transponder Operating Schedules For '94

The AO-13 Ground Command Station of G3RUH has provided the "best guess" transponder schedules for the first half of '94. Please take the following schedules and paste them in a prominent place in your station.

AO-13 Provisional Mode Schedules 1994

L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Jan 31-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 145 |<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 240/0, Apr 04

L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Apr 04-Jul 11
Mode-B : MA 0 to MA 160 | OFF
Mode-B : MA 160 to MA 220 |
Mode-S : MA 220 to MA 230 |<- S transponder; B trsp. is OFF
Mode-BS : MA 230 to MA 250 | Blon/Blat 240/0
Mode-B : MA 250 to MA 256 |
Omnis : MA 250 to MA 160 | Move to attitude 180/0, Jul 11

G3RUH also has provided a table to indicate what the Bahn longititude and latitude for AO-13 will be in the upcoming year. Again, this information should be considered as the "best guess" and placed in a prominent place in your ham shack.

AO-13 Provisional Attitude Schedule 1994-5
==========

```
Date [Mon] Blon Blat SA to SA Weeks Notes
------------------------------------------------------------------------
1994 Jan 31 180 0 -36 35 9
1994 Apr 04 240 0 -2 29 14
1994 Jul 11 180 0 36 -33 9
1994 Sep 12 230 0 0 -26 14 < Up to 132 minute eclipses
1994 Dec 19 180 0 -34 33 9 MA 96-107 Oct 22 - Nov 07
1995 Feb 20 230 0 12 21 14
1995 May 29 180 0 30 -31 8
1995 Jul 24 230 0 -10 -22 15 < Up to 132 minute eclipses
1995 Nov 06 180 0 -30 34 8 MA 96-103 Sep 05 - Sep 21
1996 Jan 01 230 0 9 -- --
------------------------------------------------------------------------
Note: SA stands for "Sun Angle"
```

Unfortunately, because AO-13's perigee height has decreased from 1500 KM to 420 KM, G3RUH is unsure about whether AO-13 will still be in orbit by the end of '95 and into early '96. But if AO-13 has not re-entered into the earth's atmosphere, the above Bahn longitiude and latitude values will be the planned values.

[The AMSAT News Service (ANS) would like to thank G3RUH for this bulletin item. G3RUH can be reached at G3RUH @GB7DDX.#22.GBR.EU]

/EX
SB SAT @ AMSAT $ANS-008.05
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 008.05 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 8, 1993
TO ALL RADIO AMATEURS BT
BID: $ANS-008.05

Weekly OSCAR Status Reports: 08-JAN-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1993 Dec 27-Jan 31
Mode-B : MA 0 to MA 180 | OFF
Mode-B : MA 180 to MA 220 |
Mode-S : MA 220 to MA 230 |<- S transponder; B trsp. is OFF
Mode-BS : MA 230 to MA 250 | Blon/Blat 240/-5
Mode-B : MA 250 to MA 256 | OFF
Omnis : MA 250 to MA 150 | Move to attitude 180/0, 31-Jan-94
Poor Sun angle and battery testing need maximum OFF time.
[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current FO-20 operating schedule:
From January '94 thru February '94, the analog mode and the
digital mode will be on alternately for a week at a time.
ANALOG MODE:
12-JAN-94 7:30 -TO- 19-JAN-94 7:50 UTC
26-JAN-94 8:20 -TO- 02-FEB-94 6:50 UTC
09-FEB-94 7:15 -TO- 16-FEB-94 7:40 UTC

DIGITAL MODE: Unless otherwise noted above. [JJ1WTK]

AO-16: Operating normally. [WH6I]

LO-19: Operating normally. [WH6I]

KO-23: Up and running. Busy as usual. [WH6I]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

112. Re: Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 02:40:10 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.94Jan9214010@prince.cs.columbia.edu>
Source record: 272560

> Use the phone in the plane. It is not only against most airline rules to
> use your own radio equipment on a commercial aircraft, it is unsafe.
>
> There is no safe method for you to insure that your equipment is not
> interfering with the aircraft's communication and navigation equipment.
>
> That's why, essentially, it is not allowed.

This is probably all the response that's necessary, however, it is just barely possible that the original inquirer may be a pilot, or somebody else who's planning to fly up there in a small private plane, rather than on an airliner. These generally don't have Airfones, although the use of cellular phones from one is still illegal because they activate too many different cells on the ground. In this case, it's the pilot's decision as to what radios may be used in flight, and it might be possible for the original inquirer to check for RFI himself, or to ask the pilot about doing so. If no RFI is observed (and you're DAMN sure there isn't any, because it's your skin on the line), or if the calls are made while flying VFR by pilotage, where no other radios may be needed at the time, then the question becomes reasonable. Not every flight needs radio navigation, or even radio communication. I don't know what such a person would do, unless they knew about a particular station in the area that they were flying over that had a phone patch available, and had arranged to use it. Does anybody have any ideas for this unlikely case?
-Steve

113. Display Phone for Packet

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 03:04:32 UTC
From: William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM
Message-ID: <9400097581.AA758171072@smtpgty.anatcp.rockwell.com>
Source record: 272562

I recently got a Northern Telcon "Display Phone" that I am trying to hook up to a PK-88. The phone is basically a smart phone with a dumb terminal attached, there real cute and have a small footprint. Now for the problem: the terminal does not recognize that it is attached to an RS232 device. It seems to want to detect the device and switch itself. I can access a screen that tells me the serial port is off line, but it does not allow a manual toggle like other set up features do. Northern-Telcon referred me to a tech who did not even understand that the serial port is hardware, not software, he did say he could change cards if there blown. :-)

I have the appropriate signals on pins 1-8 and 20, and the PK-88 works just fine with my HP-95LX as the terminal, but I would really like to get the display phone on line. Any one out there have any ideas, or know someone at Northern Telcon who could help?

Thanks and 73.

Bill

Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI
(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com
---
Who are you? * I am number 2. * Who is number 1? * You are number 6.
---

114. Morse Code

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 03:27:17 UTC
From: peter@bohm.eecs.berkeley.edu
Message-ID: <2gqhul$g5o@agate.berkeley.edu>
Source record: 272563

Sorry for the dumb question...but does anyone have a copy of
Morse code in ASCII they could e-mail me or tell me how to
ftp or finger so I can learn it?

Thanks MUCHO.

--
Bill Peter |peter@langmuir.eecs.berkeley.edu
Dept. of Nuclear Physics, Weizmann Institute of Science, Rehovot, ISRAEL

115. RFD: sci.geo.satnav

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 03:49:58 UTC
From: arkusinski_andy@si.com
Message-ID: <2gqj96INNeo9@rodan.UU.NET>
Source record: 272564
Cross-posted to: news.announce.newgroups,news.groups,rec.autos,rec.autos.tech,rec.backcountry,rec.boats,rec.radio.amateur.misc,sci.aeronautics,sci.engr.civil,sci.military,sci.space.tech

REQUEST FOR DISCUSSION: SCI.GEO.SATNAV

Title: SCI.GEO.SATNAV

This will be an unmoderated newsgroup.

SCI.GEO.SATNAV was chosen because the focus of this group is on navigation. The SCI.SPACE hierarchy deals with various aspects of space exploration and use, but this newsgroup deals mostly with terrestrial applications. The fact that the space segment is in space is almost incidental to the focus of the newsgroup.

Charter: SCI.GEO.SATNAV will allow a centralized location for discussion of global navigation satellite systems (GNSS). The charter specifically includes the US Global Positioning System (GPS) and Russian GLONASS, but is also open to discussion of other existing and future satellite positioning systems.

Some topics that fall under this newsgroup charter are:
* Technical aspects of GNSS operation.
* User experiences in the use of GNSS.
* Information regarding GNSS products.
* Discussion of GNSS policy (such as GPS selective availability).
* Extensions to basic GNSS technology, such as differential GPS and pseudolites.
* Navigational uses of satellite systems whose primary purpose is not navigation, such as a communication satellite net. (IRIDIUM, etc.)

Examples of topics that would not fall under the group charter are:
* Other satellite systems such as communications and intelligence gathering, except for navigational uses of such systems.
* Discussion of space policy in general.
* Discussion of areas that may use GNSS, such as surveying, sailing, or aeronautics, except as they directly relate to use of GNSS.

GPS, in particular, has turned out to be a technology with a great deal of synergism with many fields. GPS is used, not

only for military positioning which was the original
purpose, but in applications as diverse as entomology and
film making. A major intent of this newsgroup is to share
the uses to which GNSS technology is being put, thus
inspiring even more innovative uses.

While part of the SCI.GEO hierarchy, this newsgroup does not
exclude non-terrestrial uses of satellite navigation. For example, use
of GPS to determine space vehicle position is within the charter.

This group is also intended to function as a resource for
newcomers, who can post their questions and receive help
from others who have passed that way before.

Rationale: There is no single newsgroup where information
on GPS and other satellite navigation systems can be found.
Questions are often posted in newsgroups such as
sci.electronics, rec.aviation, and sci.aeronautics. To
address this lack, the mailing list RGPS DigestS was started
about a year ago, and now has over 400 subscribers.

Recently we attempted to convert GPS Digest from a moderated
weekly newsletter to an unmoderated reflector. Submissions,
which had been running at 2-3 per week, immediately picked
up to 15 the first day. Our resources were overloaded, and
the Digest is back to the original format. Many readers
indicated the real-time response was helpful and suggested
the formation of a newsgroup.

The RFD and CFV will be posted to the GPS Digest mailing
list as well as Usenet newsgroups. Only those readers with
access to Usenet should cast votes (for or against)
formation of the newsgroup.
--
Andy Arkusinski arkusinski_andy@si.com
Ken Jongsma jongsma_ken@si.com

116. Re: Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 06:16:00 UTC
From: bennett@erich.triumf.ca
Message-ID: <9JAN199422161744@erich.triumf.ca>
Source record: 272565

In article <POPOVICH.94Jan9214010@prince.cs.columbia.edu>, popovich@prince.cs.columbia.edu (Steve Popovich) writes...
>> Use the phone in the plane. It is not only against most airline rules to
>> use your own radio equipment on a commercial aircraft, it is unsafe.
>>
>> There is no safe method for you to insure that your equipment is not
>> interfering with the aircraft's communication and navigation equipment.
>>
>communication. I don't know what such a person would do, unless they
>knew about a particular station in the area that they were flying over
>that had a phone patch available, and had arranged to use it. Does
>anybody have any ideas for this unlikely case?
> -Steve

I recall once making a patch for someone flying over (presumably not on a commercial airliner)

If you do want to try this, remember that amateur repeaters rarely (if ever) permit long distance calls, so you could only phone someone in a city you were flying over, while within range of the local repeater. It would not be possible to contact either your origin or desination while in mid-flight.

Peter Bennett VE7CEI | Vessels shall be deemed to be in sight
Internet: bennett@erich.triumf.ca | of one another only when one can be
Bitnet: bennett@triumfer | observed visually from the other
TRIUMF, Vancouver, B.C., Canada | ColRegs 3(k)

117. Re: WANTED:Synchronous Detector Schematic

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 10:07:24 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CJEs4E.CLF@hpqmoea.sqf.hp.com>
Source record: 272566

Greg Chartrand (Greg@epitome.er.doe.gov) wrote:
: I've looked all over and only found an old Signetics application book
: which used a phased locked loop chip that is no longer manufactured. I
: have been told that Motorola makes a quad. detector that can be used as
: a synchronous detector, but I have not been able to find an application
: note to that effect. Please help me if you know where I can get a
: schematic.

: 73's,

: Greg
: WA9EYY

There was a constructional article for a synchronous demodulator
intended for receivers with 455 kHz IF published in

ELECTRONICS and WIRELESS WORLD (british magazine, used to be called
"Wireless World"

I think it was a few years ago. You could try a library search knowing
the publication and the key word.

Cheers
David

118. Re: Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 11:11:17 UTC
From: tcj@netcom.com
Message-ID: <tcjCJEv2t.2vE@netcom.com>
Source record: 272567

P.Bennett (bennett@erich.triumf.ca) writes:

> amateur repeaters rarely (if ever) permit long distance calls, so
> you could only phone someone in a city you were flying over, while
> within range of the local repeater. It would not be possible to
> contact either your origin or desination while in mid-flight.

Assuming that you're on a private plane and transmitting with the consent of the pilot....

You might try an HF/SSB HT and look for someone to set up a collect patch. Although I've never used one of these little beasties and have no idea how well they work, AEA used to offer a 10M model, and that I believe J-Com still carries them under its own label and offers models for several different bands including 10M, 20M (hah!), and 40M.

Todd, KB6JXT

119. Re: Mobile antenna question

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 11:24:06 UTC
From: tcj@netcom.com
Message-ID: <tcjCJEvo6.38q@netcom.com>
Source record: 272568

Michael Barts (mbarts@vt.edu) wrote:

> A friend just recently purchased an Acura Integra and is trying to
> figure out how to mount a two meter antenna on it. He hasn't
> reconciled himself to getting out the big drill just yet and is
> considering a glass mount antenna

I used a glass-mount antenna for a while and was extrememly unhappy with its performance. If your friend can't bring himself to get out the drill, you might suggest he try a trunk lip mount and snake the cables into the cab though the back seat.

And if his concern about drilling a hole for a proper roof mount is resale value, remind him that he can advertise the car as "cellular-ready." ;-)

Todd, KB6JXT

120. Re: Morse Code

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 11:44:36 UTC
From: tcj@netcom.com
Message-ID: <tcjCJEwMC.3Lv@netcom.com>
Source record: 272569

Bill Peter (peter@bohm.eecs.berkeley.edu) writes:

> does anyone have a copy of Morse code in ASCII they could e-mail me
> or tell me how to ftp or finger so I can learn it?

Be forewarned that learning the code as visual of dots and dashes is not a particularly good idea, as it introduces an additional level of translation (aural to visual) that you will probably find puts an upper limit on the speed at which you will be able to copy. Ideally, you want to "hear" the characters, not "see" them in your head.

You would probably be better off visiting your local purveyor of ham goodies and investing in a cassette training course, or using a computer-based trainer. A good FTP site for the latter is "ucsd.edu" under "pub/hamradio" (if I'm not mistaken.) SuperMorse for DOS is dandy (look for "sm####" where "###' is a version number), and I'm sure you'll find some UNIX-based software there as well if that's better suited to your environment.

Todd, KB6JXT

121. Houston Amateur Helpline

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 12:40:42 UTC
From: biekert@vnet.IBM.COM
Message-ID: <199401101241.EAA24453@ucsd.edu>
Source record: 272435

The Houston Amateur Radio Helpline, a telephone, touch-tone activated service for Amateur Radio operators in the Houston area is back on line again after a major hard drive crash.

This service is over 2 years old, receives around 700 calls per month. We try to keep up to date with all the VE sessions, clubs, club activities, special FCC and ARRL happenings, Classes,etc.

If you are in the Houston Texas area please give it a call. If you have information which needs to be posted please use the 04 option from the main menu to leave the information in 'your' voice. We need input as well as people using the output :)

The Houston Amateur Radio Helpline 713-488-4HAM 713-488-4426

73 de Bob KA5GLX biekert@vnet.ibm.com

122. Amateur Radio Newsline #856 7 Jan 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 13:04:13 UTC
From: Steve Coletti <bigsteve@dorsai.dorsai.org>
Message-ID: <199401101304.AA07159@dorsai.dorsai.org>
Source record: 272445
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text is transcribed from the audio service by Dale Cary and is first published on Genie.

Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #106 - POSTED 01/09/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newsline is posted on this CBBS twice monthly. For current information updates, please call

```
Los Angeles..................... (213) 462-0008
Los Angeles (Instant Update Line)..... (805) 296-2407
Seattle.......................... (206) 368-3969
Seattle.......................... (206) 281-8455
Tacoma........................... (206) 927-7373
Louisville....................... (502) 894-8559
Dayton........................... (513) 275-9991
Chicago.......................... (708) 289-0423
New York City.................... (718) 353-2801
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Melbourne, FL..... (407) 259-4479

For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

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For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

****

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[856]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not *
* for air via amateur radio. This is just a reminder that *
* the address for the Newsline Support Fund is Newsline, in *
* care of Dr. Norm Chalfin, K6PGX, P.O.Box 463, Pasadena, *
* California 91102. Again and as always, we thank you. That *
* ends the closed circuit with Newsline report number 856 for *
* release on Friday, January 7, 1994 to follow. *
* *
* *

* * * The following is a QST * * *

The ARRL takes a strong stand against instant licensing. It says that its time for all hams to say no!

*****
ARRL: NO TO INSTANT LICENSING

The American Radio Relay League has said no to the FCC's idea for a so-called "Instant License." The league says that P.R. Docket 93-267 is fraught with misgivings, not the least of which

would be the in ability of the amateur radio community to identify a person who has passed an Amateur Radio examination from someone who simply bought a radio, made up a call sign and went on the air.

By way of background, it was last November that the FCC issued the Notice of Proposed Rule Making in which it proposed that temporary operating authority for up to 120 days be granted to anyone who had earned a Certificate of Successful Completion of Examination. This, by passing the examination elements required to get any class of Amateur Radio license. The FCC put very few limitations on the program. It did say that any person with a history of non-compliance with the Amateur Service Rules would not be eligible to apply. It also noted that the FCC retained the right to cancel the operating authority at any time. And that was it. There were no other clear cut safeguards against abuses included in the proposal and that's what worried many hams.

Now, writing in the January 1994 edition of QST Magazine, ARRL-Executive Vice President Dave Sumner, K1ZZ states that the league has several major concerns with the proposal. These are with the planned system for on-the-air identification and the fact that the FCC has not proposed any safeguards to keep massive bootlegging from occurring.

Sumner notes that the call sign system being proposed would not in all cases conform to ITU regulations. He also points out that by being self assigned call letters, there would be absolutely no way for local amateurs concerned about the possibility of a non-licensed operator being in their midst. That there would be no way to check on the validity of the call sign being used.

The ARRL also questions whether or not the FCC has the authority to even propose such a self licensing scheme. K1ZZ notes that only a few years ago the Commission determined that it lacked the authority to implement a similar temporary licensing proposal and he goes on to question the basis on which the FCC has now made this about face.

According to Sumner the time it takes to issue a ham radio license can be cut down appreciably by eliminating much of the paperwork that now is involved and instead permit electronic filing of the completed applications by the nations Volunteer Examination Coordinators. He notes that the most of the nations VEC's appear to favor an electronic filing system to eliminate many of the paperwork delays now happening at the FCC's Gettysburg, Pennsylvania License Processing facility. Sumner says that this one change would result in the turn around time for processing any license to drop to only a few weeks while protecting the security of the license itself.

The ARRL is actively urging its members to take a strong position against the implementation of PR Docket 93-267. It has suggested that all concerned radio amateurs write in opposition

to the "Instant License" proposal from the FCC.

*****
VANITY CALL SIGN NPRM ISSUED

The FCC has now formally released its Notice of Proposed Rule Making, in PR Docket 93-305, aimed at permitting amateurs to choose a vanity call sign. Individuals as well as trustees of club stations will be eligible to request an available call sign from the block assigned to their license class or a lower license class.
A fee will be required for a vanity call sign. The Communications Act specifies a fee of 7 dollars per year for amateur service vanity call signs. It also allows the Commission to require payment of the fee in advance for a number of years not to exceed the relevant license term. Fee issues would be resolved under a separate FCC rule making proceeding, and the vanity call sign system would not be started until then, the FCC said.
If enacted, an applicant would have to provide the Commission a list of up to ten total call signs desired. The FCC would assign the first available requested call sign from the applicant's list. If none of the desired call signs was available, the applicant's current call sign would be reassigned. Call signs of lapsed or deceased licensees would not be available for reassignment for two years. A call sign relinquished under the vanity call sign program would be available for reassignment immediately.
The FCC said that even with its new automated licensing process it did not expect to be able to offer amateurs on-line access in order to check for call sign availability. It did however ask for comments on how such a service could be provided. The FCC says that its eventual goal is to accept all license applications electronically.
The comment deadline for P. R. Docket 93-305 is March 7, 1994. Reply comment deadline is April 7, 1994. The ARRL is asking its members to let their Division Directors know how they feel on this one as soon as they possibly can.

*****
LOS ANGELES PROBE

The probe into allegations of possible wrong doing by a growing number of Southern California Volunteer Examiners has taken a new twist. This, with word that some hams who upgraded at sessions run by these examiners have received letters from the FCC telling them that their tests have been disqualified. This is something that was expected from the outset since the FCC routinely takes this action anytime it deems a session is suspect.
What makes this case different is the possible number of hams

that could receive these notices. Newsline has learned that some of the test sessions involved took place almost a year ago. This means that some of those returning to lesser class licenses may themselves have become Volunteer Examiners and that the test sessions that they administered could be disqualified as well. Right now, the letters going out order the recipient to immediately cease using his or her upgraded privileges and to forward to the FCC by registered mail any Certificates of Successful Completion of Examination that have been awarded to them. The letters also reportedly say that in cases where the certificates have been used for further upgrade that the applicant must provide to the FCC the date, time and location of the testing session, the name of the Volunteer Examination Coordinator and the names, call signs and addresses of the Volunteer Examiners who provided the test.
If our information is correct and we have reason to believe that it is, then as many as 200 Southern California upgrades could be affected.

*****
LLOYD COLVIN, S.K.

Some sad news to report. Word has reached Newsline that famed DXepeditioner Lloyd Colvin, W6KG has died. Charles Mc Henry, W6BSY says that he received word from the Lloyd's son-in-law with word that W6KG passed away on December on 13th in Ankara, Turkey. At the time of his death, Lloyd and his wife Iris W6QL were in Ankara waiting for licenses to be issued for their next on-the-air operation. They expected their Turkey operation to least at least three months. In their long career as prominent DXers, Lloyd and Iris had operated from over 150 countries. DXer Lloyd Colvin, W6KG, dead at age 78.

*****
NEWSPAPER WRONG

Word that Thomas Lee Larsen, a convicted child molester now charged with an arson threat is not a ham. The San Jose Mercury newspaper reported that Larson was a licensed radio amateur. We checked Larson in the FCC's Amateur Radio database and in the Sam electronic call directory. Thankfully, there is no Thomas Lee Larson to be found. Someone might want to call the San Jose Mercury and tell the newspaper that it was wrong.

*****
SEDAR

SEDAR is an acronym for the newly formed South Eastern Dealers of Amateur Radio. The organization was formed at the Greensboro Hamfest to further the exchange of information and cooperation between members and assist all amateur club sponsored Ham Fests through out the South Eastern United States.

SEDAR is in the process of compiling an information booklet of all hamfests in approximately fourteen Southeastern states. If your club is planning to host a hamfest and your date is tentative, you may request a copy of other clubs' show dates from Sedar's secretary Kay Johnson KB4HHX, 5 Shoo Fly Circle, Ridgeville, SC 29472. Please be certain to include a self addressed stamped envelope with your information request.

*****
NEWSLINE SPEAKERS

While on the subject of ham radio conventions, word that we at Newsline now have speakers available to talk to your radio club, hamfest, convention, convention banquet or what have you. Many of Newsline's speakers are professionals in the world of broadcast journalism or the broadcast industry and possess a wide field of knowledge on many subjects allied to news gathering and dissemination. Through them you can learn the way that these Newsline bulletins are researched, authenticated, written, recorded and put to air while also finding out the advantages of having weekly Newsline ham radio news bulletins as a regular feature on your net or repeater. There is no honorarium charged within 25 miles of Los Angeles California and expenses only required anywhere else nationwide or world-wide. At least 60 days advance notice is required on out-of-town engagements. For further information on having a Newsline speaker at your gathering, please write to us at the address you will hear at the end of the newscast. Or you can call or fax us at area code (805) 296-7180. That number is good 24 hours a day.

*****
NJ QSO PARTY

A reminder from WB1GXM that February 12th and 13th is the date for the 1994 New Hampshire QSO Party. There will be 14 bonus point stations from across the state. The QSO Party is also a great place to work all ten New Hampshire counties needed for the New Hampshire Amateur Radio Associations Worked All New Hampshire Award. This award is administered by the North Country Amateur Radio Association of Lancaster, New Hampshire.

*****
DX

In DX, word that Fred Laun, K3ZO will be active from Thailand as HS0ZAR from mid-January to mid-February. Fred says to QSL to his home call.
Also LA5EBA, will be active as JW5EBA starting in mid January for 6 months. He will work for a meteorological station on Hopen Island, which is part of the Svalbard group that may qualify for a new IOTA number.

*****
TORA

A word of congratulations to a fine group of dedicated radio amateurs who spent New Years Eve out in the cold. Of coarse we are talking about those hams who help to coordinate the annual Tournament of Roses Parade from Pasadena, California. The group is known as TORA. That stands for Tournament of Roses Amateur Radio. Each year the TORA group is on hand to lend a hand to parade officials. Their main job comes when the floats and marchers start their way down Colorado Boulevard. Using video cameras and ham TV the TORA group is ever alert for any kind of an emergency situation that might develop. If they spot something they send their pictures back to the parade coordinator who can take the necessary action, TORA pioneered the use of ham television in the Tournament of Roses Parade almost two decades ago and the group has been refining the technology ever since.

*****
TOR-TV

Also, for those of you who tuned in early enough to catch the CBS network pre-parade show titled Coming Up Roses, be advised that it to had a ham radio connection. Anyone who caught the credits may have spotted it. Coming Up Roses was produced and edited by the same ham who co-produced the award winning New World of Amateur Radio. His name is Frosty Oden, N6ENV.

*****
WESTLINK YOUNG HAM OF THE YEAR

The Westlink Report ham radio newsletter has announced that its annual Young Ham of the Year Award will be presented June the 4th at 1994 Sea Pac Convention in Seaside Oregon. The Westlink Report Young Ham of the Year award was conceived to honor the younger members of the Amateur Radio Community. Hams aged 18 and younger who have used Amateur Radio to significantly contribute to the benefit of the service, to their community or the nation are eligible for it. With corporate underwriting from Yaesu USA Corporation, the 1994 winner will receive a trip to the Sea Pac convention, a piece of ham radio equipment and a special plaque denoting his or her accomplishments.
The cutoff date for submitting applications is April the 15th. The Winner will be notified in early May. All nominations must be submitted on an official application available for a self addressed stamped envelope to the Westlink Report Young Ham of the Year, 28197 Robin Avenue, Saugus, California 91350.

*****
And for this week, that's all from the Amateur Radio Newsline. You can write to us at Post Office Box 463, Pasadena, California 91102.

* * * Newsline Copyright 1993 all rights are reserved. * * *
---

123. Re: Vanity Callsign Notice of Propsed Rulemaking (PR93-305)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 13:08:11 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan10.130811.19613@ke4zv.atl.ga.us>
Source record: 272576

In article <J4FwFc2w165w@jackatak.raider.net> root@jackatak.raider.net (Jack GF Hill) writes:
>gdm@eieio.ualr.edu (G. Douglas Mauldin) writes:
>> and my trying to get, say, K5EE, the shortest (in CW)
>> callsign in the United States.
>
>Pardon the flame-thrower.... but seems to me, Doug, EXTRA class
>callsign and all that, that you ought to know ur cw well enuf to know
>"N" is shorter than "K", and so is "A"... so AE5E and NE5E and N5EE
>are *ALL* shorter than K5EE or the other permutations...
>
>and we thought Extra Class was a safe haven from all that... ;^)
>Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

Come on Jack, we all know that *real* ham calls start with a W or K. :-)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

124. Re: Where's my QST?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 13:12:26 UTC
From: greg@netcom.com
Message-ID: <gregCJF0or.83K@netcom.com>
Source record: 272570

In article <1994Jan7.222334.10011@TorreyPinesCA.ncr.com> kevin@TorreyPinesCA.ncr.com (Kevin Sanders) writes:
>In article <gregCJ9M8u.9tv@netcom.com> greg@netcom.com (Greg Bullough) writes:
>>
>>This solid technical content was selected by the same editorial staff
>>(at the member's expense) which no doubt smugly belittles W2NSD's monthly
>>ramblings in '73.'
>>
>>We can't cover Lambda, but choo-choos and stamps are relevant, eh guys?
>>
>
>Jeez, Greg, get a life. I see no smiley here, I guess you are just
>dying to open up that flame-bait can again. Sorry, you'll receive no
>help from me.
>
No, it's a straight (*ahem*) question.

It seems to me that the excuses for not covering Lambda are the
same as for not covering philatelists and train-spotters. Or
the reasons.

And, frankly, I'd prefer to see QST cover neither philately, train-spotting,
nor buggery.

Now that I've said that admittedly inflammatory thing, let me say that
ALL of these folks are legitimately hams, who inter-weave other key aspects
of their lives with ham radio. Be it stamps, trains, or what they point
their genitals at.

However, it seems to me that the 'angles' are irrelevant, and QST has
recently had the annoying tendency to show the cub-reporter's need for
an 'angle' story in order to fill up space.

The technical content of our journal has, in recent months, really
stunk. Oddly, some of the best technical material has been in the
'Beginner and Newcomer' section; perhaps in counting types of articles
for editorial purposes, these have counted as, and hence displaced,
more technical topics for more advanced hams.

I wouldn't mind the occasional article on "Hams Who Use Their HT's While
Bungee Jumping," if I didn't find that, by the time I wade through all
the ARRL and FCC news, and the semi-irrelevant "Human Interest" fluff,
I don't often seem to learn anything solid from QST. I'm better off
finding a back-issue and re-reading something by Lew McCoy or Doug
DeMaw.

Greg

125. q code qhh is quh

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 13:27:48 UTC
From: Terry.Murphy@launchpad.unc.edu
Message-ID: <2grl4k$ruf@samba.oit.unc.edu>
Source record: 272571

The question about QHH caused me to go into the library and find my 5th
Edition Radio Operators License Q & A Guide (RIDER 1955) by Kaufman...
QUH= Will you give me the present barometric pressure at sea level?
= The present barometric pressure at sea level is ...(units)

It lists four pages of different q codes....
If any one would like a copy, drop a SASE to AB4VJ POB61971 Durham NC 27705

QUQ terry

--
The opinions expressed are not necessarily those of the University of
North Carolina at Chapel Hill, the Campus Office for Information
Technology, or the Experimental Bulletin Board Service.
internet: laUNChpad.unc.edu or 152.2.22.80

126. On a positive note- (was: Re: RAMSEY KITS NOT TOO GOOD)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 13:30:43 UTC
From: greg@netcom.com
Message-ID: <gregCJF1J7.8MG@netcom.com>
Source record: 272572

In article <CJBuG3.Bp6@hawnews.watson.ibm.com> sehneg@austin.ibm.com (Sehne) writes:
>
>I've built several Ramsey kits, QRP receiver (40m) and several QRP XMTRS (40&20m)
>plus keyer & FM stereo transmitter.
>
>I'll concede that the early assembly manuals
>were nothing more than a photocopy sheet, but they really redid their manuals
>recently & they look close to the Heathkit quality.(XRAY drawings & tutorials)
>
>
>I've batted 1.000 with their
>kits, although I had to mess around with the 40m receiver a bit to stabilize
>the thermal drift & make the receiver a little more selective. I've not had
>a bad part in the bunch.
>If you haven't tried them recently, you may be surprised.

So, rather than warning one another off constantly, though I guess it's good to know what you're in for, how do we encourage Ramsey to continue taking steps in the right direction, rather than driving them from the business?

Heath is gone, and with it THE major source of economical amateur radio gear, and 'on the job' training.

I've seen some of the first of the Heath ham gear, and it was probably in the category of 'not too good,' too. They were selling oscillator-only transmitters when such things were kind of marginal as state-of-the-art. And I'll bet their manuals didn't start out perfect.

Goodness knows Knight-Kit had its problems, though they went to school pretty well on Heath. Eico didn't go to school as well, and produced some real losers, along with a few winners.

And some people don't realize that that mainstay of 1950's and 1960's ham hear, E.F. Johnson, produced some of their more basic gear in kit form. If we'd known that buying them would have ensured us easy access to transimitting variables for life, we probably would have made the investment :-)

Anyway, I'm glad Ramsay and some of the others are around. But since they're really start-ups, they're going to have problems. The question is, how do we help them improve?

Greg

127. Re: Morse Code

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 13:45:34 UTC
From: prvalko@vela.acs.oakland.edu
Message-ID: <2grm5u$frc@oak.oakland.edu>
Source record: 272573

For what it's worth, DITTOES.

Do NOT even attempt to learn the code by looking at dots and dashes.
Get SuperMorse, it works.

paul wb8zjl

dah dah di di dit
di di di dah dah

128. Re: Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 13:46:43 UTC
From: dls@genrad.com
Message-ID: <2grm83INNluk@sweetpea.genrad.com>
Source record: 272574

In article <POPOVICH.94Jan9214010@prince.cs.columbia.edu> popovich@prince.cs.columbia.edu (Steve Popovich) writes:
>This is probably all the response that's necessary, however, it is
>just barely possible that the original inquirer may be a pilot, or
>somebody else who's planning to fly up there in a small private plane,
>rather than on an airliner. These generally don't have Airfones,
>although the use of cellular phones from one is still illegal because
>they activate too many different cells on the ground. In this case,
>it's the pilot's decision as to what radios may be used in flight, and
>it might be possible for the original inquirer to check for RFI
>himself, or to ask the pilot about doing so. If no RFI is observed
>(and you're DAMN sure there isn't any, because it's your skin on the
>line), or if the calls are made while flying VFR by pilotage, where no
>other radios may be needed at the time, then the question becomes
>reasonable. Not every flight needs radio navigation, or even radio
>communication. I don't know what such a person would do, unless they
>knew about a particular station in the area that they were flying over
>that had a phone patch available, and had arranged to use it. Does
>anybody have any ideas for this unlikely case?

This subject has gone around so many times it's almost laughable. Anyway, the bottom line is this:
1. Most airlines specifically prohibit radios (and other electronics) during flight; there is an FAR on this.
2. On non-airline flights, it is the pilot's responsibility to determine if he/she wishes to allow the transmissions, with ONE exception:
3. Radio transmission during IMC operations is specifically prohibited by FAR.

I am a pilot, I am a ham....unfortunately, I find the two don't mix very well (when I'm piloting, I'm too busy hamming). However, I have no objection to another ham transmitting while I fly. I have never had any trouble with any ham radios in my airplanes. Note that the airline FAR is a precaution... and when you're talking about the lives of hundreds of persons, I can certainly understand why this precaution is taken so seriously.

Cheers!
Diana

TLC's (Three Letter Acronyms):
FAR Federal Aviation Regulations (laws of flying)
IMC Instrument Meteriological Conditions (ie, flying thru clouds)
VFR Visual Flight Rules (ie, flying not in clouds on nice days)
RFI Radio Frequency Interference

--
->Diana L. Carlson dls@genrad.com Ham: KC1SP (Sweet Pea) <-
->I'D RATHER BE FLYING! P-ASEL, INST CAP: CPT, Freedom 690M, MAWG<-
->GenRad, 300 Baker Ave MS/1, Concord, MA 01742 (508)369-4400 x2459 <-

129. Re: RAMSEY KITS NOT TOO G

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 14:05:11 UTC
From: greg@netcom.com
Message-ID: <gregCJF34o.9x1@netcom.com>
Source record: 272575

In article <9401091132.A6377wk@support.com> steven.rosenberg@support.com writes:
>
>YES! That's a better idea. Get one of Doug de Maw's QRP books and start
>collecting the parts.

...or buy a kit of parts for one of those same projects from a
supplier of parts who expects you to work from the construction
article.

Personally, the part I *hate* is collecting the parts. After all,
in single-unit quantities they get to be expensive. Not to mention
the time and gas expended. 'Twas easier when I lived in silicone
valley, because I could get most things at Halted, two minutes from
work. (They also have Ramsey kits at discount prices, BTW)

Certain simple projects, like power-supplies, can be built from
Radio Shlock stock. But not many things.

These mini-suppliers seem to be the ARRL's answer to the complaint
voiced by many a dozen or so years ago that the QST projects were
fine if you had the ARRL Hq. lab's junk-box at your disposal. They
amount to a 'group buy,' with a little fee for the trouble of the
guy who puts it all in a bag.

The one that always tickles me is crystal controlled QRP transmiters.
They're usually designed and written by guys who must have a whole
box of surplus crystals. Buying crystals is now very expensive, and
the quality can be real iffy. VXO rigs are a bit better, but a
decent, basic, VFO is an experimenter's friend.

BTW, I believe that Doug DeMaw is a saint, as is Lew McCoy. These
folks, from the days of the 'Novice Transmitter Using Parts Gleaned
from Two Dead TV Sets' to the days of 'Tuna-Tin Two,' have always
shown what can be done with making lots of fun out of little money.
Another deity has to be Wes Hayward.

Their are a couple of heirs apparent, but they haven't come into
their own, just yet.

By the way (ARRL, are you listening), guys like these probably have
done more to increase the ranks of membership than all of the Civics
Book rhetoric about representation combined.

Greg

130. VHF - UHF mobile antenna for scanner

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 14:23:11 UTC
From: thweatt@rtsg.mot.com
Message-ID: <thweatt.758211791@mustang18>
Source record: 272433

I asked this question about a month ago but didn't get any responce so
here it goes again.

I am looking for an excellent scanner antenna which will cover 30MHz to
1 GHz for my ICOM-R100. I would like to use this antenna to listen to
Police, fire, weather, aircraft, mall security, etc..... Does anyone
know off what "GREAT" all coverage antennas I could look for and what
frequency range are they speced at and what frequency ranges they really
cover good?... I really only want one antenna (I should be able to broadcast
from on 2M and 70cm also, for future upgrades) and it shouldn't be to obtrusive
to mount on the top of my truck.

Thanks,
John

131. Re: Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 15:11:31 UTC
From: carndt@netcom.com
Message-ID: <carndtCJF677.Axv@netcom.com>
Source record: 272577

I don't recall that the poster who started this thread actually said he wanted to call from an airplane. He sais he was going to Alaska, and wanted to "check on the kids", I believe, from 20'000 feet.

Do you suppose perhaps he's climbing Mt. McKinley (with a peak elev. of _20,300 ft_), and was looking for pointers to getting an amateur ticket so he could cart a radio up with him?

Chris KD6DSI

132. Re: Ramsey kits not too good -- what about Down East Microwave?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 15:27:05 UTC
From: lkollar@nyx10.cs.du.edu
Message-ID: <1994Jan10.152705.13195@mnemosyne.cs.du.edu>
Source record: 272429

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>[Down East Microwave]
>I've built their 902 MHz transverter, and their 2304 downconverter. They
>work, but they aren't Heathkits. The LOs are built dead bug style, and
>the docs aren't very clear at all. I needed the photos in the QST article
>to figure out parts placement for the transverter. But they did work first
>time, and no special test equipment was required for tuneup.

Sheesh, at least Ramsey tells you where to put the parts. :-) Even if
they don't give you all the parts.

By "dead bug style," do you mean surface-mount parts? I can't imagine
a 2304 MHz assembly working with "traditional" dead-bug construction....

> Ramsey has greatly improved
>their 2 meter and 70 cm transceivers from the original models, but they
>aren't bargains. Converting commercial surplus will still give you a better
>radio for less money.

When did the new & improved kits come out? Also, how much effort is it
to make commercial surplus frequency-agile?

>I'd say that if you need a reliable high performance preamp, converter,
>or transverter, you're best off buying from ARR or SSB Electronics.

Sounds like good advice. I'll get there some day, dangit! :-)

Wishing I had a KW linear under my desk (my feet are COLD!), I am --
--
Larry Kollar, KC4WZK | I like CW, but that doesn't mean I think every ham
lkollar@nyx.cs.du.edu | should have to learn it.
"On the Internet, nobody knows you're a dog."

133. Friend looking for transverter

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 15:29:08 UTC
From: pascoe@MathWorks.Com
Message-ID: <2grs85$3nt@europa.eng.gtefsd.com>
Source record: 272428

I have a friend (W1EJ) who is looking for a Microwave Modules 144 MHz transverter (or something very similar, like possibly a Sinclair).

If you have one you'd like to sell or trade for something then contact him directly at:

Tom Kirby W1EJ
603-635-2514

Thanks in advance....

-Dave KM3T

134. * SpaceNews 10-Jan-94 *

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 15:42:56 UTC
From: kd2bd@ka2qhd.DE.COM
Message-ID: <9401101542.AA02055@ka2qhd.de.com>
Source record: 272477

SB NEWS @ AMSAT $SPC0110
* SpaceNews 10-Jan-94 *

BID: $SPC0110

=========
SpaceNews
=========

MONDAY JANUARY 10, 1994

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited distribution.

* AO-16 NEWS *
==============
Recommended Operation Procedure to Reduce AO-16 Uplink Contention:

1993 has brought many new satellites and many new satellite users. It would be good to dust off an old AMSAT bulletin from 1991 to help refresh the "old-timers" procedures and to aquaint new users to the recommended uplink frequency usage.

The AO-16 Command Team recommends that users of the AO-16 PBBS system use only uplink channel D (145.960 MHz) for download and directory requests leaving channels A, B, and C (145.900, 145.920, and 145.940 MHz) for file uploads and digi users.

Stations uploading files should stay off of the download/directory/fill request channel D as their longer uplink packets will collide with the shorter request packets. Stations doing downloads and directories should stay off channels A, B, and C since their frequent but short requests will collide with longer uplink attempts seriously degrading uplink performance. Another benefit of using this procedure, while most of the uplink activity to AO-16 will be on channel D (145.960) this frequency is high enough in the passband of AO-13 that QRMing our fellow operators will be kept to a minumum when Pacsat crosses beneath AO-13's path.

Recommended AO-16 operating practice in summary:

Downlinks: 437.050 (also 2400.143 on experimenter's day.)
Uplinks: 145.900 A uploads
145.920 B uploads
145.940 C uploads
145.960 D downloads, fills and directory requests

[Info via WJ9F, AO-16 Command Team Leader]

* NASA TV MOVED *
==========
NASA Select Television has moved to Spacenet 2, transponder 5, C band,
69 degrees west longitude, 3880.0 MHz, horizontal polarization, with audio
on a 6.8 MHz subcarrier. NASA Select offers daily educational and
information programming, carries shuttle launches and mission coverage,
and occasionally airs live coverage of Shuttle Amateur Radio Experiment
activity. The move occurred on 08-Jan-93 at 1500 UTC.

[Info via ARRL]

* NEW MIR CREW *
==========
By Serge Samburov, RV3DR

Launch: 08.01.94 aboard SOYUZ-TM18 (crew #15)
Docked at the port of "MIR" 10.01.94
Undocked and launched to Earth cosmonauts V. V. Ziblyiv
and A. A. Serebrov (crew #14) 14.01.94 aboard Soyuz TM17

Crew #15:
Viktor Afanasiev (commander) HAM #30, call U9MIR
Yuri Usachev (flight engineer) HAM #31, call R3MIR
Valerij Polyakov (doctor) HAM #32, call U3MIR
Call packet: R0MIR
Call PMS "MIR": R0MIR-1
Call voice U3MIR, U9MIR, R3MIR, R0MIR op. Viktor, Valerij, Yuri

==========
CALL NAME # CREW FLIGHT TIME
==========
30 U9MIR VIKTOR AFANASIEV 15 08.01.94-04.07.94
31 R3MIR YURI USACHEV 15 08.01.94-04.07.94
32 U3MIR VALERIJ POLYAKOV 15/16/17 08.01.94-april 95

Starting 01.01.93 the new QSL Manager for cosmonauts is RV3DR.
I also confirm all QSOs with station MIR from 1988.

RV3DR-Serge Samburov, Space "MIR" QSL Manager
Chief of Cosmonaut Amateur Radio Department NPO "Energia"

All QSLs should be sent to:
P.O.BOX 73, Kaliningrad-10 city, Moscow Area, 141070, RUSSIA.

Send me message via PKT: RV3DR#R#MIR or RV3DR@RK3KP.#MSK.RUS.EU

Happy QSQ BEST 73 ***RV3DR***

[Info via N2NRD]

* GST UPDATE FOR 1994 *
==========
For those tracking satellites with BASIC programs that require sideral
time constants, here is the Greenwich Sidereal Time (GST) for January 0,
1994:

G2 = 0.2761908

You will need to replace this value in your program for element sets
having Epoch years of 1994 and later. Don't forget that you can just use
a date of 13/01/93, 13/02/93, ... until you get 1994 element sets.

[Info via Dick, N3FKV]

* FO-20 OPERATION SCHEDULE *
============================
The following is the current operating schedule for FO-20:

ANALOG MODE:

12-Jan-94 7:30 -to- 19-Jan-94 7:50 UTC
26-Jan-94 8:20 -to- 02-Feb-94 6:50 UTC
09-Feb-94 7:15 -to- 16-Feb-94 7:40 UTC

The digital (Mode JD) transponder is available at all other times.

[Info via Kazu Sakamoto, JJ1WTK]

* THANKS! *
===========
Thanks to all those who sent messages of appreciation regarding SpaceNews,
especially:

FB1RCI XE1KK VU2LBW VK3ZMF XX9AS Frank L. Weissferdt

* FEEDBACK/INPUT WELCOMED *
===========================
Mail to SpaceNews should be directed to the editor (John, KD2BD) via any
of the following paths:

FAX : 1-908-747-7107
PACKET : KD2BD @ N2KZH.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College
Lincroft, New Jersey 07738
U.S.A.

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
John A. Magliacane, KD2BD * /\/\ * Voice : 1-908-224-2948
Advanced Technology Center |/\/\/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
Brookdale Community College |\/\/\/| Internet: kd2bd@ka2qhd.ocpt.ccur.com
Lincroft, NJ 07738 * \/\/ * Morse : -.- -.. ..--- -... -..

135. Re: RAMSEY KITS NOT TOO G

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 15:51:51 UTC
From: kg7bk@indirect.com
Message-ID: <CJF82G.B72@news.direct.net>
Source record: 272430

steven.rosenberg@support.com wrote:

: gary@ke4zv.atl.ga.us (Gary Coffman) writes:

: > I've built Heathkits and Ramsey kits. Ramsey is more fun.
:
: As the unproud owner of an non-working Ramsay 40m receiver, I would
: rather the damn thing worked! Steven Rosenberg, KC6FYL

I agree with Gary. I've built 4 of the Ramsey FM transceivers and repaired numerous others. There were missing parts which Ramsey promptly replaced. After minor modifications to correct the transmit audio problem, the squelch problem, and the Oct '93 QST modifications, these rigs perform just fine.

What Ramsey needs to do is include an Applications Note with each kit. All the problems have already been solved.

73, Cecil, kg7bk@indirect.com

136. Re: Ramsey kits not too good -- what about Down East Microwave?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 16:16:05 UTC
From: charless@ecs.comm.mot.com
Message-ID: <1994Jan10.161605.28049@lmpsbbs.comm.mot.com>
Source record: 272443

In article <1994Jan8.145408.11446@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>better have a spectrum analyzer at hand when you do the tuneup. I'd say
>that anything that requires an oscillator should be avoided since Hamtronics
>doesn't seem to know how to design good ones.
>
>Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary

I receintly built a hamtronics 2m receive converter, so I figured I would put in my 2 cents worth.

The converter shifts 144-146Mhz to 28-30 Mhz so 2M sideband can be received on a HF radio. It uses a dual gate gas fet for the front end, a J308 FET for a mixer, and a crystal osc and tripler for the LO.

The kit works with the following problems.

The converter generates spurs at 140Khz intervals when driven with a relative high level signal, about -40dbm. This is a real problem in my neighbood because there are several hams that also like 2m ssb and they run lots of power. This problem was solved by re-biasing the RF amp by replacing the gate bias resistor with a pot. The pot must be carefully adjusted so as not to kill the gain too much.

The whole converter oscillates at 27MHz when the antenna is removed. Does not oscillate with an antenna, so I guess I should not disconnect the antenna.

The LO (116Mhz) is present at the antenna connector at -30dbm. This causes big time channel 5 problems.
I beleive this is due to the LO and RF amp output both being injected into the gate of the J308 mixer FET. I experimented by replacing the J308 with a 40673 dual gate FET. I used a mixer schematic from the ARRL handbook. This does work, but the gain is very low, probably due to incorrect impedance matching. It did reduce the LO at the antenna by about 3db, hardly worth all the work.

Incidently, I called hamtronics to discuss my problems. They stated that their kits do not oscillate when constructed and aligned properly. The only suggestion they made was to short the second gate of the RF Amp to ground to remove the oscillation. It does remove the oscillation, but the gain and sensitivity decrease by 20db, so this is unacceptable.

The unit did serve its purpose. I decided that I wanted to play on 2m ssb so I will pick up some comercial equipment and shelf the converter.

chuck sherwood N9QZT/AA
charless@comm.mot.com

137. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 16:25:50 UTC
From: peterson@physc1.byu.edu
Message-ID: <1994Jan10.092550.1243@physc1.byu.edu>
Source record: 272459

In article <2gksi7INNb6r@network.ucsd.edu>, brian@nothing.ucsd.edu (Brian Kantor) writes:
> Some years ago, one of our repeaters stopped working. When we got up on
> the the mountain, we found out why:
>
> Someone had torched the door off the building, stolen all the Motorola
> and GE repeaters out of the building (demonstrating good taste, they
> left the RCA repeaters alone). On their way out, just for good
> measure, they cut the guy wires on the tower. When the storm hit a few
> days later, 70 feet of H-frame tower blew over the side of the mountain
> to the desert floor below, taking our antennas and a good portion of
> our coax with it. The solar panels were smashed beyond repair.
>
> Want to know where our repeaters are now? NOYGDB!
> - Brian

I find this thief's taste to be interesting but I'm not sure that not telling anyone where your repeater is will stop this kind of activity. Someone with this kind of intent is not going to be stopped by lack of public information. If you have a 70 ft tower sitting on top of a mountain a good pair of binoculars is all that is needed to find it (and if you are really sophisticated a scanner with some type of DF antenna to get the general location). In case you haven't noticed, the backwoods areas of the west coast (and increasingly moving toward the east from CA with a real pocket up in north ID) are basically lawless. It all started with poachers, moved into large scale marijuana farms and has progressed to the point where some have begun packing guns on backpacking trips for self protection. And there is no one out there to stop them. It doesn't matter where you put this repeater if someone really wants a GE repeater - they will find it and they will get it. Don't forget - they can do this kind of thing at a downtown bank and that is far more difficult than going to the top of a mountain where they can basically do it at their leisure because even if it is alarmed it will take HOURS for anyone to get there to stop them.

Just a note - from my front porch in town I can actually see the towers for a large number of the local repeaters along with one's for the Forest Service, the Sheriff's Office, U.S.West, AT&T and a large number of radio stations. It doesn't take a lot of smarts to know that at the base of each of those towers is a building full of very expensive equipment. And a few minutes at the local store and a few dollars is all I need to have a 7.5' USGS map of the area which will show me the roads to any particular site and what is located there. If I was crazy enough to want that stuff it is not a question of locating it - it is a question of how to get into the building once I get there.

Bryan Peterson
peterson@physc1.byu.edu

138. Telemetry continues from downed balloon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 16:38:52 UTC
From: K7HFV@uugate.wa7slg.ampr.org
Message-ID: <43627@uugate.wa7slg.ampr.org>
Source record: 272512
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SUPERBALL 1-94: LAST CHANCE TO COPY

Superball 1-94, the test of superpressure balloon technology carrying amateur radio beacons, is still transmitting.

The balloon, launched on January 7 at 1626z, burst about three hours later and landed in Utah's Uinta mountains, likely between 9500 and 10,000 feet elevation. A search party, on January 8, got within about two miles of the believed crash site, but were unable to continue due to steep terrain and deep powder snow. Whether recovery will be possible before spring remains uncertain.

Three beacons on the payload are still transmitting and have enough battery power to continue for at least several days. Reception reports are solicited. Reports from Illinois and Ohio have indicated good signals. Of particular interest are reports of reception through the Russian RS satellites, because this will give an idea of how practical this method of relaying telemetry will be for a later, longer-lived flight. Reports should include the receiving site, date and time of reception (preferably in UTC), and the frames of copied data. The frequencies are as follows:

Frequency	Satellite	Satellite Output Frequency
21.229 MHz	RS-12	29.429 MHz
28.322 MHz	(not on a satellite input)	
145.871 MHz	RS-10	29.371 MHz

The 21- and 145-MHz transmitters are on for three minutes and off for nine. They send CW (not MCW) carrying telemetry information.

The 28.322 MHz beacon simply keys on and off and does not attempt to send code. This beacon, alone, has solar power. The keying rate indicates whether it is operating on solar power or from batteries. Solar power is indicated by a rate near 40 pulses per minute; battery power by a rate near 20 pulses per minute. It is unknown whether recent snows may have covered the solar panel. This transmitter may die as batteries run down, and then come back to life next spring as snow melts and the solar panel is again exposed to sunlight.

Send reception reports via E-mail to:
WB7QBC@uugate.aim.utah.edu

139. Re: What Kind of Antenna Is This?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 16:40:05 UTC
From: clifto@indep1.chi.il.us
Message-ID: <2613@indep1.chi.il.us>
Source record: 272483

In article <1994Jan7.214214.17828@mnemosyne.cs.du.edu> rchalk@nyx10.cs.du.edu (richard chalk) writes:
:This is most likely a VHF Slot antenna, with the slot running horizontally
:under the bar. A horizontal slot will radiate Vertically polarized signals,
:and the biggest advantage of this design is low physical profile....ideal
:for Busses, etc.

So, how would one go about making a 2M slot antenna for the car? Also,
how would one mount the antenna for minimum unwanted interaction between the
antenna and the ground plane / car?

--
+---+
| Cliff Sharp | clifto@indep1.chi.il.us |
| WA9PDM | clifto@indep1.UUCP never works |
+---+

140. RF Site/Region Modelling

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 16:50:33 UTC
From: ggjns@perot.mtsu.edu
Message-ID: <2gs10p$9p5@perot.mtsu.edu>
Source record: 272432
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Hello there folks. I am looking for information, pointers, etc.
on doing some terrain analysis with respect to radio signal (RF)
coverage modeling. I know that commercial consultants to broadcast
outfits use something along those lines, but (A) I've never really done
any serious elevation-dataset work, (B) I'm an ham who works with GIS,
(C) I can't afford the commercial rates for site modeling, and (D) I
have the data in hand in terms of ham radio repeater site locations, i.e.,
antenna height, effective radiated power, and the USGS Digital Elevation Maps
from resdgs1.er.usgs.gov for my area of interest (State of Tennessee, USA).
I am seeking any experiences from those of you who might have worked with
this application. I have access to GRASS 4.1 and AGIS/MAPIX GIS packages
for full treatment of DEMs, site modelling, etc. so that might suffice
rather than recommending I go buy a multi-hundred$ analysis package, or
paying similar consultant fees.

Doing RF modeling is not exactly on a line-of-sight basis, although
that's a good base to work out from in the beginning. Depending on
frequency there's a bit of bending that would influence signals in
valleys, etc. I plan on investigating those factors carefully from
other references. We are planning a packet-radio network that would
eventually span our state for message passing, hobby traffic, etc. and
good site planning is essential to our effort. Funding is out of our
back pockets which have more change than greenback, but there is a
wealth of raw materials out there (DEMs, GIS software, site info) which
give us a healthy start and will allow us to plan wisely. My lack of
personal experience in 3-D modeling leaves me with knowledge gaps on how
best to proceed.

Your input is appreciated; I would prefer responses directly to my mail
address (ggjns@knuth.mtsu.edu); if desired by anyone I can easily repost
a summary of responses. Yes, I've cross-posted this to relevant groups
in the GIS world, so apologies for its verbosity on basic stuff. PS,
GIS means Geographic Information System.
--
John N Schmidt KD4EAI, Lab Director + 615-898-5561 phone or 615-898-5592 FAX
Middle Tennessee State University ++ ggjns@knuth.mtsu.edu by Internet Email
1500 Greenland Drive, PO Box 135 +++ MTSU Center for Remote Sensing and GIS
Murfreesboro, TN 37132-0135 USA ++++ Department of Geography and Geology
---- 35d 50m 22s North Latitude, 86d 22m 00s West Longitude, 640 ft MSL ----

141. 500 pF 500V MICA Capacitors required

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 16:56:13 UTC
From: M.Willis@ee.surrey.ac.uk
Message-ID: <1994Jan10.165613.13881@ee.surrey.ac.uk>
Source record: 272431

I am trying to build the ARRL 4CX1000 144 MHz amplifier. I have all the parts except for the 500pF 500V type DM15 capacitors. They don't seem to be available in the UK. Can anyone help with a supplier for these components?

Thanks

73 Mike G0MJW

142. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 17:22:42 UTC
From: peterson@physc1.byu.edu
Message-ID: <1994Jan10.102242.1244@physc1.byu.edu>
Source record: 272460

After rereading my last post I realized I probably came across as somewhat negative. I do regret that some people have no respect for property and I am sorry that some repeaters sites have been targeted by the slime that seems to be covering our country. However, paranoia and secrecy won't stop the slime - they will get what they want for the simple reason that the law enforcement infrastructure is losing the battle against the slime. Unfortunately, secrecy doesn't work against the slime. The slime are not stupid - some of them are extremely brilliant but they have decided that it is better to use their brains to support the slime than to do something constructive. Hence, no matter what you do to hide your repeater - short of just shutting it off - will protect it from the slime assuming that they want it. At some point we have to balance the importance of providing useful information against that of protecting property and resources. All information can be misused in the wrong hands but if we lock up that information it will only slow the slime down slightly and greatly reduce the utility of whatever is being described. If I want I can have an unlisted phone number, take the numbers off my house, and only provide a post office box for my mailing address. But I am still not protected against the guy walking down the street who decides that I may have something he wants. And at the same time I have made it impossible for my friends to find me or for the ambulance to figure out which house is mine when I have a heart attack.

A recent post suggested giving fuzzy coordinates for the repeaters. Since I don't intend to operate in the direct vicinity of most repeaters (and if I am I already know exactly where it is) having the location within a mile or so would suit my purpose. Then, since I don't have coverage maps for them, I can look at where I am and where the repeater is located (direction and distance) and see if there is something like a mountain between me and the repeater. I will then have a vague idea of whether iI will be able to make it in or where I would need to move to in order to make it.

We scream at the government for their secrecy (look at the recent furor over AEC testing in the 40's and 50's) and yet we hide behind the same veil of secrecy. We expect everyone else to reveal sensitive information while being very adamant about not needing to reveal our own sensitive information. Let's try to strike a balance here and compromise on a level of information that will allow us to improve our use of limited resources (whether it's repeaters or spectrum allocation) while keeping the critical information quiet.

Bryan Peterson
peterson@physc1.byu.edu

P.S. - an interesting local example of what happens when you have things that are secret was brought up last night on a local 2m net. A person was fiddling

around with DTMF paging and messaging, a feature that is quite common on most new UHF and VHF radios. Unfortunately, out of ignorance he was bringing up all sorts of "hidden" features of the repeater like autopatches and connecting links. He was asked to stop using the DTMF features because of all the problems he was causing. There are ways around this (for instance, on one local repeater they have a special code that will cause the repeater to stop listening to DTMF codes so that a DTMF squelch or paging can be used without danger of messing up the controller) but secrecy is not the solution.

143. Hamfests near Colo???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 17:28:14 UTC
From: galen@picea.CFNR.ColoState.EDU
Message-ID: <CJFCJ2.17n9@yuma.ACNS.ColoState.EDU>
Source record: 272436
Cross-posted to: rec.radio.amateur.misc,rec.radio.swap

I need a list of hamfests in or near Colo for the next year or so.
I know about Jan 22 in Loveland (talk-in 145.115-, 100Hz?) but I
need to know to plan my spring, summer and early fall vacations.
Muchos Gracias
Galen, KF0YJ

144. Log Periodics and DXing

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 17:29:52 UTC
From: dearnshaw@worldbank.org
Message-ID: <1994Jan10.172952.17636@worldbank.org>
Source record: 272434

I'm curious. Does anyone have any experience with HF (20 meters and above) Log Periodic antennas? I'd be particularly interested in learning how they compare with the TH-7DXX/KT34XA class of antenna.

(I'm moving house, and considering a LP to replace my venerable TH-7. I've been kicking around the idea of a L.P, to get WARC band coverage. However, if the performance is such that my TH-7, or a TH-11, will outperform them for DXing and contesting, then I may reconsider.)

Opinions/Comments ?

Thanks, Darrell NR3Y.

145. REQUESTED QSL INFO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 17:39:09 UTC
From: ATKINS_K%athena@leia.polaroid.COM
Message-ID: <199401101752.JAA25234@ucsd.edu>
Source record: 272437

Date: 6 Jan 1994 16:44:52 -0400
From: newsflash.concordia.ca!nstn.ns.ca!halifax-ts2-11.nstn.ns.ca!smarsden@uunet.uu.net
Subject: callbook help?
To: info-hams@ucsd.edu

Sorry to be a mooch, but callbooks haven't found their way into
my budget recently, and the latest set I have is 1989. I also have a few
cards piling up that I would like to get off. Could somebody with a 93 or
94 callbook, a few minutes to spare, and a generous nature please provide me
with addresses for the following calls?? Reply by E-Mail please.

PZ1DYX
YU1AVQ
YU2DW
KM6ON

Thanks a lot in advance.

Steve VE1YB smarsden@fox.nstn.ns.ca

Hi Steve: Here is the qsl info you requested and is from my 94
Callbook.. I tried QSL'ng you direct via "SMARDSEN@FOX.NSTN..NS.CA
but it came back "USER UNKNOWN". Hope this routing works.

Good Luck!

PZ1DYX No listing given. Suggest recheck callsign as most of the call signs
were only 2 X 2 calls.

YU1AVQ Radio Club Zemun
Cara Dusana 57
Box 73
11080 Zemun
Serbia - Europe

YU2DW Zyonko Ljutic
Skurinjskih Zrtava 28
5100 Rijeka
Croatia - Europe

KM6ON Mike Jakiela
P.O.B. 286
Poway Ca.
92074 - U.S.A.

73 & Gud Dx.
De K1JKR - Ken
ATKINS_K%ATHENA@LEIA.POLAROID.COM

146. Re: On a positive note- (was: Re: RAMSEY KITS NOT TOO GOOD)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 17:52:11 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2gs4kbINNao3@abyss.West.Sun.COM>
Source record: 272440

In article <gregCJF1J7.8MG@netcom.com> greg@netcom.com (Greg Bullough) writes:
>
>Anyway, I'm glad Ramsay and some of the others are around. But since
>they're really start-ups, they're going to have problems. The question
>is, how do we help them improve?

We could hire them a good engineer who actually understands how to
build a PLL synthesized transceiver.

We could buy them a copy of "Solid State Design for the Radio Amateur"
so they could purloin good receivers rather than cheesy NE602
designs...

We could loan them a spectrum analyzer so they could actually
see how bad the VCO purity is in the FX series radios...

We could buy them a Motorola Radius GM-300 manual so they could
purloin excellent VHF/UHF circuits...

Etc.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

147. Re: When will my license expire?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 17:56:45 UTC
From: mcinnis@austin.ibm.com
Message-ID: <CJFDuu.4v9D@austin.ibm.com>
Source record: 272461

You are required to be in posession of your license or a copy to operate
a radio. You should get a replacement from the FCC even if you don't expire
soon. I think you need FCC form 610 to get a replacement, but I'm not sure.
--
Mickey McInnis - mcinnis@austin.ibm.com (mcinnis@vnet.ibm.com outside IBM)
--

148. Bay Area Hamfests

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 18:01:08 UTC
From: djadams@silver.ucs.indiana.edu
Message-ID: <CJFE1x.JsD@usenet.ucs.indiana.edu>
Source record: 272441

Greetings! A new job is causing me to relocate to Mountain View, CA and
I was wondering if anyone could give me a list of any upcoming Hamfests
in the Bay Area....Thanx.

73 de Dave, N9UXU

David J Adams, N9UXU Internet: djadams@silver.ucs.indiana.edu
Amiga User and Flow Cytometry Advocate
Looking for a mobile 2m and/or 70cm rig
Conure Society of America. "Push the button Frank..."
--- -. .-.. -.-- .- -- .. --. .-

149. Morse Code program

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 18:07:55 UTC
From: drumhell@claudette.nrl.navy.mil
Message-ID: <CJFED8.InE@ra.nrl.navy.mil>
Source record: 272438

I'm looking for Morse code practice software that runs either on a NeXT computer (NeXTstep), or a DOS machine. Any suggestions on freeware or commercial software that isn't too expensive. Any programs available on ftp sites?

--
David Drumheller, KA3QBQ phone: (202) 767-3524
Acoustics Division, Code 7140 fax: (202) 404-7732
Naval Research Laboratory
Washington, DC 20375-5350 e-mail: drumhell@claudette.nrl.navy.mil

150. Re: WHERE ARE ALL THE YOU

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 18:14:43 UTC
From: wolfman@p-cove.UUCP
Message-ID: <9i9XFc1w165w@p-cove.UUCP>
Source record: 272487

ip@g8sjp.demon.co.uk (Iain Philipps) writes:

> In article <334qFc4w165w@p-cove.UUCP> wolfman@p-cove.UUCP writes:
>
> > See, I was told that if I connect up both the mobile radio and the TNC
> >to the power supply, and I was to transmit at 50 watts, after finishing
> >the transmision there would be a surge of power comming back, and that
> >could damage the TNC... I don't want to use a 9v battery because I don't
> >really feel like changing it every week..
> >
>
> Hmm. Interesting concept. From my (limited - 20 years) experience in this
> field, I'd say that what you have been told is absolute bull! The other
> matter arising is that, with the concept of packet radio networks, you
> should seriously review your antenna strategy if you need to run more than
> a few watts!

For packet I only use 5 watts.. But since this is my only radio, I have
to use this one for voice also, and in order to hit the one repeater, and
make my transmission readable, I have to use 50 watts..

Aaron

---

wolfman@p-cove.uucp (Aaron Smith)
Amateur radio station KB8PFZ

151. Re: Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 18:15:46 UTC
From: gladin@gulfaero.com
Message-ID: <2gs60iINNhe7@mickey.eng.gulfaero.com>
Source record: 272439

Chris Magnuson writes:
-> .... it is possible to make phone calls from way up high by radio
-> (check on the kids, etc.). Is this possible to do via a portable
-> radio?
Alex Lane responds:
-> A number of 2-meter repeaters offer users a phone patch that allows you
-> to make phone calls through the repeater. ...
-> Of course, this pre-supposes you're a licensed ham with a 2-meter rig.

Here's a consideration in airborne operation: please be mindful of your "advantage". Under nominal conditions your "footprint" is going to extend over a 200 mile radius when transmitting from FL200. That covers a _lot_ of repeaters. Before I transmit within the repeater input segment of the band, I do extensive homework in the repeater directory on the ground and monitoring in the air before trying to hit a "specific" repeater. I would discourage spur-of-the-moment repeater work from high altitude.

Don't get me wrong. I _love_ airborne operation on 2 meters and 70cm. There's nothing like getting a report of full quieting from 275 miles away when your putting out 2.5 watts from an HT. I'd encourage anyone who gets the chance to try it (legally). But it involves more than just walking on board and keying up.

BTW, for the home-grown lawyers out there, my operations were fully compliant with Combined Federal Regulations, Part 97, paragraph 97.101 and Federal Aviation Regulations, Part 91, paragraph 91.21.

==========
John N. Gladin Gulfstream Aerospace Corporation
Flight Dynamics Group Fax: (912) 965-4812
Internet: gladin@gulfaero.com Vox: (912) 965-4939
==========
I don't speak for GAC on such matters.

152. Re: WANTED:Synchronous Detector Schematic

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 18:18:42 UTC
From: ylo@osiris.kbfi.ee
Message-ID: <2gs662$4d2@osiris.kbfi.ee>
Source record: 272442

Hi!
There was a construction article in July 1993 issue of QST.
You might also try Sept. 1992 issue of QEX, where a circuit
is printed which uses phasing method and is based on Sony parts.
Regards,
Ylo Mets.

153. BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 18:26:49 UTC
From: depaul@spk.hp.com
Message-ID: <CJFF8p.56v@spk.hp.com>
Source record: 272444

Hello.

If this has been discussed before, I'm sorry, I haven't seen it.

The ARRL handbook mentions that we should keep the face of an amp
at least 24 " from our body, etc. Rigs, power supplies, antenna tuners,
and antennas are also hazardous to our health when set too close to our
body.

So now my amp is approx 4 feet from me, and my open wire antenna tuner
is now 7 feet from me. I'm also about 2 feet from the face of the rig.
I'm hoping that will do the trick to be immune from cancer...

They mention that attic antennas are a no-no, and it appears mobiling
douses your body with an rf field big time.

There is statistically significant cancer rates above the non-electronic
population.

What I want to hear out there is anyone who has done, or is knowledgeable
of work done in this field...Let us know.

Regards,

Marc

154. DXCC wait time

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 18:38:27 UTC
From: eckman@eos1.larc.nasa.gov
Message-ID: <2gs7b3$of9@reznor.larc.nasa.gov>
Source record: 272446

I recently sent in my endorsement application to the DXCC Desk at
ARRL. I was pleasant surprised by the processing time. The application
and cards were received on 12/29. The application was processed on
12/30 and the return package was postmarked 1/4. It probably would
have been quicker had there not been a holiday in that period!
Compared to the multi-month wait that I endured back in mid-1992
for my initial DXCC application, this is a pleasant, welcome change.
Thanks to the ARRL for really making the effort to get rid of the
DXCC backlog and keeping it from reappearing.

Richard Eckman KO4MR
NASA Langley
Hampton, VA

155. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 18:51:21 UTC
From: irvine@uxh.cso.uiuc.edu
Message-ID: <2gs839$9k4@vixen.cso.uiuc.edu>
Source record: 272447

In article <CJFF8p.56v@spk.hp.com> depaul@spk.hp.com (Marc DePaul) writes:
>
>The ARRL handbook mentions that we should keep the face of an amp
>at least 24 " from our body, etc. Rigs, power supplies, antenna tuners,
>and antennas are also hazardous to our health when set too close to our
>body.

It might be hazardous because of RF burns: if you stand too close
to an emitting radar dish or high power antenna array you will get
burns on your body. Lower power WILL heat your tissues a bit, though
any claims of cancer are unsubstantiated and are probably bogus.

>So now my amp is approx 4 feet from me, and my open wire antenna tuner
>is now 7 feet from me. I'm also about 2 feet from the face of the rig.
>I'm hoping that will do the trick to be immune from cancer...

Well your tissues will probably be unheated (below the background
level anyway...

>They mention that attic antennas are a no-no, and it appears mobiling
>douses your body with an rf field big time.

It would depend on how your house is shielded. If you were to put a
layr of chicken wire between your antenna and next floor down, ground
it, your house should be safe.

If you have a car with a metal roof, placing the antenna in the middle
of it will keep the RF out of your vehicle pretty effectively. Also
I think the highest mobile wattage is less than 100 watts, no?
If you obey the reg that says you should communicate at the minimum
wattage neccesary you will probably operate at well below that figure.

Assuming that it could actually cause cancer...

>There is statistically significant cancer rates above the non-electronic
>population.

Depends on how the data was calculated. Perhaps the HAM community
is significantly older that the population at large, perhaps if
there is genetic propensity to be a HAM there will also be a
genetic propensity for cancer.

The answer is that there is no real knowledge of this. This whole
thing came about because of the 'power line' scares of the late 80's
and the lady's claim that using a mototrola portable phone gave her
brain cancer (despite the prevalnece of cancer deaths in her family)>

There might be a corrollation, but that does not prove causation!

>What I want to hear out there is anyone who has done, or is knowledgeable
>of work done in this field...Let us know.

I am currently studying Electromagnetics for a graduate degree.

--
Brent Irvine callsign: n0rzu These personal opinions can
internet: b-irvine@uiuc.edu be yours for a modest licensing
aol: bearking@aol.com fee of $50.00

156. Re: I need a terminal program for 2 TNCs at once

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 18:59:15 UTC
From: jwl@sedist.cray.com
Message-ID: <1994Jan10.125917.6895@walter.cray.com>
Source record: 272454
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

I just wrote a program, actually modified SimpTerm to handle two windows. It isn't very well debugged yet, but if you want to try a copy I'll be happy to try to get it to you. I uses a split screen that you can make as large or as small as you want. There is a hot key that will let you toggle back and forth and there is a key that will zoom the screen up to full size and back. There isn't any terminal emulation. I'm working on that. Interested? Only works on com1 and com2 right now, but that is easily modified.

Jim.
--

Jim Lynch, Sales Analyst, Cray Research, Inc. / ARS: K4GVO
Southeast District, Phone: (404) 631-2254, Email: jwl@sedist.cray.com
Suite 270, 200 Westpark Drive, Peachtree City, GA 30269

157. Club Station Licenses-Vanity calls

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 19:08:26 UTC
From: Greg@epitome.er.doe.gov
Message-ID: <2gs93a$grp@cronkite.nersc.gov>
Source record: 272448

Does the vainty call sign proposal mean that the FCC will allow NEW
club station licenses? There seems to be some ambiguity here.

Greg
WA9EYY

158. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 19:12:11 UTC
From: dave@llondel.demon.co.uk
Message-ID: <758254331snx@llondel.demon.co.uk>
Source record: 272480

In article <758146875snz@g8sjp.demon.co.uk> Ip@g8sjp.demon.co.uk writes:
>In article <758152694snx@llondel.demon.co.uk> dave@llondel.demon.co.uk writes:
>
>>There have been several cases of remote-site amateur gear being
>>stolen/vandalised in the UK. The first recorded case was the West London
>>repeater some time ago, which vanished without trace until (several years
>>later) they drained the water tower on which the repeater had been sited....
>>it was inside. A few packet nodes have been vandalised in the last year or
>>so, and the Guildford voice repeater was stolen last month.
>>
>
>Dave,
>
>I'd be interested in knowing which repreater this actually refers to, since
>the West London repeaters have always been sited on a hospital!
>
The water tower was on top of of the hospital as far as I know. Perhaps 'tower'
was the wrong word and 'tank' might have been better. You obviously know more
about London repeaters than I do - I generally avoid them like the plague as
far as operating goes (it helps that I normally live out of RF range.....)

Anyway, how did this get into this thread? Anyone elsed mystified, look
elsewhere and you will find the original I sent :-)

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

159. Re: Morse Code program

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 19:15:45 UTC
From: wjturner@iastate.edu
Message-ID: <CJFHI9.Mnz@news.iastate.edu>
Source record: 272451

In article <CJFED8.InE@ra.nrl.navy.mil> drumhell@claudette.nrl.navy.mil (David Drumheller) writes:
> I'm looking for Morse code practice software that runs either on a NeXT
>computer (NeXTstep), or a DOS machine. Any suggestions on freeware or
>commercial software that isn't too expensive. Any programs available on
>ftp sites?

SuperMorse is a *great* program for DOS. You can find it in
wuarchive.wustl.edu. It is named "sm404" and is in the directory
"/mirrors/msdos/hamradio".

73, will, n0rdv
--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

160. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 19:18:44 UTC
From: powers@aur.alcatel.com
Message-ID: <2gs9mk$gd6@aurns1.aur.alcatel.com>
Source record: 272449
Cross-posted to: rec.video,rec.radio.amateur.misc

In article 3319@cmkrnl, jeh@cmkrnl.com (Jamie Hanrahan, Kernel Mode Systems) writes:
> In article <2g7p56$9s9@crl2.crl.com>, lreeves@crl.com (Les Reeves) writes:
> > The colorburst frequency is not only cast in stone-it is extremely accurate.
> > It is more accurate as a frequency reference than WWV. This is provided
> > that you are tuned to a network-supplied program.

> Also, at that time it was stated that the networks used rubidium-clock
> frequency standards, which are secondary standards: They're awfully good but
> they still have to be calibrated against something better. NIST (the folks who
> run WWV) uses cesium-beam clocks, which are primary standards, needing no
> calibration for frequency. Have the networks since upgraded to cesium-beam
> clocks? And, given that the local stations probably haven't, does it matter
> anyway? Even if they have, they're still "only" as good as NIST's clocks, so
> why should one over-the-air signal be better than another? (propagation
> changes on shortwave, maybe?)
>

Colorburst transmit frequency is required to be +/-10Hz (5.5873E-6 or 5.5873ppm).
PPM means parts per million.
This requires a good ovenized oscillator(that isn't cheap). Rubidium Oscillators
go for about $20,000 I think. Cesium Beam clocks are > $200,000.
The clocks that NIST uses are the best in the world. They have about 10 of them
that are all averaged together.

WWV, however loses a lot in its method of transmission and to propagation effects.
Received accuracy (if you have a stable enough PLL to track it without further
loss of accuracy) is about 1E-7 (0.1ppm) frequency accuracy and 1ms for timing.
Even to keep this accuracy would cost you at least $1000. Stratum 3 oscillators used in
non-central office telephone equipment are 4.7ppm and cost at least $2000.

Since the colorburst crystal in your TV is > 100ppm, any PLL that uses that
crystal to lock onto an external source cannot be any better than 100ppm.

WWV is not the problem. Unless you are in TV broadcasting I don't think you
would need better than WWV accuracy.

Incidently, NIST was working on a computer system where you could request time
and frequency by modem. It would figure out the delay of the telephone path
and compensate for it. Some manufacturers (True Time was one of them) was working
on clock sources that are locked to the GPS (Global Positioning System) system
with Stratum 3 accuracy and better timing accuracy.

-Cliff

Clifton Powers Let No Man Have Two Fibers Until
powers@aur.alcatel.com all Men Have One.
Alcatel Network Systems -Steven Hornung, BTRL, July 1987
Video Technology Where's my Fiber?
---

161. Re: Vanity Callsign Notice of Propsed Rulemaking (PR93-30

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 19:22:12 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <758229732snz@g8sjp.demon.co.uk>
Source record: 272456

In article <1994Jan10.130811.19613@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us writes:

>Come on Jack, we all know that *real* ham calls start with a W or K. :-)
>
>Gary

AHEM!!!!

You have the Morse character elements correct, but you simply have them
arranged wrongly. Actually, they start --.

:-) <--- *just* in case ....

Iain Philipps - InterNet StormTrooper
Telephone: +44 494 432144
EMail: ip@g8sjp.demon.co.uk
On VHF: G8SJP
On HF: G0RDI
On Contests: G(W)0RDI/P [JO01KJ and IO82JJ]
On Vacation: C30DLA
At Work: N2TLY
---

162. Re: When will my license expire?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 19:28:22 UTC
From: Anthony_Pelliccio@brown.edu
Message-ID: <Anthony_Pelliccio-100194142816@138.16.64.8>
Source record: 272450

In article <dgfCJBLrF.7xJ@netcom.com>, dgf@netcom.com (David Feldman)
wrote:

> I have one of those 10 year licenses, and I can't find the orig., and
> I have the feeling that it will expire before too long. How can I find
> my expiration date? I realize this sounds like an obvious question, but
> after 23 years in ham radio I guess I'm getting senile!
>
> 73 Dave WB0GAZ dgf@netcom.com

Dave,

That's simple... just send a 610 in to the FCC. Change your address or
something. I have at least 2 copies of my extra license. When I changed the
address they sent a new copy and they also change your expiration date to
10 years after the date of the last change.
--
== Tony Pelliccio, KD1NR
== Anthony_Pelliccio@Brown.edu
== Brown University Alumni & Development Computing Services
== Box 1908
== Providence, RI 02912
== (401) 863-1880

163. Daily Summary of Solar Geophysical Activity for 09 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 19:32:05 UTC
From: oler@rho.uleth.ca
Message-ID: <9401101932.AA15080@rho.uleth.ca>
Source record: 272513
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

09 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 09 JANUARY, 1994

NOTE: Stratospheric warming exists over Siberia, the Bering Strait,
eastern Canada and southern Europe. Cold air has remained over
Greenland and the European Arctic today.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 009, 01/09/94
10.7 FLUX=117.0 90-AVG=102 SSN=098 BKI=0010 0001 BAI=000
BGND-XRAY=B2.8 FLU1=6.2E+05 FLU10=1.0E+04 PKI=1121 2221 PAI=005
BOU-DEV=004,004,006,004,004,002,002,005 DEV-AVG=003 NT SWF=00:000
XRAY-MAX= C8.2 @ 2323UT XRAY-MIN= B2.4 @ 0614UT XRAY-AVG= B6.2
NEUTN-MAX= +003% @ 2310UT NEUTN-MIN= -001% @ 2335UT NEUTN-AVG= +0.6%
PCA-MAX= +0.1DB @ 1835UT PCA-MIN= -0.8DB @ 0005UT PCA-AVG= -0.0DB
BOUTF-MAX=55349NT @ 2048UT BOUTF-MIN=55336NT @ 1734UT BOUTF-AVG=55344NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+078,+000,+000
GOES6-MAX=P:+131NT@ 1750UT GOES6-MIN=N:-053NT@ 0835UT G6-AVG=+100,+023,-024
FLUXFCST=STD:112,107,105;SESC:112,107,105 BAI/PAI-FCST=005,010,020/010,010,020
KFCST=1112 3111 0002 3000 27DAY-AP=004,004 27DAY-KP=1202 2111 1211 2211
WARNINGS=*MAJFLR;*SWF
ALERTS=**SWEEP:II=2@2244-2357UTC(~600KM/S)
!!END-DATA!!

NOTE: The Effective Sunspot Number for 08 JAN 94 was 60.0.
The Full Kp Indices for 08 JAN 94 are: 1o 2o 3- 3- 3- 2+ 2- 1+

SYNOPSIS OF ACTIVITY

Solar activity was low. Only one C-class flare occurred:
an optically uncorrelated C1 at 1254Z. Region 7648 (N07W11),
the largest group on the disk, showed overall simplification
and was quiet. Region 7650 (N05W01) displayed modest growth.

Solar activity forecast: solar activity is expected to be
low.

STD: A long-duration class C8.2/SF flare was observed from
Region 7646 (S08W82) at 09/2323Z. The flare was accompanied by
a moderate Type II sweep that had an estimated shock velocity
of approximately 600 km/second.

The geomagnetic field has been at quiet levels for
the past 24 hours.

Geophysical activity forecast: the geomagnetic field is
expected to be generally quiet to unsettled for the next two
days. An increase to active is expected on day three due to
a favorably positioned coronal hole.

Event probabilities 10 jan-12 jan

Class M 15/10/10
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 10 jan-12 jan

A. Middle Latitudes
Active 10/15/60
Minor Storm 05/05/10
Major-Severe Storm 01/01/01

B. High Latitudes
Active 10/15/55
Minor Storm 05/05/15
Major-Severe Storm 01/01/05

HF propagation conditions were normal to above normal over
most regions today, particularly over the middle, low, and
equatorial regions. MUFs have remained enhanced about 10 to 20
percent above normal and the quiet levels of geomagnetic
activity have contributed to very good propagation over the
middle and lower latitude paths, with MUFs being enhanced in
many cases by as much as approximately 25 to 30 percent. No
significant changes are expected until 12 January when effects
from a well-placed coronal hole should produce minor signal
degradation over the high and polar latitude paths.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 09/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7645 N13W80 088 0050 CAO 09 003 BETA
7646 S08W82 090 0190 DAO 08 003 BETA
7648 N07W10 018 0300 DAO 10 023 BETA
7649 S20W72 080 0000 AXX 00 001 ALPHA
7650 N05W00 008 0100 DAO 09 018 BETA

7647 S15W86 094 PLAGE
REGIONS DUE TO RETURN 10 JANUARY TO 12 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 09 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0618 0701 1054 160
2244 2323 2357 7646 S06W76 C8.2 SF 44 II

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 09 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
09/ 2244 2323 2357 S06W76 LDE C8.2 73 2

INFERRED CORONAL HOLES. LOCATIONS VALID AT 09/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
55 S80E87 S85W90 S85W90 S12W13 011 EXT NEG 183 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
08 Jan: 0015 0020 0026 B8.1 SF 7646 S05W55
0155 0158 0200 B8.4 SF 7646 S11W56
0238 0245 0258 C1.0
0302 0317 0330 C1.6 SF 7646 S10W53
0636 0642 0649 B6.5
0757 0802 0806 B9.4 SF 7647 S15W67
0920 1031 1059 C2.4
1624 1639 1648 B9.8 SF 7647 S13W69
2236 2246 2254 B7.9

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7646: 1 0 0 3 0 0 0 0 003 (33.3)
Region 7647: 0 0 0 2 0 0 0 0 002 (22.2)
Uncorrellated: 2 0 0 0 0 0 0 0 004 (44.4)

Total Events: 009 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---

08 Jan: 2236 2246 2254 B7.9 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

164. Re: I need a terminal program for 2 TNCs at once

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 19:33:16 UTC
From: bmiller@landesk.intel.com
Message-ID: <2gsahs$abt@ornews.intel.com>
Source record: 272452
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

You could run Windows and open two windows with any terminal program, as long as you set up each window (terminal pgm) to run off different comm ports.

--
Brett Miller N7OLQ E-mail: brett_miller@ccm.hf.intel.com
Intel Corp. Internet: bmiller@landesk.intel.com
American Fork, UT IP: 128.215.210.58

165. Finger stock

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 19:55:36 UTC
From: mikemr@microsoft.COM
Message-ID: <9401101958.AA13782@netmail.microsoft.com>
Source record: 272453

Anyone know of a source for small quantities of finger stock manufactured by a company called Instrument Specialities? Their minimum order quantity is too large, and they don't have any distributors. Thanks

Mike N6MZ mikemr@microsoft.com

166. Re: Ramsey kits not too good -- what about Down East Microwave?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 20:03:58 UTC
From: millar@nhqvax.sanders.lockheed.com
Message-ID: <millar.72.000F04B6@nhqvax.sanders.lockheed.com>
Source record: 272458

In article <1994Jan7.140535.5582@mnemosyne.cs.du.edu> lkollar@nyx10.cs.du.edu (Larry Kollar) writes:
>From: lkollar@nyx10.cs.du.edu (Larry Kollar)
>Subject: Ramsey kits not too good -- what about Down East Microwave?
>Date: Fri, 7 Jan 94 14:05:35 GMT

>OK, everybody and his dog has run down Ramsey kits. I also heard some
>unfavorable comments about Hamtronics and their downconverter kits. What
>about Down East Microwave? They have downconverters in kit form -- has
>anyone tried tackling one of those?

>Waiting for the frequency analyzer to get fixed before I put my FX-440
>on the air, I am --
>--
>Larry Kollar, KC4WZK | I like CW, but that doesn't mean I think every ham
>lkollar@nyx.cs.du.edu | should have to learn it.
> "On the Internet, nobody knows you're a dog."

I know Bill, the owner and think he produces very high quality equipment.
The no-tune transverters require quite a bit of additional stuff to get them working as a system, including RX preamp, TX amplifier, two coax relays, control logic, and a case. But, given a good junk box and some skill, the results equal the more expensive complete transverters.

The views expressed here are my own, not my employer's.
Jeff Millar, WA1HCO, Lockheed Sanders 603-885-7047

167. Multiple Forwards of Bulletins

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 20:11:30 UTC
From: 76260.772@CompuServe.COM
Message-ID: <940110201129_76260.772_CHG93-1@CompuServe.COM>
Source record: 272455

First let me apologize to those of you who get both AMSAT-ANS and Amsat BBS
for the duplication.

Now then (flame on),

As many of you may be aware, some of us out here pay REAL money each and
evey time we receive something through our InterNet Gateway. This means
that the repeated forwarding of AMSAT-ANS
Bulletins is not only a waste of CPU time world wide, but also a waste of
OUR money.

I, and I'm sure many others, will appreciate "pi8daz@pa0okc.ampr.org" and
"on1aeo@pa0okc.ampr.org"
(and any others out there) turning off the auto-forward or other system
that is generating these duplicates and dumping them back to AMSAT-ANS.

I look forward to receiving only one copy of all future bulletins as I know
the owners of these two adresses will fix the problem imediately.

(flame off)
Thank you all for your assistance in this matter.

Ralph G. Sbragia, KD6FYT
InterNet>KD6FYT@AMSAT.ORG
CompuServe>76260,772

168. Re: How does it work?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 20:26:36 UTC
From: gdo@aloft.att.com
Message-ID: <CJFKsJ.E04@cbnewsm.cb.att.com>
Source record: 272466

In article <1994Jan6.221522.1@wcsub.ctstateu.edu>, downing001@wcsub.ctstateu.edu writes:
|> In article <2ghta6$rj3@news.tamu.edu>, furuta@cs.tamu.edu (Richard Furuta) writes:
|> On a semi-related topic, I am curious about the card-key system that our
|> workplace has recently installed. The trade name is CardKey, and the
|> supplier told our executive that it was the "latest state-of-the-art"
|> equipment.
|>
|> The cards do not need to be passed through a reader, just within 6 inches
|> of the box on the wall. The system records the time, date, door, and
|> the serial number of the card (read employee.)
|>
|> I am curious how this technology works if anybody out there in cyber-space
|> would like to share this info. Perhaps I am being paranoid, but I also
|> suspect that the device can read a card much farther away, i.e., it
|> could track an employee's movements even if the employee did not use
|> it to operate the door. Does anybody want to comment on this?

I don't know about the CD/tape security stickers, but I do know something
about the card reader gizmos.

The card itself is a thin printed circuit board with thin surface mount
components. It also has a coil of wire which is the secret to it's power
source. The circuit is some sorta ultra-low-power RF transmitter with
a unique serial number programmed into it. The box on the wall by the door
emits a magnet field which induces power into the card via inductive coupling.
Once the card has sufficient juice from the coil, it transmits a signal to the
receiver, also in the wall box. The signal is digitally encoded with the
unique serial number.

The rest is easy. The receiver sends the serial number to the system's CPU
where it looks up the number in it's "database". If you fit all the criteria
for access at that time, bingo, you're in.

I hope that helps. I also hope someone has the CD/tape sticker answer.
I have some theories, but I'd like to see someone else verify them before
I go sticking my foot in my mouth.

73 de Glenn

--

Glenn D. O'Donnell, N3BDA Internet: gdo@aloft.att.com
AT&T Bell Laboratories Amateur Radio: n3bda@n3dpu.#epa.pa.usa.na
Allentown, PA Home QTH: Palmerton, PA (Grid FN20eu)

169. Parts Master System??

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 20:51:05 UTC
From: er580079@longs.lance.colostate.edu
Message-ID: <CJFLx6.1yq0@yuma.ACNS.ColoState.EDU>
Source record: 272457

Anybody know how to access the Parts Master System over the Internet?
I need to check the DOD stock number data on an item I have.
I have checked our gopher and others, but no luck.

-Emarit

drranu@lamar.colostate.edu OR er580079@lance.colostate.edu

Posting the answer would maybe be useful to others too.

KG0CQ _·_ __· _____ _·_· __·_

170. Re: QHH

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 20:51:41 UTC
From: gdo@aloft.att.com
Message-ID: <CJFLy8.EL3@cbnewsm.cb.att.com>
Source record: 272468

In article <1b.4064.946.0NA9C11E@bville.gts.org>, bryan.weaver@bville.gts.org (Bryan Weaver) writes:
|> Has anyone actually found out what QHH is?

With embarrassment, I admit to posting the article to start this thread.
I have received a reply from N0MWG (thanks Eric) where he states QHH as meaning "I am making an emergency landing"! Oops, not a good one to screw up! I'll inform the original source of the true meaning.
Thanks to all and 73 de Glenn

--

Glenn D. O'Donnell, N3BDA Internet: gdo@aloft.att.com
AT&T Bell Laboratories Amateur Radio: n3bda@n3dpu.#epa.pa.usa.na
Allentown, PA Home QTH: Palmerton, PA (Grid FN20eu)

171. FM5CW QSL route?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 21:30:59 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-100194133112@fp2-st-affairs-11.uoregon.edu>
Source record: 272463

I haven't seen the QSL route for FM5CW listed anywhere! Does anyone have an idea of what it might be?

Thanks,
Steve

172. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 21:39:38 UTC
From: lapin@casbah.acns.nwu.edu
Message-ID: <2gshuq$sae@news.acns.nwu.edu>
Source record: 272462

In article <CJFF8p.56v@spk.hp.com>, Marc DePaul <depaul@spk.hp.com> wrote:
>Hello.
>
>If this has been discussed before, I'm sorry, I haven't seen it.
>
>
>The ARRL handbook mentions that we should keep the face of an amp
>at least 24 " from our body, etc. Rigs, power supplies, antenna tuners,
>and antennas are also hazardous to our health when set too close to our
>body.
>
>So now my amp is approx 4 feet from me, and my open wire antenna tuner
>is now 7 feet from me. I'm also about 2 feet from the face of the rig.
>I'm hoping that will do the trick to be immune from cancer...
>
>They mention that attic antennas are a no-no, and it appears mobiling
>douses your body with an rf field big time.
>
>There is statistically significant cancer rates above the non-electronic
>population.

Statistics are funny things. If you take the often quoted Milham article entitled: "Increased Mortality in Amateur Radio Operators Due to Lymphatic and Hematopoietic Malignancies", the statistics show a slight increase in the incidence of leukemia amongst hams in Washington State and California over a 5 year period (36 deaths compared to an expected value of 29, corresponding to a death rate for hams of 7.1 per 100,000 vs. the normal population rate of 6.7 per 100,000). Pretty convincing?

Now look at deaths from all causes and find that hams had 2,485 compared to an expected number of deaths of 3,479. Does this mean that if you are a ham you have less chance of dying than others?

The data were suspect as well. The list of dead hams came from the Silent Keys announcements in QST. Other ham data came from the FCC database. There was no indication of operating habits (if at all), homebrewer vs appliance operator, length of time as a ham, sex of the operator (he eliminated female names manually), or other mitigating factors, except he did get occupation from the death certificates (31% had electrically related jobs).

The bottom line is that I put little stock in this study. The numbers are too small and the data are too incomplete.

>What I want to hear out there is anyone who has done, or is knowledgeable
>of work done in this field...Let us know.

I am a professor of biomedical engineering and neurology. I study brain tumors (mainly curing them, not causing them) but I am embarking on a study with rats to see how their tumor growth is affected by rf.

>Regards,
>
>Marc

Greg Lapin KD9AZ

173. Re: I need a terminal program for 2 TNCs at once

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 21:46:02 UTC
From: ez006683@othello.ucdavis.edu
Message-ID: <CJFoGs.2vo@ucdavis.edu>
Source record: 272464
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

On a related line. What good terminal programs allow for individual windows for each stream in multiuser mode. It would also be nice to have a window to monitor other QSO's without all the extra garbage. For instance you could just use your mouse to select a transmission and then all other transmissions to or from that station would be sent to a window and preceeded only with the sending station's call. It would be nice if it also compared the current packet to the last recieved packet from the station and not display duplicate packets that I recieved but the recipient missed. While there is probably nothing out there that has the monitoring features I would like is there an easier way to manage multi-stream conversations?

Thanks,
Dan

--
--
* Daniel D. Todd Packet: KC6UUD@WA6RDH.#nocal.ca.usa *
* Internet: DDTODD@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
--

174. No longer at computone.com - please redirect mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 22:29:00 UTC
From: larryk@computone.COM
Message-ID: <m0pJV73-001i3vC@mom.computone.com>
Source record: 272465

Due to circumstances beyond my control (i.e. I was laid off), I will no
longer be able to answer mail sent to this account. Please re-direct
my AMSAT mail to:

lkollar@nyx.cs.du.edu

Thanks to the many people who helped out with my recent problem with
the newsletter (not getting it), especially to John Hansen who is
sending me a replacement copy.

See y'all at nyx!
Larry Kollar, Senior Technical Writer | email: larryk@computone.com
Computone Inc, Roswell, GA | "You help your country by investing
Disclaimer: I just write the manuals! | in the future, not by waving flags."
Check out our World-Wide Web server, http://www.computone.com/

175. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 23:19:48 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2gsnqk$qst@hpscit.sc.hp.com>
Source record: 272469
Cross-posted to: rec.video,rec.radio.amateur.misc

In article <2gs9mk$gd6@aurns1.aur.alcatel.com>,
Clifton Powers <powers@aur.alcatel.com> wrote:

>Colorburst transmit frequency is required to
>be +/-10Hz (5.5873E-6 or 5.5873ppm).
>PPM means parts per million.
>This requires a good ovenized oscillator(that isn't cheap).

No it doesn't. Any decent AT cut crystal oscillator will hold +/- 5 ppm over
any reasonable indoor temperature range (10 to 50 degrees C).
That ought to run you about 10 bucks.

> Rubidium Oscillators
>go for about $20,000 I think. Cesium Beam clocks are > $200,000.

Rubidium standards start at less than $2000.
Cesium standards cost from $30,000 to $70,000.

> Stratum 3 oscillators used in non-central office telephone
> equipment are 4.7ppm and cost at least $2000.

No they don't. Stratum *2* oscillators are the ones that cost around $2000.
And they are far more accurate than 4.7 ppm.

>and compensate for it. Some manufacturers (True Time
>was one of them) was working on clock sources that are locked to
>the GPS (Global Positioning System) system
>with Stratum 3 accuracy and better timing accuracy.

A good GPS system should be able to achieve
Stratum 1 accuracy (1 part in 10^11)
not just Stratum 3 accuracy (worst than 1 part in 10^6).

Rick Karlquist N6RK
Precision Time and Frequency R&D
HP Santa Clara Division
rkarlqu@scd.hp.com

176. Re: Mobile antenna question

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 23:20:52 UTC
From: sas@opus.xyplex.COM
Message-ID: <9401102320.AA00873@opus.xyplex.com>
Source record: 272467

Todd KB6JXT in his reply to Michael Barts (mbarts@vt.edu) wrote:

>And if his concern about drilling a hole for a proper roof mount is resale
>value, remind him that he can advertise the car as "cellular-ready." ;-)

Hmmm...I've seen a lot of talk about drilling a hole affecting resale value but in the years I've been on the info-hams list, I have yet to hear of a single case where someone said something like "because that hole was drilled in the car, I'm reducing my offer by $XX". Can anyone cite a case where a properly and cleanly done drill-hole antenna mount has resulted in a lower resale value?

I have three permanent (drill-hole) antenna mounts in my two cars. Two are Larsen NMO mounts and one is a Hustler side-mount for my HF antenna. In probably 50,000 miles of driving including two or three salt-and-sand New England winters, there is not even a speck of rust or chipped paint anywhere near any of the mounts. On the other hand, there are quite a few scratches from the magmount I used to use on one of the cars. A proper and clean permanent drill-hole mount is easy to do and offers nothing but advantages over any other type of mount: better placement for a better ground plane, no window losses, no more door-squashed coax. BTW, Larsen makes a wonderful hole driller to make a perfect hole for their mounts. See if your local ham store or commercial radio shop will loan you theirs...

73 de Scott WO1G, the psycho car driller :-)

==========
Scott Sminkey email: sasminkey@eng.xyplex.com
Software Sustaining Engineering voice: 508 952-4792
Xyplex, Inc. fax: 508 952-4887
295 Foster St. (Opinions, comments, etc. are mine,
Littleton, MA 01460 not Xyplex's...)

177. Re: Bay Area Hamfests

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-10 23:41:10 UTC
From: n1gak@netcom.com
Message-ID: <n1gakCJFtsn.Gyv@netcom.com>
Source record: 272470

In article <CJFE1x.JsD@usenet.ucs.indiana.edu>, djadams@silver.ucs.indiana.edu (david jerome adams) writes:
>
> Greetings! A new job is causing me to relocate to Mountain View, CA and
> I was wondering if anyone could give me a list of any upcoming Hamfests
> in the Bay Area....Thanx.
>
> 73 de Dave, N9UXU

You've died & gone to heavan, Dave! Lots of great surplus shops and two of the best regular hamfests I know of ... Once a month on the first Sunday, out at Las Positas Community College in Livermore is a swap sponsored by the LARK (livermore Amateur Radio Klub). It's year round rain/shine and more popular during the winter months.

From March through October, there's the world-famous Foothill Swap at Foothill Junior College in Los Altos Hills. Second Saturday. This is by far the best I've ever been to (alas, I don't travel to Dayton). Tons of modern radios, vintage stuff, audio stuff, DOS Box trash, real computers, test equipment, components. Ahhh -- I feel the excitement building. Best ones are the first (March 12) and the last.

Scott

P.S. Look me up when you get here -- I monitor 145.23- (100Hz PL)

178. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 00:08:44 UTC
From: collinsn@spot.Colorado.EDU
Message-ID: <CJFv2M.pr@cnsnews.Colorado.EDU>
Source record: 272506
Cross-posted to: rec.video,rec.radio.amateur.misc,sci.electronics

In article <2gs9mk$gd6@aurns1.aur.alcatel.com>,
Clifton Powers <powers@aur.alcatel.com> wrote:
> In article 3319@cmkrnl, jeh@cmkrnl.com (Jamie Hanrahan, Kernel Mode Systems) writes:
> > In article <2g7p56$9s9@crl2.crl.com>, lreeves@crl.com (Les Reeves) writes:
> > > The colorburst frequency is not only cast in stone-it is extremely accurate.
> > > It is more accurate as a frequency reference than WWV. This is provided
> > > that you are tuned to a network-supplied program.
>
> > Also, at that time it was stated that the networks used rubidium-clock
> > frequency standards, which are secondary standards: They're awfully good but
> > they still have to be calibrated against something better. NIST (the folks who
> > run WWV) uses cesium-beam clocks, which are primary standards, needing no
> > calibration for frequency. Have the networks since upgraded to cesium-beam
> > clocks? And, given that the local stations probably haven't, does it matter
> > anyway? Even if they have, they're still "only" as good as NIST's clocks, so
> > why should one over-the-air signal be better than another? (propagation
> > changes on shortwave, maybe?)
> >
>
> Colorburst transmit frequency is required to be +/-10Hz (5.5873E-6 or 5.5873ppm).
> PPM means parts per million.
> This requires a good ovenized oscillator(that isn't cheap). Rubidium Oscillators
> go for about $20,000 I think. Cesium Beam clocks are > $200,000.
> The clocks that NIST uses are the best in the world. They have about 10 of them
> that are all averaged together.
>
> WWV, however loses a lot in its method of transmission and to propagation effects.
> Received accuracy (if you have a stable enough PLL to track it without further
> loss of accuracy) is about 1E-7 (0.1ppm) frequency accuracy and 1ms for timing.

I couldn't find an exact figure to back this up, but quoting "NBS Special
Publication 432" (National Bureau of Standards, which is now the
National Institute of Standards and Technology (NIST)) (#432 supersedes
publication 236) for WWV (Fort Collins, Colorado) & WWVH (Kauai,
Hawaii): "Accuracy and Stability: The time and frequency broadcasts
are controlled by the primary NBS Frequency Standard in Boulder,
Colorado. The frequencies as transmitted are accurate to within one
part in 100 billion (1x10^11) at all times. Deviations are normally
less than one part in 1000 billion (1x10^12) from day to day. However,
changes in propagation medium (causing Doppler effect, diurnal shifts,
etc.) result in fluctuations in the carrier frequencies AS RECEIVED by
the user that may be much greater than the uncertainty described above.".

A binary coded decimal (BCD) time code is also transmitted on a 100Hz subcarrier by WWV & WWVH.

The audio portion of these broadcasts can be heard via telephone (but not the RF carriers). At (303)499-7111 for WWV and (808)335-4363 for WWVH. The accuracy received anywhere in the contiguous 48 states is 30ms or better.

Now if you want real accuracy (:-)), try WWVB (Fort Collins, Colorado). This is a BCD time code only (1 bit per second!) on a 60KHz radio carrier. And to quote publication 432 again: "The frequency of WWVB is normally within its prescribed value to better than 1 part in 100 billion (1x10^11). Deviations from day to day are less than 5 parts in 1000 billion (5x10^12). Effects of the propagation medium on received signals are relatively minor at low frequencies; therefore, frequency comparisons to better than 1 part in 10^11 are possible using appropriate receiving and averaging techniques.".

From publication 432: "Frequency Calibration Service Using Network Television: For those users who require only frequency calibrations, an alternative to the radio broadcasts is available. This service provides a means of calibrating oscillators traceable to NBS. It gives the user the option of calibrating his oscillator quickly at very low cost, with modest accuracy, or of expending more time and money for higher accuracy.".

"The service is very reliable because the networks use extremely stable rubidium or cesium oscillators to generate the 3.58MHz color subcarrier frequency which is transmitted with all color programs. The color signal is then used as a transfer standard. Any oscillator that has a frequency of 10/N MHz, where N is any integer from 1 to 100, can be calibrated.".

"If a user wants to make a calibration, he compares the color signal coming from the network centers in New York City (or Los Angeles for those on the West Coast) with his local oscillator. NBS monitors the same network signals and publishes the difference between the network oscillators and the NBS Frequency Standard in the monthly NBS Time and Frequency Services Bulletin. A user then knows two things: (1) the difference between his oscillator and the network oscillators (by measurement) and (2) the difference between the networks and NBS (by publication). With this information, he can easily compute the difference between his oscillator and NBS. Thus, his calibration is traceable to the NBS Frequency Standard.".

"NBS has developed two methods for making these frequency calibrations. Equipment is commercially available for both methods.".

"Color Bar Comparator Method: The color bar comparator is a simple circuit that connects to a standard color television set. It produces a colored bar on the screen that changes color or moves across the screen at a rate that depends on the frequency difference between the user's oscillator and the TV network signal. By timing these changes with a stopwatch and referring to the data published by NBS, an oscillator

can be rapidly calibrated to an accuracy of 1 part in 1 billion (1x10^9).".

"Digital Offset Computer Method: The second method, using a digital
offset computer, provides an automatic means of calibrating high-
quality crystal or atomic oscillators. It compares a signal from the
user's oscillator with the TV color signal and displays the frequency
difference on the TV screen as parts in 100 billion (parts in 10^11).
If measurements are averaged over about 15 minutes, a calibration
accuracy of one part in 100 billion can usually be achieved.".

NBS time can also be received via the GOES (Geostationary Operational
Environmental Satellite) satellites of the National Oceanic and Atmospheric
Administration (NOAA).

> Even to keep this accuracy would cost you at least $1000. Stratum 3 oscillators used in
non-central office telephone equipment are 4.7ppm and cost at least $2000.
>
> Since the colorburst crystal in your TV is > 100ppm, any PLL that uses that
> crystal to lock onto an external source cannot be any better than 100ppm.

I am building a self-resetting clock which uses WWVB and should have
an accuracy of around 1ms (which is much more than needed for a clock :-)).
I have a current version which has been running for over 10 years which
as I remember is accurate to around 1/256 of a second. So the important
factor for accuracy while NOT receiving the WWVB signal is the STABILITY
of the crystal (not the frequency accuracy).

For more information on receiving WWVB, see Don Lancaster's articles
in Radio Electronics: July 1972 (pages 54-58), August 1972 (pages 60-62),
August 1973 (pages 48-51 - this starts the WWVB part), and September
1973 (pages 98,101). I only used the design for the receiving antenna
and preamp (which are not my areas of expertise) and threw out the rest
of the design and replaced it with a microprocessor (note the dates on
the articles :-)). I am lucky that I live in Colorado, so I didn't need
to use any of the fancier receiving methods which Don Lancaster describes
in his articles.

> Incidently, NIST was working on a computer system where you could request time
> and frequency by modem. It would figure out the delay of the telephone path
> and compensate for it. Some manufacturers (True Time was one of them) was working

(303)494-4774 (1200 baud, 8bit, 1stop, no parity).

Did everybody make it this far? :-)

| Neil Collins collinsn@spot.colorado.edu |
---

179. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 00:11:42 UTC
From: collinsn@spot.Colorado.EDU
Message-ID: <CJFv7I.ww@cnsnews.Colorado.EDU>
Source record: 272507
Cross-posted to: rec.video,rec.radio.amateur.misc,sci.electronics

In article <2gs9mk$gd6@aurns1.aur.alcatel.com>,
Clifton Powers <powers@aur.alcatel.com> wrote:
> In article 3319@cmkrnl, jeh@cmkrnl.com (Jamie Hanrahan, Kernel Mode Systems) writes:
> > In article <2g7p56$9s9@crl2.crl.com>, lreeves@crl.com (Les Reeves) writes:
> > > The colorburst frequency is not only cast in stone-it is extremely accurate.
> > > It is more accurate as a frequency reference than WWV. This is provided
> > > that you are tuned to a network-supplied program.
>
> > Also, at that time it was stated that the networks used rubidium-clock
> > frequency standards, which are secondary standards: They're awfully good but
> > they still have to be calibrated against something better. NIST (the folks who
> > run WWV) uses cesium-beam clocks, which are primary standards, needing no
> > calibration for frequency. Have the networks since upgraded to cesium-beam
> > clocks? And, given that the local stations probably haven't, does it matter
> > anyway? Even if they have, they're still "only" as good as NIST's clocks, so
> > why should one over-the-air signal be better than another? (propagation
> > changes on shortwave, maybe?)
> >
>
> Colorburst transmit frequency is required to be +/-10Hz (5.5873E-6 or 5.5873ppm).
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> go for about $20,000 I think. Cesium Beam clocks are > $200,000.
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part in 100 billion (1x10^11) at all times. Deviations are normally
less than one part in 1000 billion (1x10^12) from day to day. However,
changes in propagation medium (causing Doppler effect, diurnal shifts,
etc.) result in fluctuations in the carrier frequencies AS RECEIVED by
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to use any of the fancier receiving methods which Don Lancaster describes
in his articles.

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> and frequency by modem. It would figure out the delay of the telephone path
> and compensate for it. Some manufacturers (True Time was one of them) was working

(303)494-4774 (1200 baud, 8bit, 1stop, no parity).

Did everybody make it this far? :-)

| Neil Collins collinsn@spot.colorado.edu |
---

180. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 01:19:52 UTC
From: jeh@cmkrnl.com
Message-ID: <1994Jan10.181952.3359@cmkrnl>
Source record: 272478
Cross-posted to: rec.video,rec.radio.amateur.misc

In article <2gs9mk$gd6@aurns1.aur.alcatel.com>, powers@aur.alcatel.com (Clifton Powers) writes:
> [...]
> Incidently, NIST was working on a computer system where you could request time
> and frequency by modem. It would figure out the delay of the telephone path
> and compensate for it.

This has been running for some years now. Last I knew, the phone number was 1-303-494-4774 . ... still seems to be. It answers at 1200 or 300 bps only. The delay compensation works if your computer echoes all characters sent by NIST. With most modems, syncrhonization should be possible to within about +- 10 msec of the correct time. No frequency standard is provided by this service.

--- Jamie Hanrahan, Kernel Mode Systems, San Diego CA
Internet: jeh@cmkrnl.com (JH645) Uucp: uunet!cmkrnl!jeh CIS: 74140,2055

181. Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 01:51:38 UTC
From: darren.leno@radiohobby.chigate.com
Message-ID: <38c_9401102048@chigate.com>
Source record: 272473

To: chrism@col.hp.com (Chris Magnuson)

CM> Message-ID: <2gkha4$n2l@hp-col.col.hp.com>

CM> I am going to Alaska again this year, and would like to investigate
CM> whether it is possible to make phone calls from way up high by radio
CM> (check on the kids, etc.). Is this possible to do via a portable
CM> radio? If so, can you give any pointers on how to get started...I
CM> have until May 27 to get this going.

If you're flying Alaska Airlines, they have phones in their aircraft.
Otherwise, if there's not an inflight phone, you cannot legally use a portable
radio or telephone.

182. Phonecalls from 20,000 feet?!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 01:51:38 UTC
From: darren.leno@radiohobby.chigate.com
Message-ID: <1ec_9401102042@chigate.com>
Source record: 272475

To: chrism@col.hp.com (Chris Magnuson)

CM> Message-ID: <2gkha4$n2l@hp-col.col.hp.com>

CM> I am going to Alaska again this year, and would like to investigate
CM> whether it is possible to make phone calls from way up high by radio
CM> (check on the kids, etc.). Is this possible to do via a portable
CM> radio? If so, can you give any pointers on how to get started...I
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If you're flying Alaska Airlines, they have phones in their aircraft.
Otherwise, if there's not an inflight phone, you cannot legally use a portable
radio or telephone.

183. Help finding: BPQAX25.EXE

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 01:59:18 UTC
From: darren.leno@radiohobby.chigate.com
Message-ID: <38d_9401102048@chigate.com>
Source record: 272474

To: babiyd@mala.bc.ca (DALE BABIY)

>Hiya folks. Posted for a ham w/o net access:

>He's looking for a file called BPQAX25.EXE. I've looked through the
>net and come up with naught, so I can only assume that its some part
>of an archive or something. I'm the new ham on the
>block and I'd dearly
>like to solve this little problem for one of the oldsters :).

>Anyone give me a point in the right direction?

I have BPQAX25.ZIP at Radio Hobby Online BBS, for dialup access.
Modem is 708-238-1901. Full download access first call. Hope this helps.

73,
Darren WD0EWJ/9

184. Help finding: BPQAX25.EXE

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 01:59:18 UTC
From: darren.leno@radiohobby.chigate.com
Message-ID: <1ed_9401102042@chigate.com>
Source record: 272476

To: babiyd@mala.bc.ca (DALE BABIY)

>Hiya folks. Posted for a ham w/o net access:

>He's looking for a file called BPQAX25.EXE. I've looked through the
>net and come up with naught, so I can only assume that its some part
>of an archive or something. I'm the new ham on the
>block and I'd dearly
>like to solve this little problem for one of the oldsters :).

>Anyone give me a point in the right direction?

I have BPQAX25.ZIP at Radio Hobby Online BBS, for dialup access.
Modem is 708-238-1901. Full download access first call. Hope this helps.

73,
Darren WD0EWJ/9

185. Display Phone for Packet - Thanks

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 02:20:30 UTC
From: William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM
Message-ID: <9400107582.AA758254830@smtpgty.anatcp.rockwell.com>
Source record: 272472

With the help of Dave Redfearn N4ELM, Peter Simpson KA1AXY, and Roy
(info stripped by my mail gateway), I got the display Phone and TNC
talking to each other. This is the only way to fly. Thanks guys!

73

Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI
(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com
----
Who are you? * I am number 2. * Who is number 1? * You are number 6.
----

186. QSL routes

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 02:20:51 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2gt2e3$dh8@geraldo.cc.utexas.edu>
Source record: 272471

ATKINS_K%athena@leia.polaroid.COM says:
(in reply to the original poster)

>>PZ1DYX No listing given. Suggest recheck callsign as most of
the call signs were only 2 X 2 calls.

Let me guess that this was a cw contact, and that the op was PZ1DY,
who is quite active, and who was sending "thank you" = "TU" = "X"
if you run the T and the U together, as many do. If so, try Box
2288, Paramaribo. If it was a 'phone QSO - well, forget you ever
read this.

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

187. Fm Broadcast

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 02:55:14 UTC
From: akcs.marz@vpnet.chi.il.us
Message-ID: <2d31e75a-5415rec.radio.amateur.misc@vpnet.chi.il.us>
Source record: 272484

Is it possible for a person with ham or modified ham set up to broadcast
on the 88-108 Mhz area???

Later
Marz
akcs.marz@vpnet.chi.il.us

188. Daily Summary of Solar Geophysical Activity for 10 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 03:57:28 UTC
From: oler@rho.uleth.ca
Message-ID: <9401110357.AA19334@rho.uleth.ca>
Source record: 272515
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

10 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 10 JANUARY, 1994

NOTE: Minor stratospheric warming exists over Siberia, Alaska, and Canada
and is weakening. However, new warming over the Mediterranean area
is intensifying and spreading northeastwards. The polar region is
cooling.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 010, 01/10/94
10.7 FLUX=110.1 90-AVG=102 SSN=074 BKI=0010 0100 BAI=000
BGND-XRAY=B3.5 FLU1=6.8E+05 FLU10=1.1E+04 PKI=2111 2111 PAI=004
BOU-DEV=003,003,009,004,004,006,004,004 DEV-AVG=004 NT SWF=00:000
XRAY-MAX= C3.9 @ 0001UT XRAY-MIN= B3.0 @ 1906UT XRAY-AVG= B5.8
NEUTN-MAX= +003% @ 0750UT NEUTN-MIN= -001% @ 2035UT NEUTN-AVG= +0.6%
PCA-MAX= +1.1DB @ 1030UT PCA-MIN= -0.8DB @ 0005UT PCA-AVG= -0.0DB
BOUTF-MAX=55348NT @ 0052UT BOUTF-MIN=55326NT @ 1721UT BOUTF-AVG=55341NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+080,+000,+000
GOES6-MAX=P:+133NT@ 1838UT GOES6-MIN=N:-051NT@ 0928UT G6-AVG=+102,+023,-025
FLUXFCST=STD:100,095,094;SESC:100,095,094 BAI/PAI-FCST=010,020,015/010,020,015
KFCST=2222 2333 3333 4443 27DAY-AP=004,009 27DAY-KP=1211 2211 2233 3221
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 09 JAN 94 was 58.5.
The Full Kp Indices for 09 JAN 94 are: 1o 1- 2- 1+ 2- 2- 2- 1o

SYNOPSIS OF ACTIVITY

Solar activity was low. Departing Region 7646 (S09W93)
produced a long duration C8/SF at 09/2323Z with a moderate
intentisy Type II and minor centimeter bursts. Region 7650
(N05W13) grew slightly and now 7650 and 7648 (N06W24) appear as
abutted bipoles.

Solar activity forecast: solar activity should continue
at a generally low level. An isolated M-class flare from
Region 7646 or the 7648/7650 complex is possible.

STD: Moderate Ca XV emissions were observed on the west limb
today. The intensity of the emissions has decreased from
strong levels which were observed yesterday.

The geomagnetic field was quiet at all sites.

Geophysical activity forecast: the geomagnetic field
should be quiet until late on 11 Jan when a coronal hole
related disturbance is expected to begin. Active to minor
storm conditions are forecast for 12 Jan with unsettled to
active levels forecast for 13 Jan.

Event probabilities 11 jan-13 jan

Class M 20/15/15
Class X 05/01/01
Proton 05/01/01
PCAF Green

Geomagnetic activity probabilities 11 jan-13 jan

A. Middle Latitudes
Active 20/50/30
Minor Storm 10/30/15
Major-Severe Storm 01/05/05

B. High Latitudes
Active 20/50/30
Minor Storm 10/30/15
Major-Severe Storm 01/10/05

HF propagation conditions were normal to above normal over
all regions. Conditions are expected to return to near-normal
on 12 January for low and middle latitude paths, while high and
polar latitude paths should see periods of minor signal
degradation (mostly on night-sector circuits) due to
anticipated minor enhancements in geomagnetic and auroral
activity from a well placed solar coronal hole. Conditions
should begin returning to near-normal over the higher latitudes
on 13 and/or 14 January.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 10/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7646 S09W93 088 0060 HAX 02 001 ALPHA
7648 N06W25 020 0290 DAO 10 017 BETA
7650 N05W14 009 0180 CSI 09 026 BETA
7645 N13W93 088 PLAGE

7649 S20W85 080 PLAGE
REGIONS DUE TO RETURN 11 JANUARY TO 13 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 10 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 10 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 10/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
55 S39E25 S39E25 S11W28 S11W28 007 EXT NEG 014 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
09 Jan: 0257 0302 0305 B7.3 SF 7646 S10W70
1249 1254 1300 C1.0
1531 1542 1548 B6.2
1559 1605 1611 B7.6
1617 1625 1643 B8.3
1725 1728 1731 B6.7
2244 2323 2357 C8.2 SF 7646 S06W76 44 25 28

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7646: 1 0 0 2 0 0 0 0 002 (28.6)
Uncorrellated: 1 0 0 0 0 0 0 0 005 (71.4)

Total Events: 007 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
09 Jan: 2244 2323 2357 C8.2 SF 7646 S06W76 II,Continuum

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.

All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

189. help

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 04:29:10 UTC
From: budinger@titan.ds.gen.nj.US
Message-ID: <2d322b1b.titan@titan.ds.gen.nj.us>
Source record: 272479

--

Eric T. Budinger Dan's Domain 201-586-1223
budinger@ds.gen.nj.us Ham Central SysOp
ericbud@ritz.mordor.com 1-201-398-4619 (voice)
n2koj@w2xo.pa.usa.na 1-201-205-2134 (digital)

190. Contest Logger

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 05:34:15 UTC
From: Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US
Message-ID: <Angelo_Glorioso_Iii.2kl3@agwbbs.new-orleans.LA.US>
Source record: 272486

Hi All,

I am looking for a Contest logger that will support ARRL format for
electronic filing for ARRL RTTY ROUND-UP contest. If you know of one,
please let me know where I can ftp it??

Thanks

-- Via DLG Pro v0.995

Internet:angelo_glorioso_III@agwbbs.new-orleans.LA.US
Usenet:rex!agwbbs!angelo_glorioso_III
Packet:N5UXT @ N5UXT.#NOLA.LA.USA.NA
Tcp/ip:N5UXT.AMPR.ORG [44.108.2.13]

191. Last chance to copy Superball 1-94

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 08:08:14 UTC
From: gsmith@rahul.net
Message-ID: <CJGH9r.DBz@rahul.net>
Source record: 272485

SUPERBALL 1-94: LAST CHANCE TO COPY

Superball 1-94, the test of superpressure balloon technology carrying amateur radio beacons, is still transmitting.

The balloon, launched on January 7 at 1626z, burst about three hours later and landed in Utah's Uinta mountains, likely between 9500 and 10,000 feet elevation. A search party, on January 8, got within about two miles of the believed crash site, but were unable to continue due to steep terrain and deep powder snow. Whether recovery will be possible before spring remains uncertain.

Three beacons on the payload are still transmitting and have enough battery power to continue for at least several days. Reception reports are solicited. Reports from Illinois and Ohio have indicated good signals. Of particular interest are reports of reception through the Russian RS satellites, because this will give an idea of how practical this method of relaying telemetry will be for a later, longer-lived flight. Reports should include the receiving site, date and time of reception (preferably in UTC), and the frames of copied data. The frequencies are as follows:

Frequency	Satellite	Satellite Output Frequency
21.229 MHz	RS-12	29.429 MHz
28.322 MHz	(not on a satellite input)	
145.871 MHz	RS-10	29.371 MHz

The 21- and 145-MHz transmitters are on for three minutes and off for nine. They send CW (not MCW) carrying telemetry information.

The 28.322 MHz beacon simply keys on and off and does not attempt to send code. This beacon, alone, has solar power. The keying rate indicates whether it is operating on solar power or from batteries. Solar power is indicated by a rate near 40 pulses per minute; battery power by a rate near 20 pulses per minute. It is unknown whether recent snows may have covered the solar panel. This transmitter may die as batteries run down, and then come back to life next spring as snow melts and the solar panel is again exposed to sunlight.

Send reception reports via E-mail to:
WB7QBC@uugate.aim.utah.edu

--
Gordon R. Smith, K7HFV gsmith@rahul.net

Salt Lake City, Utah

192. Solid State HF Amps Info?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 08:41:00 UTC
From: wosborne@nmsu.edu
Message-ID: <WOSBORNE.94Jan11084100@gauss.nmsu.edu>
Source record: 272497

I was wondering if anyone in Net-land has any experience with the
newer solid state HF amps like IC-4k, FL-7000, JRC ??? or the new
Ameritron which was just announced. I have been considering one of
these and just wonder if someone could give me some advice about them?
Thanks and Best 73's Bill--AA5ZQ.

193. Re: QSL routes

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 10:14:14 UTC
From: tcj@netcom.com
Message-ID: <tcjCJGn3q.D7q@netcom.com>
Source record: 272488

Derek Wills (oo7@astro.as.utexas.edu) writes:

> > PZ1DYX No listing given....
>
> Let me guess that this was a cw contact, and that the op was PZ1DY,
> who is quite active, and who was sending "thank you" = "TU" = "X" if
> you run the T and the U together, as many do.

Inspector Morse would be impressed! ;-)

Todd, KB6JXT

194. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 11:58:00 UTC
From: oopdavid@ubvms.cc.buffalo.edu
Message-ID: <CJGrrI.D7A@acsu.buffalo.edu>
Source record: 272489

In article <2gs839$9k4@vixen.cso.uiuc.edu>, irvine@uxh.cso.uiuc.edu (Brent Irvine) writes...
>In article <CJFF8p.56v@spk.hp.com> depaul@spk.hp.com (Marc DePaul) writes:
>>
>>The ARRL handbook mentions that we should keep the face of an amp
>>at least 24 " from our body, etc. Rigs, power supplies, antenna tuners,
>>and antennas are also hazardous to our health when set too close to our
>>body.
>
The point of this recommendation was to minimize the 60 Hz exposure
from this equipment. Since it falls off rapidly from the source.

>It might be hazardous because of RF burns: if you stand too close
>to an emitting radar dish or high power antenna array you will get
>burns on your body. Lower power WILL heat your tissues a bit, though
>any claims of cancer are unsubstantiated and are probably bogus.
>
Bogus, hum. I suggest you review your course work regarding cellular
membrane theory and cancer promotion. Pay particular attention to
the information on soliton formation.

>>So now my amp is approx 4 feet from me, and my open wire antenna tuner
>>is now 7 feet from me. I'm also about 2 feet from the face of the rig.
>>I'm hoping that will do the trick to be immune from cancer...
>
>Well your tissues will probably be unheated (below the background
>level anyway...
>
>>They mention that attic antennas are a no-no, and it appears mobiling
>>douses your body with an rf field big time.
>
No question about RF and mobiling signals. Would you put an attic
antenna next to you and not worry just a little? If not you, how
about your wife. Maybe you would worry about your children?

>It would depend on how your house is shielded. If you were to put a
>layr of chicken wire between your antenna and next floor down, ground
>it, your house should be safe.
>
I do not know where you are getting this type of thinking, but
inspite of shielding, once you are in the near field of an antenna
there is not much you can do about exposure. I tell you what,
why don't you wrap your house with chicken wire and when you
are ready, I'll come out and measure the RF???

>If you have a car with a metal roof, placing the antenna in the middle
>of it will keep the RF out of your vehicle pretty effectively. Also
>I think the highest mobile wattage is less than 100 watts, no?
>If you obey the reg that says you should communicate at the minimum
>wattage neccesary you will probably operate at well below that figure.
>
>Assuming that it could actually cause cancer...
>
>>There is statistically significant cancer rates above the non-electronic
>>population.
>
>Depends on how the data was calculated. Perhaps the HAM community
>is significantly older that the population at large, perhaps if
>there is genetic propensity to be a HAM there will also be a
>genetic propensity for cancer.
>
>The answer is that there is no real knowledge of this. This whole
>thing came about because of the 'power line' scares of the late 80's
>and the lady's claim that using a mototrola portable phone gave her
>brain cancer (despite the prevalnece of cancer deaths in her family)>
>
There are currently a series of prospective and retrospective
articles appearing in the literature which point to the likely
relationship between some forms of cancer in children and proximity
to power lines. This is no scare tactic, I assure you.

>There might be a corrollation, but that does not prove causation!
>
>>What I want to hear out there is anyone who has done, or is knowledgeable
>>of work done in this field...Let us know.
>
>I am currently studying Electromagnetics for a graduate degree.
>
Actually, I co-authored the section in the ARRL handbook on the
RF safety things. It was written and reviewed by several of the
most respected scientists in the country who also just happpen
to be hams. The comments I have reviewed here are typical of
the general misunderstanding and ignorance on behalf of general
ham population. May I suggest a more thoughtful approach to posting
comments on this forum. I am tired of seeing it. Dave.

>--
>Brent Irvine callsign: n0rzu These personal opinions can
> internet: b-irvine@uiuc.edu be yours for a modest licensing
> aol: bearking@aol.com fee of $50.00

195. Re: Ramsey kits not too good -- what about Down East Microwave?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 14:14:28 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan11.141428.24713@ke4zv.atl.ga.us>
Source record: 272494

In article <1994Jan10.152705.13195@mnemosyne.cs.du.edu> lkollar@nyx10.cs.du.edu (Larry Kollar) writes:
>
>By "dead bug style," do you mean surface-mount parts? I can't imagine
>a 2304 MHz assembly working with "traditional" dead-bug construction....

No, I mean traditional leaded parts suspended by the leads of other parts. That's for the LO of the 902 transverter, not the 2304. The actual 902 part of the transverter is true surface mount using MMICs and DBMs.

>> Ramsey has greatly improved
>>their 2 meter and 70 cm transceivers from the original models, but they
>>aren't bargains. Converting commercial surplus will still give you a better
>>radio for less money.
>
>When did the new & improved kits come out? Also, how much effort is it
>to make commercial surplus frequency-agile?

They made running changes to the design and documentation. The kits made after mid-93 should have the changes. They still aren't great, but some of the worst problems were addressed. As to commercial equipment, most of the older stuff had 8 frequency decks available, and the newer programmable units can have up to 16 channels preset. Few people really need more frequency agility than that. I don't think I have as many as 16 frequencies programmed into any of my radios, and some of them have 100 memories.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

196. Re: VHF - UHF mobile antenna for scanner

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 14:19:04 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan11.141904.24796@ke4zv.atl.ga.us>
Source record: 272495

In article <thweatt.758211791@mustang18> thweatt@rtsg.mot.com (John A. Thweatt) writes:
>
>I am looking for an excellent scanner antenna which will cover 30MHz to
>1 GHz for my ICOM-R100. I would like to use this antenna to listen to
>Police, fire, weather, aircraft, mall security, etc..... Does anyone
>know off what "GREAT" all coverage antennas I could look for and what
>frequency range are they speced at and what frequency ranges they really
>cover good?... I really only want one antenna (I should be able to broadcast
>from on 2M and 70cm also, for future upgrades) and it shouldn't be to obtrusive
>to mount on the top of my truck.

The only antenna that will cover from 30-1000 MHz is a discone, and that
has 0db gain, and certainly wouldn't be unobtrusive on the top of your
truck. :-) It would work for 2 meters and 70 cm transmit though. Lots
of people use them as base antennas. Radio Shack sells one, as does Icom,
though the RS one doesn't have the whip to extend the coverage down to
30 MHz, you can add one, and it's *lots* cheaper than the Icom antenna.
It's construction is fairly sturdy too.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

197. Re: Log Periodics and DXing

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 14:25:36 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan11.142536.24875@ke4zv.atl.ga.us>
Source record: 272496

In article <1994Jan10.172952.17636@worldbank.org> dearnshaw@worldbank.org (Darrell Earnshaw) writes:
>I'm curious. Does anyone have any experience with HF (20 meters and above) Log
>Periodic antennas? I'd be particularly interested in learning how they compare
>with the TH-7DXX/KT34XA class of antenna.
>
>(I'm moving house, and considering a LP to replace my venerable TH-7. I've been
>kicking around the idea of a L.P, to get WARC band coverage. However, if the
>performance is such that my TH-7, or a TH-11, will outperform them for DXing
>and contesting, then I may reconsider.)
>
>Opinions/Comments ?

Reconsider. I don't know of any off the shelf LPs that will match your
current antennas. HyGain made some special ones for the military that
would be a match for your current antennas, but they were huge. In general,
an LP must be *much* larger than an optimized yagi for a given frequency
to have equivalent performance.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

198. need Idaho QSL for WAS!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 14:49:22 UTC
From: tjf@beta.lanl.gov
Message-ID: <tjf-110194074922@mamie.lanl.gov>
Source record: 272490

Hi...finally got cards from MS and UT. Now I need Idaho! I've made several contacts into ID, but two of my cards have been "return to sender" (no forwarding from old callbook address) or my card disappeared into a black hole. Any folks from Idaho care to try a sked? I set a goal for myself of confirming WAS in a year from getting my license and I have only a few weeks to go. I've gotten into ID on 80m, 20m and 10m. Will work CW (less than 15 WPM) or SSB. If you're interested, please repond to tjf@beta.lanl.gov.

Thanks!

Tom
KJ5LT

199. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 14:49:46 UTC
From: cnc23a@b4pph13e.bnr.ca
Message-ID: <1994Jan11.144946.25480@brtph560.bnr.ca>
Source record: 272492

In article <CJFF8p.56v@spk.hp.com>, depaul@spk.hp.com (Marc DePaul) writes:
|> Hello.
|>
|> If this has been discussed before, I'm sorry, I haven't seen it.
|>
|>
|> The ARRL handbook mentions that we should keep the face of an amp
|> at least 24 " from our body, etc. Rigs, power supplies, antenna tuners,
|> and antennas are also hazardous to our health when set too close to our
|> body.
|>
|> So now my amp is approx 4 feet from me, and my open wire antenna tuner
|> is now 7 feet from me. I'm also about 2 feet from the face of the rig.
|> I'm hoping that will do the trick to be immune from cancer...
|>
|> They mention that attic antennas are a no-no, and it appears mobiling
|> douses your body with an rf field big time.
|>
|> There is statistically significant cancer rates above the non-electronic
|> population.
|>
|>
|> What I want to hear out there is anyone who has done, or is knowledgeable
|> of work done in this field...Let us know.
|>
|>
|> Regards,
|>
|> Marc

If you have studied RF-EM radiation and its biological effects, you know that there are four factors that need to be considered (not withstanding the actual research methods - which is an entirely different subject) which are intensity, proximity, frequency, and length of exposure.

True that the hand-helds are 1/2 w, but the EM fields are much more intense (literally right against your skull). The police handhelds typically are the 'walkie-talkie' style and they have also learned to point the antenna away from the body (head in particular), thereby greatly reducing the field intensity. The EM field intensity has an inverse square relationship with proximity.

We have through research seen various effects on the body at various frequencies. Example, your microwave is set at a particular frequency that
will excite water molecules, thereby creating heat. At 27 Mhz (CB frequencies), the EM field has an affect on the sleep center of the brain. Exteremly low audio frequencies can, well let's just say can have an GI reaction.

The most critical factors, IMHO, is the length of exposure. The individual from Motorola on Eye-to-eye that claimed brain cancer from cell-phone use was also testing prototype antennas. I strongly suspect he spent hours per day on a cell-phone close to his head. Length of exposure is directly in the users control.

There was an intresting related story several months ago about how some police officers were developing prostrait (sp ?) cancer. They also linked it to a practice of removing the radar gun from its mounting on the exterior of the vechicle and keeping it between their legs (as to not alert motorists). They were using the equipment in direct contrdiction to the manufacturer's recommendations.

Measuring biological effects of RF-EM radiation is itself somewhat contriversal. The only agreed upon measurement (that I am aware of) is the change in temperature in tissue. It was shown in a seminar that I attended on the subject, that long term cell exposure will raise the brain tissue.

On the subject on research methods (which I know little about), here is a humorous happening tht illustraits the complexity of the problem. A group of researchers were studying the effects of RF on lab rats. They noticed when a particlar frequency was used, the rats would run wildly until they eventually sat in a water bowl. They concluded that this frequency had a effect on the rat's brain. Later in discussing their result, a radio engineer asked what the frequency was, and after doing some calculation, found the rat's tail was a perfect antenna for that frequency, hense, the tail was getting HOT !

There is much more that we don't know about RF-EM effects on biological systems than we do know. In the meantime, the best thing to do is not panic, not ignore, but use good ol' common sense.

73s :)

--
==========

Ken M. Edwards, PE Bell Northern Research, Research Triangle Park, NC
(919) 481-8476 email: cnc23a@bnr.ca Ham: N4ZBB

All opinions are my own and do not necessarily reflect the views of my employer or co-workers, family, friends, congress, or president.

(To the e-mail'r out there -> This is a short as it will gets)

200. Re: When will my license expire?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 14:56:43 UTC
From: prvalko@vela.acs.oakland.edu
Message-ID: <2guenb$6d0@oak.oakland.edu>
Source record: 272491

I looked you up in the callbook server at 128.205.32.2 and it says you are good until 4/21/1997. Send in a 610 and get a replacement though.

First time I checked, I did it wrong and it said your call did not exist, I then thought it may be a joke because ...

WB0GAZ could be w BOGAZ or bogus hihi

73 paul wb8zjl

201. Re: Fm Broadcast

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 15:05:38 UTC
From: mjg@ep130.wg2.waii.com
Message-ID: <2guf82$516a@ep130.wg2.waii.com>
Source record: 272493

In article <2d31e75a-5415rec.radio.amateur.misc@vpnet.chi.il.us>,
akcs.marz@vpnet.chi.il.us (chris andersen) writes:
|> Is it possible for a person with ham or modified ham set up to broadcast
|> on the 88-108 Mhz area???
|>
|> Later
|> Marz
|> akcs.marz@vpnet.chi.il.us
|>

Anything is possible but the FCC might take a dim veiw of a bootleg broadcast
station on the commericial FM band.

Mike KB5TOJ

202. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 15:06:58 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan11.150658.25191@ke4zv.atl.ga.us>
Source record: 272500

In article <CJFF8p.56v@spk.hp.com> depaul@spk.hp.com (Marc DePaul) writes:
>If this has been discussed before, I'm sorry, I haven't seen it.
>
>The ARRL handbook mentions that we should keep the face of an amp
>at least 24 " from our body, etc. Rigs, power supplies, antenna tuners,
>and antennas are also hazardous to our health when set too close to our
>body.
>
>So now my amp is approx 4 feet from me, and my open wire antenna tuner
>is now 7 feet from me. I'm also about 2 feet from the face of the rig.
>I'm hoping that will do the trick to be immune from cancer...

There's no such thing as immunity to cancer. The correlation between low level RF exposure and cancer is weak at best, about 0.4 per 100,000 in the Milham study, and it had no controls for the other exposures that hams suffer from electronic chemicals, lead vapor, etc. Other studies have actually shown a *negative* correlation. And remember, correlation does not equal causation. No in vivo controlled laboratory data exists that shows any causation mechanism. There is some inconclusive evidence from in vitro studies, but in vitro results often don't translate one to one to in vivo results. There is very hard data, however, that exposure to field power densities greater than 10 mw/cm^2 cause health problems, not cancer, but rather things like cataracts. That's why you want to stay out of the near field of radiating objects.

>They mention that attic antennas are a no-no, and it appears mobiling
>douses your body with an rf field big time.

Attic antennas can be a problem, particularly if you are running significant power, but an antenna mounted in the center of the metal roof of a car shouldn't expose you to signifcant fields. A through the glass antenna, however, could make the entire passenger cabin hot with RF, I have actual measurement data to prove that. Another reason to avoid these poor performers.

>There is statistically significant cancer rates above the non-electronic
>population.

That's not clear at all. The Milham study shows a weak positive correlation, but other studies either show no correlation, or a negative correlation. The IBEW study of union electrical workers actually shows a negative correlation despite the fact that many electrical workers are also exposed to PCBs. Most of the studies of childhood leukemia increases depended on *calculated* exposure values. When control studies have been done with *measured* exposure values, the correlation goes away.

>What I want to hear out there is anyone who has done, or is knowledgeable
>of work done in this field...Let us know.

John Moulder produced the EMF faq for sci.med. While it deals mainly
with power line radiation, it points out the pitfalls of blindly accepting
some of the studies often cited as evidence of increased cancer risk.
I'm appending it to the end of this post.

Gary

#include faq

Power-Frequency Fields and Cancer (J. Moulder, v3, 22-Aug-93)

Notice: This FAQ sheet may be redistributed as long at remains correctly
attributed. If it is edited or condensed prior to redistribution, please add
a note to that effect.

1) Why is there a concern about power lines and cancer?

Most of the concern about power lines and cancer stems from epidemiological
studies of people living near distribution and transmission lines, and
epidemiological studies of people working in "electrical occupations". Some
of these epidemiological studies appear to show a relationship between
exposure to power-frequency fields and the incidence of cancer. Laboratory
studies have shown no link between power-frequency fields and cancer.

2) What's the difference between the electromagnetic [EM] energy associated
with power lines and other forms of EM energy such as microwaves or x-rays?

X-rays, ultraviolet (UV) light, visible light, infrared light, microwaves
(MW), radiowaves (RF), and magnetic fields from electrical power systems are
all parts of the EM spectrum. The parts of the EM spectrum are
characterized by their frequency or wavelength. The frequency and wave
length are related, and as the frequency rises the wavelength gets shorter.
The frequency is the rate at which the EM field changes direction and is
usually given in Hertz (Hz), where one Hz is one cycle per second.

Power-frequency fields in the US vary 60 times per second, so they are 60 Hz
fields, and have a wavelength of 3000 miles. Power in much of the rest of
the world is at 50 Hz. Broadcast AM radio has a frequency of around one
million Hz and wavelengths of around 1000 ft. Microwave ovens have a
frequency of about 2 billion Hz, and a wavelength of about 5 inches. X-rays
and UV light have frequencies of millions of billions of Hz, and wavelengths
of less than a thousandth of an inch.

3) What differences are there in the biological effects of these different
portions of the EM spectrum?

The interaction of biological material with an EM source depends on the
frequency of the source. We usually talk about the electromagnetic spectrum
as though it produced waves of energy. This is not strictly correct, because
sometimes electromagnetic energy acts like particles rather than waves; this
is particularly true at high frequencies. This double nature of the
electromagnetic spectrum is referred to as "wave-particle duality". The

particle nature of electromagnetic energy is important because it is the energy per particle (or photons, as these particles are called) that determines what biological effects electromagnetic energy will have.

At the very high frequencies characteristic of UV light and X-rays, electromagnetic particles (photons) have sufficient energy to break chemical bonds. This breaking of bonds is termed ionization, and this portion of the electromagnetic spectrum is termed ionizing radiation. At lower frequencies, such as those characteristic of visible light, radiowaves, and microwaves, the photons don't carry enough energy to break chemical bonds; but they do carry enough energy to cause molecules to vibrate, causing heating. These are called thermal effects, and this portion of the electromagnetic spectrum is termed the thermal, non-ionizing portion. Below the frequencies used in commercial broadcast radio (such as the 60 Hz frequencies generated in the production and distribution of electricity), the photons have insufficient energy to cause heating, and this portion of the electromagnetic spectrum is termed the non-thermal, non-ionizing portion.

4) What is difference between EM radiation and EM fields?

In general, EM sources produce both radiant energy (radiation) and non-radiant energy (fields). Radiated energy exists apart from its source, travels away from the source, and continues to exist even if the source is turned off. Non-radiant energy is not projected away into space, and it ceases to exist when the energy source is turned off. When a person or object is more than several wavelengths from an EM source, a condition called far-field, the radiation component of the EM fields dominates. In the far-field the electrical and magnetic components are closely related. When a person or object is less than one wavelength from an EM source, a condition called near-field, the field effect dominates, and the electrical and magnetic components are unrelated.

For ionizing frequencies where the wavelengths are less than thousandths of an inch, human exposure is entirely in the far-field, and only the radiation from the EM source is relevant to possible health effects. For MW and RF, where the wavelengths are in inches and feet, human exposure can be in both the near- and the far-field, so that both field and radiation effects are relevant. For power-frequency fields, where the wavelength is thousands of miles, human exposure is always in the near-field, and only the field component is relevant to possible health effects.

5) How does ionizing EM sources cause biological effects?

Ionizing EM radiation carries sufficient energy to break chemical bonds. In particular, ionizing radiation is capable of breaking bonds in the genetic material of the cell, the DNA. Severe damage to DNA can kill cells, resulting in tissue damage or death. Lesser damage to DNA can result in permanent changes in the cells which may lead to cancer. If these changes occur in reproductive cells, they can lead to inheritable changes, a phenomena called mutation. All of the known hazards from exposure to the ionizing portion of the EM spectrum are the result of the breaking of chemical bonds in DNA. For frequencies below that of UV light, DNA damage

does not occur. Well-accepted safety standards exist to prevent significant damage to the genetic material of persons exposed to ionizing EM radiation.

6) How do the thermal non-ionizing EM sources cause biological effects?

Visible light, MW, and RF can cause molecules to vibrate, causing heating. This molecular heating can kill cells. If enough cells are killed an organism will suffer a noticeable burn. Cells which are not killed by heating are normal when the heating ceases. All of the known hazards from exposure to the thermal non-ionizing portion of the EM spectrum are the result of heating. For frequencies below about the middle of the AM broadcast spectrum, this heating does not occur.

The molecular vibration caused by MW is how and why a MW oven works - exposure of the food to the microwaves causes water molecules to vibrate and get hot. MW and RF penetrate and heat best when the size of the object is close to the wavelength. For the 2450 MHz (2.45 billion Hz) used in microwave ovens the wavelength is 5 inches, a good match for most of what we cook.

7) How do the power-frequency EM fields cause biological effects?

The electrical and magnetic fields associated with power-frequency fields cannot break bonds or cause molecular heating. Thus the known mechanisms through which ionizing radiation, MW and RF effect biological material have no relevance for power-frequency fields.

The electrical fields associated with the power-frequency fields exist whenever voltage is present. These electrical fields have very little ability to penetrate buildings or even skin. The magnetic fields associated with power-frequency fields exist only when current is flowing. These magnetic fields are difficult to shield, and easily penetrate buildings and people. Because power-frequency electrical fields do not penetrate, any biological effects from routine exposure to power-frequency fields must be due to the magnetic component of the field.

Exposure of people to power-frequency magnetic fields results in the induction of electrical currents in the body. These currents are similar to naturally-occurring currents. It requires a power-frequency magnetic field in excess of 5 Gauss (see Q8 for typical exposures) to cause electrical currents of a magnitude similar to those that occur naturally in the body. Electrical currents that are above those that occur naturally in the body can cause noticeable effects, including direct nerve stimulation. Well-accepted safety standards exist to protect persons from exposure to power-frequency fields that would induce such currents (see Q16).

8) What sort of power-frequency magnetic fields are common in residences and workplaces?

In the US magnetic fields are commonly measured in Gauss (G). In the rest of the world, they are measured in Tesla (T), were 10,000 gauss equals 1 Tesla. Within the right-of-way (ROW) of a high voltage transmission line, fields can approach 100 mG (0.1 G, 100 microT). At the edge of a high-voltage ROW, the

field will be 5-25 mG. Ten meters from a 12 kV distribution line will be fields will be 2-10 mG. Actual fields depend on voltage, design and current. Fields within residences vary from over 1000 mG near certain appliances to less than 0.2 mG in the center of some rooms. Occupational exposures may exceed 10 Gauss (e.g., induction furnaces, arc welding), but exposures in the 10-50 mG range are more common.

9) What is known about the relationship between powerline corridors and cancer rates?

Some studies have shown that children (but not adults) living near certain types of powerlines (high current distribution lines and transmission lines) have higher than average rates of leukemia and brain cancers (Refs 1-3). The correlation is not strong, and none of the studies have shown dose-response curves. When power-frequency fields are actually measured, the correlation vanishes (not surprising, since the major source of power-frequency fields within most dwellings is inside the house). Several other studies have shown no correlations (Refs 4-6).

10) How big is the "cancer risk" associated with living next to a powerline?

The excess cancer found in epidemiological studies is usually quantified in a number called the relative risk (RR). This is the risk of an "exposed" person getting cancer divided by the risk of an "unexposed" person getting cancer. Since no one is unexposed to power-frequency fields, the comparison is actually "high exposure" versus "low exposure". Relative risks are generally given with 95% confidence intervals. These 95% confidence intervals are almost never adjusted for multiple comparisons even when multiple types of cancer and multiple indices of exposure are studied.

Taken together, using a technique known as "meta-analysis", the relative risks for the residential exposure studies are (adapted from ref. 7):
childhood leukemia: 1.3 (0.8 - 2.1) 5 studies
childhood brain cancer: 2.4 (1.7 - 3.5) 3 studies
adult leukemia: 1.1 (0.9-1.4) 2 studies
all adult cancer: 1.2 (0.8-1.6) 2 studies

11) What is known about the relationship between "electrical occupations" and cancer rates?

Several studies have shown that people who work in electrical occupations have higher than average leukemia, lymphoma, and brain cancer rates (refs 8-10). Most of the cautions listed for the residential studies apply here also: many negative studies, weak correlations, no dose-response curves. Additionally, these studies are mostly based on job titles, not on measured exposures.

Taken together, using a technique known as "meta-analysis", the relative risks for the occupational exposure studies are (adapted from ref. 7):
leukemia: 1.1 (1.0-1.2) 24 studies
brain: 1.2 (1.0-1.5) 16 studies
lymphoma: 1.2 (0.9-1.5) 6 studies
all cancer: 1.0 (0.9-1.1) 8 studies

12) What do laboratory studies tell us about power-frequency fields and cancer?

Power-frequency fields show none of the classic signs of being carcinogens - they do not cause DNA damage or chromosome breaks, and they are not mutagenic (refs 11-15). No studies have shown that animals exposed to power-frequency fields have increased cancer rates. On the other hand, numerous studies have reported that power-frequency fields do have "effects", particularly at high field strength (refs 16, 17). Even among the scientists who believe that there may be a connection between power-frequency fields and cancer, there is no consensus as to possible mechanisms (refs 16, 18).

There are agents that influence the development of cancer without directly damaging the genetic material. It has been suggested that power-frequency EMFs could either promote cancer or influence the progression of cancer. A promoter is an agent that increases the cancer risk in an animals already exposed to a genotoxic carcinogen. A progression effect would be one that increased the growth rate of an existing tumor. Promotion studies of power-frequency fields have been uniformly negative (refs 14, 19-21). Studies of progression have been mixed: 75% show no effects on tumor growth, while the rest are about equally mixed between studies showing increased growth and studies showing decreased growth (refs 11, 15, 20-22).

13) What about the new "Swedish" study showing a link between power lines and cancer?

There are new residential and occupational studies from both Sweden and Denmark. None have been published in full, but translations of the preliminary reports have been circulated.

- Fleychting & Ahlbom [Magnetic fields and cancer in people residing near Swedish high voltage powerlines]. A case-control study of everyone who lived within 300 meters of high-voltage powerlines between '60 and '85. For children all types of tumors were analyzed, for adults only leukemia and brain tumors were studied. "Exposure" was assessed by spot measurements, calculated retrospective assessments, and distance from powerlines. No increased overall cancer risk was found for either children or adults. An increased risk for leukemia (but not other cancers) was found in children for *calculated* fields at the time of diagnosis. No significantly elevated cancer risks were found for measured fields or proximity to powerlines.

- Olsen and Nielson [Electromagnetic fields from high-power electricity transmission systems and the risk of childhood cancer]. Case-control study based on all childhood leukemia, brain tumors and lymphomas diagnosed in Denmark between '68 and '86. "Exposure" was assessed on the basis of calculated fields over the period from conception to diagnosis. No overall increase in cancer risk was found, but the risk of lymphoma was elevated. No increase in childhood leukemia or brain cancer was found.

- Guenel et al. [Cancer incidence among Danish persons who have been exposed to magnetic fields at work]. Case-control study based on all cancer in actively employed Danes between '70 and '87 who were 20-64 years old in 1970. Each occupation-industry combination was coded on the basis of supposed 50-Hz

magnetic field exposure. No significant increases in risk were seen for breast cancer, malignant lymphomas or brain tumors. Leukemia incidence was elevated among men in the highest "exposure" category; women in similar exposure categories showed no excess risk.

-Floderus et al [Occupational exposure to EM fields in relation to leukemia and brain tumors]. Case-control study of leukemia and brain tumors of men, 20-64 years of age in '80. "Exposure" calculations were based on the job held longest during the 10-year period prior to diagnosis. Many measurements were taken using a person whose job was most similar to that of the person in the study. About two thirds of the subjects in the study could be assessed in this manner. A significantly elevated risk was found for leukemia, but not for brain cancer.

14) How do scientists evaluate all the confusing and contradictory laboratory and epidemiological studies of power-frequency magnetic fields and cancer?

There are certain widely accepted criteria that are weighed when assessing such groups of studies. These are the Hill criteria (ref. 23).

- First, what is the *strength of the association* between exposure and risk; is there a clear risk associated with exposure? A strong association is one with a RR (see Q9) of 5 or more. Tobacco smoking, for example, shows a RR for lung cancer of 10-30 times that of non-smokers.

Most of the positive power-frequency studies have RRs of less than two. The leukemia studies as a group have RRs of about 1.2, while the brain cancer studies as a group have RRs of about 2. This is only a weak association.

- Second, are there many *consistent studies* indicating the same risk; do most studies show about the same risk for the same disease? Using the same example, essentially all studies of smoking and cancer showed an increased risk for lung and head-and-neck cancers.

Many power-frequency studies show statistically significant risks for some types of cancers and some types of exposures, but many do not. Even the positive studies are inconsistent with each other. For example, while a new Swedish study shows an increased risk for childhood leukemia for one measure of exposure, it contradicts prior studies that showed a risk for brain cancers, and a parallel Danish study shows a risk for childhood lymphomas, but not for leukemia. Many of the studies are internally inconsistent. For example, where the Swedish study shows an increased risk for childhood leukemia, it shows no overall increase in childhood cancer, implying that the rates of other types of cancer are decreased. In summary, few show the same positive result, so that the consistency is quite weak.

- Third, is there evidence for a *dose-response relationship*; does risk increase when the exposure increases? Again, the more a person smokes, the higher the risk of lung cancer.

No power-frequency exposure studies have shown a dose-response relationship between measured fields and cancer rates, or between distances from

transmission lines and cancer rates. The lack of a relationship between exposure and increased cancer risk is a major reason why many scientists are skeptical about the significance of the epidemiology.

- Fourth, is there *laboratory evidence* suggesting that there is a risk associated with such exposure? Epidemiological associations are greatly strengthened when we have laboratory evidence for a risk. When the US Surgeon General first stated that smoking caused lung cancer, the laboratory evidence was ambiguous. We knew that cigarette smoke and tobacco contained carcinogens, but no one had been able to make lab animals get cancer by smoking.

Power-frequency fields show none of the effects on cells, tissues or animals that point towards their being a cause of cancer, or to their contributing to cancer.

-Fifth, are there *plausible biological mechanisms* that suggest that there should be a risk? If we understand how something causes disease, it is much easier to interpret ambiguous epidemiology. With smoking, for example, the fact that there were known cancer-causing agents in tobacco made it very easy to believe the epidemiology.

>From what we know of power-frequency fields and their effects on biological systems we have no reason to even suspect that they pose a risk to people at the exposure levels associated with the generation and distribution of electricity.

- Overall the evidence for a connection between power frequency fields and cancer is at most weak, because of the weakness and inconsistencies in the epidemiological studies, combined with the lack of a dose-response relationship in the human studies, and the negative laboratory studies

15) What are some good overview articles?

A very good review of the area has just been published by Oak Ridge Associated Universities. It is titled "Health Effects of Low-Frequency Electric and Magnetic Fields". It costs $25 and is available from National Technical Information Service (ARAU 92/F-8) and the US Government Printing Office (029-000-00443-9). If you're in the U.K., a good review is: R Doll et al, Electromagnetic Fields and the Risk of Cancer, National Radiation Protection Board, Chilton, 1992. Another good review is MN Bates, "Extremely low frequency electromagnetic fields and cancer: the epidemiologic evidence", in Environmental Health Perspectives 95:147-156, 1991.

16) Are there exposure standards for power-frequency fields?

Yes, a number of governmental and professional organizations have developed exposure standards. These standards are based on keeping the body currents induced by power-frequency EM fields to a level below the naturally occurring fields. The most generally relevant are:

- Guidance as to restriction on exposures to time varying EM fields and the 1988 recommendations on the International Non-Ionizing Radiation Committee, National Radiation Protection Board, Chilton, 1989.
50/60 Hz E-field: ~10 kV/m (freq. dependent)
50/60 Hz H-field: 1630 A/m, 2 mT (20 G)

- Sub-radiofrequency (30 KHz and below) magnetic fields, In: Documentation of the threshold limit values, American Committee of Government and Industrial Hygienists, pp. 55-64,1992.
At 60 Hz: 1 mT (10 G); 0.1 mT (1 G) for pacemaker wearers

- HP Jammet et al: Interim guidelines on limits of exposure to 50/60 Hz electric and magnetic fields. Health Physics 58:113-122, 1990.
*H-field (rms)
24 hr general public: 0.1 mT = 1 G
Short-term general public: 1 mT = 10 G
Occupational continuous: 0.5 mT = 5 G
Occupational short-term: 5 mT = 50 G
*E-field (rms)
24 hr general public: 5 kV/m
Short-term general public: 10 kV/m
Occupational continuous: 10 kV/m
Occupational short-term: 30 kV/m

References:

1) N Wertheimer & E Leeper: Electrical wiring configurations and childhood cancer. Amer J Epidemiol 109:273-284, 1979.
2) DA Savitz et al: Case-control study of childhood cancer and exposure to 60-Hz magnetic fields. Amer J Epidemiol 128:21-38, 1988.
3) SJ London et al: Exposure to residential electric and magnetic fields and risk of childhood leukemia. Amer J Epidemiol 134:923-937, 1991.
4) MP Coleman et al: Leukemia and residence near electricity transmission equipment: a case-control study. Br J Cancer 60:793-798, 1989.
5) ME McDowall: Mortality of persons resident in the vicinity of electrical transmission facilities. Br J Cancer 53:271-279, 1986.
6) A Myers et al: Childhood cancer and overhead powerlines: a case-control study. Brit J Cancer 62:1008-1014, 1990.
7) G.B. Hutchison: Cancer and exposure to electric power. Health Environ Digest 6:1-4, 1992.
8) M Coleman & V Beral: A review of epidemiological studies of the health effects of living near or working with electrical generation and transmission equipment. Int J Epidemiol 17:1-13, 1988.
9) JR Jauchem & JH Merritt: The epidemiology of exposure to EM fields: an overview of the recent literature. J Clin Epidemiol 44:895-906, 1991.
10) DA Savitz & EE Calle: Leukemia and occupational exposure to EM fields: Review of epidemiological studies. J Occup Med 29:47-51, 1987.
11) GK Livingston et al: Reproductive integrity of mammalian cells exposed to power frequency EM fields. Environ Molec Mutat 17:49-58, 1991.
12) M Rosenthal & G Obe: Effects of 50-Hertz EM fields on proliferation and on chromosomal aberrations in human peripheral lymphocytes untreated and

pretreated with chemical mutagens. Mutat Res 210:329-335, 1989.
13) J. Nafziger et al: DNA mutations and 50 Hz EM fields. Bioelec Bioenerg 30:133-141, 1993.
14) A. Rannug et al: A study on skin tumor formation in mice with 50 Hz magnetic field exposure. Carcinogenesis 14:573-578, 1993.
15) R. Zwingelberg et al: Exposure of rats of a 50-Hz, 30-mT magnetic field influences neither the frequencies of sister-chromatid exchanges nor proliferation characteristics of cultured peripheral lymphocytes. Mutat Res 302:39-44, 1993.
16) TS Tenforde: Biological interactions and potential health effects of extremely-low-frequency magnetic fields from power lines and other common sources. Ann Rev Publ Health 13:173-196, 1992.
17) R Goodman & A Shirley-Henderson: Transcription and translation in cells exposed to extremely low frequency EM fields. Bioelec Bioenerg 25:335-355, 1991.
18) RB Goldberg & WA Creasey: A review of cancer induction by extremely low frequency EM fields. Is there a plausible mechanism? Medical Hypoth 35:265-274, 1991.
19) A Rannug et al: Rat liver foci study on coexposure with 50 Hz magnetic fields and known carcinogens. Bioelectromag 14:17-27, 1993.
20) MA Stuchly et al: Modification of tumor promotion in the mouse skin by exposure to an alternating magnetic field. Cancer Letters 65:1-7, 1992.
21) JRN McLean et al: Cancer promotion in a mouse-skin model by a 60-Hz magnetic field: II. Tumor development and immune response. Bioelectromag 12:273-287, 1991.
22) S Baumann et al: Lack of effects from 2000-Hz magnetic fields on mammary adenocarcinoma and reproductive hormones in rats. Bioelectromag 10:329-333, 1989.
23) AB Hill: The environment and disease: Association or causation? Proc Royal Soc Med 58:295-300, 1965.

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Radiation Biology Group FAX: 414-257-5033
Medical College of Wisconsin, Milwaukee
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

203. Re: Fm Broadcast

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 15:19:00 UTC
From: brown_mi@eisner.decus.org
Message-ID: <1994Jan11.101900.1857@eisner>
Source record: 272498

In article <2d31e75a-5415rec.radio.amateur.misc@vpnet.chi.il.us>,
akcs.marz@vpnet.chi.il.us (chris andersen) writes:
> Is it possible for a person with ham or modified ham set up to broadcast
> on the 88-108 Mhz area???
>

Sure, anything is possible. It is highly illegal though for hams to be
broadcasting in the frequency band mentioned. As a matter of fact, hams
are not allowed to broadcast (transmit with the intent of the general
public to be the audience) period, except under very specific circumstances,
such as code practice in the ham bands, and maybe shuttle audio. Why do you
ask?

Mike
N9OPG

204. Re: Fm Broadcast

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 15:19:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan11.151900.25320@ke4zv.atl.ga.us>
Source record: 272501

In article <2d31e75a-5415rec.radio.amateur.misc@vpnet.chi.il.us> akcs.marz@vpnet.chi.il.us (chris andersen) writes:
>Is it possible for a person with ham or modified ham set up to broadcast
>on the 88-108 Mhz area???

Sure it's *possible*, illegal as hell though, and the narrow band FM
used by ham rigs wouldn't sound very good on the wide band FM receivers
of broadcast listeners.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

205. Re: I need a terminal program for 2 TNCs at once

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 15:56:22 UTC
From: jim@n5ial.mythical.com
Message-ID: <1994Jan11.155622.2290@n5ial.mythical.com>
Source record: 272394
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <CJFoGs.2vo@ucdavis.edu> ez006683@othello.ucdavis.edu
(Daniel D. Todd) writes:

> On a related line. What good terminal programs allow for
>individual windows for each stream in multiuser mode. It would also be
>nice to have a window to monitor other QSO's without all the extra
>garbage.

I may be way off here---I'm not sure exactly what you're after. If you're looking for something that helps when multiple people are involved in a single conversation, say on some BBS with a conferencing bridge, etc., then I've got nothing for you. :-(

If, however, you're looking for something that does this for ``normal'' packet use, and you just want each active stream in its own window, as well as another window for monitor output, you might want to get with me about KAMterm. It isn't a Windows program---it's plain text mode, but it does have multiple windows (each active stream has its own window, and each of these takes up lines 0-20, or something like that..., of the screen). KAMterm is currently only available for dos, but I'm slowly but surely working on a UNIX version.

Later,
--jim

--
73 DE N5IAL (/4) < Running Linux 0.99 PL10 >
jim@n5ial.mythical.com ICBM: 30.23N 86.32W
|| j.graham@ieee.org Packet: N5IAL@W4ZBB (Ft. Walton Beach, FL)
E-mail me for information about KAMterm (host mode for Kantronics TNCs).

206. CA HAM vs Sheriff/FCC Update?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 16:19:35 UTC
From: hpeach@ca.uky.edu
Message-ID: <hpeach.49.00105413@ca.uky.edu>
Source record: 272380

Has anyone heard an update on the California ham who lost his HT over
calling for help on the local Sheriff's frequency during an emergency?
Monitoring Times had a short note on it this month and said the League has
appointed a lawyer to fight the FCC's ruling, but not much more.

Harold
hpeach@ca.uky.edu

207. Power Lines Cause Cancer? Maybe Not...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 16:20:12 UTC
From: peterson@physc1.byu.edu
Message-ID: <1994Jan11.092012.1257@physc1.byu.edu>
Source record: 272522

Recently an interesting article came across the "What's New" feed from the American Institute of Physics (3 Dec 93 issue). To quote part of item 3:

"Just last month (What's New, 5 Nov 93), we reviewed 'The Great Power-Line Cover-up.' Now it appears that Finland has joined the cover-up! The Finns, it seems, are obsessive about keeping records, making it possible to calculate the exposure levels of children living near power-lines amounting to one-million person years! In the whole cohort of 134,800 children there were 140 cancers, 5 less than expected. The only increased risk was for nervous system tumors among boys, but even that was attributed to one boy who had 3 tumors."

I don't think this study ever made the news (doesn't fit the agenda of the news media establishment) and there is no reference to where the study was published. However, it does indicate that living next to power-lines (at least Finnish power-lines) may actually reduce the incidence of cancer. Maybe there is something different about power-lines in Denver that causes increased cancer (the original study) other than a difference in frequency (Finland does use 50 Hz like the rest of Europe don' they?).

Just food for thought.

Bryan Peterson
peterson@physc1.byu.edu

208. GB2ATG (January 1994)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 16:26:00 UTC
From: IKENDALL@UNIVERSITY-OF-HUMBERSIDE.AC.UK
Message-ID: <94Jan11.103527-0700.18632@scapa.cs.ualberta.ca>
Source record: 272399
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

BARTG * GB2ATG * NEWS * BARTG * NEWS * GB2ATG * BARTG
This is the - British Amateur Radio Teledata Group - News Broadcast Service for all Amateurs and Short Wave Listeners interested in RTTY Amtor, Pactor and Packet Radio.

This news is broadcast during the first full week commencing Monday each month, to the following schedule..

Evening transmissions at 1930 GMT. on 3.584 MHz. Mark. +/- for QRM.
RTTY on Monday-AFSK, Wednesday-AFSK, and Friday-FSK.
Pactor-FEC on Tuesday.
Amtor-FEC on Thursday and Saturday.

Morning transmission at 1000 GMT. on 7.041 MHz. Mark. +/- for QRM.
RTTY on Sunday-AFSK.

An edited version of this bulletin is available on the Packet network as a BARTG @ GBR. file thanks to: Andy (G3ZYP) @ GB7MXM.#36.GBR.EU.

It is also posted on the "INTERNET" system via the INFO-HAMS list on UCSD.EDU. thanks to Iain (G6ARO) who is available on the "JANET" network as Iain @UK.AC.HUMBER.

News for January 1994. Bulletin No. 013. (all times are GMT).

BARTG Information.

GB2ATG editor would welcome 2 more volunteer transmit stations for 3.5 MHz. on week-day or Saturday evenings. Bulletins are supplied on disk to almost any IBM compatible format so no typing required. I would particularly welcome an offer from the North of England or Scotland to serve that geographical area. Please write or telephone for further details to: Bob (G0ARF).

RTTY DX Activity.

The HF bands have not been in very good shape over the last month but several short openings provided the following:

14 MHz.
FK8GS and ZL1KN 0730, CN8NP 0800, ZL1SY, LU2ATR and BY1QH 0830,
VK2RT 0900, IC8BNK 1000, VP9/WB2RAJ 1230,
VK5GY, S51GL and 4L8A 1400, A43YY and VQ9WL 1430,
VQ9TV, EA6MQ and UJ8JCQ 1500, TK5ML 1530,
CH2STN and J28JJ 1600, 9M2MW 1630,

21 MHz.
CU3EM 1100, CU1AC and LU2DGO 1600,

14 MHz Pactor.
7Z1AB 1400, HS1ASC 1600.

QSL Information.
VP9/WB2RAJ to home call. 4L8A (Tblisi, Georgia) via OZ1HPS.
CH2STN was on Jesus Isl, a Canadian PQ14 area contest site.
QSL via VE2STN.

Contests.
The Spanish EA-RTTY contest starts 1600 February 12 until 1600 February 13 on all 5 HF bands 80 through 10 meters.
Four classes:
A) Single operator all band.
B) Single operator single band.
C) Multi operator all band.
D) Short Wave Listener.
Exchange for EA stations is RST plus "Prefijo Provincial" (52 total) eg. - B, M, PM, VA, etc. All others give RST plus CQ zone.
Copies of rules and sample log sheets from the editor if sase enclosed.
Deadline for logs 15th April 1994 to:
EA RTTY contest manager. (EA1MV). Antonio Alcolado, P.O. Box 240, 09400 Aranda de Duero (Burgos), Spain.

Notes of interest.
The long awaited DX-Pedition to Peter 1st Island (3Y) should be QRV all bands and modes from February 1 through 14. KYFC.

(IC8BNK) is on the Isle of Capri, IOTA EU-031.

Peter (XT2BW) takes 2 months leave in Ghana from the end of January. He hopes to obtain a license and be QRV (9G) when time permits. We all hope to get some RTTY from him following his splendid service from Burkina Faso.

(A43YY) was operating from the Royal Omani Amateur Radio Field Day camp.

DXCC. The ARRL Awards Committee voted 6 for 1 against accepting the ARRL DX Advisory Committee (DXAC) recommendation to create an Honour Roll for RTTY DXCC. Qualification for the new Honour Roll is the same as for Mixed Honour Roll. This move makes it possible to achieve DXCC Honour Roll "All RTTY" for the first time.

Good news from Nikos (SV2WT) that Monk Apollo is active again on the HF bands as (SV2ASP/A) from Mount Athos. With equipment provided by Minoru JA3MNP and other JA stations, we all hope to find Mount Athos QRV RTTY in the coming months.

Thanks this month to:.
G3ZYP, DXNS, OPDX/BARF80.

BARTG caters for all DATA interests with information-components-kits -ready built units and software from experts. Members receive a 120 page quarterly journal devoted to data modes. Beginners guides for most data modes are available. The group sponsors HF and VHF RTTY contests, administers its own DX and members award scheme and runs an annual rally.

This copy of BARTG News is posted by Iain Kendall (G6ARO) who can be contacted via Internet e-mail at.. iain@humber.ac.uk Items for inclusion in the broadcast may also be mailed to this address, as well as any queries regarding membership or services offered by BARTG.

Copy of the news as distributed by G0ARF 931229

209. GB2ATG News Bulletins

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 16:28:00 UTC
From: IKENDALL@UNIVERSITY-OF-HUMBERSIDE.AC.UK
Message-ID: <199401111733.JAA23572@ucsd.edu>
Source record: 272503

I am responsible for posting the BARTG (British Amateur Radio Teledata Group)
news (GB2ATG), each month, to the following news groups:

rec.radio.amateur.misc
uk.radio.amateur
rec.radio.info

Thanks to the assistance of Mark Salyzyn/VE6MGS.

If anyone is unable to receive this via one of these newsgroups and would like
to get a copy, then please mail me at the address below. Please use the same
address if you would like further information about BARTG, or have any news,
relating to any data mode, for distribution within the news bulletin.

73,

Iain.
****
Iain Kendall email:- iain@university-of-humberside.ac.uk
Network Controller Phone:- +44 482 440550 xtn 4237
University of Humberside Fax :- +44 482 440279
Hull, England. Ham :- G6ARO

Disclaimer:- These are my own personal views, NOT those of anyone else
****

210. Re: Ramsey kits not too good

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 16:46:38 UTC
From: doc@webrider.central.sun.com
Message-ID: <2gul5eINNt6j@cronkite.Central.Sun.COM>
Source record: 272499

Just to mix up the pot abit more - Just talked with a local ham
who bought and put together the Ramsey 2 meter amplifier kit. He
was on the air with it last night and sounded very good. I asked
him if he had run into any problems with construction, design etc.
and he claimed it came up and worked the first time. He was very
happy with it. His total cost (kit + case & misc.) came to just
under $50.

Now I understand that this design is much less complex than building
a transceiver, but it sounds like you need to pick and choose which
kits to buy, and which to avoid.

73,

Steve

--
-- Steve Bunis, Sun Microsystems ***DoD #0795*** 93-ST1100
-- Itasca, IL ***AMA #682049***
-- ***HRCA #HM125617**
-- *** N9VLP ***

211. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 16:58:51 UTC
From: ornitz@kodak.rdcs.kodak.com
Message-ID: <1994Jan11.165851.23593@kodak.rdcs.kodak.com>
Source record: 272510

In article <1994Jan11.144946.25480@brtph560.bnr.ca> cnc23a@b4pph13e.bnr.ca (Ken Edwards) writes:
>We have through research seen various effects on the body at various
>frequencies. Example, your microwave is set at a particular frequency that
>will excite water molecules, thereby creating heat.

This is a common misconception and one that needs to be corrected, especially in regard to a discussion on how radio waves interact with living cells.

The lowest resonant absorption frequency for water (rotational spectra) is 22.235 GHz. Home microwave ovens in the United States operate at 2.45 GHz. Industrial ovens often use 916 MHz. In Europe, other frequencies are often used such as 433.9 and 896 MHz (UK), 2.375 GHz (former USSR), 3.39 GHz (Netherlands), etc. None of these frequencies specifically excite water molecules. Water has a high dielectric constant and high dielectric losses from low frequencies to well into the microwave region (8 to 18 GHz depending on many factors). Many other materials also are good absorbers of microwave energy in this part of the spectrum: ethanol (drinking alcohol), methanol (Wood alcohol), acetone (fingernail polish remover), ethylene glycol (antifreeze), etc. Ice, however, is a relatively poor absorber of microwaves. Many plastics such as Nylon and ceramics such as Steatite are also good microwave absorbers at elevated temperatures (in fact Nylon and Steatite can undergo thermal runaway). The frequency of 2.45 GHz was chosen by international agreement. It is a reasonable compromise of a number of factors: magnetrons are relatively inexpensive for this part of the spectrum, the absorption of most foods is high at this frequency yet not so high that penetration becomes a problem, and the dimensions of a multimode cavity cooking chamber are reasonable for most kitchens.

A good reference on how microwaves interact with materials is "Microwave Spectroscopy" by Townes and Schawlow. [This is the same Charles Townes of maser and laser fame.] A more practical reference is "Industrial Microwave Heating" by Metaxas and Meredith. I believe both of these books are still in print.
73, Barry WA4VZQ

| ___ _____ | Dr. Barry L. Ornitz WA4VZQ
| | / / | | Eastman Chemical Company
| | / / | | ECC Research Laboratories, Engineering Research Div.
| |< < K O D A K| | Process Instrumentation Research Laboratory
| | \ \ | | P. O. Box 1972, Building 167B
| |__\ _____| | Kingsport, TN 37662 (615/229-4904, FAX 615/229-4558)
| | INTERNET: ornitz@kodak.com

Eastman Chemical Company is no longer a part of Kodak. Until we have our own Internet connection, Kodak is graciously letting us continue to use theirs.

212. Recent Ham Innovation

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 17:14:52 UTC
From: brian@positron.amd.com
Message-ID: <CJH6Ks.MBL@dvorak.amd.com>
Source record: 272517

In the January 1994 issue of IEEE Spectrum (the IEEE's general circulation magazine) was a note of interest to amateurs on page 24:

There is also a class of Non-Voice Non-Geostationary (NVNG) Mobile Satellites Services -- LEO satellites operating below 1GHz that have come to be known as "Little LEO" systems. On Nov. 16, they were allocated spectrum in the 150- and 400MHz bands. [....]

The NVNG service, based on technology pioneered by radio amateurs, will be used for brief data messages, monitoring and control of remote industrial, agricultural, and natural resource facilities, and consumer alarm, electronic mail, and vehicle location. Launches of the first NVNG satellites are expected later this year.

(The above is quoted, typos are probably mine...)

Brian McMinn N5PSS brian@amd.com

213. Re: I need a terminal program for 2 TNCs at once

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 17:20:46 UTC
From: dts@world.std.com
Message-ID: <CJH6un.ELt@world.std.com>
Source record: 272504
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <CJFoGs.2vo@ucdavis.edu> ez006683@othello.ucdavis.edu (Daniel D. Todd) writes:
> On a related line. What good terminal programs allow for
>individual windows for each stream in multiuser mode. It would also be
>nice to have a window to monitor other QSO's without all the extra
>garbage. For instance you could just use your mouse to select a
>transmission and then all other transmissions to or from that station
>would be sent to a window and preceeded only with the sending station's
>call. It would be nice if it also compared the current packet to the last
>recieved packet from the station and not display duplicate packets that I
>recieved but the recipient missed. While there is probably nothing out
>there that has the monitoring features I would like is there an easier
>way to manage multi-stream conversations?
>
>Thanks,
>Dan
>

PKGold (for AEA TNCs) and KAGOLD (for Kantronics) do a fantastic job in this
area. They allow for multiple packet connects, keeping each separate from
the other, monitoring of traffic on the frequency, and if dual port TNC, the
ability to run HF on the other side, all at the same time.

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

214. Re: callbook help?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 17:21:02 UTC
From: ggs@lanl.gov
Message-ID: <1994Jan11.162533.8985@newshost.lanl.gov>
Source record: 272502

In article <smarsden.1.757889081@fox.nstn.ns.ca>, <smarsden@fox.nstn.ns.ca>
writes:
> Path:
lanl!hellgate.utah.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!europa.eng.g
tefsd.com!uunet!newsflash.concordia.ca!nstn.ns.ca!halifax-ts2-11.nstn.ns.ca!sma
rsden
> From: smarsden@fox.nstn.ns.ca (Steven Marsden)
> Newsgroups: rec.radio.amateur.misc
> Subject: callbook help?
> Date: 6 Jan 1994 16:44:52 -0400
> Organization: Nova Scotia Technology Network
> Lines: 15
> Sender: news@nstn.ns.ca
> Message-ID: <smarsden.1.757889081@fox.nstn.ns.ca>
> NNTP-Posting-Host: owl.nstn.ns.ca
>
> Sorry to be a mooch, but callbooks haven't found their way into
> my budget recently, and the latest set I have is 1989. I also have a few
> cards piling up that I would like to get off. Could somebody with a 93 or
> 94 callbook, a few minutes to spare, and a generous nature please provide me
> with addresses for the following calls?? Reply by E-Mail please.
>
> PZ1DYX
> YU1AVQ
> YU2DW
> KM6ON
>
> Thanks a lot in advance.
>
> Steve VE1YB smarsden@fox.nstn.ns.ca
>
Steve telnet to callsign.cs.buffalo.edu 2000. Be sure
you include the port number. Follow the instructions
I believe the access is the March '93 CD-ROM works good
tastes great. 73 KC5EGG

215. Re: Phonecalls from 20,00

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 17:28:19 UTC
From: alex.lane@springsboard.org
Message-ID: <940111104429856@springsboard.org>
Source record: 272508

John Gladin writes:
-> Chris Magnuson writes:
-> -> .... it is possible to make phone calls from way up high by radio
-> -> (check on the kids, etc.). Is this possible to do via a portable
-> -> radio?
-> Alex Lane responds:
-> -> A number of 2-meter repeaters offer users a phone patch that allow
-> -> to make phone calls through the repeater. ...
-> -> Of course, this pre-supposes you're a licensed ham with a 2-meter
-> ---
->
-> Here's a consideration in airborne operation:....

Many other postings also assume Chris wants to make phone calls from an airplane, and have provided useful caveats about radio operation from a plane. My response, however, assumes Chris will be operating *on the ground* (I know it's tough to find ground that's 20K feet up, but I figure what Chris meant is that he's going to be up high climbing mountains and stuff.)

Cheers...

The SpringsBoard BBS | "You *can* get here from there."
Pagosa Springs, Colorado | KD6JJA
Alex Lane (303) 264-2339 | alex.lane@springsboard.org
---

216. Re: BRAIN CANCER, LEUKEMI

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 17:40:00 UTC
From: alex.lane@springsboard.org
Message-ID: <940111104429857@springsboard.org>
Source record: 272509

D.Rodman writes:
-> There are currently a series of prospective and retrospective
-> articles appearing in the literature which point to the likely
-> relationship between some forms of cancer in children and proximity
-> to power lines. This is no scare tactic, I assure you.

I am currently gathering material of this kind. Since this information you must have close at hand, could I trouble you for a brief list of citations? Thanks.

Cheers...

The SpringsBoard BBS | "You *can* get here from there."
Pagosa Springs, Colorado | KD6JJA
Alex Lane (303) 264-2339 | alex.lane@springsboard.org

---

217. Re: Solid State HF Amps Info?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 17:46:41 UTC
From: mcduffie@unlinfo.unl.edu
Message-ID: <2guom1$no7@crcnis1.unl.edu>
Source record: 272505

wosborne@nmsu.edu (William Osborne) writes:

>I was wondering if anyone in Net-land has any experience with the
>newer solid state HF amps like IC-4k, FL-7000, JRC ??? or the new
>Ameritron which was just announced. I have been considering one of
>these and just wonder if someone could give me some advice about them?
>Thanks and Best 73's Bill--AA5ZQ.

I can't speak for the newer ones that you mentioned, however, the old Magnus (now sold under the name Metron) is bullet-proof. I have a blind friend who has been running one for 15 years. He has run it with no antenna, the wrong antenna, bandswitched to the wrong band, all without a failure. He really abuses it, not on purpose, it just happens. All you have to do is come up with a 100a 12v supply and it talks! I have a trucker friend who runs one from his truck all the time and he also likes his.

Good luck,
Gary - AG0N

218. Re: Fm Broadcast

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 18:04:18 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseCJH8v7.933@netcom.com>
Source record: 272520

>In article <2d31e75a-5415rec.radio.amateur.misc@vpnet.chi.il.us>
akcs.marz@vpnet.chi.il.us (chris andersen) writes:
>>Is it possible for a person with ham or modified ham set up to broadcast
>>on the 88-108 Mhz area???

Don't do this. the Funny Cookie Corporation goes after unlicensed broadcasters
and issues fines as big as $20K. And they might take your amateur license,
too.

219. Re: Log Periodics and DXing

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 18:06:04 UTC
From: mack@ncifcrf.gov
Message-ID: <CJH8y4.807@ncifcrf.gov>
Source record: 272516

In article <1994Jan11.142536.24875@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <1994Jan10.172952.17636@worldbank.org> dearnshaw@worldbank.org (Darrell Earnshaw) writes:
>>I'm curious. Does anyone have any experience with HF (20 meters and above) Log
>>Periodic antennas? I'd be particularly interested in learning how they compare
>>with the TH-7DXX/KT34XA class of antenna.
>>
>>(I'm moving house, and considering a LP to replace my venerable TH-7. I've been
>>kicking around the idea of a L.P, to get WARC band coverage. However, if the
>>performance is such that my TH-7, or a TH-11, will outperform them for DXing
>>and contesting, then I may reconsider.)
>>
>>Opinions/Comments ?
>
>Reconsider. I don't know of any off the shelf LPs that will match your
>current antennas. HyGain made some special ones for the military that
>would be a match for your current antennas, but they were huge. In general,
>an LP must be *much* larger than an optimized yagi for a given frequency
>to have equivalent performance.
>
>Gary
>--
>Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
>Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
>534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
>Lawrenceville, GA 30244 | |

If you want an idea of what an L{ will look like on top of your house, look at the CQ calendar for this year - on e of the pictures ther will give you a good idea. Joe NA3T mack@ncifcrf.gov

220. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 18:11:30 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2guq4i$m3t@news.acns.nwu.edu>
Source record: 272514

In article <1994Jan11.150658.25191@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> included a FAQ on radiation.

Thanks for including it Gary. I enjoyed reading it and learnt a lot
from it. The following paragraph about microwave ovens caught my attention:

>The molecular vibration caused by MW is how and why a MW oven works -
>exposure of the food to the microwaves causes water molecules to vibrate and
>get hot. MW and RF penetrate and heat best when the size of the object is
>close to the wavelength. For the 2450 MHz (2.45 billion Hz) used in
>microwave ovens the wavelength is 5 inches, a good match for most of what we
>cook.

And I thought that this frequency was picked because it was close to
a resonant frequencty of the O-H bond present in water, sugars and fats -
common though often undesired components of what we eat.

Rajiv
aa9ch

221. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 18:13:59 UTC
From: mikewood@rock.concert.net
Message-ID: <2guq97$mds@inxs.concert.net>
Source record: 272518

In article <1994Jan5.125300.21517@mnemosyne.cs.du.edu>,
Jay Maynard <jmaynard@nyx10.cs.du.edu> wrote:
>It's real simple: lat/lon/haat information is enough to walk up to the tower
>or building the repeater is on, and therefore enough to get the repeater
>stolen, or for someone to talk to the site owner and get the repeater kicked
>off of the site. Sites are very, very hard to get unless you're willing to pay
>commercial rates - and very few hams are that rich.
>

HORSE-FROCKEY !!! If someone wants to find a repeater's location for
mischevious purposes he can find it using simple direction finding
techniques used by 'Fox-Hunters'. A 30 minute process usually.

>
>At lease in the cas of the Texas VHF-FM Society, lat/lon/HAAT data is
>considered confidential data, and is not accessible to those not directly
>involved in the coordination process. I'm a director, and _I_ can't even get
>access to it. The reason for this is simple: if we didn't keep it
>confidential, we wouldn't get the data either.
>--

More BS.... The REAL reason this information isn't given out is that
Cordination Groups want to wield their coordination POWER without
fear of any questioning their declarations. With all the data on
a repeater (lat/lon/haat/erp , etc) you could challenge or even
ignore their refusal to coordinate a repeater on a frequency you
have chosen. I suspect less than 1% of the so called coordinated
repeaters in operation today have any sort of REAL engineering
study including contour maps done on them. Most have been 'coordinated
' by either first come first served ---- or Good Ole Boys Network
methods.

This information is publicly available for EVERY commercial radio
and televion station in the USA and there is absolutely no reason other
than small minded POWERMONGERING politics that this isn't available
for amateur repeaters.

I dare ANY so called coordinating group to prove me wrong by PUBLISHING
there engineering studies for all their "coordinated" repeaters.

All we'll probably hear is eithe silence or a crescendo of flames
about how their "integrity " has been insulted....but the engineering
studies generally don't exist so we will never see them!

Mike Wood Internet: mikewood@rock.concert.net
The Signal Group

P.O. Box 1979 ***Avoid company disclaimers by owning the company ***
Wake Forest, NC 27588

Phone: 919-556-8477 Fax: 919-556-0115

222. Any interest in X Logging Program?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 18:19:57 UTC
From: cmoore@mothra.rose.hp.com
Message-ID: <2guqkd$7k5@hpchase.rose.hp.com>
Source record: 272519

Hi all,

I'm starting to work on a logging program which will run on a unix workstation running the X11 windowing system. I realize that most people don't have X11 workstations and radios in the same place, but I thought maybe somone out there might be interested. It will support interface to an Icom radio as well as logging and awards tracking.

Is there any interest in this? I'd be happy to give out copies once it is done. Also, are there any suggestions or requests as to what you'd like it to do? For example, I could probably add code to talk to other radios but I would need details on how they work...I only have an Icom.

If you would are interested in the program and/or have suggestions, send me mail at cmoore@mothra.rose.hp.com and let me know. I'll try to incorporate as many suggestions as I can. I also may need help with beta testing, particularly if I add support for radios I don't have.

If the response is overwhelming I'll probably just find an FTP site that I can put it on to make it available. If the response is non-existant I'll just go off and use it myself. :-)

Chris Moore
N6IYS
cmoore@mothra.rose.hp.com

223. UK Radio Groups

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 18:25:27 UTC
From: M.Willis@ee.surrey.ac.uk
Message-ID: <1994Jan11.182527.13865@ee.surrey.ac.uk>
Source record: 272521

I hear there are UK radio based groups but they don't seem to propagate here.

Can anyone let me know of a method of getting them?

73 Mike

224. THANK YOU FOR CANCER REMARKS.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 19:04:51 UTC
From: depaul@spk.hp.com
Message-ID: <CJHBo3.585@spk.hp.com>
Source record: 272523

Thank you to all who wrote articles on the posting I had called:

Brain Cancer, Leukemia from Ham Radio

I've printed out all articles both posted here and posted to my address. Now I need to sit down in a quiet place and learn.

Again, THANK YOU FOR YOUR TIME!

Regards,

Marc DePaul
KA3DNR

225. Repeater Purposes

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 19:22:48 UTC
From: jackson@longlast.cs.nyu.edu
Message-ID: <2guua8$6op@slinky.cs.nyu.edu>
Source record: 272527

I am interested in hearing from people who run or utilize special purpose repeaters or simplex freqs. For example, I've heard mention of commuter nets, particularly in the Bay Area. Are they regular nets that just happen to be populated by commuters most of the time or did the area coordinators decide 146.880 (or whatever) to be the "Commuter Channel".

I would be interested in a traffic notification net. For instance, during rush hours, the majority of the calls would be traffic hotspots or drivers requesting conditions from drivers along a certain route or on a roadway tens of miles away. Perhaps even autopatch to make it easier for more people to make calls for assistance. The level of professionalism would certainly be an improvement over CB.

I was following a QSO a while ago on 2m when one of the conversants stated in the middle of the conversation, "I wonder if anyone on the channel can tell me how the George Washington Bridge is doing." He received a reply rather quickly, and I got to thinking that maybe a repeater just for those types of calls would be appreciated. Lots of backups could be avoided if some of us only knew to steer well clear of an accident twenty miles down the road.

Just a thought.
--
Steven Jackson New York University
Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012

226. Re: Fm Broadcast

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 20:02:28 UTC
From: alanb@sr.hp.com
Message-ID: <CJHEC5.CJK@srgenprp.sr.hp.com>
Source record: 272524

chris andersen (akcs.marz@vpnet.chi.il.us) wrote:
: Is it possible for a person with ham or modified ham set up to broadcast
: on the 88-108 Mhz area???

None of the other respondents mentioned that it is perfectly legal to broadcast on the FM broadcast band using very low power. You can buy "wireless microphones" and other devices with a range of a couple hundred feet or so.

AL N1AL

227. Motorola Cell-Phone Interface

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 20:06:47 UTC
From: brian@umbc.edu
Message-ID: <2gv0snINNi3k@umbc7.umbc.edu>
Source record: 272525
Cross-posted to: comp.dcom.telecom.tech,rec.radio.amateur.misc,alt.dcom.telecom

Does anyone know anything about the 8-pin modular interface near the bottom
of the Motorola MicroTAC UltraLite Cellular Phone (Flip Phone) ?

Please email responses. I will summarize to the net.

Thanks

Brian

brian@umbc.edu

--
Brian Cuthie
Systemix Software, Inc.
brian@systemix.com

228. Re: Fm Broadcast

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 20:19:52 UTC
From: mjg@ep130.wg2.waii.com
Message-ID: <2gv1l8$4jrn@ep130.wg2.waii.com>
Source record: 272526

In article <CJHEC5.CJK@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom)
writes:
|> chris andersen (akcs.marz@vpnet.chi.il.us) wrote:
|> : Is it possible for a person with ham or modified ham set up to broadcast
|> : on the 88-108 Mhz area???
|>
|> None of the other respondents mentioned that it is perfectly legal to
|> broadcast on the FM broadcast band using very low power. You can
|> buy "wireless microphones" and other devices with a range of a couple
|> hundred feet or so.
|>
|> AL N1AL
|>

Al you are correct, I did not mention low power. IF you use less then 100mw and
a antenna for less then 5' in length then I beleive that it is legal. I thought
that a higher power was implied though.

Mike KB5TOJ

229. Re: I need a terminal program for 2 TNCs at once

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 20:32:53 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCJHFqt.11I@netcom.com>
Source record: 272381
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <1994Jan10.125917.6895@walter.cray.com> jwl@sedist.cray.com (Jim Lynch) writes:
>
>I just wrote a program, actually modified SimpTerm to handle two windows. It isn't
>very well debugged yet, but if you want to try a copy I'll be happy
>to try to get it to you. I uses a split screen that you can make as large
>or as small as you want. There is a hot key that will let you toggle
>back and forth and there is a key that will zoom the screen
>up to full size and back. There isn't any terminal emulation.
>I'm working on that. Interested? Only works on com1 and com2 right
>now, but that is easily modified.
>
>Jim.
>--
>--
>Jim Lynch, Sales Analyst, Cray Research, Inc. / ARS: K4GVO
>Southeast District, Phone: (404) 631-2254, Email: jwl@sedist.cray.com
>Suite 270, 200 Westpark Drive, Peachtree City, GA 30269

This program (dual002.zip) is now available on world.std.com in the
directory pub/hamradio/pc/digital

Enjoy!

73,
Scott

--
==
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
the World - world.std.com pub/hamradio
==

230. Re: Morse Code

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 20:36:56 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCJHFxL.1Ip@netcom.com>
Source record: 272382

```
In article <2grm5u$frc@oak.oakland.edu> prvalko@vela.acs.oakland.edu (prvalko) writes:
>For what it's worth, DITTOES.
>
>Do NOT even attempt to learn the code by looking at dots and dashes.
>Get SuperMorse, it works.
>
>paul wb8zjl
>
>dah dah di di dit
>di di di dah dah
>

Another good site for ham radio software (including Morse Code progs.)
is world.std.com pub/hamradio

73,
Scott

--
==============================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
==============================================================================
```

231. Alpha Bravo Charlie Delta: phonetic alphabets (revised)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 20:38:56 UTC
From: bck1@cl.cam.ac.uk
Message-ID: <1994Jan11.203856.20421@infodev.cam.ac.uk>
Source record: 272379
Cross-posted to: alt.usage.english,sci.lang,rec.radio.amateur.misc,rec.radio.info

Alpha Bravo alphabets

Here is a collection of alphabets of the Alpha Bravo Charlie Delta kind, variously known as radio alphabets, phonetic alphabets and spelling alphabets. This collection currently includes alphabets for the following languages:

English, French, German, Dutch, Flemish, Italian, Rumantsch, Slovak, Polish, Hungarian, Swedish, Finnish and Russian.

This posting supersedes the one of 10th December.

My thanks to the many contributors, not all of whom are acknowledged below.

I can make no guarantee of accuracy of this information; indeed please send me any corrections or additions.

Comments in square brackets are my own.

Brian Kelk bck1@cl.cam.ac.uk
11 January 1994

***** ENGLISH *****

The NATO phonetic alphabet:

Alpha Bravo Charlie Delta Echo Foxtrot Golf Hotel India
Juliet Kilo Lima Mike November Oscar Papa Quebec Romeo
Sierra Tango Uniform Victor Whiskey Xray Yankee Zulu

[The same alphabet, modulo Alfa and Juliett, is approved by the International Civil Aviation Organization and the FAA. Dates from about 1956.
UK police use Indigo instead of India (?)]

Telecom B:

Alfred Benjamin Charles David Edward Frederick George Harry Isaac Jack King London Mary Nellie Oliver Peter Queen Robert Samuel Tommy Uncle Victor William Xray Yellow Zebra

[Found in Swedish, Dutch, Hungarian telephone directories. A Swiss directory has: Andrew Charlie Lussy Queenie Sugar]

British A:

Amsterdam Baltimore Casablanca Denmark Edison Florida
Gallipoli Havana Italia Jerusalem Kilogramme Liverpool
Madagascar New_York Oslo Paris Quebec Roma Santiago Tripoli
Uppsala Valencia Washington Xantippe Yokohama Zurich

[An 'international' alphabet in a Dutch telephone directory
has: Danemark. A 'French' alphabet in a Hungarian directory
has: Cassablanka Danemark Que'bec Upsala Zu"rich]

Used (still?) by New York police:

Adam Boston Chicago Denver Edward Frank George Henry Ida
John King Lincoln Mary Nancy Ocean Peter Queen Robert Sam
Thomas Union Victor William X-ray Young Zebra

Used by police in San Diego, California:

Adam Boy Charles David Edward Frank George Henry Ida John
King Lincoln Mary Nora Ocean Paul Queen Robert Sam Tom Unit
Victor William Xray Yellow Zebra

Sometimes used by radio hams (unofficial):

America Boston Canada Denmark England France Germany
Honolulu India Japan Kilowatt London Mexico Norway Ontario
or Ocean Pacific Quebec Radio Santiago or Spain Tokyo United
Victoria Washington Xray Yokohama Zanzibar

[Much variation: Amsterdam, Brazil, Baltimore, Chile,
Finland, Greece, Guatemala etc]

The ARRL (American Radio Relay League) alphabet (1948):

Adam Baker Charlie David Edward Frank George Henry Ida John
king Lewis Mary Nancy Otto Peter queen Robert Susan Thomas
union Victor William x-ray young zebra

[Nowadays the ARRL endorses the NATO/ICAO alphabet]

Allied Services 1945:

Able Baker Charlie Dog Edward Fox George How Item Jig King
Love Mike Nan Oboe Peter Queen Roger Sugar Tape Uncle Victor
William X-ray Yoke Zebra

From a book entitled "The Complete Morse Instructor..." (1944):

able baker charlie dog easy fox george how item jig king
love mike nan oboe peter queen roger sugar tare uncle victor
william x-ray yoke zebra

[This one seems to have undergone quite a lot of evolution,
with different branches of the U.S. armed forces using
different versions. Entries also cited: affirm, cast, hypo,
inter, negat, option, over, prep]

Western Union:

Adams Boston Chicago Denver Easy Frank George Henry Ida John
King Lincoln Mary New_York Ocean Peter Queen Roger Sugar
Thomas Union Victor William X-ray Young Zero

British Army 1927:

Ack Beer Charlie Don Edward Freddy George Harry Ink Johnnie
King London Monkey Nuts Orange Pip Queen Robert Sugar Toc
Uncle Vic William X-ray Yorker Zebra

Royal Navy 1917:

Apples Butter Charlie Duff Edward Freddy George Harry Ink
Johnnie King London Monkey Nuts Orange Pudding Queenie
Robert Sugar Tommy Uncle Vinegar Willie Xerxes Yellow Zebra

U.S. Army 1916:

Able Buy Cast Dock Easy Fox George Have Item Jig King Love
Mike Nap Opal Pup Quack Rush Sail Tape Unit Vice Watch X-ray
Yoke Zed

***** FRENCH *****

Contributor: Erik Tjong Kim Sang <erikt@let.rug.nl>

anatole bernard c'ecile denise 'emile fran5cois g'erard
henri isidore jean kl'eber louis marcel nicole oscar pierre
quital robert suzanne th'er`ese ursule victor wagon xavier
yvonne zo'e

Contributor: Rudolf Lais <chibm5hp@ibmmail.com>

(Swiss telephone directory)

Anna Berthe Ce'cile Daniel Emile Franc,ois Gustave Henri Ida
Jeanne Kilo Louise Marie Nicolas Olga Paul Quittance Robert
Suzanne The're`se Ulysse Victor William Xavier Yvonne Zurich

***** GERMAN *****

Contributor: mrosa@eso.org (Michael Rosa)

Anton Berta Caesar Dora Emil Friedrich Gustav Heinrich Ida
Julius Karl Ludwig Martha Nordpol Otto Paula Quelle Richard
Siegfried Theodor Ulrich Viktor Wilhelm Xanthippe Ypsilon
Zeppelin

Umlaut: A"rger O"dipus U"bel

More recent replacements: Konrad Zacharias

Contributor: Erik Tjong Kim Sang <erikt@let.rug.nl>

anton bertha c"asar dora emil friederich gustav heinrich ida
julius kaufmann ludwig martha nordpol otto paula quelle
richard samuel theodor ulrich viktor wilhelm xanthippe

ypsilon zacharias

"a "arger
ch charlotte
"o "okonom
sch schule
"u "ubermut

Contributor: Rudolf Lais <chibm5hp@ibmmail.com>

(Swiss telephone directory)

Anna Bertha Caesar Daniel Emil Friedrich Gustav Heinrich Ida
Jakob Kaiser Leopold Marie Niklaus Otto Peter Quelle Rosa
Sophie Theodor Ulrich Viktor Wilhelm Xaver Yverdon Zuerich

Contributor: Christof A Neumann <neumann@informatik.tu-muenchen.de>

(issued by Deutsche Bundespost)

Anton Bertha Caesar Dora Emil Friedrich Gustav Heinrich Ida
Jakob Konrad Ludwig Martha Nordpol Otto Paula Quelle Richard
Siegfried Theodor Ulrich Viktor Wilhelm Xantippe Ypsilon
Zeppelin

sch Schule

Contributor: Steve Dunham <dunham@gdl.msu.edu>

Anton Berta Caesar Dora Emil Friedrich Gustav Heinrich Ida
Johann Kaufmann Ludwig Martha Nordpol Otto Paula quer
Richard Siegfried Theodor Ulrich Viktor Wilhelm Xaver
Ypsilon Zeppelin

ss Eszett

Contributor: Anno Siegel <anno4000@w172zrz.zrz.TU-Berlin.DE>

Arno Borvaselin Coburg-Gotha Doria Ernst Friedrichsroda
Gomorrha Herrenzimmer Ida Jawohl_Odol Kolberg_Ost Leonidas
Motor Nora Oekonom Per_Motorrad Quohnsdorf_bei_Forst
Revolver Sabine Tod Uniform Verbrennungstod Weltnordpol
Xolabaphon York_Yellowstone Zoroaster

oe Oekonomie
ue Ueberkonto

[This alphabet provides mnemonics for Morse code: a syllable
corresponds to a dash if it contains 'o', a dot otherwise.]

***** DUTCH and FLEMISH *****

Contributor: Erik Tjong Kim Sang <erikt@let.rug.nl>

Dutch Flemish

a anna arthur
b bernhard brussel
c cornelis carolina
d dirk desire
e eduard emiel
f ferdinand frederik
g gerard gustaaf
h hendrik hendrik
i izaak isidoor
j jan jozef
k karel kilogram
l lodewijk leopold
m marie maria
n nico napoleon
o otto oscar
p pieter piano
q quotient qualite
r rudolf robert
s simon sofie
t teunis telefoon
u utrecht ursula
v victor victor
w willem waterloo
x xantippe xavier
ij ijmuiden -
y ypsilon yvonne
z zaandam zola

***** ITALIAN *****

Contributor: ebuie@sed.csc.com (Elizabeth Buie)
ebuie@starlab.csc.com

Ancona, Bologna, Como, Domodossola, Empoli, Firenze, Genova,
Hacca, Imola, Jolly, Kappa, Livorno, Milano, Napoli,
Otranto, Pisa/Palermo, Quartomiglio, Roma, Savona/Siena,
Torino, Udine, Venezia, Wagner, Xilofono, York, Zara

Contributor: Rudolf Lais <chibm5hp@ibmmail.com>

(Swiss telephone directory)

Anna Battista Carol Davide Ernesto Federico Giovanni acca
Isidoro i_lungo cappa Luigi Maria Nicola Olga Pietro
Quintino Rodolfo Susanna Teresa Umberto Vittorio vu_doppia
ics ipsilon Zurigo

***** RUMANTSCH *****

Contributor: Rudolf Lais <chibm5hp@ibmmail.com>

(Swiss telephone directory)

Anna Berta Carla Dora Emil Flurin Guido Hugo Ida Judit Kilo
Luisa Maria Nesa Otto Paula Quirin Rita Silvia Toni Ursin
Victor Willi Xaver Yvonne Zita

***** SLOVAK *****

Contributor: Martin Votruba <votruba+@pitt.edu>

(telephone directory)

Adam, Boz~ena, Cyril, C~adca, Da'vid, D~umbier, Emil,
Frantis~ek, Gusta'v, Helena, CHrudim, Ivan, Karol, Ludvi'k,
L~ubochn~a, Ma'ria, Norbert, N~ - Nitra, Oto, Peter, Quido,
Rudolf, Sva"topluk, S~imon, Toma's~, T~ - Tepla', Urban,
Va'clav, W - dvojite' ve', Xaver, Ypsilon, Zuzana, Z~ofia

***** POLISH *****

Contributor: Michal Jankowski <michalj@fuw.edu.pl>

(Warsaw telephone directory)

Adam Barbara Celina Danuta Ewa Franciszek Genowefa Henryk
Irena Jadwiga Karol Leon L/ukasz Maria Natalia Olga Pawel/
Roman Stanisl/aw Tadeusz Urszula Wl/adysl/aw Xantypa Ygrek
Zygmunt

***** HUNGARIAN *****

(telephone directory)

Andra's Be'la Cecil Do'ra Eleme'r Ferenc Gizella Hajnalka
Istva'n Ja'nos Katalin Luca Ma'tya's Na'ndor Olga Piroska
Queen Ro'bert Sarolta Ti'mea Ubul Vilmos Walter Xe'nia
Ypsilon Zolta'n

***** SWEDISH *****

Contributors: simon@dront.nada.kth.se (Simon Tardell)
Jonas Wallgren <jwc@ida.liu.se>

Adam, Bertil, Cesar, David, Erik, Filip, Gustav, Helge,
Ivar, Johan, Kalle, Ludvig, Martin, Niklas, Olof, Petter,
Quintus, Rudolf, Sigurd, Tore, Urban, Viktor, Wilhelm,
Xerxes, Yngve, Z{ta,]ke, [rlig, \sten

where { is a with dots
] A with ring
[A with dots
\ O with dots

NB that W does not belong to the Swedish alphabet
(it is merely considered a graphical variant of V).

***** FINNISH *****

Contributor: Jukka Rahkonen <jrahkone@viikki.helsinki.fi>

Aarne Bertta Celsius Daavid Eemeli Faarao Gideon Heikki
Iivari Jussi Kalle Lauri Matti Niilo Otto Paavo Kuu Risto
Sakari Tyyne Urho Ville Viski [ks{ Yrj| Tseta]ke [iti \ljy

Uppercase Lowercase
] } a with circle (Swedish)
[{ a with dots
\ | o with dots

***** RUSSIAN *****

Contributor: tom@systemtechnik.tu-ilmenau.de (Thomas Planke)

Aleksej Boris Vasilij Grigorij Dmitrij Elena Zhenja Zoya
Ivan Ivan_Kratkij Kilowatt Leonid Maria Nikolai Olga Pavel
Roman Sergej Tatjana Uljana Fjodor Hariton Zaplja Chelovek
Shura Schuka Tviordiy_Znak Igrek Miagkiy_Znak Emilija Yuri
Jakow

***** END *****

Brian Kelk
Cambridge
U.K.
bck1@cl.cam.ac.uk

232. Re: Morse Code program

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 20:39:19 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCJHG1J.1pt@netcom.com>
Source record: 272383

In article <CJFED8.InE@ra.nrl.navy.mil> drumhell@claudette.nrl.navy.mil (David Drumheller) writes:
> I'm looking for Morse code practice software that runs either on a NeXT
>computer (NeXTstep), or a DOS machine. Any suggestions on freeware or
>commercial software that isn't too expensive. Any programs available on
>ftp sites?
>
>--
>David Drumheller, KA3QBQ phone: (202) 767-3524
>Acoustics Division, Code 7140 fax: (202) 404-7732
>Naval Research Laboratory
>Washington, DC 20375-5350 e-mail: drumhell@claudette.nrl.navy.mil

On world.std.com, there is a C program for code in the directory:
pub/hamradio/unix called superiormorse.shar.

For DOS, there is always Super Morse, as well as others.

73,
Scott

--
```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
================================================================================
```

233. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 20:57:58 UTC
From: bwilkins@iat.holonet.net
Message-ID: <CJHGwo.8Lu@iat.holonet.net>
Source record: 272386

clifto@indep1.UUCP (Cliff Sharp) after my editing writes:

: HAAT, on the other hand, provides clues that might be better left
: unpublished...

HAAT is height above average terrain. The repeater I use is about 2000'
above sea level. The HAAT is about 450'. This happens when there are
taller hills within ten miles. Repeaters located in mountain valleys may
have mountains towering around them and will often times show a calculated
HAAT of - 200' as the repeater is 200' below the average terrain of the
ten mile circle around the repeater. This does not mean the repeater does
not get out vary far....propagation and defraction over the local terrain
may allow this -200' repeater to cover over 100 miles.

This only works in mountainous areas...don't try this from the bottom of a
200' pit in flat country ;)

HAAT is just a calculation that attempts to even out the playing field.

:
: --
: +---+
: | Cliff Sharp | clifto@indep1.chi.il.us |
: | WA9PDM | clifto@indep1.UUCP never works |
: +---+

Bob

--
Bob Wilkins n6fri voice 440.250+ 100pl san francisco bay area
bwilkins@cave.org packet n6fri @ n6eeg.#nocal.ca.usa.na

234. Want current DXCC prefix listing

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 21:05:47 UTC
From: david_mcgee.mailcenter#u#17@maca.sarnoff.com
Message-ID: <david_mcgee.mailcenter#u#17-110194160409@130.33.11.66>
Source record: 272332

Does anyone have a source for the current DXCC prefix vs country list? I'm having trouble keeping up with all the new ones popping up these days.

Dave N3AHF

235. Re: Ramsey kits not too good

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 21:15:40 UTC
From: Anthony_Pelliccio@brown.edu
Message-ID: <Anthony_Pelliccio-110194161555@138.16.64.8>
Source record: 272378

In article <2gul5eINNt6j@cronkite.Central.Sun.COM>,
doc@webrider.central.sun.com (Steve Bunis SE Southwest Chicago) wrote:

>
> Just to mix up the pot abit more - Just talked with a local ham
> who bought and put together the Ramsey 2 meter amplifier kit. He
> was on the air with it last night and sounded very good. I asked
> him if he had run into any problems with construction, design etc.
> and he claimed it came up and worked the first time. He was very
> happy with it. His total cost (kit + case & misc.) came to just
> under $50.
>
> Now I understand that this design is much less complex than building
> a transceiver, but it sounds like you need to pick and choose which
> kits to buy, and which to avoid.

So I'll throw my two cents in. Having built a couple of things from
Hamtronics (a voice-ID board and a 70cm, 30W amp) I must say that the
voice-id'er was ok, but the amp absolutely sucked. Never never never buy
anything from Hamtronics in kit form. It's not worth the headache. Then
again, so is their pre-built stuff too.

Tony

--
== Tony Pelliccio, KD1NR
== Anthony_Pelliccio@Brown.edu
== Brown University Alumni & Development Computing Services
== Box 1908
== Providence, RI 02912
== (401) 863-1880

236. TRIP to AUSTRALIA

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 21:40:04 UTC
From: lsavoy@neuron.uchc.edu
Message-ID: <2gv6bk$sao@threed.uchc.edu>
Source record: 272384

I will be going to Perth, Western Australia in March.
I like to know the 2 meter repeaters in the Perth area
Please e-mail ....lsavoy@neuron.uchc.edu

237. Portable 2m Antenna for Mountaineering???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 22:01:29 UTC
From: mercer@dgs.dnd.ca
Message-ID: <2gv7jp$3e0@netfs.dnd.ca>
Source record: 272385
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I am an avid climber/backpacker etc and want to be able to use my HT in the backcountry. I require a design for an antenna (with better gain than my rubber duck) that is light, easily packable, and not too bulky, which will allow me to work repeaters in the 2m band. In case it matters, most (but not all) of the use will be from mountain tops.

Obviously, a 1/2 wave diapole is a candidate but I was wondering if there are any others?

How about a boom that can be disassembeled? A flexable J pole? I would appreciate any and all suggestions.

Thanks
DAve

|---|
| Captain Dave Mercer |
| Directorate of Land Armament and |
| Electronics Engineering and |
| Maintainenance 2-3-3 |
| National Defence Headquarters |
| Ottawa, Ontario, Canada |
| K1A 0K2 |
| |
| Voice: (819) 997-9831 |
| Fax: (819) 994-4246 |
| EMail: mercer@ncs.dnd.ca |
HAM: VE3XMJ

-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.3

mQCNAiw7jJkAAAEEALpAIvULlA/xvrzuR30NcLZE0HCHyGm5QR4ej8xM6k3AcH3T
Q3NkgV2FK5f8t/fBAhO1+ffa5K7F10B4hPqKkAASNlk1PIx9ty5oUgxAlZnfya4V
ScNIx0x2h2f3roRjiZLfNYM2zkm26sZhFQjVJxyNnluJq/xVb45/LyY+p9flAAUR
tCBEYXZpZCBNZXJjZXIgPG1lcmNlckBuY3MuZG5kLmNhPg==
=0azF
-----END PGP PUBLIC KEY BLOCK-----

238. Re: Fm Broadcast

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 22:13:02 UTC
From: geraldg@oakhill.sps.mot.com
Message-ID: <CJHKDr.F52@oakhill.sps.mot.com>
Source record: 272387

In article 933@netcom.com, wa2ise@netcom.com (Robert Casey) writes:
> >In article <2d31e75a-5415rec.radio.amateur.misc@vpnet.chi.il.us>
akcs.marz@vpnet.chi.il.us (chris andersen) writes:
> >>Is it possible for a person with ham or modified ham set up to broadcast
> >>on the 88-108 Mhz area???
>
> Don't do this. the Funny Cookie Corporation goes after unlicensed broadcasters
> and issues fines as big as $20K. And they might take your amateur license,
> too.

Do those "Mr. Microphone" products transmit in the FM broadcast band? Do those products have to be "type accepted", or is just a matter of limiting transmission power and signal type? Also, don't those "spy" transmitters radiate in the FM broadcast band? Is it just a matter of not transmitting under the authority of an Amatuer radio license?

Regards,
Gerald

Gerald W. Garcia, P.E. N5UMB Motorola Inc., MD: TX30/OE37
Senior Design Engineer 6501 Wm. Cannon Dr. West
geraldg@spud.sps.mot.com Austin, TX 78735-8598
(512) 891-2806 (voice) (512) 891-8315 (fax)

239. Re: Ramsey kits not too good

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-11 23:23:57 UTC
From: rich@mulvey.com
Message-ID: <1994Jan11.232357.14924@mulvey.com>
Source record: 272390

Steve Bunis SE Southwest Chicago (doc@webrider.central.sun.com) wrote:

: Just to mix up the pot abit more - Just talked with a local ham
: who bought and put together the Ramsey 2 meter amplifier kit. He
: was on the air with it last night and sounded very good. I asked
: him if he had run into any problems with construction, design etc.
: and he claimed it came up and worked the first time. He was very
: happy with it. His total cost (kit + case & misc.) came to just
: under $50.

: Now I understand that this design is much less complex than building
: a transceiver, but it sounds like you need to pick and choose which
: kits to buy, and which to avoid.

Ask him again after he puts it on a spectrum analyzer.

- Rich

--
Rich Mulvey Amateur Radio: N2VDS Rochester, NY
rich@mulvey.com "Full power on half a watt."

240. Packet-Internet gateways

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 00:27:40 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCJHqM6.2LE@netcom.com>
Source record: 272389
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

I have finally completed my collection of packet <-> internet gateways.
I have placed the information on world.std.com in
pub/hamradio/packet-internet

If anyone has any updated information, please e-mail me.

The information included is for the following gateways:

amprnet (miscellaneous Amateur tcp/ip gateways)
ka2qhd
n0ary
n6qmy
w2xo
wb7tpy

73 and enjoy!
Scott

--
```
==========================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
==========================================================================
```

241. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 00:58:06 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <758372692.F00002@ocitor.fidonet>
Source record: 272358

```
The following files were processed Wednesday 01-12-94:

HAMPACK [ HAM: Packet Communications programs ]
------------------------------------------------------------------------
APRS308.ZIP ( 625748 bytes) Automatic Packet Reporting System

------------------------------------------------------------------------
625748 bytes in 1 file(s)

Total of 625748 bytes in 1 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - wa5eha
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)
```

242. *WANTED-> Kenwood SM220 station monitor

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 01:22:30 UTC
From: white@csusys.ctstateu.edu
Message-ID: <1994Jan11.202230.1@csusys.ctstateu.edu>
Source record: 272388
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc

```
Looking for a Kenwood SM-220 station monitor......
Replies to WHITE@CSUSYS.CTSTATEU.EDU
73 de N1QVE
Harry
```

243. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 01:32:45 UTC
From: bwilkins@iat.holonet.net
Message-ID: <CJHtMM.C7p@iat.holonet.net>
Source record: 272392

mikewood@rock.concert.net (W. M Wood -- The Signal Group)after editing writes:
:
: More BS.... The REAL reason this information isn't given out is that
: Cordination Groups want to wield their coordination POWER without
: fear of any questioning their declarations. With all the data on
: a repeater (lat/lon/haat/erp , etc) you could challenge or even
: ignore their refusal to coordinate a repeater on a frequency you
: have chosen.

Should be quite easy to challenge your coordinating body with an
engineering study. The easiest amateur method is to draw a line on a map
of the usable coverage area of the adjacent repeater as it relates to your
proposal. You know that the good ole boys got to you when the line changes
;) Bare in mind there should not be any overlap of significant magnitude.

: I suspect less than 1% of the so called coordinated
: repeaters in operation today have any sort of REAL engineering
: study including contour maps done on them. Most have been 'coordinated
: ' by either first come first served ---- or Good Ole Boys Network
: methods.
:

The Motorola Engineering Study for our hilltop shows their mobile coverage
the same as our portable less than 5 watt contour. Of course the mobile
coverage of our repeater is significantly greater.

: This information is publicly available for EVERY commercial radio
: and televion station in the USA and there is absolutely no reason other
: than small minded POWERMONGERING politics that this isn't available
: for amateur repeaters.

I think you are confused with the licence information available from the
FCC . An engineering study is only a tool to be used with caution.
Depending on the formulas used for the computed contures I have seen five
different contours for our repeater. Several of the programs fail to
enclude diffraction. We know our repeater plays over hills and can be
enhanced by ridge lines into areas that do not show up in your typical
engineering study.

:
: I dare ANY so called coordinating group to prove me wrong by PUBLISHING
: there engineering studies for all their "coordinated" repeaters.
:

No need to publish a study....You can drive the contour yourself, It
should be obvious even to an amateur. When you are on the edge you know it.

The edge does not change from day to day...you know how far up route 123
the repeater will work.

: All we'll probably hear is eithe silence or a crescendo of flames
: about how their "integrity " has been insulted....but the engineering
: studies generally don't exist so we will never see them!
:

I am sure you are right.....

:
: Mike Wood Internet: mikewood@rock.concert.net
: The Signal Group
: P.O. Box 1979 ***Avoid company disclaimers by owning the company ***
: Wake Forest, NC 27588
:
: Phone: 919-556-8477 Fax: 919-556-0115

Bob

--
Bob Wilkins n6fri voice 440.250+ 100pl san francisco bay area
bwilkins@cave.org packet n6fri @ n6eeg.#nocal.ca.usa.na

244. Re: Ramsey kits not too good

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 02:22:46 UTC
From: myers@cypress.West.Sun.COM
Message-ID: <2gvmtmlNNbc0@abyss.West.Sun.COM>
Source record: 272391

In article 14924@mulvey.com, rich@mulvey.com () writes:
>Steve Bunis SE Southwest Chicago (doc@webrider.central.sun.com) wrote:
>
>: Just to mix up the pot abit more - Just talked with a local ham
>: who bought and put together the Ramsey 2 meter amplifier kit. He
>: was on the air with it last night and sounded very good. I asked
>: him if he had run into any problems with construction, design etc.
>: and he claimed it came up and worked the first time. He was very
>: happy with it. His total cost (kit + case & misc.) came to just
>: under $50.
>
>: Now I understand that this design is much less complex than building
>: a transceiver, but it sounds like you need to pick and choose which
>: kits to buy, and which to avoid.
>
> Ask him again after he puts it on a spectrum analyzer.
>
>- Rich

Not to pick on Ramsey in particular, but the Part 97 requirements
for spectral purity between 50 and 225Mhz are stringent enough to
make me put *any* RF emitting device for these frequencies on a
spectrum analyzer before putting them into service.

The subjective "I tried it and it worked" test for RF amplifiers
and transmitters does not take into account the possibility of
illegal levels of spurious and harmonic output.

---
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

245. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 03:18:18 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan12.031818.27269@ke4zv.atl.ga.us>
Source record: 272396
Cross-posted to: rec.video,rec.radio.amateur.misc,sci.electronics

In article <CJFv2M.pr@cnsnews.Colorado.EDU> collinsn@spot.Colorado.EDU (Neil Collins) writes:
>
> From publication 432: "Frequency Calibration Service Using Network
>Television: For those users who require only frequency calibrations,
>an alternative to the radio broadcasts is available. This service provides
>a means of calibrating oscillators traceable to NBS. It gives the user
>the option of calibrating his oscillator quickly at very low cost, with
>modest accuracy, or of expending more time and money for higher accuracy.".
>
> "The service is very reliable because the networks use extremely
>stable rubidium or cesium oscillators to generate the 3.58MHz color
>subcarrier frequency which is transmitted with all color programs. The
>color signal is then used as a transfer standard. Any oscillator that
>has a frequency of 10/N MHz, where N is any integer from 1 to 100, can
>be calibrated.".

Unfortunately publication 432 is out of date here. The nets don't work this way anymore, and haven't since the late 1970s, as has been noted previously in this thread. Using broadcast colorburst will only give you a reference that's the local crystal oscillator at the local broadcast outlet. It's likely no more accurate than your own crystal oscillator, about 4 ppm. NIST should circulate a retraction of this technique because it's likely still misleading folks. (They may have issued one, but I haven't seen it.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

246. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 03:23:39 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan12.032339.27360@ke4zv.atl.ga.us>
Source record: 272397

In article <2guq4i$m3t@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:
>In article <1994Jan11.150658.25191@ke4zv.atl.ga.us>,
>Gary Coffman <gary@ke4zv.atl.ga.us> included a FAQ on radiation.
>
>Thanks for including it Gary. I enjoyed reading it and learnt a lot
>from it. The following paragraph about microwave ovens caught my attention:
>
>>The molecular vibration caused by MW is how and why a MW oven works -
>>exposure of the food to the microwaves causes water molecules to vibrate and
>>get hot. MW and RF penetrate and heat best when the size of the object is
>>close to the wavelength. For the 2450 MHz (2.45 billion Hz) used in
>>microwave ovens the wavelength is 5 inches, a good match for most of what we
>>cook.
>
>And I thought that this frequency was picked because it was close to
>a resonant frequencty of the O-H bond present in water, sugars and fats -
>common though often undesired components of what we eat.

That's true. The faq is saying two separate things here. First it's
noting that 2.45 GHz excites water molecules. And second it's saying
that an object tends to absorb RF best when the wavelength, actually
half wavelength, matches the size of the object. That's because
maximum E (or H) field difference is developed across it.

Note: 2.45 GHz is *not* a resonant frequency for water molecules,
but water does absorb significantly at this frequency.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

247. Re: Portable 2m Antenna for Mountaineering???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 03:35:37 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan12.033537.27514@ke4zv.atl.ga.us>
Source record: 272398
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <2gv7jp$3e0@netfs.dnd.ca> mercer@dgs.dnd.ca (David Mercer) writes:
>I am an avid climber/backpacker etc and want to be able to use my HT in
>the backcountry. I require a design for an antenna (with better gain
>than my rubber duck) that is light, easily packable, and not too bulky,
>which will allow me to work repeaters in the 2m band. In case it
>matters, most (but not all) of the use will be from mountain tops.
>
>Obviously, a 1/2 wave diapole is a candidate but I was wondering if
>there are any others?
>
>How about a boom that can be disassembeled? A flexable J pole? I would
>appreciate any and all suggestions.

Obviously a roled up twinlead J-pole will offer better performance than
the rubber dummy load, and it's easy to carry in the pack. However, if
you're really in the back country, a collapsable beam will be much better.
Simple designs based on folding elements from common TV antennas are
available. You can slip the folded antenna into a PVC tube and use that
as a walking stick. When you're ready to operate, the PVC can double as
a short mast.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

248. Re: Portable 2m Antenna for Mountaineering???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:06:35 UTC
From: bobw@col.hp.com
Message-ID: <2gvt0b$fiv@hp-col.col.hp.com>
Source record: 272393
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

David Mercer (mercer@dgs.dnd.ca) wrote:
: I am an avid climber/backpacker etc and want to be able to use my HT in
: the backcountry. I require a design for an antenna (with better gain
: than my rubber duck) that is light, easily packable, and not too bulky,
: which will allow me to work repeaters in the 2m band. In case it
: matters, most (but not all) of the use will be from mountain tops.

: Obviously, a 1/2 wave diapole is a candidate but I was wondering if
: there are any others?

: How about a boom that can be disassembeled? A flexable J pole? I would
: appreciate any and all suggestions.

I'd recommend an AEA Hot Rod (tm) antenna or similar.
Its a half-wave vertical (so no ground radials required) that
fits onto an HT BNC, telescopes down to about 8 inches long.
(There's one laying somewhere on the Continental Divide Trail,
where I dropped it.:-)

2nd choice is a j-pole made out of TV twinlead. Not really that
great unless there are usually trees around to hang it in.
Even then its probably too much hassle for the hiking/backpacking
scenario.

There are beams that disassemble, but unless you really need the
few dB of gain and are going to stay put for a while, I'd say
they are too much hassle as well.

Bob Witte / HP PMO (Colo Springs) / bobw@col.hp.com / KB0CY / (719) 590-3230

249. Daily Summary of Solar Geophysical Activity for 11 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:30:42 UTC
From: oler@rho.uleth.ca
Message-ID: <9401120430.AA23408@rho.uleth.ca>
Source record: 272345
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

11 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 11 JANUARY, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 011, 01/11/94
10.7 FLUX=101.1 90-AVG=102 SSN=056 BKI=0143 2533 BAI=016
BGND-XRAY=B2.8 FLU1=9.7E+05 FLU10=1.0E+04 PKI=2133 2543 PAI=015
BOU-DEV=004,009,042,024,017,072,029,031 DEV-AVG=028 NT SWF=00:000
XRAY-MAX= C1.8 @ 0417UT XRAY-MIN= B2.1 @ 2251UT XRAY-AVG= B3.9
NEUTN-MAX= +003% @ 0440UT NEUTN-MIN= -002% @ 2305UT NEUTN-AVG= -0.1%
PCA-MAX= +0.1DB @ 1745UT PCA-MIN= -0.3DB @ 1505UT PCA-AVG= -0.0DB
BOUTF-MAX=55349NT @ 1500UT BOUTF-MIN=55310NT @ 1651UT BOUTF-AVG=55340NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+071,+000,+000
GOES6-MAX=P:+161NT@ 1753UT GOES6-MIN=N:-062NT@ 0639UT G6-AVG=+095,+020,-018
FLUXFCST=STD:095,094,094;SESC:095,094,094 BAI/PAI-FCST=025,015,015/025,015,015
KFCST=3445 4433 3344 3222 27DAY-AP=009,019 27DAY-KP=2233 3221 1334 4434
WARNINGS=*SWF;*AURMIDWCH
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 10 JAN 94 was 60.4.
The Full Kp Indices for 10 JAN 94 are: 2- 1- 1o 1o 2- 1- 1+ 1o

SYNOPSIS OF ACTIVITY

Solar activity was low. Region 7648 (N07W37) produced
several small C-class flares. This region, and abutted Region
7650 (N05W27) were generally stable. The trailer of 7648 is
intruding upon the leader of Region 7650 creating high magnetic
gradients there.

Solar activity forecast: solar activity should be very
low to low. An isolated M-class flare remains a possibility
from the 7648/7650 complex.

STD: A full-disk Yohkoh x-ray image has been appended to this
report, showing the position of the coronal hole and the

strong, broad emissive area covered by departed Regions 7646 and 7645. It is interesting to note that intense Fe X emissions were also observed from these regions as they departed the west limb, in addition to the moderate Ca XV emissions reported earlier.

The geomagnetic field was quiet to unsettled until approximately 1500Z when the field became disturbed. Mid latitudes went to active to minor storm levels. Some high latitude sites experienced major to severe storm conditions. The coronal hole in the southwest is the likely source of this disturbance. The time of onset is slightly earlier than expected.

Geophysical activity forecast: the geomagnetic field should be at active to minor storm levels for 12 Jan. Local nighttime sectors could experience major storm conditions. Near active levels are forecast for 13-14 Jan with some minor storm periods possible during that time.

Event probabilities 12 jan-14 jan

Class M 20/20/20
Class X 05/05/05
Proton 05/05/05
PCAF Green

Geomagnetic activity probabilities 12 jan-14 jan

A. Middle Latitudes
Active 50/40/35
Minor Storm 30/20/15
Major-Severe Storm 05/05/01

B. High Latitudes
Active 50/40/35
Minor Storm 30/20/15
Major-Severe Storm 05/05/01

HF propagation conditions were near-normal over the low and middle latitudes. High and polar latitudes were also near-normal until approximately 12:00 UTC when minor signal instabilities began to be noticed with the onset of enhanced geomagnetic and auroral activity. Conditions deteriorated rapidly thereafter. Barely usable propagation was observed between approximately 17:00 and 19:30 UTC, with some upper middle latitude regions also noticing degradation. Effects were most pronounced during the local night-sectors. Conditions then showed some improvements for the remainder of the day. Propagation is expected to be unstable over the higher latitudes during the next 24 to 48 hours. Fair to occasionally very poor propagation can be expected. Middle and low latitude regions should remain near-normal with

night-sector conditions occasionally dipping to fair levels,
particularly on circuits approaching the proximity of the
auroral ovals. Conditions should begin improving on 13 or 14
January.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 11/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7648 N07W38 020 0220 EAO 12 013 BETA
7650 N05W28 010 0140 DAI 09 023 BETA
REGIONS DUE TO RETURN 12 JANUARY TO 14 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 11 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 11 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 11/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
56 S49E57 S49E57 S34W43 S28W33 347 EXT NEG 029 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
10 Jan: 0323 0333 0348 B8.1
0412 0420 0427 B7.5
0439 0442 0443 B6.3
1002 1005 1010 B4.5
1126 1129 1134 B4.7
1303 1308 1321 SF 7648 N07W18
1734 1735 1738 SF 7648 N06W21
1941 1945 1950 B7.2
2048 2052 2055 B6.2
2132 2135 2137 B9.5 SF 7648 N07W23
2311 2316 2322 C1.3 SF 7648 N07W27

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7648: 1 0 0 4 0 0 0 0 004 (36.4)
Uncorrellated: 0 0 0 0 0 0 0 0 007 (63.6)

Total Events: 011 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---

NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

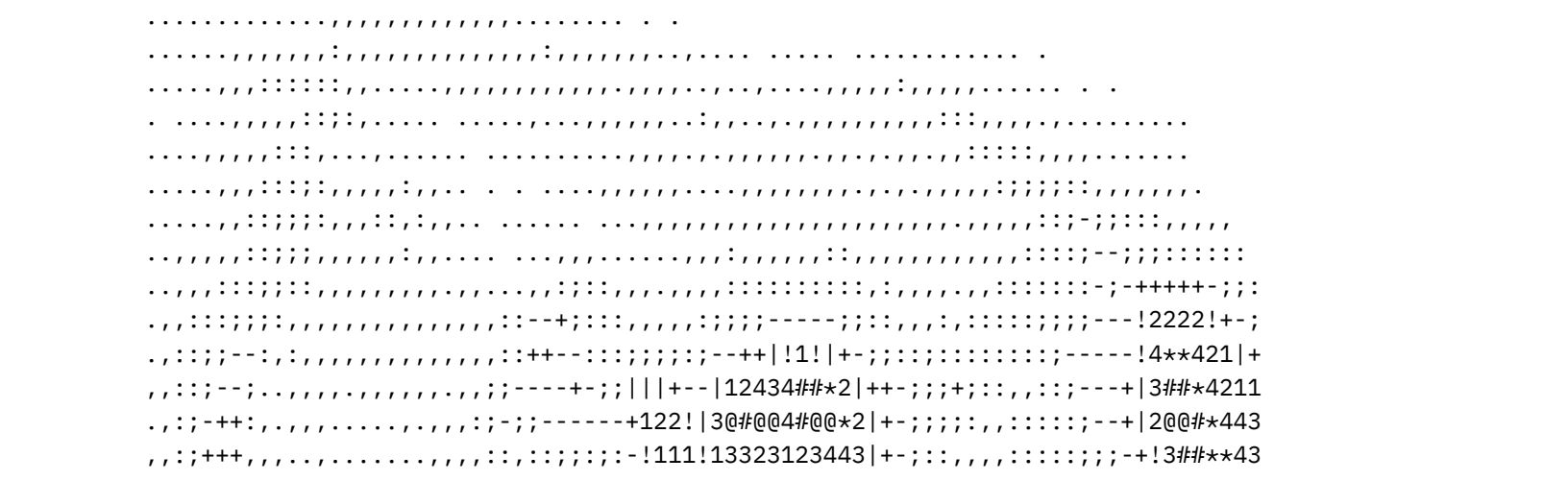
Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

SPECIAL INSERT: CURRENT X-RAY EMISSIONS FROM THE JAPANESE YOHKOH SPACECRAFT
==========

10 January 1994, 03:00 UTC

North



South

KEY: East and west limbs are to the left and right respectively. Emission strength, from minimum to maximum are coded in the following way:

[space] . , : ; - + | ! 1 2 3 4 * # @

Units used are arbitrary, for illustrative purposes. Get "showasc.zip" from "pub/solar/Software" at the anonymous FTP site: ftp.uleth.ca (IP # 142.66.3.29) to view these images on VGA screens.

** End of Daily Report **

250. Re: ANS Bulletin 001.02

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:33:06 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121106.A10044-0100000@cmu.chiangmai.ac.th>
Source record: 272409

On 2 Jan 1994 pi8daz@pa0okc.ampr.org. wrote:

> R:940108/0943z 54769@KE7KD.#NONEV.NV.USA.NOAM [RENO, NV.]
> R:940108/0925Z @:VK3BBS.VIC.AUS.OC #:12778 [St Albans] FBB5.15b $:940101233821
> R:940108/0940Z @:VK1KCM.ACT.AUS.OC [Canberra, ACT] $:940101233821
> R:940108/0643Z @:OH3RBR.#TRE.FIN.EU #:21405 [Tampere] FBB5.15b $:940101233821
> R:940107/2129Z @:OH6RBV.#VAA.FIN.EU #:54757 [Vaasa, KP03TC] FBB5.15b $:94010123
> R:940107/2041Z @:OH6RBG.FIN.EU [Jakobstad, KP13IQ] FBB5.14d #:131704
> R:940107/1955Z @:SK2AT.AC.SWE.EU [Umea, KP03DU] #:1827 Z:90742 FBB5.15
> R:940107/1724Z @:SM2TEZ.AC.SWE.EU [Umea] Z:90637 F5.15 $:940101233821
> R:940105/2024Z @:GB7BBS.#28.GBR.EU #:64937 [Bridgnorth] $:940101233821
> R:940103/0838Z @:GB7LWB.#27.GBR.EU [Northampton] #:75429 Z:NN7 1AE FBB5.15
> R:940103/0836Z @:M0DEM.#38.GBR.EU [London] #:115258 Z:IO90WX FBB5.15
> R:940103/0822Z @:GB7ICE.#34.GBR.EU [Rochester_Kent] #:11980 Z:ME2 FBB5.15
> R:940103/0801z 8574@GB7MXM.#36.GBR.EU $:940101233821 [Felixstowe:JO01PX] NNA V2.04
> R:940103/0145Z @:ON1CED.WVN.BEL.EU [Beernem] #:40255 Z:8720 FBB5.15
> R:940103/0041Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:18342 Z:B-9000 FBB5.15
> R:940102/1936Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:53239 Z:B-2000 FBB5.15
> R:940102/1857Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:9092 Z:3290 FBB5.15
> R:940102/1830z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940102/1808z @DB0IZ.#NRW.DEU.EU [Solingen, JO31NE, Op: DL6EE]
> R:940102/1758z @DB0MKA.DEU.EU [MAILBOX KOELN-AACHEN, JO30PR OP: DL3OE]
> R:940102/1743z @DK0MWX.#NRW.DEU.EU [Langenfeld JO31LC, DL-HF 20m OP:DL1WX]
> R:940102/1602z @DB0SGL.DEU.EU [Brachbach, JO30XU, TheBox1.9a SYSOP: DC5KL]
> R:940102/1552z @DB0END.#NRW.DEU.EU [Ennepetal, JO31QH, TheBox 1.9 SYSOP: DB4DU]
> R:940102/1322Z @:PI8DAZ.#TWE.NLD.EU [Hengelo] $:940101233821
> R:940102/1309Z @:PI8APD.#GLD.NLD.EU [Apeldoorn] #:73782 Z:7327 AV FBB5.15
> R:940102/1309Z @:PI8PKT.#NH2.NLD.EU [Velserbroek] #:17709 Z:1991SP FBB5.15
> R:940102/1250Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:150393 Op:PE0MAR
> R:940102/1232z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9550 $:940101233821 Z:2724 HR
>
> >From listmaint@amsat.org Sun Jan 02 12:32:55 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with SMTP
> id AA9550 ; Sun, 02 Jan 94 12:32:37 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> id AA20457 ; Sun, 02 Jan 94 01:17:12 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> id XAA02801 to ans-dist; Sat, 1 Jan 1994 23:43:39 GMT
> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> id PAA02798 to <ans@amsat.org>; Sat, 1 Jan 1994 15:43:37 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> id SAA23740; Sat, 1 Jan 1994 18:41:11 -0500
> >From: Bill Tynan <70323.2750@CompuServe.COM>
> Message-ID: <940101233821_70323.2750_CHV79-1@CompuServe.COM>

>
> HR AMSAT NEWS SERVICE BULLETIN 001.02 FROM AMSAT HQ
> SILVER SPRING, MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.02
>
> RV3DR, QSL manager for MIR contacts, advises that on December 24,
> 1993, December 31, 1993 and January 6, 1994 the MIR space station
> will be transmitting special digitized voice messages on its
> normal frequency of 145.55 MHz. The message repeats every tow
> minutes. Sergey says that the developer of this equipment is
> DL2MDE.
>
> ANS thanks RV3DR for the information that went into this bulletin
> and James Mollica N2NRD for relaying it to us.
>
>

251. Re: ANS Bulletin 001.02

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:33:18 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121118.B10044-0100000@cmu.chiangmai.ac.th>
Source record: 272408

On 2 Jan 1994 pi8daz@pa0okc.ampr.org. wrote:

> R:940108/0925Z @:VK3BBS.VIC.AUS.OC #:12778 [St Albans] FBB5.15b $:940101233821
> R:940108/0940Z @:VK1KCM.ACT.AUS.OC [Canberra, ACT] $:940101233821
> R:940108/0643Z @:OH3RBR.#TRE.FIN.EU #:21405 [Tampere] FBB5.15b $:940101233821
> R:940107/2129Z @:OH6RBV.#VAA.FIN.EU #:54757 [Vaasa, KP03TC] FBB5.15b $:94010123
> R:940107/2041Z @:OH6RBG.FIN.EU [Jakobstad, KP13IQ] FBB5.14d #:131704
> R:940107/1955Z @:SK2AT.AC.SWE.EU [Umea, KP03DU] #:1827 Z:90742 FBB5.15
> R:940107/1724Z @:SM2TEZ.AC.SWE.EU [Umea] Z:90637 F5.15 $:940101233821
> R:940105/2024Z @:GB7BBS.#28.GBR.EU #:64937 [Bridgnorth] $:940101233821
> R:940103/0838Z @:GB7LWB.#27.GBR.EU [Northampton] #:75429 Z:NN7 1AE FBB5.15
> R:940103/0836Z @:M0DEM.#38.GBR.EU [London] #:115258 Z:IO90WX FBB5.15
> R:940103/0822Z @:GB7ICE.#34.GBR.EU [Rochester_Kent] #:11980 Z:ME2 FBB5.15
> R:940103/0801z 8574@GB7MXM.#36.GBR.EU $:940101233821 [Felixstowe:JO01PX] NNA V2.04
> R:940103/0145Z @:ON1CED.WVN.BEL.EU [Beernem] #:40255 Z:8720 FBB5.15
> R:940103/0041Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:18342 Z:B-9000 FBB5.15
> R:940102/1936Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:53239 Z:B-2000 FBB5.15
> R:940102/1857Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:9092 Z:3290 FBB5.15
> R:940102/1830z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940102/1808z @DB0IZ.#NRW.DEU.EU [Solingen, JO31NE, Op: DL6EE]
> R:940102/1758z @DB0MKA.DEU.EU [MAILBOX KOELN-AACHEN, JO30PR OP: DL3OE]
> R:940102/1743z @DK0MWX.#NRW.DEU.EU [Langenfeld JO31LC, DL-HF 20m OP:DL1WX]
> R:940102/1602z @DB0SGL.DEU.EU [Brachbach, JO30XU, TheBox1.9a SYSOP: DC5KL]
> R:940102/1552z @DB0END.#NRW.DEU.EU [Ennepetal, JO31QH, TheBox 1.9 SYSOP: DB4DU]
> R:940102/1322Z @:PI8DAZ.#TWE.NLD.EU [Hengelo] $:940101233821
> R:940102/1309Z @:PI8APD.#GLD.NLD.EU [Apeldoorn] #:73782 Z:7327 AV FBB5.15
> R:940102/1309Z @:PI8PKT.#NH2.NLD.EU [Velserbroek] #:17709 Z:1991SP FBB5.15
> R:940102/1250Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:150393 Op:PE0MAR
> R:940102/1232z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9550 $:940101233821 Z:2724 HR
>
> >From listmaint@amsat.org Sun Jan 02 12:32:55 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with SMTP
> id AA9550 ; Sun, 02 Jan 94 12:32:37 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> id AA20457 ; Sun, 02 Jan 94 01:17:12 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> id XAA02801 to ans-dist; Sat, 1 Jan 1994 23:43:39 GMT
> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> id PAA02798 to <ans@amsat.org>; Sat, 1 Jan 1994 15:43:37 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> id SAA23740; Sat, 1 Jan 1994 18:41:11 -0500
> >From: Bill Tynan <70323.2750@CompuServe.COM>
> Message-ID: <940101233821_70323.2750_CHV79-1@CompuServe.COM>
>

> HR AMSAT NEWS SERVICE BULLETIN 001.02 FROM AMSAT HQ
> SILVER SPRING, MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.02
>
> RV3DR, QSL manager for MIR contacts, advises that on December 24,
> 1993, December 31, 1993 and January 6, 1994 the MIR space station
> will be transmitting special digitized voice messages on its
> normal frequency of 145.55 MHz. The message repeats every tow
> minutes. Sergey says that the developer of this equipment is
> DL2MDE.
>
> ANS thanks RV3DR for the information that went into this bulletin
> and James Mollica N2NRD for relaying it to us.
>
>

252. Re: ANS Bulletin 001.02

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:33:30 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121130.C10044-0100000@cmu.chiangmai.ac.th>
Source record: 272410

On 2 Jan 1994 pi8daz@pa0okc.ampr.org. wrote:

> R:940108/1857Z @:F6CNB.#SETX.TX.USA.NA [SugarLand] #:83389 Z:77478
> R:940108/0925Z @:VK3BBS.VIC.AUS.OC #:12778 [St Albans] FBB5.15b $:940101233821
> R:940108/0940Z @:VK1KCM.ACT.AUS.OC [Canberra, ACT] $:940101233821
> R:940108/0643Z @:OH3RBR.#TRE.FIN.EU #:21405 [Tampere] FBB5.15b $:940101233821
> R:940107/2129Z @:OH6RBV.#VAA.FIN.EU #:54757 [Vaasa, KP03TC] FBB5.15b $:94010123
> R:940107/2041Z @:OH6RBG.FIN.EU [Jakobstad, KP13IQ] FBB5.14d #:131704
> R:940107/1955Z @:SK2AT.AC.SWE.EU [Umea, KP03DU] #:1827 Z:90742 FBB5.15
> R:940107/1724Z @:SM2TEZ.AC.SWE.EU [Umea] Z:90637 F5.15 $:940101233821
> R:940105/2024Z @:GB7BBS.#28.GBR.EU #:64937 [Bridgnorth] $:940101233821
> R:940103/0838Z @:GB7LWB.#27.GBR.EU [Northampton] #:75429 Z:NN7 1AE FBB5.15
> R:940103/0836Z @:M0DEM.#38.GBR.EU [London] #:115258 Z:IO90WX FBB5.15
> R:940103/0822Z @:GB7ICE.#34.GBR.EU [Rochester_Kent] #:11980 Z:ME2 FBB5.15
> R:940103/0801z 8574@GB7MXM.#36.GBR.EU $:940101233821 [Felixstowe:JO01PX] NNA V2.04
> R:940103/0145Z @:ON1CED.WVN.BEL.EU [Beernem] #:40255 Z:8720 FBB5.15
> R:940103/0041Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:18342 Z:B-9000 FBB5.15
> R:940102/1936Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:53239 Z:B-2000 FBB5.15
> R:940102/1857Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:9092 Z:3290 FBB5.15
> R:940102/1830z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940102/1808z @DB0IZ.#NRW.DEU.EU [Solingen, JO31NE, Op: DL6EE]
> R:940102/1758z @DB0MKA.DEU.EU [MAILBOX KOELN-AACHEN, JO30PR OP: DL3OE]
> R:940102/1743z @DK0MWX.#NRW.DEU.EU [Langenfeld JO31LC, DL-HF 20m OP:DL1WX]
> R:940102/1602z @DB0SGL.DEU.EU [Brachbach, JO30XU, TheBox1.9a SYSOP: DC5KL]
> R:940102/1552z @DB0END.#NRW.DEU.EU [Ennepetal, JO31QH, TheBox 1.9 SYSOP: DB4DU]
> R:940102/1322Z @:PI8DAZ.#TWE.NLD.EU [Hengelo] $:940101233821
> R:940102/1309Z @:PI8APD.#GLD.NLD.EU [Apeldoorn] #:73782 Z:7327 AV FBB5.15
> R:940102/1309Z @:PI8PKT.#NH2.NLD.EU [Velserbroek] #:17709 Z:1991SP FBB5.15
> R:940102/1250Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:150393 Op:PE0MAR
> R:940102/1232z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9550 $:940101233821 Z:2724 HR
>
> >From listmaint@amsat.org Sun Jan 02 12:32:55 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with SMTP
> id AA9550 ; Sun, 02 Jan 94 12:32:37 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> id AA20457 ; Sun, 02 Jan 94 01:17:12 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> id XAA02801 to ans-dist; Sat, 1 Jan 1994 23:43:39 GMT
> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> id PAA02798 to <ans@amsat.org>; Sat, 1 Jan 1994 15:43:37 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> id SAA23740; Sat, 1 Jan 1994 18:41:11 -0500
> >From: Bill Tynan <70323.2750@CompuServe.COM>
> Message-ID: <940101233821_70323.2750_CHV79-1@CompuServe.COM>

>
> HR AMSAT NEWS SERVICE BULLETIN 001.02 FROM AMSAT HQ
> SILVER SPRING, MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.02
>
> RV3DR, QSL manager for MIR contacts, advises that on December 24,
> 1993, December 31, 1993 and January 6, 1994 the MIR space station
> will be transmitting special digitized voice messages on its
> normal frequency of 145.55 MHz. The message repeats every tow
> minutes. Sergey says that the developer of this equipment is
> DL2MDE.
>
> ANS thanks RV3DR for the information that went into this bulletin
> and James Mollica N2NRD for relaying it to us.
>
>

253. Re: ANS Bulletin 001.01

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:33:40 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121139.D10044-0100000@cmu.chiangmai.ac.th>
Source record: 272417

On 2 Jan 1994 pi8daz@pa0okc.ampr.org. wrote:

> R:940108/0951z 54772@KE7KD.#NONEV.NV.USA.NOAM [RENO, NV.]
> R:940108/0939Z @:VK3BBS.VIC.AUS.OC #:12803 [St Albans] FBB5.15b $:940102210233
> R:940108/1042Z @:VK1KCM.ACT.AUS.OC [Canberra, ACT] $:940102210233
> R:940108/0902Z @:OH3RBR.#TRE.FIN.EU #:21426 [Tampere] FBB5.15b $:940102210233
> R:940107/2350Z @:OH6RBV.#VAA.FIN.EU #:54818 [Vaasa, KP03TC] FBB5.15b $:94010221
> R:940108/0120Z @:OH6RBG.FIN.EU [Jakobstad, KP13IQ] FBB5.14d #:131868
> R:940108/0012Z @:SK2AT.AC.SWE.EU [Umea, KP03DU] #:1985 Z:90742 FBB5.15
> R:940107/1748Z @:SM2TEZ.AC.SWE.EU [Umea] Z:90637 F5.15 $:940102210233
> R:940106/0833Z @:GB7BBS.#28.GBR.EU #:65319 [Bridgnorth] $:940102210233
> R:940106/0750Z @:GB7PMB.#28.GBR.EU [Minsterley] #:23800 Z:SY5 FBB5.15
> R:940106/0748Z 48638@GB7CHS.#11.GBR.EU [Cheshire NTS] $:940102210233
> R:940106/0739Z @:GB7SAM.#11.GBR.EU [Staffordshire] #:163675 $:940102210233
> R:940106/0742Z @:GB7MAX.#28.GBR.EU [IO82VO] $:940102210233
> R:940106/0550Z @:GB7COV.#29.GBR.EU [Coventry] FBB5.14 #:11970
> R:940106/0334Z @:GB7LWB.#27.GBR.EU [Northampton] #:78404 Z:NN7 1AE FBB5.15
> R:940106/0313Z @:M0DEM.#38.GBR.EU [London] #:116520 Z:IO90WX FBB5.15
> R:940106/0107Z @:GB7ICE.#34.GBR.EU [Rochester_Kent] #:13380 Z:ME2 FBB5.15
> R:940106/0027z 9502@GB7MXM.#36.GBR.EU $:940102210233 [Felixstowe:JO01PX] NNA V2.04
> R:940103/1042Z @:ON1CED.WVN.BEL.EU [Beernem] #:40768 Z:8720 FBB5.15
> R:940103/0941Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:18743 Z:B-9000 FBB5.15
> R:940103/0930Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:53870 Z:B-2000 FBB5.15
> R:940103/0917Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:9554 Z:3290 FBB5.15
> R:940103/0857z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940103/0843z @DB0IZ.#NRW.DEU.EU [Solingen, JO31NE, Op: DL6EE]
> R:940103/0839z @DB0MKA.DEU.EU [MAILBOX KOELN-AACHEN, JO30PR OP: DL3OE]
> R:940103/0837z @DK0MWX.#NRW.DEU.EU [Langenfeld JO31LC, DL-HF 20m OP:DL1WX]
> R:940103/0820z @DB0SGL.DEU.EU [Brachbach, JO30XU, TheBox1.9a SYSOP: DC5KL]
> R:940103/0817z @DB0END.#NRW.DEU.EU [Ennepetal, JO31QH, TheBox 1.9 SYSOP: DB4DU]
> R:940103/0115Z @:PI8DAZ.#TWE.NLD.EU [Hengelo] $:940102210233
> R:940102/2341Z @:PI8DRE.#DRE.NLD.EU [Mailbox_Drenthe] #:292098 Z:9489TH FBB5.15
> R:940102/2155Z @:PI8APD.#GLD.NLD.EU [Apeldoorn] #:73927 Z:7327 AV FBB5.15
> R:940102/2201Z @:PI8PKT.#NH2.NLD.EU [Velserbroek] #:17769 Z:1991SP FBB5.15
> R:940102/2139Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:150509 Op:PE0MAR
> R:940102/2225z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9614 $:940102210233 Z:2724 HR
>
> >From listmaint@amsat.org Sun Jan 02 22:27:02 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with SMTP
> id AA9614 ; Sun, 02 Jan 94 22:25:57 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> id AA20488 ; Sun, 02 Jan 94 22:32:19 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> id VAA03214 to ans-dist; Sun, 2 Jan 1994 21:08:01 GMT

> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> id NAA03211 to <ans@amsat.org>; Sun, 2 Jan 1994 13:07:58 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> id QAA08990; Sun, 2 Jan 1994 16:05:32 -0500
> >From: Bill Tynan <70323.2750@CompuServe.COM>
> Message-ID: <940102210233_70323.2750_CHV57-1@CompuServe.COM>
>
> HR AMSAT NEWS SERVICE BULLETIN 001.01 FROM AMSAT HQ
> SILVER SPRING, MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.01
>
> A number of messages have recently been posted to the AMSAT BBS
> concerning the schedules for the various satellites and how they
> are arrived at. In the case of OSCAR-13, the schedule is
> determined by the AO-13 Command Team consisting of James Miller
> G3RUH, Peter Guelzow DB2OS and Graham Ratcliff VK5AGR. As to how
> these volunteers determine the schedule, a very fine set of
> comments was posted by Paul Beckmann WA0RSE Internet address
> wa0rse@amsat.org. The AMSAT News Service thanks Paul for his well-
> put comments and has taken the liberty of extracting them for this
> bulletin.
>
> Paul begins by asking himself: What determines the mode schedule
> for a satellite? He says thae he found an answer in the very
> clearly written piece in the 1993 Space Symposium Proceedings by,
> you guessed it, James, G3RUH.
>
> In his attempt to put the article by James in terms that may not be
> obvious to new to satellites as well as many not so new
> "bird-watchers", Paul offers a list of some of the important
> considerations:
>
> 1. All modern satellites are battery-powered with solar cell
> recharging systems. In order to work, the batteries must stay
> charged.
>
> 2. Most satellites do not have solar cells covering their entire
> surface. This means the attitude of the satellite with relation to
> the sun must be managed to keep the batteries charged.
>
> 3. The antennas are fixed to the satellite, not steerable, and
> necessarily "go along for the ride" when accomplishing Item 2.)
>
> 4. Each mode involves a receiver, a transmitter, and a pair of
> antennas. The receivers vary in sensitivity, the transmitters in
> power, and the antennas in gain and beamwidth.
>
> 5. Because of Item 3, the characteristics of item 4 allow
> transponder operation only in particular modes, when the distances

> and spacecraft attitudes are within certain limits. For example,
> a narrowbeam antenna pointing away from the Earth will not support
> communications. If a particular mode requires the use of that
> antenna, it would not do any good to place the satellite in that
> mode, no matter how badly it was desired. To change the attitude
> of the spacecraft to point the antenna at the Earth could very well
> compromise solar cell illumination, hence battery charge, hence
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> satellite communications for our fellow hams across the globe.
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> Information on ordering a copy of the Space Symposium Proceedings,
> which contains James Miller's article can be found on page 12 of
> the Nov/Dec AMSAT Journal.
>
>

254. Re: ANS Bulletin 001.01

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:33:59 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121159.E10044-0100000@cmu.chiangmai.ac.th>
Source record: 272416

On 2 Jan 1994 pi8daz@pa0okc.ampr.org. wrote:

> R:940108/0939Z @:VK3BBS.VIC.AUS.OC #:12803 [St Albans] FBB5.15b $:940102210233
> R:940108/1042Z @:VK1KCM.ACT.AUS.OC [Canberra, ACT] $:940102210233
> R:940108/0902Z @:OH3RBR.#TRE.FIN.EU #:21426 [Tampere] FBB5.15b $:940102210233
> R:940107/2350Z @:OH6RBV.#VAA.FIN.EU #:54818 [Vaasa, KP03TC] FBB5.15b $:94010221
> R:940108/0120Z @:OH6RBG.FIN.EU [Jakobstad, KP13IQ] FBB5.14d #:131868
> R:940108/0012Z @:SK2AT.AC.SWE.EU [Umea, KP03DU] #:1985 Z:90742 FBB5.15
> R:940107/1748Z @:SM2TEZ.AC.SWE.EU [Umea] Z:90637 F5.15 $:940102210233
> R:940106/0833Z @:GB7BBS.#28.GBR.EU #:65319 [Bridgnorth] $:940102210233
> R:940106/0750Z @:GB7PMB.#28.GBR.EU [Minsterley] #:23800 Z:SY5 FBB5.15
> R:940106/0748Z 48638@GB7CHS.#11.GBR.EU [Cheshire NTS] $:940102210233
> R:940106/0739Z @:GB7SAM.#11.GBR.EU [Staffordshire] #:163675 $:940102210233
> R:940106/0742Z @:GB7MAX.#28.GBR.EU [IO82VO] $:940102210233
> R:940106/0550Z @:GB7COV.#29.GBR.EU [Coventry] FBB5.14 #:11970
> R:940106/0334Z @:GB7LWB.#27.GBR.EU [Northampton] #:78404 Z:NN7 1AE FBB5.15
> R:940106/0313Z @:M0DEM.#38.GBR.EU [London] #:116520 Z:IO90WX FBB5.15
> R:940106/0107Z @:GB7ICE.#34.GBR.EU [Rochester_Kent] #:13380 Z:ME2 FBB5.15
> R:940106/0027z 9502@GB7MXM.#36.GBR.EU $:940102210233 [Felixstowe:JO01PX] NNA V2.04
> R:940103/1042Z @:ON1CED.WVN.BEL.EU [Beernem] #:40768 Z:8720 FBB5.15
> R:940103/0941Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:18743 Z:B-9000 FBB5.15
> R:940103/0930Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:53870 Z:B-2000 FBB5.15
> R:940103/0917Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:9554 Z:3290 FBB5.15
> R:940103/0857z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940103/0843z @DB0IZ.#NRW.DEU.EU [Solingen, JO31NE, Op: DL6EE]
> R:940103/0839z @DB0MKA.DEU.EU [MAILBOX KOELN-AACHEN, JO30PR OP: DL3OE]
> R:940103/0837z @DK0MWX.#NRW.DEU.EU [Langenfeld JO31LC, DL-HF 20m OP:DL1WX]
> R:940103/0820z @DB0SGL.DEU.EU [Brachbach, JO30XU, TheBox1.9a SYSOP: DC5KL]
> R:940103/0817z @DB0END.#NRW.DEU.EU [Ennepetal, JO31QH, TheBox 1.9 SYSOP: DB4DU]
> R:940103/0115Z @:PI8DAZ.#TWE.NLD.EU [Hengelo] $:940102210233
> R:940102/2341Z @:PI8DRE.#DRE.NLD.EU [Mailbox_Drenthe] #:292098 Z:9489TH FBB5.15
> R:940102/2155Z @:PI8APD.#GLD.NLD.EU [Apeldoorn] #:73927 Z:7327 AV FBB5.15
> R:940102/2201Z @:PI8PKT.#NH2.NLD.EU [Velserbroek] #:17769 Z:1991SP FBB5.15
> R:940102/2139Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:150509 Op:PE0MAR
> R:940102/2225z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9614 $:940102210233 Z:2724 HR
>
> >From listmaint@amsat.org Sun Jan 02 22:27:02 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with SMTP
> id AA9614 ; Sun, 02 Jan 94 22:25:57 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> id AA20488 ; Sun, 02 Jan 94 22:32:19 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> id VAA03214 to ans-dist; Sun, 2 Jan 1994 21:08:01 GMT
> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)

> id NAA03211 to <ans@amsat.org>; Sun, 2 Jan 1994 13:07:58 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> id QAA08990; Sun, 2 Jan 1994 16:05:32 -0500
> >From: Bill Tynan <70323.2750@CompuServe.COM>
> Message-ID: <940102210233_70323.2750_CHV57-1@CompuServe.COM>
>
> HR AMSAT NEWS SERVICE BULLETIN 001.01 FROM AMSAT HQ
> SILVER SPRING, MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.01
>
> A number of messages have recently been posted to the AMSAT BBS
> concerning the schedules for the various satellites and how they
> are arrived at. In the case of OSCAR-13, the schedule is
> determined by the AO-13 Command Team consisting of James Miller
> G3RUH, Peter Guelzow DB2OS and Graham Ratcliff VK5AGR. As to how
> these volunteers determine the schedule, a very fine set of
> comments was posted by Paul Beckmann WA0RSE Internet address
> wa0rse@amsat.org. The AMSAT News Service thanks Paul for his well-
> put comments and has taken the liberty of extracting them for this
> bulletin.
>
> Paul begins by asking himself: What determines the mode schedule
> for a satellite? He says thae he found an answer in the very
> clearly written piece in the 1993 Space Symposium Proceedings by,
> you guessed it, James, G3RUH.
>
> In his attempt to put the article by James in terms that may not be
> obvious to new to satellites as well as many not so new
> "bird-watchers", Paul offers a list of some of the important
> considerations:
>
> 1. All modern satellites are battery-powered with solar cell
> recharging systems. In order to work, the batteries must stay
> charged.
>
> 2. Most satellites do not have solar cells covering their entire
> surface. This means the attitude of the satellite with relation to
> the sun must be managed to keep the batteries charged.
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> 3. The antennas are fixed to the satellite, not steerable, and
> necessarily "go along for the ride" when accomplishing Item 2.)
>
> 4. Each mode involves a receiver, a transmitter, and a pair of
> antennas. The receivers vary in sensitivity, the transmitters in
> power, and the antennas in gain and beamwidth.
>
> 5. Because of Item 3, the characteristics of item 4 allow
> transponder operation only in particular modes, when the distances
> and spacecraft attitudes are within certain limits. For example,

> a narrowbeam antenna pointing away from the Earth will not support
> communications. If a particular mode requires the use of that
> antenna, it would not do any good to place the satellite in that
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> of the spacecraft to point the antenna at the Earth could very well
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>

255. Re: ANS Bulletin 001.01

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:34:08 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121107.F10044-0100000@cmu.chiangmai.ac.th>
Source record: 272418

On 2 Jan 1994 pi8daz@pa0okc.ampr.org. wrote:

> R:940108/1935Z @:F6CNB.#SETX.TX.USA.NA [SugarLand] #:83408 Z:77478
> R:940108/0939Z @:VK3BBS.VIC.AUS.OC #:12803 [St Albans] FBB5.15b $:940102210233
> R:940108/1042Z @:VK1KCM.ACT.AUS.OC [Canberra, ACT] $:940102210233
> R:940108/0902Z @:OH3RBR.#TRE.FIN.EU #:21426 [Tampere] FBB5.15b $:940102210233
> R:940107/2350Z @:OH6RBV.#VAA.FIN.EU #:54818 [Vaasa, KP03TC] FBB5.15b $:94010221
> R:940108/0120Z @:OH6RBG.FIN.EU [Jakobstad, KP13IQ] FBB5.14d #:131868
> R:940108/0012Z @:SK2AT.AC.SWE.EU [Umea, KP03DU] #:1985 Z:90742 FBB5.15
> R:940107/1748Z @:SM2TEZ.AC.SWE.EU [Umea] Z:90637 F5.15 $:940102210233
> R:940106/0833Z @:GB7BBS.#28.GBR.EU #:65319 [Bridgnorth] $:940102210233
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> R:940106/0748Z 48638@GB7CHS.#11.GBR.EU [Cheshire NTS] $:940102210233
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> R:940106/0313Z @:M0DEM.#38.GBR.EU [London] #:116520 Z:IO90WX FBB5.15
> R:940106/0107Z @:GB7ICE.#34.GBR.EU [Rochester_Kent] #:13380 Z:ME2 FBB5.15
> R:940106/0027z 9502@GB7MXM.#36.GBR.EU $:940102210233 [Felixstowe:JO01PX] NNA V2.04
> R:940103/1042Z @:ON1CED.WVN.BEL.EU [Beernem] #:40768 Z:8720 FBB5.15
> R:940103/0941Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:18743 Z:B-9000 FBB5.15
> R:940103/0930Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:53870 Z:B-2000 FBB5.15
> R:940103/0917Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:9554 Z:3290 FBB5.15
> R:940103/0857z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940103/0843z @DB0IZ.#NRW.DEU.EU [Solingen, JO31NE, Op: DL6EE]
> R:940103/0839z @DB0MKA.DEU.EU [MAILBOX KOELN-AACHEN, JO30PR OP: DL3OE]
> R:940103/0837z @DK0MWX.#NRW.DEU.EU [Langenfeld JO31LC, DL-HF 20m OP:DL1WX]
> R:940103/0820z @DB0SGL.DEU.EU [Brachbach, JO30XU, TheBox1.9a SYSOP: DC5KL]
> R:940103/0817z @DB0END.#NRW.DEU.EU [Ennepetal, JO31QH, TheBox 1.9 SYSOP: DB4DU]
> R:940103/0115Z @:PI8DAZ.#TWE.NLD.EU [Hengelo] $:940102210233
> R:940102/2341Z @:PI8DRE.#DRE.NLD.EU [Mailbox_Drenthe] #:292098 Z:9489TH FBB5.15
> R:940102/2155Z @:PI8APD.#GLD.NLD.EU [Apeldoorn] #:73927 Z:7327 AV FBB5.15
> R:940102/2201Z @:PI8PKT.#NH2.NLD.EU [Velserbroek] #:17769 Z:1991SP FBB5.15
> R:940102/2139Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:150509 Op:PE0MAR
> R:940102/2225z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9614 $:940102210233 Z:2724 HR
>
> >From listmaint@amsat.org Sun Jan 02 22:27:02 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with SMTP
> id AA9614 ; Sun, 02 Jan 94 22:25:57 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> id AA20488 ; Sun, 02 Jan 94 22:32:19 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> id VAA03214 to ans-dist; Sun, 2 Jan 1994 21:08:01 GMT

> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> id NAA03211 to <ans@amsat.org>; Sun, 2 Jan 1994 13:07:58 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> id QAA08990; Sun, 2 Jan 1994 16:05:32 -0500
> >From: Bill Tynan <70323.2750@CompuServe.COM>
> Message-ID: <940102210233_70323.2750_CHV57-1@CompuServe.COM>
>
> HR AMSAT NEWS SERVICE BULLETIN 001.01 FROM AMSAT HQ
> SILVER SPRING, MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.01
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> which contains James Miller's article can be found on page 12 of
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>
>

256. Re: ans001.03

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:34:15 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121115.G10044-0100000@cmu.chiangmai.ac.th>
Source record: 272412

On 6 Jan 1994 on1aeo@pa0okc.ampr.org. wrote:

> R:940109/0354z 54978@KE7KD.#NONEV.NV.USA.NOAM [RENO, NV.]
> R:940109/0336Z @:F6CNB.#SETX.TX.USA.NA [SugarLand] #:83870 Z:77478
> R:940107/0942Z @:F5KEQ.FPDL.FRA.EU [Nantes] #:77483 Z:44087 FBB5.15-TCP/I=
P
> R:940106/2346Z @:F6KSU.FPDL.FRA.EU [Laval] Z:53000 $:940105030951
> R:940106/2103Z @:F6DEG.FNOR.FRA.EU [Alen=87on] #:241461 Z:61000 FBB5.15
> R:940106/2042Z @:F8REF.FCEN.FRA.EU [Tours] #:44358 Z:37100 FBB5.15
> R:940106/2033Z @:F6KBN.FCEN.FRA.EU [St EPAIN] #:7979 Z:37320 FBB5.15
> R:940106/1928Z @:F5GHV.FPOC.FRA.EU [Poitiers] #:251537 Z:86000 $:94010503=
0951
> R:940106/1004Z @:F1HAQ.FALI.FRA.EU [Brive] #:280682 Z:JN05SD $:9401050309=
51
> R:940106/0940Z @:F6KDC.FALI.FRA.EU [Clermont-Fd]#:196963 JN15NQ $:9401050=
30951
> R:940106/0937Z @:F6BIG.FRHA.FRA.EU [Annecy (74)] #:399398 Z:74940 FBB5.15
> R:940106/0934Z @:HB9IAP.SROM.CHE.EU [GENEVE] #:232731 Z:1213 FBB5.15-I.A.=
P.C.
> R:940106/0856z @HB9PD.CHE.EU [PRIG BOX Bern, JN36RW, TheBox 1.9b]
> R:940106/0301z @HB9EAS.CHE.EU [The Basel Area BBS]
> R:940106/0303z @DB0GE.#SAR.DEU.EU [BBS Saarbruecken, DieBox 1.9]
> R:940106/0232z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940106/0240Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:11399 Z:3290 FBB5.15
> R:940106/0219Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:56302 Z:B-2000 FBB5=
.15
> R:940106/0223Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:21073 Z:B-9000 FBB5.1=
5
> R:940106/0200Z @:PI8MID.#ZLD.NLD.EU [Middelburg] Z:4336XD $:940105030951
> R:940106/0151Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:5993 Op:PE0MAR
> R:940106/0206z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9837 $:940105030951=
Z:2724 HR
>=20
> >From listmaint@amsat.org Thu Jan 06 02:07:11 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with =
SMTP
> =09id AA9837 ; Thu, 06 Jan 94 02:06:37 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> =09id AA20614 ; Wed, 05 Jan 94 04:33:20 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> =09id DAA04522 to ans-dist; Wed, 5 Jan 1994 03:15:36 GMT
> Received: from arl-img-1.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> =09id TAA04519 to <ans@amsat.org>; Tue, 4 Jan 1994 19:15:34 -0800
> Received: from localhost by arl-img-1.compuserve.com (8.6.4/5.930129sam)

> =09id WAA15806; Tue, 4 Jan 1994 22:13:08 -0500
> >From: Russ Platt WJ9F <70774.641@CompuServe.COM>
> Message-ID: <940105030951_70774.641_CHG79-1@CompuServe.COM>
>=20
> HR AMSAT NEWS SERVICE BULLETIN 001.03 FROM AMSAT HQ
> SILVER SPRING,MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.03
>=20
> Experimenter's Day Returns to AO-16
>=20
> AO-16 Command Team Leader, Russ Platt, WJ9F, announces the resumption
> of Experimenter's Day on Pacsat. In the past Experimenter's Days on Pacs=
at
> the procedure was to change to the Pacsat Raised Cosine PSK transmitter
> on 437.050 Mhz and activate the S-Band transmitter on 2400.143 Mhz. With
> the decline of the carrier suppression on the "Straight" PSK transmitter
> (437.025 Mhz) the RC PSK transmitter has become the primary downlink for=
=20
> some time. In the upcoming schedule of Experimenter's Days the power out=
put
> will be reduced on the RC PSK transmitter and the S-Band transmitter will
> be turned on. The power output from the S-Band transmitter is not variab=
le
> so power management is controlled by varying the output of the RC PSK=20
> transmitter. =20
>=20
> Experimenter's Days managed by AMSAT-NA have been held on UTC Wednesdays
> since the days of AMSAT-OSCARS 6 and 7 when Wednesday was " battery recha=
rge
> day." (Incidentally, this is also the reason that the continental U.S.
> 75 meter nets were originally scheduled for Tuesday evenings.)
>=20
> Future Experimenter's Days are scheduled for:
>=20
> 05 January 0411 UTC through 06 January 0340 UTC
> 26 January 0400 UTC through 27 January 0330 UTC
>=20
>=20

257. Re: ans001.03

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:34:20 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121119.H10044-0100000@cmu.chiangmai.ac.th>
Source record: 272411

On 6 Jan 1994 on1aeo@pa0okc.ampr.org. wrote:

> R:940109/0336Z @:F6CNB.#SETX.TX.USA.NA [SugarLand] #:83870 Z:77478
> R:940107/0942Z @:F5KEQ.FPDL.FRA.EU [Nantes] #:77483 Z:44087 FBB5.15-TCP/I=
P
> R:940106/2346Z @:F6KSU.FPDL.FRA.EU [Laval] Z:53000 $:940105030951
> R:940106/2103Z @:F6DEG.FNOR.FRA.EU [Alen=87on] #:241461 Z:61000 FBB5.15
> R:940106/2042Z @:F8REF.FCEN.FRA.EU [Tours] #:44358 Z:37100 FBB5.15
> R:940106/2033Z @:F6KBN.FCEN.FRA.EU [St EPAIN] #:7979 Z:37320 FBB5.15
> R:940106/1928Z @:F5GHV.FPOC.FRA.EU [Poitiers] #:251537 Z:86000 $:94010503=
0951
> R:940106/1004Z @:F1HAQ.FALI.FRA.EU [Brive] #:280682 Z:JN05SD $:9401050309=
51
> R:940106/0940Z @:F6KDC.FALI.FRA.EU [Clermont-Fd]#:196963 JN15NQ $:9401050=
30951
> R:940106/0937Z @:F6BIG.FRHA.FRA.EU [Annecy (74)] #:399398 Z:74940 FBB5.15
> R:940106/0934Z @:HB9IAP.SROM.CHE.EU [GENEVE] #:232731 Z:1213 FBB5.15-I.A.=
P.C.
> R:940106/0856z @HB9PD.CHE.EU [PRIG BOX Bern, JN36RW, TheBox 1.9b]
> R:940106/0301z @HB9EAS.CHE.EU [The Basel Area BBS]
> R:940106/0303z @DB0GE.#SAR.DEU.EU [BBS Saarbruecken, DieBox 1.9]
> R:940106/0232z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940106/0240Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:11399 Z:3290 FBB5.15
> R:940106/0219Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:56302 Z:B-2000 FBB5=
.15
> R:940106/0223Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:21073 Z:B-9000 FBB5.1=
5
> R:940106/0200Z @:PI8MID.#ZLD.NLD.EU [Middelburg] Z:4336XD $:940105030951
> R:940106/0151Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:5993 Op:PE0MAR
> R:940106/0206z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9837 $:940105030951=
Z:2724 HR
>=20
> >From listmaint@amsat.org Thu Jan 06 02:07:11 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with =
SMTP
> =09id AA9837 ; Thu, 06 Jan 94 02:06:37 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> =09id AA20614 ; Wed, 05 Jan 94 04:33:20 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> =09id DAA04522 to ans-dist; Wed, 5 Jan 1994 03:15:36 GMT
> Received: from arl-img-1.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> =09id TAA04519 to <ans@amsat.org>; Tue, 4 Jan 1994 19:15:34 -0800
> Received: from localhost by arl-img-1.compuserve.com (8.6.4/5.930129sam)
> =09id WAA15806; Tue, 4 Jan 1994 22:13:08 -0500

```
> >From: Russ Platt WJ9F <70774.641@CompuServe.COM>
> Message-ID: <940105030951_70774.641_CHG79-1@CompuServe.COM>
>=20
> HR AMSAT NEWS SERVICE BULLETIN 001.03 FROM AMSAT HQ
> SILVER SPRING,MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.03
>=20
> Experimenter's Day Returns to AO-16
>=20
> AO-16 Command Team Leader, Russ Platt, WJ9F, announces the resumption
> of Experimenter's Day on Pacsat. In the past Experimenter's Days on Pacs=
at
> the procedure was to change to the Pacsat Raised Cosine PSK transmitter
> on 437.050 Mhz and activate the S-Band transmitter on 2400.143 Mhz. With
> the decline of the carrier suppression on the "Straight" PSK transmitter
> (437.025 Mhz) the RC PSK transmitter has become the primary downlink for=
=20
> some time. In the upcoming schedule of Experimenter's Days the power out=
put
> will be reduced on the RC PSK transmitter and the S-Band transmitter will
> be turned on. The power output from the S-Band transmitter is not variab=
le
> so power management is controlled by varying the output of the RC PSK=20
> transmitter. =20
>=20
> Experimenter's Days managed by AMSAT-NA have been held on UTC Wednesdays
> since the days of AMSAT-OSCARS 6 and 7 when Wednesday was " battery recha=
rge
> day." (Incidentally, this is also the reason that the continental U.S.
> 75 meter nets were originally scheduled for Tuesday evenings.)
>=20
> Future Experimenter's Days are scheduled for:
>=20
> 05 January 0411 UTC through 06 January 0340 UTC
> 26 January 0400 UTC through 27 January 0330 UTC
>=20
>=20
```

258. Re: ans001.03

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:34:27 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121127.I10044-0100000@cmu.chiangmai.ac.th>
Source record: 272414

On 6 Jan 1994 on1aeo@pa0okc.ampr.org. wrote:

> R:940109/0411z 54983@KE7KD.#NONEV.NV.USA.NOAM [RENO, NV.]
> R:940109/0337Z @:F6CNB.#SETX.TX.USA.NA [SugarLand] #:83876 Z:77478
> R:940107/0946Z @:F5KEQ.FPDL.FRA.EU [Nantes] #:77485 Z:44087 FBB5.15-TCP/I=
P
> R:940106/2351Z @:F6KSU.FPDL.FRA.EU [Laval] Z:53000 $:940105031232
> R:940106/2329Z @:F6DEG.FNOR.FRA.EU [Alen=87on] #:241479 Z:61000 FBB5.15
> R:940106/2248Z @:F6RAE.FNOR.FRA.EU [Vernon] #:257041 Z:27207 FBB5.15
> R:940106/2242Z @:F6RAC.FRPA.FRA.EU #:250029 [Paris - FBB5.13]
> R:940106/2223Z @:F6PTT.FRPA.FRA.EU #:64800 [91-MASSY] FBB5.15b $:94010503=
1232
> R:940106/2159Z @:F5MSQ.FCEN.FRA.EU [MUIDES] #:52238 Z:41500 FBB5.15
> R:940106/2130Z @:F8REF.FCEN.FRA.EU [Tours] #:44371 Z:37100 FBB5.15
> R:940106/2122Z @:F6KBN.FCEN.FRA.EU [St EPAIN] #:7991 Z:37320 FBB5.15
> R:940106/2107Z @:F5GHV.FPOC.FRA.EU [Poitiers] #:251558 Z:86000 $:94010503=
1232
> R:940106/2005Z @:F1HAQ.FALI.FRA.EU [Brive] #:280831 Z:JN05SD $:9401050312=
32
> R:940106/2001Z @:F6KDC.FALI.FRA.EU [Clermont-Fd]#:197033 JN15NQ $:9401050=
31232
> R:940106/1955Z @:F6BIG.FRHA.FRA.EU [Annecy (74)] #:399578 Z:74940 FBB5.15
> R:940106/1953Z @:HB9IAP.SROM.CHE.EU [GENEVE] #:232864 Z:1213 FBB5.15-I.A.=
P.C.
> R:940106/1932z @HB9PD.CHE.EU [PRIG BOX Bern, JN36RW, TheBox 1.9b]
> R:940106/0859z @HB9EAS.CHE.EU [The Basel Area BBS]
> R:940106/0902z @DB0GE.#SAR.DEU.EU [BBS Saarbruecken, DieBox 1.9]
> R:940106/0828z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940106/0831Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:11537 Z:3290 FBB5.15
> R:940106/0737Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:56441 Z:B-2000 FBB5=
.15
> R:940106/0622Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:21207 Z:B-9000 FBB5.1=
5
> R:940106/0558Z @:PI8MID.#ZLD.NLD.EU [Middelburg] Z:4336XD $:940105031232
> R:940106/0350Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:6041 Op:PE0MAR
> R:940106/0207z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9841 $:940105031232=
Z:2724 HR
>=20
> >From listmaint@amsat.org Thu Jan 06 02:08:02 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with =
SMTP
> =09id AA9841 ; Thu, 06 Jan 94 02:07:26 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> =09id AA20616 ; Wed, 05 Jan 94 04:44:06 UTC

> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> =09id DAA04533 to ans-dist; Wed, 5 Jan 1994 03:17:04 GMT
> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> =09id TAA04529 to <ans@amsat.org>; Tue, 4 Jan 1994 19:17:00 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> =09id WAA24261; Tue, 4 Jan 1994 22:14:34 -0500
> >From: Russ Platt WJ9F <70774.641@CompuServe.COM>
> Message-ID: <940105031232_70774.641_CHG79-2@CompuServe.COM>
>=20
> HR AMSAT NEWS SERVICE BULLETIN 001.03 FROM AMSAT HQ
> SILVER SPRING,MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.03
>=20
> Experimenter's Day Returns to AO-16
>=20
> AO-16 Command Team Leader, Russ Platt, WJ9F, announces the resumption
> of Experimenter's Day on Pacsat. In the past Experimenter's Days on Pacs=
at
> the procedure was to change to the Pacsat Raised Cosine PSK transmitter
> on 437.050 Mhz and activate the S-Band transmitter on 2400.143 Mhz. With
> the decline of the carrier suppression on the "Straight" PSK transmitter
> (437.025 Mhz) the RC PSK transmitter has become the primary downlink for=
=20
> some time. In the upcoming schedule of Experimenter's Days the power out=
put
> will be reduced on the RC PSK transmitter and the S-Band transmitter will
> be turned on. The power output from the S-Band transmitter is not variab=
le
> so power management is controlled by varying the output of the RC PSK=20
> transmitter. =20
>=20
> Experimenter's Days managed by AMSAT-NA have been held on UTC Wednesdays
> since the days of AMSAT-OSCARS 6 and 7 when Wednesday was " battery recha=
rge
> day." (Incidentally, this is also the reason that the continental U.S.
> 75 meter nets were originally scheduled for Tuesday evenings.)
>=20
> Future Experimenter's Days are scheduled for:
>=20
> 05 January 0411 UTC through 06 January 0340 UTC
> 26 January 0400 UTC through 27 January 0330 UTC
>=20
>=20

259. Re: ans001.03

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:34:33 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121133.J10044-0100000@cmu.chiangmai.ac.th>
Source record: 272406

On 6 Jan 1994 on1aeo@pa0okc.ampr.org. wrote:

> R:940109/0437Z @:VK3BBS.VIC.AUS.OC #:13124 [St Albans] FBB5.15b $:9401050=
31232
> R:940109/0411z 54983@KE7KD.#NONEV.NV.USA.NOAM [RENO, NV.]
> R:940109/0337Z @:F6CNB.#SETX.TX.USA.NA [SugarLand] #:83876 Z:77478
> R:940107/0946Z @:F5KEQ.FPDL.FRA.EU [Nantes] #:77485 Z:44087 FBB5.15-TCP/I=
P
> R:940106/2351Z @:F6KSU.FPDL.FRA.EU [Laval] Z:53000 $:940105031232
> R:940106/2329Z @:F6DEG.FNOR.FRA.EU [Alen=87on] #:241479 Z:61000 FBB5.15
> R:940106/2248Z @:F6RAE.FNOR.FRA.EU [Vernon] #:257041 Z:27207 FBB5.15
> R:940106/2242Z @:F6RAC.FRPA.FRA.EU #:250029 [Paris - FBB5.13]
> R:940106/2223Z @:F6PTT.FRPA.FRA.EU #:64800 [91-MASSY] FBB5.15b $:94010503=
1232
> R:940106/2159Z @:F5MSQ.FCEN.FRA.EU [MUIDES] #:52238 Z:41500 FBB5.15
> R:940106/2130Z @:F8REF.FCEN.FRA.EU [Tours] #:44371 Z:37100 FBB5.15
> R:940106/2122Z @:F6KBN.FCEN.FRA.EU [St EPAIN] #:7991 Z:37320 FBB5.15
> R:940106/2107Z @:F5GHV.FPOC.FRA.EU [Poitiers] #:251558 Z:86000 $:94010503=
1232
> R:940106/2005Z @:F1HAQ.FALI.FRA.EU [Brive] #:280831 Z:JN05SD $:9401050312=
32
> R:940106/2001Z @:F6KDC.FALI.FRA.EU [Clermont-Fd]#:197033 JN15NQ $:9401050=
31232
> R:940106/1955Z @:F6BIG.FRHA.FRA.EU [Annecy (74)] #:399578 Z:74940 FBB5.15
> R:940106/1953Z @:HB9IAP.SROM.CHE.EU [GENEVE] #:232864 Z:1213 FBB5.15-I.A.=
P.C.
> R:940106/1932z @HB9PD.CHE.EU [PRIG BOX Bern, JN36RW, TheBox 1.9b]
> R:940106/0859z @HB9EAS.CHE.EU [The Basel Area BBS]
> R:940106/0902z @DB0GE.#SAR.DEU.EU [BBS Saarbruecken, DieBox 1.9]
> R:940106/0828z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940106/0831Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:11537 Z:3290 FBB5.15
> R:940106/0737Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:56441 Z:B-2000 FBB5=
.15
> R:940106/0622Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:21207 Z:B-9000 FBB5.1=
5
> R:940106/0558Z @:PI8MID.#ZLD.NLD.EU [Middelburg] Z:4336XD $:940105031232
> R:940106/0350Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:6041 Op:PE0MAR
> R:940106/0207z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9841 $:940105031232=
Z:2724 HR
>=20
> >From listmaint@amsat.org Thu Jan 06 02:08:02 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with =
SMTP
> =09id AA9841 ; Thu, 06 Jan 94 02:07:26 UTC

> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> =09id AA20616 ; Wed, 05 Jan 94 04:44:06 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> =09id DAA04533 to ans-dist; Wed, 5 Jan 1994 03:17:04 GMT
> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> =09id TAA04529 to <ans@amsat.org>; Tue, 4 Jan 1994 19:17:00 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> =09id WAA24261; Tue, 4 Jan 1994 22:14:34 -0500
> >From: Russ Platt WJ9F <70774.641@CompuServe.COM>
> Message-ID: <940105031232_70774.641_CHG79-2@CompuServe.COM>
>=20
> HR AMSAT NEWS SERVICE BULLETIN 001.03 FROM AMSAT HQ
> SILVER SPRING,MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.03
>=20
> Experimenter's Day Returns to AO-16
>=20
>=20
>=20

260. Re: ans001.03

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:34:44 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121144.K10044-0100000@cmu.chiangmai.ac.th>
Source record: 272413

On 6 Jan 1994 on1aeo@pa0okc.ampr.org. wrote:

> R:940109/0337Z @:F6CNB.#SETX.TX.USA.NA [SugarLand] #:83876 Z:77478
> R:940107/0946Z @:F5KEQ.FPDL.FRA.EU [Nantes] #:77485 Z:44087 FBB5.15-TCP/I=
P
> R:940106/2351Z @:F6KSU.FPDL.FRA.EU [Laval] Z:53000 $:940105031232
> R:940106/2329Z @:F6DEG.FNOR.FRA.EU [Alen=87on] #:241479 Z:61000 FBB5.15
> R:940106/2248Z @:F6RAE.FNOR.FRA.EU [Vernon] #:257041 Z:27207 FBB5.15
> R:940106/2242Z @:F6RAC.FRPA.FRA.EU #:250029 [Paris - FBB5.13]
> R:940106/2223Z @:F6PTT.FRPA.FRA.EU #:64800 [91-MASSY] FBB5.15b $:94010503=
1232
> R:940106/2159Z @:F5MSQ.FCEN.FRA.EU [MUIDES] #:52238 Z:41500 FBB5.15
> R:940106/2130Z @:F8REF.FCEN.FRA.EU [Tours] #:44371 Z:37100 FBB5.15
> R:940106/2122Z @:F6KBN.FCEN.FRA.EU [St EPAIN] #:7991 Z:37320 FBB5.15
> R:940106/2107Z @:F5GHV.FPOC.FRA.EU [Poitiers] #:251558 Z:86000 $:94010503=
1232
> R:940106/2005Z @:F1HAQ.FALI.FRA.EU [Brive] #:280831 Z:JN05SD $:9401050312=
32
> R:940106/2001Z @:F6KDC.FALI.FRA.EU [Clermont-Fd]#:197033 JN15NQ $:9401050=
31232
> R:940106/1955Z @:F6BIG.FRHA.FRA.EU [Annecy (74)] #:399578 Z:74940 FBB5.15
> R:940106/1953Z @:HB9IAP.SROM.CHE.EU [GENEVE] #:232864 Z:1213 FBB5.15-I.A.=
P.C.
> R:940106/1932z @HB9PD.CHE.EU [PRIG BOX Bern, JN36RW, TheBox 1.9b]
> R:940106/0859z @HB9EAS.CHE.EU [The Basel Area BBS]
> R:940106/0902z @DB0GE.#SAR.DEU.EU [BBS Saarbruecken, DieBox 1.9]
> R:940106/0828z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940106/0831Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:11537 Z:3290 FBB5.15
> R:940106/0737Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:56441 Z:B-2000 FBB5=
.15
> R:940106/0622Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:21207 Z:B-9000 FBB5.1=
5
> R:940106/0558Z @:PI8MID.#ZLD.NLD.EU [Middelburg] Z:4336XD $:940105031232
> R:940106/0350Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:6041 Op:PE0MAR
> R:940106/0207z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9841 $:940105031232=
Z:2724 HR
>=20
> >From listmaint@amsat.org Thu Jan 06 02:08:02 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with =
SMTP
> =09id AA9841 ; Thu, 06 Jan 94 02:07:26 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> =09id AA20616 ; Wed, 05 Jan 94 04:44:06 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)

> =09id DAA04533 to ans-dist; Wed, 5 Jan 1994 03:17:04 GMT
> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> =09id TAA04529 to <ans@amsat.org>; Tue, 4 Jan 1994 19:17:00 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> =09id WAA24261; Tue, 4 Jan 1994 22:14:34 -0500
> >From: Russ Platt WJ9F <70774.641@CompuServe.COM>
> Message-ID: <940105031232_70774.641_CHG79-2@CompuServe.COM>
>=20
> HR AMSAT NEWS SERVICE BULLETIN 001.03 FROM AMSAT HQ
> SILVER SPRING,MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.03
>=20
> Experimenter's Day Returns to AO-16
>=20
> AO-16 Command Team Leader, Russ Platt, WJ9F, announces the resumption
> of Experimenter's Day on Pacsat. In the past Experimenter's Days on Pacs=
at
> the procedure was to change to the Pacsat Raised Cosine PSK transmitter
> on 437.050 Mhz and activate the S-Band transmitter on 2400.143 Mhz. With
> the decline of the carrier suppression on the "Straight" PSK transmitter
> (437.025 Mhz) the RC PSK transmitter has become the primary downlink for=
=20
> some time. In the upcoming schedule of Experimenter's Days the power out=
put
> will be reduced on the RC PSK transmitter and the S-Band transmitter will
> be turned on. The power output from the S-Band transmitter is not variab=
le
> so power management is controlled by varying the output of the RC PSK=20
> transmitter. =20
>=20
> Experimenter's Days managed by AMSAT-NA have been held on UTC Wednesdays
> since the days of AMSAT-OSCARS 6 and 7 when Wednesday was " battery recha=
rge
> day." (Incidentally, this is also the reason that the continental U.S.
> 75 meter nets were originally scheduled for Tuesday evenings.)
>=20
> Future Experimenter's Days are scheduled for:
>=20
> 05 January 0411 UTC through 06 January 0340 UTC
> 26 January 0400 UTC through 27 January 0330 UTC
>=20
>=20

261. Re: ans001.03

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:34:53 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121153.L10044-0100000@cmu.chiangmai.ac.th>
Source record: 272405

On 6 Jan 1994 on1aeo@pa0okc.ampr.org. wrote:

> R:940110/1546Z @:N5VGC.#DFW.TX.USA.NOAM [NDALNK] #:87125 $:940105031232
> R:940110/1611Z @:W5IFP.#SAT.TX.USA.NOAM #:74883 $:940105031232
> R:940110/1554z 59719@K3WGF.#SAT.TX.USA.NOAM $:940105031232
> R:940106/0207z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9841 $:940105031232 Z:2724 HR
> .AMPR.ORG. [Z'meer] JNOS1.15 #:9841 $:940105031232 Z:2724 HR
>
> >From listmaint@amsat.org Thu Jan 06 02:08:02 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with SMTP
> id AA9841 ; Thu, 06 Jan 94 02:07:26 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> id AA20616 ; Wed, 05 Jan 94 04:44:06 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)
> id DAA04533 to ans-dist; Wed, 5 Jan 1994 03:17:04 GMT
> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> id TAA04529 to <ans@amsat.org>; Tue, 4 Jan 1994 19:17:00 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> id WAA24261; Tue, 4 Jan 1994 22:14:34 -0500
> >From: Russ Platt WJ9F <70774.641@CompuServe.COM>
> Message-ID: <940105031232_70774.641_CHG79-2@CompuServe.COM>
>
> HR AMSAT NEWS SERVICE BULLETIN 001.03 FROM AMSAT HQ
> SILVER SPRING,MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.03
>
> Experimenter's Day Returns to AO-16
>
> AO-16 Command Team Leader, Russ Platt, WJ9F, announces the resumption
> of Experimenter's Day on Pacsat. In the past Experimenter's Days on Pacsat
> the procedure was to change to the Pacsat Raised Cosine PSK transmitter
> on 437.050 Mhz and activate the S-Band transmitter on 2400.143 Mhz. With
> the decline of the carrier suppression on the "Straight" PSK transmitter
> (437.025 Mhz) the RC PSK transmitter has become the primary downlink for
> some time. In the upcoming schedule of Experimenter's Days the power output
> will be reduced on the RC PSK transmitter and the S-Band transmitter will
> be turned on. The power output from the S-Band transmitter is not variable
> so power management is controlled by varying the output of the RC PSK
> transmitter.
>
> Experimenter's Days managed by AMSAT-NA have been held on UTC Wednesdays
> since the days of AMSAT-OSCARS 6 and 7 when Wednesday was " battery recharge
> day." (Incidentally, this is also the reason that the continental U.S.

> 75 meter nets were originally scheduled for Tuesday evenings.)
>
> Future Experimenter's Days are scheduled for:
>
> 05 January 0411 UTC through 06 January 0340 UTC
> 26 January 0400 UTC through 27 January 0330 UTC
>
>

262. Re: ans001.04

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:35:21 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121121.N10044-0100000@cmu.chiangmai.ac.th>
Source record: 272415

On 6 Jan 1994 on1aeo@pa0okc.ampr.org. wrote:

> R:940109/0336Z @:F6CNB.#SETX.TX.USA.NA [SugarLand] #:83872 Z:77478
> R:940107/0943Z @:F5KEQ.FPDL.FRA.EU [Nantes] #:77484 Z:44087 FBB5.15-TCP/I=
P
> R:940106/2349Z @:F6KSU.FPDL.FRA.EU [Laval] Z:53000 $:940105031141
> R:940106/2324Z @:F6DEG.FNOR.FRA.EU [Alen=87on] #:241473 Z:61000 FBB5.15
> R:940106/2256Z @:F6RAE.FNOR.FRA.EU [Vernon] #:257044 Z:27207 FBB5.15
> R:940106/2245Z @:F6RAC.FRPA.FRA.EU #:250033 [Paris - FBB5.13]
> R:940106/2226Z @:F6PTT.FRPA.FRA.EU #:64801 [91-MASSY] FBB5.15b $:94010503=
1141
> R:940106/2203Z @:F5MSQ.FCEN.FRA.EU [MUIDES] #:52239 Z:41500 FBB5.15
> R:940106/2132Z @:F8REF.FCEN.FRA.EU [Tours] #:44372 Z:37100 FBB5.15
> R:940106/2123Z @:F6KBN.FCEN.FRA.EU [St EPAIN] #:7992 Z:37320 FBB5.15
> R:940106/2114Z @:F5GHV.FPOC.FRA.EU [Poitiers] #:251561 Z:86000 $:94010503=
1141
> R:940106/2039Z @:F1HAQ.FALI.FRA.EU [Brive] #:280874 Z:JN05SD $:9401050311=
41
> R:940106/2037Z @:F6KDC.FALI.FRA.EU [Clermont-Fd]#:197037 JN15NQ $:9401050=
31141
> R:940106/2002Z @:F6BIG.FRHA.FRA.EU [Annecy (74)] #:399580 Z:74940 FBB5.15
> R:940106/1958Z @:HB9IAP.SROM.CHE.EU [GENEVE] #:232865 Z:1213 FBB5.15-I.A.=
P.C.
> R:940106/1937z @HB9PD.CHE.EU [PRIG BOX Bern, JN36RW, TheBox 1.9b]
> R:940106/0900z @HB9EAS.CHE.EU [The Basel Area BBS]
> R:940106/0903z @DB0GE.#SAR.DEU.EU [BBS Saarbruecken, DieBox 1.9]
> R:940106/0828z @ON4UBO.#LG.BEL.EU [Battice(LG),JO20VP,OP : ON4UAA]
> R:940106/0831Z @:ON1AEO.#DST.BEL.EU [Schaffen] #:11538 Z:3290 FBB5.15
> R:940106/0738Z @:ON6AR.#AN.BEL.EU [Antwerpen <PWG>] #:56442 Z:B-2000 FBB5=
.15
> R:940106/0622Z @:ON4AWP.OVN.BEL.EU [Gent, JO11ub] #:21208 Z:B-9000 FBB5.1=
5
> R:940106/0604Z @:PI8MID.#ZLD.NLD.EU [Middelburg] Z:4336XD $:940105031141
> R:940106/0450Z @:PI8VNW.#ZH2.NLD.EU [Hoek v Holland] #:6068 Op:PE0MAR
> R:940106/0208z @:PA0OKC.AMPR.ORG. [Z'meer] JNOS1.15 #:9845 $:940105031141=
Z:2724 HR
>=20
> >From listmaint@amsat.org Thu Jan 06 02:08:49 1994
> Received: from duttnpc.tn.tudelft.nl by pa0okc.ampr.org. (JNOS1.15) with =
SMTP
> =09id AA9845 ; Thu, 06 Jan 94 02:08:16 UTC
> Received: from amsat.org by duttnpc.tn.tudelft.nl (JNOS1.10x1) with SMTP
> =09id AA20618 ; Wed, 05 Jan 94 04:58:02 UTC
> Received: from localhost by AMSAT.Org (8.6.4/amsat.1)

> =09id DAA04528 to ans-dist; Wed, 5 Jan 1994 03:16:50 GMT
> Received: from dub-img-2.compuserve.com by AMSAT.Org (8.6.4/amsat.1)
> =09id TAA04525 to <ans@amsat.org>; Tue, 4 Jan 1994 19:16:48 -0800
> Received: from localhost by dub-img-2.compuserve.com (8.6.4/5.930129sam)
> =09id WAA24248; Tue, 4 Jan 1994 22:14:21 -0500
> >From: Russ Platt WJ9F <70774.641@CompuServe.COM>
> Message-ID: <940105031141_70774.641_CHG79-1@CompuServe.COM>
>=20
> HR AMSAT NEWS SERVICE BULLETIN 001.04 FROM AMSAT HQ
> SILVER SPRING, MD January 1, 1994
> TO ALL RADIO AMATEURS BT
> BID: $ANS-001.04
>=20
> Recommended Operation Procedure to Reduce AO-16 Uplink Contention
>=20
> 1993 has brought many new satellites and many new satellite users. I fee=
l
> it would be good to dust off an old bulletin from 1991 to help refresh
> the "old-timers" procedures and to aquaint new users to the recommended
> uplink frequency usage.
> The AO-16 Command Team recommends that users of the AO-16 PBBS system
> use only uplink channel D (145.960 Mhz) for download and directory reques=
ts
> leaving channels A, B, and C (145.900, 145.920, and 145.940 Mhz) for file
> uploads and digi users.
> Stations uploading files should stay off of the download/directory/fill
> request channel D as their longer uplink packets will collide with the
> shorter request packets. Stations doing downloads and directories should
> stay off channels A, B, and C since their frequent but short requests wil=
l
> collide with longer uplink attempts seriously degrading uplink performanc=
e.
> Another benefit of using this procedure, while most of the uplink activit=
y
> to AO-16 will be on channel D (145.960) this frequency is high enough in =
the
> passband of AO-13 that QRMing our fellow operators will be kept to a minu=
mum
> when Pacsat crosses beneath AO-13's path.
>=20
> Recommended AO-16 operating practice in summary:
>=20
> Downlinks: 437.050 (also 2400.143 on experimenter's day.)
> Uplinks: 145.900 A uploads
> 145.920 B uploads
> 145.940 C uploads
> 145.960 D downloads, fills and directory requests
>=20
>=20
> WJ9F / AO-16 Command Team Leader=20

```
> =20
>=20
>=20
>=20
```

263. Re: ANS-008 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:35:41 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121141.P10044-0100000@cmu.chiangmai.ac.th>
Source record: 272420

On Sun, 9 Jan 1994, Dave Cowdin wrote:

> SB SAT @ AMSAT $ANS-008.01
> PoSAT-1 BBS TO OPEN
>
> HR AMSAT NEWS SERVICE BULLETIN 008.01 FROM AMSAT HQ
> SILVER SPRING, MD JANUARY 8, 1993
> TO ALL RADIO AMATEURS BT
> BID: $ANS-008.01
>
> PoSAT-1 Opens For Radio Amateur Use
>
> As many of you may already know, PoSAT-1 was built at University of Surrey
> and is owned by a Portuguese Industrial Consortium. It carries a commer-
> cial and an Amateur Radio payload. The Amateur Service hasn't yet started
> operation because of some doubts about the use of PoSAT-1 were brought up
> because of the the possiblity of misuse of the Amateur Radio spectrum.
>
> AMSAT-PO (the Portuguese AMSAT "branch") and others were very worried about
> this situation, and after a few setbacks and many meetings, a protocol was
> finally established between the PoSAT Industrial Consortium and AMSAT-PO on
> 6-DEC-93. The main concern of AMSAT-PO was always to protect the Amateur
> bands and the Amateur code and practice.
>
> Jose Carlos (CT1ERC) has provided the main points of that agreement which
> are as follows:
>
> * RAM memory allocated to the Amateur store-and-forward BBS: at least 6 MB
> out of a total of 16 MB;
>
> * The operating schedule (between the commercial and Amateur service) will
> be valid for two years and may be re-negotiated every two years;
>
> * The Amateur ground stations are allowed to download all the files related
> to the technical and scientific experiments onboard, but by imposition of
> the Consortium, the IMAGES TAKEN BY THE ONBOARD CCD CAMERAS WILL NOT BE
> MADE AVAILABLE TO THE AMATEUR RADIO SERVICE!!!
>
> In a meeting held recently between AMSAT-PO officials and the PoSAT
> Consortium the schedule approved is as follows:
>
> EVERY minute PoSAT will be 5 seconds in the commercial frequencies and
> the remaining 55 seconds in the amateur frequencies. The Consortium
> feels that they need at lest 5 seconds to download the images. The

> telemetry will be downloaded in the amateur frequencies as well. This
> schedule will be valid starting on 07-JAN-94.
>
> Since the amateurs aren't allowed to download the image files from the
> onboard cameras, there are the two experiments that will, however, be quite
> interesting. The are the following:
>
> 1) The onboard GPS receiver: if everything goes as expected, the days of
> difficult tracking are over. Just wait the AOS and the satellite will
> tell you were it is and where to point your antennas, if you know your
> QTH position.
>
> 2) The possibility of operation at 38.4 Kbps provided through the DSP
> system, which is will allow the amateurs to develope the necessary RF
> and digital techniques to go beyond 9600 baud. Imagine receiving
> about 100 Kbytes file in just 5 seconds!
>
> PoSAT-1 will benefit mostly the amateurs that have 9600 baud operational
> capability and since there are only two of 9600 baud capable stations at
> the present time in Portugal operating regularly using these birds, your
> suggestions and comments would be most appreciated and might help AMSAT-PO
> in their contacts and negotiations with the PoSAT Consortium through
> AMSAT-PO.
>
> The following are the PoSAT-1 radio amateur frequencies:
>
> PoSat-1 Transponder Frequencies
>
> UPLINK 145.975 MHz 145.925 MHz (Secondary)
> DONWLINK 435.075 MHz 435.050 MHz (Secondary)
>
> BBSCALL: posat-11 posat-12
>
> [The AMSAT News Service (ANS) would like to thank Jose Carlos (CT1ERC) for
> this bulletin item. CT1ERC can receive your inquiries and comments on the
> BBS of KO-23 or at his INTERNET mailbox address of: J_CARDOSO%utad.pt@
> nunes.uminho.pt]
>
> /EX
> SB SAT @ AMSAT $ANS-008.02
> MIR GETS A NEW CREW
>
> HR AMSAT NEWS SERVICE BULLETIN 008.02 FROM AMSAT HQ
> SILVER SPRING, MD JANUARY 8, 1993
> TO ALL RADIO AMATEURS BT
> BID: $ANS-008.02
>
> New Cosmonauts To Begin Stay on MIR
>
> Today, 08-JAN-94, a Soyuz TM-18 spacecraft was launched from Baikonur at

> 10:08 UTC with three cosmonauts aboard. The new cosmonauts are Victor
> Afanassiev (U9MIR), Yuri Usachov (R3MIR), and Valery Poliakov (U3MIR).
> The TM-18 spacecraft is scheduled to dock with the MIR space station on
> 10-JAN-94. The cosmonauts that are currently aboard MIR,Vassili Tsybliev
> and Alexander Serebrov (R0MIR), will return to earth on 14-JAN-94.
>
> What is interesting to note about U3MIR is that he will attempt to break
> Musa Manarov record for remaining in space. U3MIR is a medical doctor and
> will remain aboard MIR until April '95.
>
> The new MIR QSL Manager is Serge Samburov (RV3DR). He has held that
> position since January '93. To receive a QSL confirming your MIR contact,
> send your QSL cards to his postal address of: P.O.BOX 73, Kaliningrad-10
> City, Moscow Area, 141070, RUSSIA. Also, you can send your inquiries to
> the following packet radio address: RV3DR#R#MIR or RV3DR@RK3KP.#MSK.RUS.EU.
>
>
> [The AMSAT News Service (ANS) would like to thank RV3DR and LW2DTZ for this
> for the information which went into this bulletin item.]
>
> /EX
> SB SAT @ AMSAT $ANS-008.03
> STS-60 SAREX MISSION INFO
>
> HR AMSAT NEWS SERVICE BULLETIN 008.03 FROM AMSAT HQ
> SILVER SPRING, MD JANUARY 8, 1993
> TO ALL RADIO AMATEURS BT
> BID: $ANS-008.03
>
> Next SAREX Mission: STS-60
>
> The STS-60 flight of the Space Shuttle Discovery represents the next
> Shuttle Amateur Radio Experiment (SAREX) mission. STS-60 is
> currently scheduled for launch on February 3, 1994 at 12:10 UTC. The
> primary payloads on-board STS-60 are the Wake Shield Facility and the
> second flight of the Spacehab, a pressurized module installed in the
> forward section of the Orbiter. The Spacehab science objectives are
> primarily micro-gravity oriented with emphasis on materials and life
> science.
>
> The flight of STS-60 represents an historic first---the first joint
> U.S.-Russian Space Shuttle flight. This will be the first of several
> joint missions planned in preparation for the development of the
> international Space Station. Cosmonaut Sergei Krikalev, U5MIR, was
> chosen to be the first Russian to fly on the U.S. Space Shuttle.
> During the 8 day flight, Cosmonaut Krikalev will support the science
> operations on the Space Shuttle as Mission Specialist 4.
>
> The SAREX operations on this flight include voice and packet.
> Preliminary discussions between the astronauts and the SAREX working

> group indicate that the Shuttle crew will be extremely busy with the
> numerous payloads on this flight. This information is being provided
> so the amateur community is aware that voice operations might be rare
> on this flight. Packet radio operations are expected when the crew
> is not engaged in voice operations. Please remember that this is a
> preflight prediction. The astronauts and the SAREX working group
> cannot guarantee this prediction. The following information sheet
> gives more details on SAREX operations for STS-60.
>
>
> STS-60 Shuttle Amateur Radio Experiment (SAREX)
> Information Sheet
>
> Mission:STS-60 Space Shuttle Discovery
> Wake Shield Facility & Spacehab-2 Mission
>
> Launch: February 3, 1994, 12:10 UTC
>
> Orbit: 57 degree inclination
>
> Mission Length:8 days (Nominal)
>
> Amateur Radio Operators: Charlie Bolden (License Pending), Ron Sega
> (License Pending), Sergei Krikalev, U5MIR
>
> Modes:FM Voice
> Prime callsign: To be provided once Commander Bolden's callsign is known
>
> Packet Radio: Callsign W5RRR-1
>
> Frequencies: All operations in split mode. Do not transmit on
> the downlink frequency.
>
>
> Voice Freqs: Downlink: 145.55 MHz (Worldwide)
> Uplinks: 144.91, 144.93, 144.95, 144.97,
> 144.99 MHz (Except Europe)
> 144.70, 144.75, 144.80 MHz (Europe only)
>
> Note: The crew will not favor any specific uplink frequency, so your ability to
> work the crew will be the "luck of the draw."
>
> Packet Freqs: Downlink: 145.55 MHz
> Uplink: 144.49 MHz
>
>
> Info: Goddard Amateur Radio Club, WA3NAN, Greenbelt Maryland,
> SAREX Bulletins and Shuttle Retransmissions
> 3860 KHz, 7185 KHz, 14,295 KHz, 21,395 KHz, 28,650 KHz
> and 147.45 MHz (FM)

>
> Johnson Space Center ARC, W5RRR, Houston, Texas
> SAREX Bulletins 7225 KHz, 14,280 KHz, 21,395 KHz, 28,650 KHz, (SSB)
> and 146.64 MHz (FM)
>
> ARRL Amateur Radio Station, W1AW, Newington, CT
> SAREX News Bulletins: 3990, 7290, 14,290, 18,160, 21,390,
> and 28,590 KHz and 147.555 MHz (FM)
>
> Also, bulletins available on internet, via AMSAT ANS, Compuserve,
> and your local PBSS.
>
> School Group Participation: 5 school groups will participate in SAREX with
> pre-scheduled direct and telebridge contacts.
> These include 4 in the U.S., and one in Russia.
>
> Prelaunch Keplerian Elements: The following Keplerian Elements are provided by
> Gil Carman (WA5NOM) at the Johnson Space Center
> ARC:
>
> Satellite: STS-58
> Catalog number: 00058
> Epoch time: 94024.67747791 = (24-JAN-94 16:15:34.09 UTC)
> Element set: 005
> Inclination: 39.0114 deg
> RA of node: 124.6663 deg Space Shuttle Flight STS-58
> Eccentricity: .0007676 Prelaunch Element set JSC-005
> Arg of perigee: 272.4217 deg Launch: 24-JAN-94 14:53 UTC
> Mean anomaly: 87.5676 deg
> Mean motion: 15.96123499 rev/day Gil Carman, WA5NOM
> Decay rate: 1.19475e-03 rev/day*2 NASA Johnson Space Center
> Epoch rev: 2
> Checksum: 329
>
> [The AMSAT News Service (ANS) would like to thank Frank Bauer (KA3HDO) for this
> bulletin item.]
>
> /EX
> SB SAT @ AMSAT $ANS-008.04
> AO-13 TRANSPONDER SCHEDULES
>
> HR AMSAT NEWS SERVICE BULLETIN 008.04 FROM AMSAT HQ
> SILVER SPRING, MD JANUARY 8, 1993
> TO ALL RADIO AMATEURS BT
> BID: $ANS-008.04
>
> G3RUH Provides AO-13 "Provisional" Transponder Operating Schedules For '94
>
> The AO-13 Ground Command Station of G3RUH has provided the "best guess"
> transponder schedules for the first half of '94. Please take the following

> schedules and paste them in a prominent place in your station.
>
> AO-13 Provisional Mode Schedules 1994
> ------------------------------------
> L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Jan 31-Apr 04
> Mode-B : MA 0 to MA 90 |
> Mode-BS : MA 90 to MA 120 |
> Mode-S : MA 120 to MA 145 |<- S transponder; B trsp. is OFF
> Mode-S : MA 145 to MA 150 |<- S beacon only
> Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
> Mode-B : MA 180 to MA 256 |
> Omnis : MA 230 to MA 30 | Move to attitude 240/0, Apr 04
>
> L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Apr 04-Jul 11
> Mode-B : MA 0 to MA 160 | OFF
> Mode-B : MA 160 to MA 220 |
> Mode-S : MA 220 to MA 230 |<- S transponder; B trsp. is OFF
> Mode-BS : MA 230 to MA 250 | Blon/Blat 240/0
> Mode-B : MA 250 to MA 256 |
> Omnis : MA 250 to MA 160 | Move to attitude 180/0, Jul 11
>
> G3RUH also has provided a table to indicate what the Bahn longititude and
> latitude for AO-13 will be in the upcoming year. Again, this information
> should be considered as the "best guess" and placed in a prominent place
> in your ham shack.
>
> AO-13 Provisional Attitude Schedule 1994-5
> ==
>
> Date [Mon] Blon Blat SA to SA Weeks Notes
> --
> 1994 Jan 31 180 0 -36 35 9
> 1994 Apr 04 240 0 -2 29 14
> 1994 Jul 11 180 0 36 -33 9
> 1994 Sep 12 230 0 0 -26 14 < Up to 132 minute eclipses
> 1994 Dec 19 180 0 -34 33 9 MA 96-107 Oct 22 - Nov 07
> 1995 Feb 20 230 0 12 21 14
> 1995 May 29 180 0 30 -31 8
> 1995 Jul 24 230 0 -10 -22 15 < Up to 132 minute eclipses
> 1995 Nov 06 180 0 -30 34 8 MA 96-103 Sep 05 - Sep 21
> 1996 Jan 01 230 0 9 -- --
> --
> Note: SA stands for "Sun Angle"
>
> Unfortunately, because AO-13's perigee height has decreased from 1500 KM to
> 420 KM, G3RUH is unsure about whether AO-13 will still be in orbit by the
> end of '95 and into early '96. But if AO-13 has not re-entered into the
> earth's atmosphere, the above Bahn longitiude and latitude values will be
> the planned values.
>

> [The AMSAT News Service (ANS) would like to thank G3RUH for this bulletin
> item. G3RUH can be reached at G3RUH @GB7DDX.#22.GBR.EU]
>
> /EX
> SB SAT @ AMSAT $ANS-008.05
> WEEKLY OSCAR STATUS REPORTS
>
> HR AMSAT NEWS SERVICE BULLETIN 008.05 FROM AMSAT HQ
> SILVER SPRING, MD JANUARY 8, 1993
> TO ALL RADIO AMATEURS BT
> BID: $ANS-008.05
>
> Weekly OSCAR Status Reports: 08-JAN-94
>
> AO-13: Current Transponder Operating Schedule:
> L QST *** AO-13 TRANSPONDER SCHEDULE *** 1993 Dec 27-Jan 31
> Mode-B : MA 0 to MA 180 | OFF
> Mode-B : MA 180 to MA 220 |
> Mode-S : MA 220 to MA 230 |<- S transponder; B trsp. is OFF
> Mode-BS : MA 230 to MA 250 | Blon/Blat 240/-5
> Mode-B : MA 250 to MA 256 | OFF
> Omnis : MA 250 to MA 150 | Move to attitude 180/0, 31-Jan-94
> Poor Sun angle and battery testing need maximum OFF time.
> [G3RUH/DB2OS/VK5AGR]
>
> FO-20: The following is the current FO-20 operating schedule:
> From January '94 thru February '94, the analog mode and the
> digital mode will be on alternately for a week at a time.
> ANALOG MODE:
> 12-JAN-94 7:30 -TO- 19-JAN-94 7:50 UTC
> 26-JAN-94 8:20 -TO- 02-FEB-94 6:50 UTC
> 09-FEB-94 7:15 -TO- 16-FEB-94 7:40 UTC
> DIGITAL MODE: Unless otherwise noted above. [JJ1WTK]
>
> AO-16: Operating normally. [WH6I]
>
> LO-19: Operating normally. [WH6I]
>
> KO-23: Up and running. Busy as usual. [WH6I]
>
> The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly
> OSCAR status reports. If you have a favorite OSCAR which you work on a
> regular basis and would like to contribute to this bulletin, please send
> your observations to WD0HHU at his CompuServe address of 70524,2272, on
> INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO
> area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current
> set of orbital elements are not generating the correct AOS/LOS times at
> your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you
> provide will be of value to all OSCAR enthusiasts.
>

> /EX
>

264. Re: Sat freqs

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:35:52 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121152.Q10044-0100000@cmu.chiangmai.ac.th>
Source record: 272403

On Mon, 10 Jan 1994, R.BENNETT wrote:

>
> It would be useful, if on occcassion, someone would post a list of all the
> amateur sattelites up and their frequencies.
>
> This would be extremely useful to the new satellite enthusiasts, and for
> others who may wish to try out a new bird from time to time.
>
> It would be a good item to post on packet as well as a supplement to the
> Monthly satellite reports form John M. in New Jersey.
>
> Bob Bennett
> kf8ph
>

265. Re: * SpaceNews 10-Jan-94 *

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:36:02 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121102.R10044-0100000@cmu.chiangmai.ac.th>
Source record: 272342

On Mon, 10 Jan 1994, John Magliacane wrote:

> SB NEWS @ AMSAT $SPC0110
> * SpaceNews 10-Jan-94 *
>
> BID: $SPC0110
>
>
> =========
> SpaceNews
> =========
>
>
> MONDAY JANUARY 10, 1994
>
>
> SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is
> published every week and is made available for unlimited distribution.
>
>
> * AO-16 NEWS *
> ==============
> Recommended Operation Procedure to Reduce AO-16 Uplink Contention:
>
> 1993 has brought many new satellites and many new satellite users. It
> would be good to dust off an old AMSAT bulletin from 1991 to help refresh
> the "old-timers" procedures and to aquaint new users to the recommended
> uplink frequency usage.
>
> The AO-16 Command Team recommends that users of the AO-16 PBBS system
> use only uplink channel D (145.960 MHz) for download and directory requests
> leaving channels A, B, and C (145.900, 145.920, and 145.940 MHz) for file
> uploads and digi users.
>
> Stations uploading files should stay off of the download/directory/fill
> request channel D as their longer uplink packets will collide with the
> shorter request packets. Stations doing downloads and directories should
> stay off channels A, B, and C since their frequent but short requests will
> collide with longer uplink attempts seriously degrading uplink performance.
> Another benefit of using this procedure, while most of the uplink activity
> to AO-16 will be on channel D (145.960) this frequency is high enough in the
> passband of AO-13 that QRMing our fellow operators will be kept to a minumum
> when Pacsat crosses beneath AO-13's path.

>
> Recommended AO-16 operating practice in summary:
>
> Downlinks: 437.050 (also 2400.143 on experimenter's day.)
> Uplinks: 145.900 A uploads
> 145.920 B uploads
> 145.940 C uploads
> 145.960 D downloads, fills and directory requests
>
> [Info via WJ9F, AO-16 Command Team Leader]
>
>
> * NASA TV MOVED *
> ==========
> NASA Select Television has moved to Spacenet 2, transponder 5, C band,
> 69 degrees west longitude, 3880.0 MHz, horizontal polarization, with audio
> on a 6.8 MHz subcarrier. NASA Select offers daily educational and
> information programming, carries shuttle launches and mission coverage,
> and occasionally airs live coverage of Shuttle Amateur Radio Experiment
> activity. The move occurred on 08-Jan-93 at 1500 UTC.
>
> [Info via ARRL]
>
>
> * NEW MIR CREW *
> ==========
> By Serge Samburov, RV3DR
>
> Launch: 08.01.94 aboard SOYUZ-TM18 (crew #15)
> Docked at the port of "MIR" 10.01.94
> Undocked and launched to Earth cosmonauts V. V. Ziblyiv
> and A. A. Serebrov (crew #14) 14.01.94 aboard Soyuz TM17
>
> Crew #15:
> Viktor Afanasiev (commander) HAM #30, call U9MIR
> Yuri Usachev (flight engineer) HAM #31, call R3MIR
> Valerij Polyakov (doctor) HAM #32, call U3MIR
> Call packet: R0MIR
> Call PMS "MIR": R0MIR-1
> Call voice U3MIR, U9MIR, R3MIR, R0MIR op. Viktor, Valerij, Yuri
>
> ==========
> # CALL NAME # CREW FLIGHT TIME
> ==========
> 30 U9MIR VIKTOR AFANASIEV 15 08.01.94-04.07.94
> 31 R3MIR YURI USACHEV 15 08.01.94-04.07.94
> 32 U3MIR VALERIJ POLYAKOV 15/16/17 08.01.94-april 95
>
> Starting 01.01.93 the new QSL Manager for cosmonauts is RV3DR.
> I also confirm all QSOs with station MIR from 1988.

>
> RV3DR-Serge Samburov, Space "MIR" QSL Manager
> Chief of Cosmonaut Amateur Radio Department NPO "Energia"
>
> All QSLs should be sent to:
> P.O.BOX 73, Kaliningrad-10 city, Moscow Area, 141070, RUSSIA.
>
> Send me message via PKT: RV3DR#R#MIR or RV3DR@RK3KP.#MSK.RUS.EU
>
> Happy QSQ BEST 73 ***RV3DR***
>
> [Info via N2NRD]
>
>
> * GST UPDATE FOR 1994 *
> ======================
> For those tracking satellites with BASIC programs that require sideral
> time constants, here is the Greenwich Sidereal Time (GST) for January 0,
> 1994:
> G2 = 0.2761908
>
> You will need to replace this value in your program for element sets
> having Epoch years of 1994 and later. Don't forget that you can just use
> a date of 13/01/93, 13/02/93, ... until you get 1994 element sets.
>
> [Info via Dick, N3FKV]
>
>
> * FO-20 OPERATION SCHEDULE *
> ============================
> The following is the current operating schedule for FO-20:
>
> ANALOG MODE:
>
> 12-Jan-94 7:30 -to- 19-Jan-94 7:50 UTC
> 26-Jan-94 8:20 -to- 02-Feb-94 6:50 UTC
> 09-Feb-94 7:15 -to- 16-Feb-94 7:40 UTC
>
> The digital (Mode JD) transponder is available at all other times.
>
> [Info via Kazu Sakamoto, JJ1WTK]
>
>
> * THANKS! *
> ===========
> Thanks to all those who sent messages of appreciation regarding SpaceNews,
> especially:
>
> FB1RCI XE1KK VU2LBW VK3ZMF XX9AS Frank L. Weissferdt
>

>
> * FEEDBACK/INPUT WELCOMED *
> ==========================
> Mail to SpaceNews should be directed to the editor (John, KD2BD) via any
> of the following paths:
>
> FAX : 1-908-747-7107
> PACKET : KD2BD @ N2KZH.NJ.USA.NA
> INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org
>
> MAIL : John A. Magliacane, KD2BD
> Department of Engineering and Technology
> Advanced Technology Center
> Brookdale Community College
> Lincroft, New Jersey 07738
> U.S.A.
>
>
> <<=- SpaceNews: The first amateur newsletter read in space! -=>>
>
> /EX
>
> --
> John A. Magliacane, KD2BD * /\/\ * Voice : 1-908-224-2948
> Advanced Technology Center |/\/\/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
> Brookdale Community College |\/\/\/| Internet: kd2bd@ka2qhd.ocpt.ccur.com
> Lincroft, NJ 07738 * \/\/ * Morse : -.- -.. ..--- -... -..
>

266. Re: Multiple Forwards of Bulletins

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:36:13 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121113.S10044-0100000@cmu.chiangmai.ac.th>
Source record: 272404

On 10 Jan 1994, Ralph G. Sbragia wrote:

> First let me apologize to those of you who get both AMSAT-ANS and Amsat BBS
> for the duplication.
>
>
> Now then (flame on),
>
> As many of you may be aware, some of us out here pay REAL money each and
> evey time we receive something through our InterNet Gateway. This means
> that the repeated forwarding of AMSAT-ANS
> Bulletins is not only a waste of CPU time world wide, but also a waste of
> OUR money.
>
> I, and I'm sure many others, will appreciate "pi8daz@pa0okc.ampr.org" and
> "on1aeo@pa0okc.ampr.org"
> (and any others out there) turning off the auto-forward or other system
> that is generating these duplicates and dumping them back to AMSAT-ANS.
>
> I look forward to receiving only one copy of all future bulletins as I know
> the owners of these two adresses will fix the problem imediately.
>
> (flame off)
> Thank you all for your assistance in this matter.
>
> Ralph G. Sbragia, KD6FYT
> InterNet>KD6FYT@AMSAT.ORG
> CompuServe>76260,772
>

267. Re: No longer at computone.com - please redirect mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 04:36:27 UTC
From: scphi003@cmu.CHiangmai.ac.TH
Message-ID: <Pine.3.87.9401121127.T10044-0100000@cmu.chiangmai.ac.th>
Source record: 272402

On Mon, 10 Jan 1994, larry kollar wrote:

>
> Due to circumstances beyond my control (i.e. I was laid off), I will no
> longer be able to answer mail sent to this account. Please re-direct
> my AMSAT mail to:
>
> lkollar@nyx.cs.du.edu
>
> Thanks to the many people who helped out with my recent problem with
> the newsletter (not getting it), especially to John Hansen who is
> sending me a replacement copy.
>
>
> See y'all at nyx!
> Larry Kollar, Senior Technical Writer | email: larryk@computone.com
> Computone Inc, Roswell, GA | "You help your country by investing
> Disclaimer: I just write the manuals! | in the future, not by waving flags."
> Check out our World-Wide Web server, http://www.computone.com/
>
>

268. Re: When will my license expire?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 05:08:45 UTC
From: jtriolo@delphi.com
Message-ID: <9401120004591.jtriolo.DLITE@delphi.com>
Source record: 272395

>
>You are required to be in posession of your license or a copy to operate
>a radio. You should get a replacement from the FCC even if you don't
expire
>soon. I think you need FCC form 610 to get a replacement, but I'm not
sure.

Yes, you will need to file a form 610 for a replacement license, but it's not necessary to go through a VEC to submit it. You can mail it to Gettysburg yourself. I think they might automatically give you a new expiration date (that is, your license would be good for 10 years from the issue date of the replacement ticket).

73 de Jason, KD4ACG

269. Re: Log Periodics and DXing

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 05:40:56 UTC
From: dts@world.std.com
Message-ID: <CJI549.CDL@world.std.com>
Source record: 272400

In article <CJH8y4.807@ncifcrf.gov> mack@ncifcrf.gov (Joe Mack) writes:
>In article <1994Jan11.142536.24875@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>In article <1994Jan10.172952.17636@worldbank.org> dearnshaw@worldbank.org (Darrell Earnshaw) writes:
>>>I'm curious. Does anyone have any experience with HF (20 meters and above) Log
>>>Periodic antennas? I'd be particularly interested in learning how they compare
>>>with the TH-7DXX/KT34XA class of antenna.
>>>
>>>(I'm moving house, and considering a LP to replace my venerable TH-7. I've been
>>>kicking around the idea of a L.P, to get WARC band coverage. However, if the
>>>performance is such that my TH-7, or a TH-11, will outperform them for DXing
>>>and contesting, then I may reconsider.)
>>>
>>>Opinions/Comments ?
>>
>>Reconsider. I don't know of any off the shelf LPs that will match your
>>current antennas. HyGain made some special ones for the military that
>>would be a match for your current antennas, but they were huge. In general,
>>an LP must be *much* larger than an optimized yagi for a given frequency
>>to have equivalent performance.
>>
>>Gary
>>--
>>Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
>>Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
>>534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
>>Lawrenceville, GA 30244 | |
>
>If you want an idea of what an L{ will look like on top of your house, look
>at the CQ calendar for this year - on e of the pictures ther will
>give you a good idea. Joe NA3T mack@ncifcrf.gov
>

I think you are referring to the picture of WA1EKV, who lives a short distance from here. His LP with it's 60 foot boom looks positively SMALL, compared to the 4 element, full size 80 meter beam he used to have up. Both are pretty impressive sights!

Dan N1JEB
--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

270. 1274 clock chip

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 05:43:00 UTC
From: tom.perkins@arbbs.simivalley.ca.us
Message-ID: <9401120450122855@arbbs.simivalley.ca.us>
Source record: 272424

>Does anyone out there know what the clock chip is for an
>MFJ 1274 TNC? This is a device that can be user installed
>so that the real time clock does not have to be set every
>time the unit is powered up. MFJ has one available for
>about 30 bucks...but if its a $1.98 item from Digi-Key I'll
>buy it from them. Coming from MFJ I really don't think it
>can anything very special...Thanks

>Paul Anderson WB0ZRD at AT&T Bell Labs in Denver.

Paul - I came into this discussion late, so if you found the $1.98 (or
equivalent) part from somewhere else, could you let me know how much and
where?

I will be putting my 1274 on line for HF packet forwarding in a few days
and didn't know about the clock chip. Guess I don't have one now.

Thanks!

* OLX 2.1 TD * tom.perkins@arbbs.simivalley.ca.us (Tom Perkins KD6BXM)

271. RACES Bulletin #308

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 06:55:01 UTC
From: enge@almaden.ibm.COM
Message-ID: <199401120655.WAA08032@ucsd.edu>
Source record: 272401

```
Bid : $RACESBUL.308

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES (W6SIG@WA6NWE.CA)
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832 916-262-1600
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.308 RELEASE DATE: January 10, 1993
SUBJECT: TNG - Training for RACES people - Part 1/3
What kind of training could or should be given RACES
operators by disaster response (OES, CD, etc.) organizations? The
following are some worthwhile meeting and training topics
submitted by volunteers and paid staff in California, Nevada,
Colorado and Utah. Every effort to provide handouts should be
made. A three-ring binder format is successful.
These are not shown in any particular order of priority nor
does it reflect ALL the topics that could be covered. These are
simply the most common topics that should be covered for all
Amateur Radio operators assigned to a local government's RACES
unit.
1. Write or update the RACES Plan.
2. Agency policies, procedures, practices and philosophies.
3. Message form and message center (handling) procedures. Keep it
simple!
4. Names and titles of key local government leaders, department
heads, and division chiefs.
5. Incident Command System (ICS) and ICS communications.
6. Mission of the organization.
7. Inter-agency relationships.
8. Inter-government relationships.
(To be continued in the next Bulletin)
EOM
Sent via W6WWW@KD6XZ.#NOCAL.USA.NA

-----------------
RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races
and can be retrieved using FTP.
```

272. Re: DEP May Impose Fees On YOU!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 07:59:24 UTC
From: dbraun@ilx118.intel.com
Message-ID: <2h0aks$281v@ilx018.intel.com>
Source record: 272407

In article <2gih9o$6rl@reznor.larc.nasa.gov>, kludge@grissom.larc.nasa.gov (Scott Dorsey) writes:
|>
|> Yes, but everything with an oscillator in it is RF transmitting equipment.
|> If you don't believe me, put a radio next to your terminal. It's radiating
|> plenty. Inadvertently perhaps, but still enough to tax.

If you look at the actual power density numbers in proposal that was
posted, and do a bit of arithmetic, you will find that you need
a hefty power output (100's of watts) within 20 or 30 feet to exceed
the limits. If you are running a kW twenty feet from your neighbor's
bedroom, they have a right to get upset.

--

Doug Braun Intel Israel, Ltd. M/S: IDC-42 (new mailstop!)
Tel: 011-972-4-655069 dbraun@inside.intel.com

273. Re: Log Periodics and DXing

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 09:10:23 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CJIEtC.7qu@hpqmoea.sqf.hp.com>
Source record: 272419

The log-periodic is a specialist antenna for wideband, continuous frequency coverage. Their design is related to bandpass filter design, but in simplified terms, a passband is chosen, and then the number of elements per octave is chosen. The gain has ripples across the passband, rather as a Chebyshev filter has. Choosing the number of elements per octave sets the amplitude of the ripple. The return loss (another way of expressing impedance match, like VSWR) is a series of deep dips, having more elements per octave spaces these dips closer, and so the return loss is better beween the dips... in other words, the VSWR varies cyclically across the antennas bandwidth, and the number of elements/octave sets the peak VSWR.

Log periodics can be made with high gain, if the number of elements/octave is made large, but for a 14-30 MHz antenna, this would be huge... you would be wasting elements and their associated boomlength to cover frequencies between the amateur bands and the space between bands is far, far wider than the bands.

The log periodic has had its gain/size sacrificed to give continuous coverage.

I find it interesting that this is fast becoming a fashionable antenna. They are certainly big and very impressive, but for the same gain as amateur bands only beams, far more boomlength and far more elements are necessary. People with log periodics seem to think them wonderful, but measurement and comparison of full size HF antennae is a major undertaking, and the subjective assessment of antennae is impossible due to the far greater variability of band conditions.

I hope this helps a little

Cheers
David GM4ZNX

(For adding WARC bands to high gain HF antennae, the multi-element quad seems a good starting point, loops for added bands have been nested inside existing triband quads by several people, and the results have sounded encouraging.)

274. Re: Portable 2m Antenna for Mountaineering???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 11:25:46 UTC
From: walker_d@ix.wcc.govt.nz
Message-ID: <2h0mnq$mge@golem.wcc.govt.nz>
Source record: 272421
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <2gv7jp$3e0@netfs.dnd.ca>, mercer@dgs.dnd.ca (David Mercer) writes:
>I am an avid climber/backpacker etc and want to be able to use my HT in
>the backcountry. I require a design for an antenna (with better gain
>than my rubber duck) that is light, easily packable, and not too bulky,
>which will allow me to work repeaters in the 2m band. In case it
>matters, most (but not all) of the use will be from mountain tops.
>
>Obviously, a 1/2 wave diapole is a candidate but I was wondering if
>there are any others?
>
>How about a boom that can be disassembeled? A flexable J pole? I would
>appreciate any and all suggestions.
>
>Thanks
>DAve
>|--

I've been using a J-pole for years now.. it's made of 1/4 inch Al, and
breaks down into 3 x 1/4 wavelength sections. When I go tramping (hiking)
into areas where rptr coverage is marginal, I just strap the thing to the
side of my pack (slip it inside my compression straps). Takes less than
a minute to take it off the side of the pack and assemble it, and it
weighs next to nothing. The antenna has survived fairly rough treatment,
and is still going strong. I've decided that the extra hassles involved
in carrying a beam (ie extra weight and bulk) are not justified; the
J-pole is also easily repairable should any damage occur.
What I am now looking for is a rugged dual band antenna design (no radials)
that I can break down and throw onto the pack. Any suggestions??? Some of the
hills around here reflect UHF signals into the valleys much better thhan 2m
ones, though generally, attenuation in the bush on 70cm seems to be a lot
greater than at 2m.

cheers,
Dave, ZL2BHE.

275. Re: DXCC wait time

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 12:44:50 UTC
From: michaela@freenet2.scri.fsu.edu
Message-ID: <2h0rc2$1ko@mailer.fsu.edu>
Source record: 272422

My recent experience with the DXCC desk has been similar, i.e., excellent! -- They've been turning a few-card-endorsement around in super fast time..so, in November I sent in a new band application involving 114 cards. Including the day of the mailing and the day of receipt, they received, processed and returned the 114 cards in 10 days flat! [The award, per se, arrived about 3 weeks later.]

My hat is off to the DXCC Desk...what a change, whew!

Michael Christie, K7RLS
Crawfordville, Florida

276. Re: I need a terminal program for 2 TNCs at once

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 13:56:31 UTC
From: gregg@plains.NoDak.edu
Message-ID: <CJIs27.1EAr@ns1.nodak.edu>
Source record: 272423
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

Dave, I have had good luck with XPCOM. It is written by a guy out west, KB7XP, I think. You can hook up two tncs to two different comm ports and it will put the text from each one in a separate window. It wants to see either a PK232 or MFJ1278, but I have used kantronics tncs with it too. If you have two pk232s or aea tnc's it will use them in host mode. It is shareware, try and buy. One of our local guys sent a letter to the author with, I think, a bug report, and got a very nice note back, so the author is very responsive. What I'd like to find is a packet program that uses host mode for the MFJ tnc's. I wish I could tell you where to find a copy of xpcom, but if no one else can tell you, I'm pretty sure I have one around here somewhere, all zipped up and ready to go.
Joe, KN0A
DAVE CASE - KA1NCN (CASEDA@ECSUC.CTSTATEU.EDU) wrote:

: I am looking for a TERMINAL (not a logging) program that can handle
: two TNCs at once (one through each of two COM ports).
: Preferable FTP-able, but I can send you a disk if you have it.
: 73
: Dave/KA1NCN

: End of returned message

277. Re: Portable 2m Antenna for Mountaineering???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 14:24:50 UTC
From: Nguyent@snowmass.ksc.nasa.gov
Message-ID: <1994Jan12.092451.1134@titan.ksc.nasa.gov>
Source record: 272336
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

David,

Try a rolled up J-pole. It's made of 300 Ohm Twin lead and tapped with a
50 Ohm coax with BNC connector on opposite end. It provides about 2.8dB
gain. You can buy the ant from MFJ for about $12 or build it yourself.
The dimensions are below:

```
-- for 146MHz center freq
|
|
|
|
this side |
56" |
| | <---------------------------------- trim here for best SWR.
| | 14" on this side
| |
coax====> - - 1-3/4" tap from bottom
| |
---
```

I've experimented with lots of these with good results (built about 30 or so
for myself, friends, and local HAM classes).

Good luck and 73,
Tom
AD4NA

278. Re: Fm Broadcast (Legal Part 15 power levels)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 15:39:11 UTC
From: ornitz@kodak.rdcs.kodak.com
Message-ID: <1994Jan12.153911.9434@kodak.rdcs.kodak.com>
Source record: 272427

In article <2gv1l8$4jrn@ep130.wg2.waii.com> mjg@ep130.wg2.waii.com
(Michael Gentle) writes:
>Al you are correct, I did not mention low power. IF you use less then 100mw and
>a antenna for less then 5' in length then I beleive that it is legal. I thought
>that a higher power was implied though.

You would think that amateur radio operators would know the rules better than
this. Part 15 of the FCC R&R's governs unlicensed transmitters.

Fellow hams...
PLEASE stop propagating these myths.

The Part 15 rules give the maximum permissible field strength at a specified
distance from the antenna. For transmissions in the FM broadcast band, the
numbers are 250 microvolts per meter measured at three meters. Note that
this is a near-field measurement. For a ground-plane antenna, the necessary
power to achieve this field strength is approximately 3 NANOWATTS. For a
dipole antenna, 6 NANOWATTS will be the maximum permitted power.

Many commercial wireless microphones and FM home-broadcaster kits far exceed
these power levels and are illegal to use by FCC rules.

73, Barry WA4VZQ

| ___ ________ | Dr. Barry L. Ornitz WA4VZQ
| | / / | | Eastman Chemical Company
| | / / | | ECC Research Laboratories, Engineering Research Div.
| |< < K O D A K| | Process Instrumentation Research Laboratory
| | \ \ | | P. O. Box 1972, Building 167B
| |__\ ________| | Kingsport, TN 37662 (615/229-4904, FAX 615/229-4558)
| | INTERNET: ornitz@kodak.com

Eastman Chemical is no longer a part of Kodak. Until we get our own Internet
connection Kodak has been gracious to continue to let us use hers.

279. Vintage 50's station for sale

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 15:44:34 UTC
From: Terry.Murphy@launchpad.unc.edu
Message-ID: <2h15t2$kr@samba.oit.unc.edu>
Source record: 272340

For Sale:

TX- EF Johnson Viking Valiant II (Mint) 250 watts am/cw transmitter with
full manuals and docs (even the warranty card)

RX- R390a Receiver (Very Good) recently retubed, realigned, lubed, painted
with silkcreen and fully cleaned. The classic receiver with manuals

Acces: EF Johnson 250 watt Matchbox in fair condition. Was repainted but
left decals
Millen 10 m preamp tubed in very good condition

Make me an offer I can't refuse or It will appear at Dayton in April...
de ab4vj terry

(919)544-5729 days/(919) 471-4018 after 2100 UTC
terry.murphy@launchpad.unc.edu

--
The opinions expressed are not necessarily those of the University of
North Carolina at Chapel Hill, the Campus Office for Information
Technology, or the Experimental Bulletin Board Service.
internet: laUNChpad.unc.edu or 152.2.22.80

280. Re: Repeater database?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 16:21:36 UTC
From: jmaynard@nyx10.cs.du.edu
Message-ID: <1994Jan12.162136.17158@mnemosyne.cs.du.edu>
Source record: 272329

In article <2guq97$mds@inxs.concert.net>,
W. M Wood -- The Signal Group <mikewood@rock.concert.net> wrote:
>>The reason for this is simple: if we didn't keep it
>>confidential, we wouldn't get the data either.
>More BS....

Ask Brian Kantor about that.
...or, for that matter, the majority of repeater trustees.

> The REAL reason this information isn't given out is that
>Cordination Groups want to wield their coordination POWER without
>fear of any questioning their declarations. With all the data on
>a repeater (lat/lon/haat/erp , etc) you could challenge or even
>ignore their refusal to coordinate a repeater on a frequency you
>have chosen.

This sounds like the ravings of somoene who had a coordination denied, or who wants to start a repeater war and not have the FCC come explain the situation to him. You obviously have not been on the other side of the table.

> I suspect less than 1% of the so called coordinated
>repeaters in operation today have any sort of REAL engineering
>study including contour maps done on them. Most have been 'coordinated
>' by either first come first served ---- or Good Ole Boys Network
>methods.

First come first served is the only way that coordinators can operate and not get their collective butts sued off. Don't believe me? I've been there, again, and so have others. As for the kind of real engineering studies you advocate, do you know how much time and effort goes into producing a contour map? Multiply that by a thousand repeaters in Texas. It's prohibitive. We coordinate repeaters based on 85-mile seperation, and will waive that if the trustee of the existing system will agree in writing.

>This information is publicly available for EVERY commercial radio
> and televion station in the USA and there is absolutely no reason other
>than small minded POWERMONGERING politics that this isn't available
>for amateur repeaters.

How about time and money? Are you volunteering to run all those contour studies, or pay to have them done?

>I dare ANY so called coordinating group to prove me wrong by PUBLISHING
>there engineering studies for all their "coordinated" repeaters.

They don't exist to the degree you want, nor are they ever likely to in the amateur service.

>All we'll probably hear is eithe silence or a crescendo of flames
>about how their "integrity " has been insulted....but the engineering
>studies generally don't exist so we will never see them!

No flames about integrity here; just cold, hard reality. Then again, you sound like you've been hit by reality before, and didn't like it.
--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"A good flame is fuel to warm the soul." -- Karl Denninger

281. An online repeater database

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 16:42:12 UTC
From: yee@mipgsun.mipg.upenn.edu
Message-ID: <2h1994$oaq@netnews.upenn.edu>
Source record: 272425

OK guys, here is the beginnings of a project that I have been working on since about February 1993. It is my next etext and is an online repeater directory which currently contains over 1400 entries. There are entries for CT, DC, DE, HI, ID, KY, ME, NC, ND, NH, NJ, NY, PA, RI, SD, VT, WV, WY. I have started on UT (but have a volunteer for data to provide complete info) and have finished three states since the last time this thing was posted.

Assistance in other states would be appreciated. I would be interested in volunteer assistance in completing this database. Volunteers should be willing to take up an entire state. Partial state listings do me absolutely no good as I will have to go over everything by hand to see what is missing. If all those people who are interested in getting an online directory together would be willing to volunteer for one or two states each, then this directory will be completed in short order.

Is this project serious? Yes. As a gesture of good faith, I have not concentrated solely on regions of the country where I live and work for the states I have already completed. As you can readily tell, I have already personally completed 18 states and intend to continue working. Any effort that a volunteer might make is not likely to be wasted. Unfortunately, I do not have the time or the energy for all 50 states. I already have someone who is willing to provide data for Montana and Utah. If you guys are actually interested in an online directory, put up or shut up.

If there are file format revisions after 0.2, I will worry about the file format conversion but I don't expect that there will be any need as all or nearly all important fields have already been defined and (hopefully) plenty of room has been left for expansion of the field definitions.

At first, this directory will contain only 2 meter entries. After all 50 states have been completed, updates will then be accepted. If someone else is interested in tackling other bands, it would be most appreciated. The proposed file format should be flexible enough for all bands and all modes for which a repeater directory would be useful.

I make absolutely no claims as to the accuracy of ANYTHING!! There are undoubtedly numerous errors all over the place. Some are typographical errors on my part (the data has been typed in by hand). Other errors are due to outdated information. Little or no attempt has been made thus far to check the data at all as I consider it more important to finish the database itself. In general, corrections to

the database will not be applied until this is done.

==========

The file format (version 0.2) shall be as follows. Consider this file format to be in the alpha stage and subject to frequent and arbitrary revisions. Each entry will be delineated by being on a different line. Each field of a repeater entry shall be delineated by colons. The text within a field shall not contain a colon. The field definitions are as follows:

0 latitude (deg,min,sec)
Each component of the field shall be delineated by commas.
1 longitude (deg,min,sec)
Each component of the field shall be delineated by commas.
2 elevation (meters)
The metric system has been chosen for this field fo the eventuality that this database is expanded internationally. Unfortunately, in backward countries such as the US, the English system is still dominant.
3 height above average terrain (meters)
The metric system has been chosen for this field fo the eventuality that this database is expanded internationally. Unfortunately, in backward countries such as the US, the English system is still dominant.
4 spare location designation if grid squares are used for some repeaters while others have the above.
5-7 reserved for future use (e.g. ERP)
8 continent
9 country
10 major region designation (e.g. state, province)
Use standard abbreviations if possible (e.g. NY, CA).
11 minor region designation (e.g. county, nearest major city)
12 immediate location (e.g. town, city, mountain)
13 input frequency (MHz)
14 output frequency (MHz or standard offset: + or -)
The use of +,- may have to be deleted in the future if this repeater directory is extended to other countries that have differing standard offsets.
15 repeater call sign
16 misc. notes (for anything not covered in other fields)
17 sponsor (call sign or club name)
18 source of entry (call sign preferred)
If entry is copied from a published source and not personally verified, use the organization publishing the data (e.g. ARRL)
19 date entry last updated (YYYYMMDD)
Since published data may only have a year of publication, the date shall have a month and date of 0000 (e.g. 19940000).
20 PL access (Hertz)
If multiple for multiple inputs, delineate with commas.
If none, enter 0.0

21 mode (e.g. F3E, A1A)
22-27 reserved for future use (e.g. trustee)

Any subsequent fields are free for users to define for their own use.

Conway Yee, N2JWQ
yee@mipg.upenn.edu

==========

::::::::NA:USA:CT:Bridgeport:Bridgeport:146.835:-:W1BHZ:oae:CAFM:ARRL:19920000::::::::
::::::::NA:USA:CT:Bridgeport:Bridgeport:146.895:-:WA1JTB:oae:CAFM:ARRL:19920000::::::::
::::::::NA:USA:CT:Bridgeport:Fairfield:146.625:-:WB1CQO:oae:Frfld
ARA:ARRL:19920000::::::::
::::::::NA:USA:CT:Danbury:Danbury:147.120:+:KE1H:o(ca)e:PVRA:ARRL:19920000::::::::
::::::::NA:USA:CT:Hartford:#Glastonbury:147.285:+:K1SSO:oe:GbyCvlPrp:ARRL:19920000:::::::
:
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::::::::NA:USA:CT:Hartford:Bristol:146.880:-:K1DFS:oaelz:Ins Cy RC:ARRL:19920000::::::::
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RC:ARRL:19920000::::::::
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RA:ARRL:19920000::::::::
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ARA:ARRL:19920000::::::::
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ARA:ARRL:19920000::::::::

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London:Groton:146.865:-:WA1PTS:o(ca)ezl:Nighthawk:ARRL:19920000:::::::::
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::::::::NA:USA:ME:Farmington/NE:Farmington:147.015:+:KLIB:o::ARRL:19920000::::::::
::::::::NA:USA:ME:Fort Kent:Charette Hill:146.640:-:W1TCF:oxaeBl::ARRL:19920000::::::::
::::::::NA:USA:ME:Houlton:#Houlton:146.790:-:WA1UDP:o::ARRL:19920000::::::::
::::::::NA:USA:ME:Lewiston:Auburn:146.610:-:W1NPP:o(ca):AARC:ARRL:19920000::::::::
::::::::NA:USA:ME:Lewiston:Auburn:146.790:-:N1BKD:oal::ARRL:19920000::::::::
::::::::NA:USA:ME:Lewiston:Auburn:146.940:-:N1BKD:o::ARRL:19920000::::::::
::::::::NA:USA:ME:Lewiston:Buckfield:146.880:-:KQ1L:oe:YankeeARC:ARRL:19920000::::::::
::::::::NA:USA:ME:Lewiston:Topsham:147.210:+:N1MA:oe:MryMtRA:ARRL:19920000::::::::
::::::::NA:USA:ME:Lincoln/NE:Lincoln Center:147.000:+:KW1Q:o::ARRL:19920000::::::::
::::::::NA:USA:ME:North:#Presque Isle:146.940:-:N1EYO:o::ARRL:19920000::::::::
::::::::NA:USA:ME:North:Fort Kent:146.700:-:N1CHF:o:N1CHF:ARRL:19920000::::::::
::::::::NA:USA:ME:North:Madawaska:147.330:+:N1FCV:o:N1FCV:ARRL:19920000::::::::
::::::::NA:USA:ME:Northeast
Coast:Columbia:146.640:-:WB5NJK:o:WB5NJK:ARRL:19920000::::::::
::::::::NA:USA:ME:Penobscot Bay:Camden:146.820:-:KQ1L:oe:MdcstARRC:ARRL:19920000::::::::
::::::::NA:USA:ME:Penobscot Bay:Hope:147.060:+:KC1CG:o::ARRL:19920000::::::::
::::::::NA:USA:ME:Penobscot Bay:Rockland:145.330:-:WA1ZDA:oaerl::ARRL:19920000::::::::
::::::::NA:USA:ME:Penobscot
Bay:Rockland:147.240:+:WA1ZDA:o:PenBayRC:ARRL:19920000::::::::
::::::::NA:USA:ME:Portland:Falmouth:147.090:+:WA1MZG:oaerz:BlkstrpRA:ARRL:19920000:::::::
:
::::::::NA:USA:ME:Portland:Orrs Island:147.270:+:N1FLN:o:Hrp Cep:ARRL:19920000::::::::
::::::::NA:USA:ME:Portland:Portland:146.730:-:W1KVI:oe:PAWA:ARRL:19920000::::::::
::::::::NA:USA:ME:Portland:Portland:147.360:+:K1SA:oerl::ARRL:19920000::::::::
::::::::NA:USA:ME:Portland:Saco:146.775:-:WA1GTT:o(ca)lrz:SVRA:ARRL:19920000::::::::
::::::::NA:USA:ME:Portland:Scarborough:146.925:-:K1MON:o::ARRL:19920000::::::::
::::::::NA:USA:ME:Presque Isle:Presque
Isle:146.730:-:K1TFX:oae:ArstkARA:ARRL:19920000::::::::
::::::::NA:USA:ME:Waterville:Skowhegan:146.730:-:KA1C:x:KA1C:ARRL:19920000::::::::
::::::::NA:USA:ME:Waterville:Waterville:146.760:-:K1PMR:o:K1PMR:ARRL:19920000::::::::
::::::::NA:USA:ME:West Central:Kingfield:146.970:-:W1HTG:o:W1HTG:ARRL:19920000::::::::
::::::::NA:USA:ME:West Central:Spruce Mtn:145.390:-:WB1EUI:o::ARRL:19920000::::::::
::::::::NA:USA:ME:West Central:Wilton:147.180:+:KY1C:oe:BssHllRG:ARRL:19920000::::::::
::::::::NA:USA:NC: :Goldsboro:224.96:223.36:WB3JVX:ctcss (ca)l
156.7:Metro-Com:ARRL:19920000::::::::
::::::::NA:USA:NC: :Goldsboro:443.04:448.05:WB3JVX:ctcss l
156.7:Metro-Com:ARRL:19920000::::::::
::::::::NA:USA:NC::Ahoskie:145.130:-:WB4YNF:oa::ARRL:19920000::::::::
::::::::NA:USA:NC::Ahoskie:146.910:-:WA4ZGQ:o(ca):TRI-COUNTY:ARRL:19920000::::::::
::::::::NA:USA:NC::Albemarle:146.985:-:K4OGB:oa::ARRL:19920000::::::::
::::::::NA:USA:NC::Andrews/Robbin:147.045:-:K4AIH:oezl(ca):WD4JEM:ARRL:19920000::::::::
```

:::::::::NA:USA:NC::Aquadale:147.390:+:WA4CHZ:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Asheboro:147.255:+:KJ4AV:o(ca)l::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Asheville:146.835:-:WA4QCO:o:STEELMAN:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Asheville:147.225:+:N4UQS:oa:CAP/SUGARL:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Ashvl/Mt Pisga:146.760:-:WA4BVW:151.4::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Ashvl/SpiveyMtn:146.910:-:W4MOE:oa:W CAROLINA:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Bakersville:145.310:-:KC4WPM:oaez:+MCRA:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Beulaville:145.230:-:N4VBH:oa:n4vbh:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Boone/RichMtn:147.360:+:WA4KDB:oa:WATAUGA ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Brevard:147.135:+:K4GBH:o(ca):TRANSYLVAN:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Burgaw:146.940:-:W4DLH:o:4-CTY ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Burlington:146.670:-:WA4YGD:oa:ALAMANCE RC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Burlington:147.075:+:WA4HBQ:oz::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Burnsville:147.375:+:N4YN:oa::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Carthage:147.240:+:W4NIW:o(ca)pk:MOORE CTY:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Charlotte:145.230:-:W4BFB:o:MECKLENBUR:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Charlotte:145.290:-:W4BFB:oa:MECKLENBUR:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Charlotte:145.350:-:WA4AOS:ol::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Charlotte:146.940:-:W4BFB:oa:MECKLENBUR:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Charlotte:147.060:-:W4CQ:oa:CHARLOTTE:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Charlotte:147.390:+:WD4PLY:o(ca)::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Cherry Mt:146.670:-:WA4BKU:o:WA4BKU:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Cherryville:145.150:-:K4JTX:(temp off air):K4JTX:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Clinton:146.790:-:WA4LZD:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Columbia:145.110:-:KB4TOH:oaezl:COLUMBIA EOC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Concord/Kannap:146.655:-:K4CEB:o(ca)e:Cabarrus
ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Crowders Mtn:145.450:-:WD4PLY:o:SOUTH SALE:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Dunn:146.700:-:N4CID:o(ca):CHICORA ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Durham:145.450:-:WA4WTX:oal:DURHAM FM:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Durham:146.940:-:WA4BFT:oa::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Durham:147.360:+:WD4LDB:OA:MID-STATE:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Eden/Stonevill:147.390:+:WA4QBF:o:+WA4QBG:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Elizabeth City:146.655:-:WA4VTX:oa::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Fayetteville:146.805:-:N4EWG:o:N3EWG:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Fayetteville:147.045:-:WA4FLR:oy:FAYV'L ARES:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Fayvlle/CFARS:146.910:-:WB4YZF:o(ca):CAPE FEAR:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Fayvlle/Ft Bragg:147.330:+:W4LPL:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Forest City:147.240:+:K4PBG:a123.0:RUTHERFORD:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Franklin:145.490:-:W4ZCZ:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Franklin:147.240:+:W4GHZ:151.4::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Gast/Spcr Mtn:147.120:+:W4REW:oa:GASTON CTY:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Gastonia:146.805:-:N0IZF:oaezlrb:GAARC (GAS):ARRL:19920000:::::::::
:::::::::NA:USA:NC::Gibsonville:145.490:-:AC4DZ:arb103.5:AC4DZ:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Goldsboro:146.850:-:K4CYP:(ca)t:WAYNE CO ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Greensboro:145.250:-:N4GGD:ozl:GTR GBO HM:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Greensboro:145.290:-:N4GGD:oa::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Greensboro:146.610:-:K4SNI:oa:GREENSBORO:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Greensboro:146.760:-:N4GGD:oazrb:GTR GBO HM:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Greensboro:147.030:+:W4GG:o(ca)l:G.A.S.:ARRL:19920000:::::::::

:::::::::NA:USA:NC::Greensboro:147.210:+:W4BUZ:oe::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Greenville:145.350:-:WD4JPQ:oaezl:PITT CTY RC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Greenville:147.375:+:K4ROK:oa:TAR RIVER:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Greenvl/Estn:147.090:+:W4GDF:o:GREENVILLE:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Grifton:146.685:-:W4NBR:o:ENC REPEAT:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Hendersonville:146.640:-:WB4YAO:ol::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Hendsvl/Berwlw:145.27-:-:WA4KNI:oa::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Hendsvl/Penic:147.255:+:WA4KNI:oa::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Hickory/Brt Mtn:146.850:-:WA4MDW:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::High Point:145.410:-:N4XO:oa::ARRL:19920000:::::::::
:::::::::NA:USA:NC::High Point:146.835:+:N4NNR:o(ca)l:N4NNR:ARRL:19920000:::::::::
:::::::::NA:USA:NC::High Point:147.165:+:WA4RIS:o(ca):HPARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Hillsborough:147.225:+:WA4WTX:oal:DURHAM FM:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Jacksonville:145.190:-:WA4WGA:oe:WA4WGA/KA4:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Jacksonville:147.000:-:WD4FVO:oaz:ONSLOW ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Jefferson:147.300:+:W4YJG:oa:ASHE CTY ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Kinston:145.470:-:W4OIX:oa:KINSTON ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Laurinburg:146.625:-:KI4RR:o(ca)z:SCOTLAND:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Lenoir:147.195:+:N4NIN:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Lenoir/Hibritn:147.330:+:KN4K:o:HIBRITEN RC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Lexington:145.310:-:WD4ICX:oaz:HEALING SP:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Lexington:146.910:-:K4IZM:oaz:HEALING SP:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Lk Nrmn/Clt:147.015:+:WB4KPF:o(ca):ANDERSON:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Lumberton:147.360:+:KS4S:o(ca):+W4NHV:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Maco:147.060:+:WA4LED:o(ca):WILMGTN RA:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Madison:146.895:-:KA4YFF:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Maggie Valley:146.805:+:W4HCY:(temp off air)::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Manteo/Wanches:146.940:-:W4ACY:oa:+W4ACY:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Marion:146.985:-:WD4PVE:oa::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Midway:145.270:-:KM4AR:o:KM4AR:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Millers Creek:146.715:-:N4GGN:oa:BLUE RIDGE:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Monroe:147.105:+:K4JCK:(temp off air):NONE:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Monroe/UCARS:145.390:-:KF4NJ:o(ca):UNION CITY:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Morganton:147.150:+:K4VLY:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Mountain Home:147.105:+:K4GHH:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Mt Airy:145.330:-:KD4J:oa:KD4J:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Mt Airy:146.940:-:N4XRY:o:N4XRY:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Mt Airy:146.970:-:N4XRY:o:N4XRY:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Mt Mitchell:145.190:-:WA4BVW:0:WA4BVW:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Murphy:147.195:+:KC4WB:(temp off air)::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Murphy/Stalcup:146.865:+:K4FOY:o:TRIODE ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::N Wilkesboro:145.370:-:N4AGN:o(ca):FOOTHILLS:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Nags Head/Bodi:146.835:-:K4UOR:o(ca)z:OUTERBANKS:ARRL:19920000:::::::::
:::::::::NA:USA:NC::New Bern:146.610:-:WD4JMS:oal:NEW BERN ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Newport:145.450:-:K4GRW:(temp off air)::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Newton:147.075:+:AG4L:oazrb:CATAWBA CT:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Newton/AndsnMtn:145.170:-:W4ZQB:o:W4ZQB:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Oxford:145.170:-:KA4RVS:o(ca):GRANVILLE:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Oxford:145.370:-:WA4MII:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Raleigh:145.270:-:N4BQF:o(ca)l::ARRL:19920000:::::::::

:::::::::NA:USA:NC::Raleigh:145.490:-:K4BWC:oey:K4BWC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Raleigh:146.640:-:W4DW:o(ca)z:RALEIGH ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Raleigh:146.730:-:K4BWC:o(ca)e:K4BWC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Raleigh:146.880:-:WB4TQD:ol:PCRN:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Raleigh:147.150:+:WB4TQD:o(ca):PCRN:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Raleigh Benson:147.270:+:WB4TQD:o(ca):JOHNSTON
ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Randleman/Gbo:145.150:-:WD4CVM:ol:GREENSBOROR:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Red Springs:147.300:+:W4MZP:o(ca):RAD.AM.GRP:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Reidsville:146.850:-:K4YEC:o:PENNINGTON:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Roanoke Rapids:147.030:+:WA4DTS:o(ca):ROANOKE VA:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Roaring Gap:146.820:-:WB4PZA:(temp off air):BLUE
RIDGE:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Rockingham:146.955:-:K4PTB:oaez:RCARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Rocky Mount:147.120:+:WN4Z:o(ca)z:ROCKY MOUN:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Salisbury:146.730:-:W4EXU:ozlrb:BARBER JCT:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Sanford:147.180:+:WB4EJJ:oa::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Sauratown Mtn:145.110:-:W4RXG:oy:W4RXG:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Sauratown Mtn:145.470:-:W4NC:o:FORSYTH ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Sauratown Mtn:146.790:-:N4QDK:o(ca):TRIAD ARA:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Sauratown Mtn:147.315:+:K4JYH:oe(ca):K4JYH:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Shallotte:145.370:-:K4PPD:o(ca)z:BRUNSWICK:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Shallotte:147.315:+:K4PPD:oz:BRUNSWICK:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Shallotte:147.390:+:N4FAU:oz:BRUNSWICK:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Shelby:146.880:-:W4NYR:o:SHELBY ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Shelby:147.345:+:W4NYR:o(ca):SHELBY ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Smithfield:146.970:-:KD4JQ:oa:KD4JQ:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Smithfield:147.390:+:W2AC:oaez:TEARA:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Southport:146.775:-:K4JYH:o:+K4JYH:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Sparta/GreenMtn:145.430:-:K4ITL:ol:PIEL COAST:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Spring Lake:146.715:-:WB4KDC:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Statesville:146.685:-:KB4QP:o(ca)z::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Statsvl/Asbry:147.045:+:KB4QP:oy:ICARS:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Swansboro:146.760:-:KO4S:oa:KO4S:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Tabor City:147.375:+:W4DCD:oalrb:W4DCD:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Thomasville:147.000:-:K4AZA:oal:K4AZA:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Trenton:145.210:-:WB4TQD:ol:PCRN:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Tuckasegee:147.300:+:W8OMV:o::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Wadesboro:146.835:-:W4USH:oa:SELECTRONI:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Washington:147.345:+:WA4TEP:o:TAR RIVER:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Waxhaw:146.865:+:WA4ZRS:o(ca):WBT ARC WA:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Waynesville:147.270:+:N4SM:oa:HAYWOOD CT:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Whiteville:147.210:+:K4MSD:oal:COLUMBUS:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Williamston:145.410:-:KA4KNU:ol:ROANOKE ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Wilmington:146.730:-:W4VNK:oae:WILMINGTON:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Wilmington:146.820:-:K4GMP:oel:WILMINGTON:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Wilmington:147.180:+:N4CTJ:oal::ARRL:19920000:::::::::
:::::::::NA:USA:NC::Wilson:146.760:-:WB4THL:oa:WILSON ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Winston-Salem:146.640:-:W4NC:oal:FORSYTH ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NC::Yadkinville:147.015:-:N4XRY:o::ARRL:19920000:::::::::

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::::::::NA:USA:NC::Yaupon Beach:146.670:-:W4RPC:o::ARRL:19920000::::::::
::::::::NA:USA:ND:Statewide:Statewide:145.230:-::snp::ARRL:19920000::::::::
::::::::NA:USA:ND:Statewide:Statewide:145.470:-::snp::ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast
Central:Crary:147.330:52.525:K0PVG:o:K0PVG:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast Central:Devils
Lake:146.880:-:K0PVG:oea:RCARC:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast
Central:Maddock:147.240:+:KFOHR:oel:BCARC:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast
Central:Petersburg:146.820:-:KA0FIN:eo:RCARC:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast Central:Rock Lake:147.300:+:WC0M:o:WC0M:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast Central:Rugby:147.060:-:WB0ATB:oea:GCHC:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast Central:St
Johns:146.850:-:KE0PW:o:TMARC:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast:#Grand
Forks:145.490:-:KA7CHZ:oae:KA7CHZ:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast:Cavalier:147.150:+:K0BGV:o:PCARC:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast:Grand Forks:146.865:-:KA0CLH:oa:UND ARC:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast:Grand Forks:146.940:-:WA0JXT:oe:FORX
ARC:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast:Grand Forks:147.030:-:WA0LPV:o(ca):FORX
UG:ARRL:19920000::::::::
::::::::NA:USA:ND:Northeast:Grand Forks:147.390:+:WA0VFY:o:WA0VFY:ARRL:19920000::::::::
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Central:Crary:52.525:147.330:K0PVG:o:K0PVG:ARRL:19920000::::::::
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AFB:146.760:-:WD0FGR:oea:NTARC:ARRL:19920000::::::::
::::::::NA:USA:ND:Southeast
Central:Carrington:146.670:-:KR0W:oel:HNARC:ARRL:19920000::::::::
::::::::NA:USA:ND:Southeast Central:Cooperstown:147.210:+:KA0OFP:o::ARRL:19920000::::::::
::::::::NA:USA:ND:Southeast
Central:Jamestown:147.180:+:W0FX:oael:JARC:ARRL:19920000::::::::
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::::::::NA:USA:ND:Southwest:Dickinson:146.820:-:W0ZCM:oae:TRARC:ARRL:19920000::::::::
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:::::::::NA:USA:ND:Southwest
Central:Bismarck:146.850:-:KB0UK:oe:CDARC:ARRL:19920000:::::::::
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Central:Bismarck:147.390:+:W0ZRT:oel:CDARC:ARRL:19920000:::::::::
:::::::::NA:USA:ND:Southwest
Central:Mandan:146.940:-:N0EPK:oael:CDARC:ARRL:19920000:::::::::
:::::::::NA:USA:NH:Central:Ossipee:145.310:-:N1DQB:oxl:N1DQB:ARRL:19920000:::::::::
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Coast:Portsmouth:146.805:-:W1WQM:oe:PrtCtyARC:ARRL:19920000:::::::::
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:::::::::NA:USA:NH:Littleton:Littleton:145.430:+:KB1HR:o:K1HR:ARRL:19920000:::::::::
:::::::::NA:USA:NH:Manchester/Nashua:#Hollis:147.135:+:KA1SU:oae:KA1SU:ARRL:19920000:::::::
::
:::::::::NA:USA:NH:Manchester/Nashua:Amherst:145.150:-:K1KA:oa:AmherstRA:ARRL:19920000:::::
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:::
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0:::::::::
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FMA:ARRL:19920000:::::::::
:::::::::NA:USA:NH:Manchester/Nashua:Hudson:147.105:+:WA2ROJ:oa:RRAssn:ARRL:19920000:::::::
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::
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100.0:wa1wok:ARRL:19920000:::::::::
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:::::::::NA:USA:NH:Southeast:Chester:145.190:-:K1OX:o:K1OX:ARRL:19920000:::::::::

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::::::::NA:USA:NJ:::146.475:147.475:::Tri State:ARRL:19920000::::::::
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::::::::NA:USA:NJ:::146.460:147.460:::Tri State:ARRL:19920000::::::::
::::::::NA:USA:NJ:::146.490:147.490:::Tri State:ARRL:19920000::::::::
::::::::NA:USA:NJ:::146.595:147.595:::Tri State:ARRL:19920000::::::::
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123.0:KB2IOJ:ARRL:19920000::::::::
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EMA:ARRL:19920000::::::::
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County:Pleasantville:146.940:-:KA2OOR:o:KA2OOR:ARRL:19920000::::::::
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County:Pleasantville:146.985:-:WA2ESD:o(ca)e:SPARC:ARRL:19920000::::::::
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County:Pomona:146.745:-:K2BR:o(ca)e:SCARA:ARRL:19920000::::::::
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Park:147.390:+:WA2SQQ:oez(ca):WA2SQQ:ARRL:19920000::::::::
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County:Hackensack:145.210:-:WA2UXC:oa:WA2UXC:ARRL:19920000::::::::
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Park:145.150:-:WA2VLD:t:WA2VLD:ARRL:19920000::::::::
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County:Montvale:146.955:-:K2ETN:o:CsntRdgRC:ARRL:19920000::::::::
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County:Oakland:146.490:147.490:WA2SNA:a:RamapoARC:ARRL:19920000::::::::
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RA:ARRL:19920000::::::::
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::::::::NA:USA:NJ:Bergen County:Woodcliff Lake:146.835:-:K2LSA:c(ca)t:Stln
RC:ARRL:19920000::::::::
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County:Chatsworth:145.470:-:W2HOB:c(ca)l:BurCoARES:ARRL:19920000::::::::
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County:Chatsworth:145.470:147.750:W2HOB:c(ca)l:BurCoARES:ARRL:19920000::::::::
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::::::::NA:USA:NJ:Burlington County:Mount
Holly:147.150:+:W2HOB:c(ca)elt:BurCoARES:ARRL:19920000::::::::
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Holly:147.150:144.870:W2HOB:c(ca)elt:BurCoARES:ARRL:19920000::::::::
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TR:ARRL:19920000::::::::
::::::::NA:USA:NJ:Burlington

County:Willingboro:146.925:-:WB2YGO:o(ca)el:WARG:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Camden
County:Bellmawr:146.895:-:WA2VQG:o:BellmrOEM:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Camden County:Camden:146.820:-:WB2ERI:o:PARA:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Camden County:Pine
Hill:146.865:-:K2CJX:o(ca):CCARAI:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Camden County:Waterford
Wks:145.210:-:W2FLY:celt:W2FLY:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Camden County:Waterford Wks:147.345:+:W2HOB:oey 127.3:SJ TT
UG:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Cape May County:Cape May CH:146.610:-:AE2Y:oa:CM cty
RC:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Cape May County:N
Wildwood:146.775:-:WB3KAG:131.8:CARES:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Cumberland County:Millville:147.135:+:N2VV:oxelr(ca) wx ctss
156.7:Metro-Com N2VV:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Cumberland
County:Vineland:146.655:-:WB2RUH:oa:Vineland:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:East Central:#Deal:147.135:+:K2KMT:ct(ca)el
tt:DMARC:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:East Central:#Deal:449.000:147.825:K2KMT:ct(ca)el
tt:DMARC:ARRL:19920000:::::::::
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Grove:146.445:147.445:K2KJI:oaelz::ARRL:19920000:::::::::
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County:Livingston:146.595:147.595:N22S:oae:SBARC:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Essex County:Montclair:145.190:-:K2AQG:oa:K2AQG:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Essex County:Newark:145.330:-:WA2CBM:o:WA2CBM:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Essex County:Newark:147.225:+:K2MFF:oe:NJIT ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Essex County:Newark:147.285:+:WB2MFC:o:WARC:ARRL:19920000:::::::::
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Orange:146.415:147.415:W2QR:al:W2QR:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Essex County:West Orange:146.745:-:WA2BAU:o::ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Essex County:West Orange:147.345:+:WA2HYO:oaer::ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Glouchester
County:Grenlock:145.390:-:KB2BF:oe:KB2BF:ARRL:19920000:::::::::
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County:Pitman:147.180:+:W2MMD:o(ca):GlouCoARC:ARRL:19920000:::::::::
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:::::::::NA:USA:NJ:Hudson County:Bayonne:145.430:-:W2ODV:oaerl:BEM
ARC:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Hudson County:Jersey
City:145.125:-:WB2TSH:o:WB2TSH:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Long Branch:Ashbury Park:147.045:+:W2EXQ:o(ca)e:Monmouth
CoRA:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Long Branch:Belmar:146.775:-:N2CTD:o::ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Long Branch:Middletown:145.485:-:K2RAP:oaez:MTCD:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Mercer County:Hopewell:146.670:-:W2ZQ:oel:DVRA:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Mercer

County:Lawrenceville:146.460:147.460:K2RCG:o(ca)l:SarnoffRC:ARRL:19920000:::::::::
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County:Lawrenceville:147.105:+:K2UQ:c(ca):Allentown:ARRL:19920000:::::::::
::::::::NA:USA:NJ:Mercer
County:Robbinsville:147.075:+:K2ASF:o(ca)el:K2ASF:ARRL:19920000:::::::::
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County:Fords:146.820:-:K2IEZ:otlrz:NJFMRA:ARRL:19920000:::::::::
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Bridge:147.120:+:KB2TX:o(ca)er:OldBrdgRA:ARRL:19920000:::::::::
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County:Sayreville:146.760:-:K2GE:etlr:RBRA:ARRL:19920000:::::::::
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County:Morristown:145.370:-:KC2CY:ote:KC2CY:ARRL:19920000:::::::::
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Freedom:146.895:-:K2GDD:oerxz:MorrisOEM:ARRL:19920000:::::::::
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County:Rockaway:146.985:-:K2RF:o(ca)ez:SpltrckRA:ARRL:19920000:::::::::
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131.8:CrmRdgRG:ARRL:19920000:::::::::
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County:Manahawkin:146.835:-:N2OO:o:.835/OCEM:ARRL:19920000:::::::::
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Milford:146.925:-:W3YAX:o:SkylndsRC:ARRL:19920000:::::::::
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Paterson:146.610:-:W2FCL:clt:WA2JXE:ARRL:19920000:::::::::
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County:Pennsville:146.625:-:W2AMN:oe:SalemCoRA:ARRL:19920000:::::::::
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NJ:ARRL:19920000:::::::::
::::::::NA:USA:NJ:Somerset
County:Martinsville:145.330:-:K2RB:o:TelEmplRA:ARRL:19920000:::::::::
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County:Martinsville:146.625:-:W2QW:oa:RVRC:ARRL:19920000:::::::::
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Smplx::ARRL:19920000:::::::::
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Smplx::ARRL:19920000:::::::::
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Smplx::ARRL:19920000:::::::::
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Smplx::ARRL:19920000:::::::::
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Smplx::ARRL:19920000:::::::::
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Point:146.715:440.025:K2KQZ:oelt:HPLinkSys:ARRL:19920000:::::::::
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RA:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Sussex
County:Newton:147.300:+:N3WM:o(ca)elr:SussexARC:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Sussex
County:Newton:147.330:+:N3WM:oepry:SussexARC:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Sussex County:Pahaquarry:145.390:-:KA2EIA:otely
tt:CIS:ARRL:19920000:::::::::
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:::::::::NA:USA:NJ:Union
County:Linden:146.655:-:K2ACU:o(ca)er:EARS-NJ:ARRL:19920000:::::::::
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Hill:147.255:+:W2LI:o:Tri-CoRA:ARRL:19920000:::::::::
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County:Springfield:147.505:146.505:WA2BAT:oaerz:SpgfldOEM:ARRL:19920000:::::::::
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Meadows:146.805:-:K2OWR:oe:K2OWR:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:Warren County:Washington:146.820:-:WA2AFB:o::ARRL:19920000:::::::::
:::::::::NA:USA:NJ:West
Central:Cherryville:147.135:+:K2NJ:ot:WJsyDxGrp:ARRL:19920000:::::::::
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RA:ARRL:19920000:::::::::
:::::::::NA:USA:NJ:West
Central:Frenchtown:146.850:-:WA2GWA:atez:K2PM:ARRL:19920000:::::::::
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Island:146.880:-:NS2U:oe:NYCRA:ARRL:19920000:::::::::
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Island:147.315:+:WA2RXQ::WA2RXQ:ARRL:19920000:::::::::
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HLRC:ARRL:19920000:::::::::
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COL:ARRL:19920000:::::::::
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156.7:Metro-Com:ARRL:19920000::::::::
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z:Metro-Com:ARRL:19920000::::::::
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Asn:ARRL:19920000:::::::::
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Albany:147.285:+:NE3O:o:NoTierRG:ARRL:19920000:::::::::
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County:Carlisle:145.190:-:KD3HJ:oael:N3GCG:ARRL:19920000:::::::::
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County:Mechanicsburg:145.270:-:K3WKK:oe:CCARS:ARRL:19920000:::::::::

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::::::::NA:USA:PA:Eastern Penna:EPA Section:146.535:::FM Smplx::ARRL:19920000::::::::
::::::::NA:USA:PA:Eastern Penna:EPA Section:146.550:::FM Smplx::ARRL:19920000::::::::
::::::::NA:USA:PA:Eastern Penna:EPA Section:146.565:::FM Smplx::ARRL:19920000::::::::
::::::::NA:USA:PA:Eastern Penna:EPA Section:146.580:::FM Smplx::ARRL:19920000::::::::
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::::::::NA:USA:PA:Eastern Penna:EPA Section:147.420:::FM Smplx::ARRL:19920000::::::::

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::::::::NA:USA:PA:Eastern Penna:EPA Section:147.450:::FM Smplx::ARRL:19920000::::::::
::::::::NA:USA:PA:Eastern Penna:EPA Section:147.465:::FM Smplx::ARRL:19920000::::::::
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::::::::NA:USA:PA:Eastern Penna:EPA Section:147.495:::FM Smplx::ARRL:19920000::::::::
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::::::::NA:USA:PA:Erie:Cherry Hill:146.760:-:WA3USH:oaelx:+WYZ:ARRL:19920000::::::::
::::::::NA:USA:PA:Erie:Cory:147.090:+:W3YXE:o:RAC:ARRL:19920000::::::::
::::::::NA:USA:PA:Erie:Erie:146.610:-:W3GV:o:RAErie:ARRL:19920000::::::::
::::::::NA:USA:PA:Erie:Erie:146.640:-:KA3MJN:oelz(ca):KA3MJN:ARRL:19920000::::::::
::::::::NA:USA:PA:Erie:Erie:146.820:-:W3GV:oael:RAErie:ARRL:19920000::::::::
::::::::NA:USA:PA:Erie:Erie:147.000:-:WB3DWL:oael RB:GANNON:ARRL:19920000::::::::
::::::::NA:USA:PA:Erie:Erie:147.270:+:N3APP:oe(ca):N3APP:ARRL:19920000::::::::
::::::::NA:USA:PA:Erie:Erie:147.375:+:WB3DWL:o 100.0:Gannon U:ARRL:19920000::::::::
::::::::NA:USA:PA:Erie:Union City:146.730:-:WA3PGL:ca:WA3PGL:ARRL:19920000::::::::
::::::::NA:USA:PA:Johnstown:Johnstown:145.390:-:WA3WGN:oery:+CVARC:ARRL:19920000::::::::
::::::::NA:USA:PA:Johnstown:Johnstown:146.940:-:WA3WGN:o(ca)erz:+CVARC:ARRL:19920000::::::
:::
::::::::NA:USA:PA:Johnstown:Johnstown:147.370:+:N3AGW:oa:HITpRA:ARRL:19920000::::::::
::::::::NA:USA:PA:Juniata
County:Mifflintown:147.045:-:KI3D:oe:Tuscarora:ARRL:19920000::::::::
::::::::NA:USA:PA:Lackawana
County:Scranton:146.940:-:K3CSG:o(ca)e:SPARK:ARRL:19920000::::::::
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County:Columbia:146.715:-:K3FHC:o(ca):CoulAreaARC:ARRL:19920000::::::::
::::::::NA:USA:PA:Lancaster
County:Columbia:147.255:+:WB3KAW:o:W3GES:ARRL:19920000::::::::
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County:Lancaster:146.610:-:WA3NOF:c(ca)t:SeaComm:ARRL:19920000::::::::
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County:Lancaster:147.015:+:N3CC:o(ca)e:RedRoseRA:ARRL:19920000::::::::
::::::::NA:USA:PA:Lebanon
County:Cambelltown:147.165:+:WA3ZFM:oa:ZFM-ESN:ARRL:19920000::::::::
::::::::NA:USA:PA:Lebanon
County:Cornwall:145.390:-:KA3NKB:oael:LRTS:ARRL:19920000::::::::
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County:Lebanon:147.315:+:W3EIA:oae:LebVyScty:ARRL:19920000::::::::
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151.4:KA3HJW:ARRL:19920000::::::::
::::::::NA:USA:PA:Lehigh County:Allentown:147.135:+:W3OI:o:LVARC:ARRL:19920000::::::::
::::::::NA:USA:PA:Lehigh County:Coopersburg:147.285:+:W3IDZ:oel
151.4:w3idz:ARRL:19920000::::::::
::::::::NA:USA:PA:Luzerne

County:Freeland:146.670:-:K3JSZ:oae:Anthracit:ARRL:19920000:::::::::
::::::::NA:USA:PA:Luzerne County:Freeland:147.030:+:K3BS:o:AnthrRC:ARRL:19920000:::::::::
::::::::NA:USA:PA:Luzerne County:Hanover
Twp:147.330:+:K3FUT:oae:K3FUT:ARRL:19920000:::::::::
::::::::NA:USA:PA:Luzerne
County:Pringle:146.880:-:W3KUA:o(ca):W3KUA:ARRL:19920000:::::::::
::::::::NA:USA:PA:Luzerne
County:Wilkes-Barre:145.410:-:N3DAX:o(ca)e:N3DAX:ARRL:19920000:::::::::
::::::::NA:USA:PA:Lycoming
County:Huntersville:145.450:-:K3QFW:oaelw:LCDptES:ARRL:19920000:::::::::
::::::::NA:USA:PA:Lycoming County:Trout
Run:145.150:-:K3QFW:oaelw:LCDptES:ARRL:19920000:::::::::
::::::::NA:USA:PA:Lycoming
County:Waterville:145.350:-:K3QFW:oael:LCDptES:ARRL:19920000:::::::::
::::::::NA:USA:PA:Lycoming
County:Williamsport:145.490:-:N3AFX:o:BERA:ARRL:19920000:::::::::
::::::::NA:USA:PA:Lycoming
County:Williamsport:146.730:-:W3AVK:oael:WBrARA:ARRL:19920000:::::::::
::::::::NA:USA:PA:Lycoming
County:Williamsport:147.090:+:N3AFX:o:BERA:ARRL:19920000:::::::::
::::::::NA:USA:PA:Monroe County:Long
Pond:145.230:-:N3DZM:o(ca)lt:Complex:ARRL:19920000:::::::::
::::::::NA:USA:PA:Monroe County:Tannersville:146.865:-:N3BFL:oal:Monroe
CO:ARRL:19920000:::::::::
::::::::NA:USA:PA:Montgomery
County:Abington:147.270:+:W3FRY:o:Frankford:ARRL:19920000:::::::::
::::::::NA:USA:PA:Montgomery County:Bryn
Mawr:145.130:-:WB3JOE:o:MAAC:ARRL:19920000:::::::::
::::::::NA:USA:PA:Montgomery
County:Eagleville:146.805:-:WA3SSG:o:WA3SSG:ARRL:19920000:::::::::
::::::::NA:USA:PA:Montgomery
County:Hatfield:147.330:+:WA3RYQ:o(ca)el:WA3RYQ:ARRL:19920000:::::::::
::::::::NA:USA:PA:Montgomery
County:Meadowbrook:147.165:+:K3SSC:o(ca)e:DelMontRC:ARRL:19920000:::::::::
::::::::NA:USA:PA:Montgomery County:Wynnwood:145.410:-:K3TR:oa:OARC:ARRL:19920000:::::::::
::::::::NA:USA:PA:Mountour County:Liberty
Twp:145.290:-:WA2JOC::MCEMA:ARRL:19920000:::::::::
::::::::NA:USA:PA:North Central:DuBois:147.390:+:K3PS:or:QCFMA:ARRL:19920000:::::::::
::::::::NA:USA:PA:North
Central:Emporium:146.805:-:N3FYD:o(ca):CCARC:ARRL:19920000:::::::::
::::::::NA:USA:PA:North
Central:Emporium:147.180:+:WA3WPS:o(ca)e:CCARC:ARRL:19920000:::::::::
::::::::NA:USA:PA:North Central:Lock Haven:147.360:+:K3KR:oelr:K3KR:ARRL:19920000:::::::::
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::::::::NA:USA:PA:North
Central:Rockton:146.775:-:N3GJZ:oel(ca):RMRA:ARRL:19920000:::::::::
::::::::NA:USA:PA:North Central:Ulysses:145.430:-:K3MOE:or:PCEMA:ARRL:19920000:::::::::
::::::::NA:USA:PA:Northampton
County:Bangor:147.045:+:WA3GYE:o:SPARK:ARRL:19920000:::::::::
::::::::NA:USA:PA:Northampton
County:Nazareth:145.110:-:W3PYF:o:NoCtyEMA:ARRL:19920000:::::::::

:::::::::NA:USA:PA:Northampton
County:Nazareth:146.700:-:W3OK:oel:DelLehRC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northumberland
County:Milton:146.970:-:WA3AMI:o(ca):WA3AMI:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northumberland
County:Shamokin:147.300:+:WB3KCW:o(ca)e:CentPaARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northumberland
County:Sunbury:147.270:+:K3ARR:oae:SusVyARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:Franklin:145.230:-:W3ZIC:oaelz:FVM&KC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:James City:146.730:-:WB3IGM:oel:WB3IGM:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:Leeper:147.075:+:KA3CII:o:KA3CII:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:Meadville:145.130:-:W3MIE:oelr:CfdARS:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:Meadville:147.030:-:W3NRU:oaer:W3NRU:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:Meadville:147.210:+:K3YAK:oaerz:K3YAK:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:Pleasantville:147.120:+:W3ZIC:oalrz:FVM&KC:ARRL:19920000::::::
:::
:::::::::NA:USA:PA:Northwest:Union City:146.700:-:KD3OE:oe:KD3OE:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:Warren:146.760:-:WB3IWY:oez 88.5:CCAFMA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:Warren:147.360:+:AK3R:o:WrnHMS:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Northwest:Youngsville:146.970:-:N3DB:oe:n3db:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Philadelphia County:Phila/Centcty:145.430:-:K3NL:o:Lbty
Bell:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Philadelphia
County:Phila/Roxboro:147.030:+:W3QV:oal:Phil-Mont:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Philadelphia County:Phila/West:145.270:-:K2SVX:oel:Ch 6
ARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Philadelphia
County:Phila/West:146.685:-:WA3AOP:ol:HolmesARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pike County:Milford:145.350:-:KD3L:oe:TSARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pike County:Shohola Falls:146.715:-:K2KQZ:o:K2KQZ:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pike County:Twin
Lakes:147.090:+:K2KQZ:oe:7StatesRG:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:Allison Park:147.300:+::oae::ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:Apollo:146.970:-:KR3P:oaelrzx:BPRA:ARRL:19920000:::::::::
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:::::::::NA:USA:PA:Pittsburgh:Carnegie:147.030:+:W3KWH:o:SCARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:Churchill:146.820:-:W3MIF:o::ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:Clinton:147.210:+:K3KEM:oaelz
100.0:K3KEM:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:Gibsonia:145.290:-:KD3JT:o:KD3JT:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:Jeanette:146.925:-:WB3JSI:oe:lwnARA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:McMurray:147.345:+:WB3AZL:at::ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:Monroeville:145.250:-:K3SYJ:oel(ca):K3CFY:ARRL:19920000::::::
:::
:::::::::NA:USA:PA:Pittsburgh:Mt Lebanon:146.955:-:N3CGD:o:MtLHSARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:N
Huntingdon:147.120:+:WA3NTR:(ca)t:WA3GXO:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:Natrona Hts:147.000:-:WB3AHI:p:WB3AHI:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Pittsburgh:New

Kensingtn:146.640:-:K3MJW:oae:Skyvu:ARRL:19920000:::::::::
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:::
::::::::NA:USA:PA:Pittsburgh:Pgh/Hazelwood:145.470:-:WA3PBD:oaex:Gtwy
FMA:ARRL:19920000:::::::::
::::::::NA:USA:PA:Pittsburgh:Pgh/Homestead:146.730:-:WA3PBD:oaex:GtwyFM:ARRL:19920000:::::
::::
::::::::NA:USA:PA:Pittsburgh:Phg/N Hills:145.370:-:KA3NVP:oe dx
info:WPaDXA:ARRL:19920000:::::::::
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::::::::NA:USA:PA:Pittsburgh:Phg/N Hills:147.090:+:W3BIS:o:NHARC:ARRL:19920000:::::::::
::::::::NA:USA:PA:Schuykill
County:Delano:145.370:-:W3EEK:o(ca):SchuylARA:ARRL:19920000:::::::::
::::::::NA:USA:PA:Schuykill County:Pine
Grove:145.170:-:K3SLG:el:AARG:ARRL:19920000:::::::::
::::::::NA:USA:PA:Schuykill County:Pine
Grove:146.640:-:K3SLG:o(ca)ew:AARG:ARRL:19920000:::::::::
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County:Pottsville:146.955:-:WB3CRX:o:WB3CRX:ARRL:19920000:::::::::
::::::::NA:USA:PA:Schuykill County:Saint Clair:147.345:+:WB3CRM:o(ca):Schuy
ARA:ARRL:19920000:::::::::
::::::::NA:USA:PA:Schuykill
County:Tamaqua:147.105:+:W3TI:oe:TamTrsScy:ARRL:19920000:::::::::
::::::::NA:USA:PA:Snyder
County:Middleburg:146.820:-:WA3DTV:oty:SnyCtyEMA:ARRL:19920000:::::::::
::::::::NA:USA:PA:Snyder County:Selinsgrove:147.180:+:NR3U:oe:SVARC:ARRL:19920000:::::::::
::::::::NA:USA:PA:Somerset
County:Friedens:146.625:-:N3GQP:olr(ca):N3GQP:ARRL:19920000:::::::::
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County:Friedens:146.625:-:WA3MYA:o(ca)elrzx110.9RBDS:N3GQP:ARRL:19920000:::::::::
::::::::NA:USA:PA:Somerset County:Hidden Valley:146.985:-:W3WGX:olxz Exp
DS:+N3GQP:ARRL:19920000:::::::::
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County:Myersdale:145.270:-:KQ3M:o(ca)elrz-107.2:AHRA:ARRL:19920000:::::::::
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RB:+N3GQP:ARRL:19920000:::::::::
::::::::NA:USA:PA:South Central:Bedford:145.490:-:K3SAK:o:BCARS:ARRL:19920000:::::::::
::::::::NA:USA:PA:South Central:Blue
Knob:147.150:+:K3OIH:oaelrzx:BKRA:ARRL:19920000:::::::::
::::::::NA:USA:PA:South
Central:Chambersburg:147.120:+:W3ACH:o:CVARC:ARRL:19920000:::::::::
::::::::NA:USA:PA:South Central:Derry:145.150:-:N3FLR:oeary:LHVHFS:ARRL:19920000:::::::::
::::::::NA:USA:PA:South Central:Fort Loudon:147.225:+:K3PQX:o:K3PQX:ARRL:19920000:::::::::
::::::::NA:USA:PA:Southwest:Bentleyville:147.270:+:WA3KIQ:oy:WA3DIQ:ARRL:19920000:::::::::
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:::
::::::::NA:USA:PA:Southwest:Connellsville:146.895:-:K3YYM:oer:CCRC:ARRL:19920000:::::::::
::::::::NA:USA:PA:Southwest:Greensburg:147.180:+:W3LWW:o(ca)e:FARC:ARRL:19920000:::::::::
::::::::NA:USA:PA:Southwest:Hopwood:145.170:-:WB3LUC:o:WB3LUC:ARRL:19920000:::::::::
::::::::NA:USA:PA:Southwest:Indian Head:147.225:+:KA3BFI:oa:KA3BFI:ARRL:19920000:::::::::

:::::::::NA:USA:PA:Southwest:Indiana:146.910:-:W3BMD:o:ICARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Southwest:Mt Pleasant:147.015:+:KA3JSD:o:KA3JSD:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Southwest:Somerset:147.195:+:NJ3T:aerz:SARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Southwest:Uniontown:147.045:+:W3PIE:oax:UARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Southwest:Uniontown:147.255:+:W3PIE:o:UARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Southwest:Washington:145.490:-:W3CYO:oa:+AD3T:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Southwest:Washington:146.790:-:K3PSP:oa:K3PSP:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Susquehanna
County:Montrose:147.375:+:N3HPY:o(ca)e:MARA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Susquehanna County:Uniondale:147.240:+:K3EEL:oe:Elk Mt
RG:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Tioga County:Wellsboro:146.790:-:WA3CSP:o:WA3DPV:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Tioga County:Wellsboro:146.910:-:W3VEG:oe:W3VEG:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Union County:New
Berlin:146.625:-:WA3SXQ:o:MiltonARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Wayne County:Honesdale:145.210:-:K3MMC:o:Wayne
ARS:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Wayne
County:Waymart/Salem:146.655:-:WB3KGE:oae:KA3BXT:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:#Petrolia:146.715:-:N3HLG:t:N3HLG:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West
Central:Aliquippa:145.530:222.960:N3IRI:oz:N3IPW:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West
Central:Beaver:146.850:-:W3VRZ:o(ca)erz:TAARA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Beaver:147.135:+:W3VRZ:oery:TAARA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Beaver:147.165:+:N3CYR:or
100.0:N3CYR:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Beaver
Falls:145.310:-:W3SGJ:oaelrz:BVARA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West
Central:Bessemer:145.170:-:N3FYK:oez(ca):N3FYK:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West
Central:Brookville:147.285:147.285:WA3FFC:o(ca):WB3HUE:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Butler:147.360:+:W3UDX:oa:BARA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West
Central:Industry:146.415:146.415:N3CYR:oe(ca):RESCU40:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Kittanning:145.410:-:K3JVJ:o:FAWA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West
Central:Leechburg:147.330:+:WA3JVG:oer:WA3JVG:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Mars:145.450:-:W3GT:oelt:W3GT:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:New
Castle:146.625:-:WA3VRD:o:BDeSanzo:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:New Castle:147.195:+:N3CVB:otaz:NCRA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Parker:145.190:-:W3ZIC:oalr:FVM&KC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Sharon:145.350:-:AF3P:oaelrzx:SPRING:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Sharon:147.150:+:W3LIF:oaerz:MCARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:West Central:Zelienople:147.240:+:W3WKD:oe:BCFMA:ARRL:19920000:::::::::
:::::::::NA:USA:PA:Wyoming County:Mehoopany:147.210:+:WB3IWZ:o:EMARC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:York
County:Hanover:147.330:+:W3JNT:o(ca)e:Penn-Mar:ARRL:19920000:::::::::

:::::::::NA:USA:PA:York County:Red Lion:146.865:-:WB3ERZ:oae:Hill Top:ARRL:19920000:::::::::
:::::::::NA:USA:PA:York County:Shrewsbury:146.700:-:K3NXU:oe:SPaComGrp:ARRL:19920000:::::::::
:::::::::NA:USA:PA:York County:York:146.790:-:N3AIA:o(ca):WB3JEC:ARRL:19920000:::::::::
:::::::::NA:USA:PA:York County:York:146.970:-:W3HZU:o:Keystone:ARRL:19920000:::::::::
:::::::::NA:USA:RI::#Cranston:147.105:+:W1OAV:ael:Pine Hill ARG:ARRL:19920000:::::::::
:::::::::NA:USA:RI::#Lincoln:146.940:-:WA1OAF:oelx:RI RMA:ARRL:19920000:::::::::
:::::::::NA:USA:RI::Bristol:145.330:-:K1CW:oe:E Bay AWA:ARRL:19920000:::::::::
:::::::::NA:USA:RI::Bristol:146.350:-:W1CG:ey:HopeVlyRA:ARRL:19920000:::::::::
:::::::::NA:USA:RI::Coventry:145.350:-:WA1KWZ:o:AEWA:ARRL:19920000:::::::::
:::::::::NA:USA:RI::Cranston:145.170:-:KA1JNP:o:KA1JNP:ARRL:19920000:::::::::
:::::::::NA:USA:RI::Cranston:146.700:-:WA1RBT:oaer:OcnSt ARG:ARRL:19920000:::::::::
:::::::::NA:USA:RI::E Providence:147.330:+:W1AQ:oe::ARRL:19920000:::::::::
:::::::::NA:USA:RI::Exeter:147.165:+:WA1HAH:oae:HopeVlyRA:ARRL:19920000:::::::::
:::::::::NA:USA:RI::Johnston:146.835:-:WA1QCA:oerx::ARRL:19920000:::::::::
:::::::::NA:USA:RI::Newport:146.880:-:N1BED:o::ARRL:19920000:::::::::
:::::::::NA:USA:RI::Newport:146.985:-:K1DA:a:K1DA:ARRL:19920000:::::::::
:::::::::NA:USA:RI::Portsmouth:147.360:+:W1SYE:oae:NwprtCoRC:ARRL:19920000:::::::::
:::::::::NA:USA:RI::Scituate:146.760:-:W1HQV:olx:RI FM RS:ARRL:19920000:::::::::
:::::::::NA:USA:SD:Central:Eagle Butte:146.850:-:W0KUX:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Central:Huron:146.820:-:WB0ULX:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Central:Huron:147.090:+:WB0PLP:oa::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Central:Mitchell:146.640:-:W0ZSJ:oa::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Central:Pierre:145.350:-:W0HVY:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Central:Redfield:147.150:+:WD0BIA:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Central:Reliance:146.940:-:WB0HTT:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Central:Wessingtn Sprgs:147.345:+:AA0F:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:East Central:Brookings:146.940:-:W0BXO:oa::ARRL:19920000:::::::::
:::::::::NA:USA:SD:North Central:Aberdeen:146.910:-:WA0UWA:ol::ARRL:19920000:::::::::
:::::::::NA:USA:SD:North Central:Mobridge:147.210:+:W0YMB:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Northeast:Bowdle:147.120:+:WB0JZZ:o::ARRL:19920000:::::::::
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:::::::::NA:USA:SD:Northeast:Clear Lake:147.180:+:WAOYIN:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Northeast:Crandall:146.970:-:W0JOZ:ol::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Northeast:Groton:147.330:+:WBOJZZ:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Northeast:Sisseton:146.880:-:WA0BZD:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Northeast:Watertown:146.850:-:KF0HL:ol::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Southeast:Beresford:147.240:+:W0OJY:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Southeast:Canton:147.150:+:K0TVJ:oa::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Southeast:Humbolt:147.285:+:N0LCL:ol::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Southeast:Menno:147.000:-:W0OJY:ol::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Southeast:Sioux Falls:145.310:-:KBOA:o::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Southeast:Sioux Falls:146.895:-:W0ZWY:oae::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Southeast:Vermillion:147.375:+:AC0M:ol::ARRL:19920000:::::::::
:::::::::NA:USA:SD:Southeast:Yankton:146.850:-:W0OJY:ol::ARRL:19920000:::::::::
:::::::::NA:USA:SD:West:Custer:146.850:-:W0BLK:o::ARRL:19920000:::::::::
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:::::::::NA:USA:SD:West:Rapid City:146.940:-:WB0BLK:ol::ARRL:19920000:::::::::
:::::::::NA:USA:SD:West:Rapid City:147.840:-:K0VKH:oa::ARRL:19920000:::::::::

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::::::::NA:USA:SD:West:Custer:147.090:+:K0DPD:o::ARRL:19920000::::::::
::::::::NA:USA:VT:Burlington:Burlington:146.610:-:W1KOO:oa:BrlngtnAR:ARRL:19920000:::::::
:
::::::::NA:USA:VT:Burlington:Essex:146.670:-:WB1GQR:oelpExp:Pisamone:ARRL:19920000:::::::
:
::::::::NA:USA:VT:Burlington:Essex Jct:146.850:-:WA1WLM:o(ca)l 10FM:SilJct
RC:ARRL:19920000::::::::
::::::::NA:USA:VT:Burlington:Essex Jct:146.850:+:WA1WLM:o(ca)l +600lP:SilJct
RC:ARRL:19920000::::::::
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Assoc:ARRL:19920000::::::::
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Mansfield:146.940:-:W1KOO:o:BrlngtnAR:ARRL:19920000::::::::
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::::::::NA:USA:VT:East Central:Norwich:145.130:-:N1CIV:oae:N1CIV:ARRL:19920000::::::::
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FM:K1MOQ:ARRL:19920000::::::::
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Central:Williamstown:146.625:-:W1BD:oae:CentVtARC:ARRL:19920000::::::::
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::::::::NA:USA:VT:Plattsburgh:Plattsburgh
NY:147.150:+:W2UXC:oa:ChmpVlyRC:ARRL:19920000::::::::
::::::::NA:USA:VT:Southeast:Marlboro:147.015:+:N1HWI:te:N1HWI:ARRL:19920000::::::::
::::::::NA:USA:VT:Southeast:Mt Ascutney:146.760:-:W1GUA:o:CtVlyFMA:ARRL:19920000::::::::
::::::::NA:USA:VT:Southwest:Mt Equinox:145.390:-:WA1ZMS:tex:WA1ZMS:ARRL:19920000::::::::
::::::::NA:USA:VT:West Central:Mendon:145.370:-:WA1ZMS:t:WA1ZMS:ARRL:19920000::::::::
::::::::NA:USA:VT:West Central:Middlebury:147.360:+:WA1NRA:o:WA1NRA:ARRL:19920000::::::::
::::::::NA:USA:VT:West
Central:Rutland:147.045:-:WA1ONT:oae:GreenMtWS:ARRL:19920000::::::::
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::::::::NA:USA:WV:T-Marc
Area:Barboursville:441.000:146.460:KB8EHJ:ol::ARRL:19920000::::::::
::::::::NA:USA:WV:T-Marc Area:Beckley/Bolt:145.170:-:N8FRV:oal:ARA
NORTH:ARRL:19920000::::::::
::::::::NA:USA:WV:T-Marc Area:Beckley/EOC:145.370:-:KD8VS:oa:BLACK
DIAM:ARRL:19920000::::::::
::::::::NA:USA:WV:T-Marc Area:Beckley/Flat Top:146.850:-:K8BO:o:BLACK
DIAM:ARRL:19920000::::::::
::::::::NA:USA:WV:T-Marc Area:Beckley/Laylan:145.310:-:WF1G:ol:ARA
NORTH:ARRL:19920000::::::::
::::::::NA:USA:WV:T-Marc Area:Bluefield:145.490:-:W8MOP:o(ca):EAST
RIVER:ARRL:19920000::::::::
::::::::NA:USA:WV:T-Marc Area:Bridgeport:147.120:+:WB8DKM:(ca)t::ARRL:19920000::::::::
::::::::NA:USA:WV:T-Marc Area:Buckhannon:145.130:-:N8FHE:oal:MOUNTAIN
ARC:ARRL:19920000::::::::
::::::::NA:USA:WV:T-Marc Area:Buckhannon:145.410:-:N8FHE:oa:MOUNTAIN
ARC:ARRL:19920000::::::::
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:::::::::NA:USA:WV:T-Marc Area:Buckhannon:146.850:-:WD8L:o:UPSHUR
REP:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc
Area:Charleston:145.430:-:WS8L:o(ca):GR.KANAWHA:ARRL:19920000:::::::::
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:::::::::NA:USA:WV:T-Marc Area:Clarksburg:147.315:+:KE8MR:o::ARRL:19920000:::::::::
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:::::::::NA:USA:WV:T-Marc Area:Elkins:146.775:-:KB8BWZ:o::ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Evans:147.210:+:KD8TC:o::ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Fairmont:146.900:-:W8SP:o::ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Flat Top/Wintr:146.625:-:WF1G:oa:ARA
NORTH:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Franklin:147.345:+:W3RUA:oe:W3RUA:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Gassaway:146.610:-:WB8MZI:o::ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Glenville:145.290:-:KA8ZXP:oazlrb::ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Grafton:147.375:+:WD8LNB:o:WD8LNB:ARRL:19920000:::::::::
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ARC:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Harrisvl/Pensb:147.300:+:WD8NSL:o::ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Hinton:147.255:+:KB8EQC:oae:BLUESTONE:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Horsepen
Mtn:147.195:+:NV8H:o(ca)l:NV8H:ARRL:19920000:::::::::
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Area:Huntington:146.760:-:W8VA:o(ca)zl:TARA:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Huntington/Cha:146.640:-:WB8EZR:ozrb:WPBY-TV
RP:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Kingston/Lick:145.470:-:W8FG:o:KFC
ARA:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Leon:147.180:+:WB8NMT:(temp off air)::ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc
Area:Lewisburg:146.730:-:WA8AVZ:o(ca):SOUTHERN:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Liberty:145.410:-:W8HYX:o:WV AR, INC:ARRL:19920000:::::::::
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CTY:ARRL:19920000:::::::::
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ARC:ARRL:19920000:::::::::
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Area:Morgantown:147.075:+:KE8QC:oazlrb(ca):KE8MR:ARRL:19920000:::::::::
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Storm:147.105:+:KA8JTH:o(ca)lzrb:KA8JTH:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:Mullens/Hrdn:147.030:+:KC8IT:orb:ARA
NORTH:ARRL:19920000:::::::::
:::::::::NA:USA:WV:T-Marc Area:New Martinsvll:146.940:+:WB8CSW:::ARRL:19920000:::::::::

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ARC:ARRL:19920000:::::::::
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Area:Parkersburg:146.970:-:WA8CRW:oa:PARKERSBUR:ARRL:19920000:::::::::
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COUNT:ARRL:19920000:::::::::
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Area:Parkersburg:147.390:+:WA8CRW:o(ca):PARKERSBUR:ARRL:19920000:::::::::
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GEO:ARRL:19920000:::::::::
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::::::::NA:USA:WV:T-Marc
Area:Princeton:147.060:-:KA8PNC:o(ca):PRINCETON:ARRL:19920000:::::::::
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Area:Princeton:147.225:+:WB8NRK:o:PRINCETON:ARRL:19920000:::::::::
::::::::NA:USA:WV:T-Marc Area:Princeton/Pipe:146.925:-:WD8OGY:oa::ARRL:19920000:::::::::
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CO:ARRL:19920000:::::::::
::::::::NA:USA:WV:T-Marc Area:Ravenswood:146.700:-:WD8JNU:orb:JAX CTY
AR:ARRL:19920000:::::::::
::::::::NA:USA:WV:T-Marc Area:Richwood:145.190:-:WB8YJJ:oe:WILLIAM
CO:ARRL:19920000:::::::::
::::::::NA:USA:WV:T-Marc Area:Salt Rock:145.110:-:WD8MCR:o::ARRL:19920000:::::::::
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INC:ARRL:19920000:::::::::
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STA:ARRL:19920000:::::::::
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Charleston:146.880:-:WB8CQV:ol:WB8CQV:ARRL:19920000:::::::::
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Tract:146.655:-:KB8BUC:oe:KB8BUC:ARRL:19920000:::::::::
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::::::::NA:USA:WV:T-Marc Area:Williamson:145.330:-:WR8M:oarb::ARRL:19920000:::::::::
::::::::NA:USA:WV:East:Berkeley Spgs:146.745:-:KK3L:oerx:KK3L:ARRL:19920000:::::::::

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::::::::NA:USA:WV:East:Martinsburg:145.150:-:WA8FSE:oe:OpequonRS:ARRL:19920000::::::::
::::::::NA:USA:WV:East:Martinsburg:147.255:+:WB8YZV:o:WB8YZV:ARRL:19920000::::::::
::::::::NA:USA:WY:Big Horn Basin:Greybull:146.670:-:WB7QQA:or:CO
RACES:ARRL:19920000::::::::
::::::::NA:USA:WY:Buffalo:Buffalo:147.120:+:N7BVX:o:N7BVX:ARRL:19920000::::::::
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::::::::NA:USA:WY:Evanston:Evanston:145.330:-:N7EYQ:o:N7EYQ:ARRL:19920000::::::::
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Hole:Hackson:146.910:-:N7NG:oaer:TetnRACES:ARRL:19920000::::::::
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::::::::NA:USA:WY:Sheridan:Sheridan:146.730:-:N7KEO:o:N7KEO:ARRL:19920000::::::::
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::::::::NA:USA:WY:South Central:Rawlins:146.760:-:WA7YWA:oa:CCARS:ARRL:19920000::::::::
::::::::NA:USA:WY:South Central:Rawlins:147.240:+:KS7Q:o:Univ ARC:ARRL:19920000::::::::
::::::::NA:USA:WY:South Central:Rawlins:147.390:+:N7JNI:ol:n7jni:ARRL:19920000::::::::
::::::::NA:USA:WY:Southeast:Laramie:147.015:+:N7MMC:ol:N7MMC:ARRL:19920000::::::::
::::::::NA:USA:WY:Southeast:Wheatland:146.880:-:WA7SNU:ol:GPARA:ARRL:19920000::::::::
::::::::NA:USA:WY:Southwest:Cokeville:147.300:+:N7BRQ:oae:N7BRQ:ARRL:19920000::::::::
::::::::NA:USA:WY:Southwest:Rock Springs:146.610:-:N7ERH:or:SC
RACES:ARRL:19920000::::::::
::::::::NA:USA:WY:Southwest:Rock Springs:146.940:-:NW7I:o:SARC:ARRL:19920000::::::::
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::::::::NA:USA:WY:West Central:Lander:145.290:-:WB7FFK:o:WB7FFK:ARRL:19920000::::::::
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::::::::NA:USA:WY:West Central:Riverton:147.300:+:N7BMH:oal:H7BMH:ARRL:19920000::::::::
::::::::NA:USA:WY:West Central:Thermopolis:147.030:+:KD7BN:ol:FCARS:ARRL:19920000::::::::

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Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

282. WANTED: Info on Standard C5718DA

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 16:44:10 UTC
From: benjy@benjy.cc.vt.edu
Message-ID: <2h19cq$gjp@vtserf.cc.vt.edu>
Source record: 272426

Hi,

I'm interested in Standard's C5718DA dual-band mobile rig and
would like to hear from anyone who has experience with it.
I'm looking for a rig that I can mount under my car seat
and operate from the mic so that I don't have to mount a
control head on the dash.

Please e-mail if you have any knowledge of this rig.

Thanks, Benjy

--
Benjy Cline, AC4XO
Virginia Tech Computing Center
benjy@benjy.cc.vt.edu

283. Re: Portable 2m Antenna for Mountaineering???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 17:03:00 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2h1ag4INNbhq@abyss.West.Sun.COM>
Source record: 272328
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <1994Jan12.092451.1134@titan.ksc.nasa.gov> Nguyent@snowmass.ksc.nasa.gov (Tom) writes:
>David,
>
>Try a rolled up J-pole. It's made of 300 Ohm Twin lead and tapped with a
>50 Ohm coax with BNC connector on opposite end. It provides about 2.8dB
>gain. You can buy the ant from MFJ for about $12 or build it yourself.

Since a J-pole is an end-fed 1/2 wave vertical, how does it have
2.8 dB of gain? 2.8dB of gain in relation to what? A quarter-wave?
A dipole? An isotropic radiator?

Optimally, a J-pole will have 0 dB relative to a 1/2 wave dipole,
but the matching section contributes loss, so I'd normally expect
a J-pole to provide a little less than 0dB, say -.5dB relative
to a dipole. If so, this is something like 1.5dB over an isotropic
radiator...

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

284. Re: Fm Broadcast

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 17:16:39 UTC
From: jfw@ksr.com
Message-ID: <38407@ksr.com>
Source record: 272331

alanb@sr.hp.com (Alan Bloom) writes:
>chris andersen (akcs.marz@vpnet.chi.il.us) wrote:
>: Is it possible for a person with ham or modified ham set up to broadcast
>: on the 88-108 Mhz area???

>None of the other respondents mentioned that it is perfectly legal to
>broadcast on the FM broadcast band using very low power. You can
>buy "wireless microphones" and other devices with a range of a couple
>hundred feet or so.

True, but normally those "wireless microphones" aren't described as "ham or
modified ham set ups" (though there are people who have converted 49MHz
walkie-talkies to 6 meters...).

285. Re: An online repeater database

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 17:26:51 UTC
From: Greg@epitome.er.doe.gov
Message-ID: <2h1bsr$9mt@cronkite.nersc.gov>
Source record: 272330

Can someone copy this file to an anonymous FTP site? My mailer won't
let me copy it, its too big.

Greg
WA9EYY

286. Re: VHF - UHF mobile antenna for scanner

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 17:51:32 UTC
From: root@jackatak.raider.net
Message-ID: <Lsw2Fc4w165w@jackatak.raider.net>
Source record: 272353

thweatt@rtsg.mot.com (John A. Thweatt) writes:

> I asked this question about a month ago but didn't get any responce so
> here it goes again.
I just read what you are looking for, and based on your wish that it
hear spectacularly from 30MHz to well over 1,000MHz, and also function
as a gain transmitting antenna for 146MHz and 440MHz...all the while
not looking obtrusive and marring the natural lines of your pickup
truck...

I suspect you would find better answers in
alt.fountain.of.youth.I.found.it

You are asking for the near impossible, and just a guess, but you
probably don't want to spend more than, say $50..., right?

That is a more difficult quest than the Fountain of Youth or the Holy
Grail... it *IS* the Holy Grail of mobile antennas...

No wonder no one answered... there is no answer... wonder why I
tried...? ;^)
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

287. Re: QSL routes

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 18:22:05 UTC
From: root@jackatak.raider.net
Message-ID: <i8X2Fc6w165w@jackatak.raider.net>
Source record: 272352

tcj@netcom.com (Todd Jonz) writes:
> Derek Wills (oo7@astro.as.utexas.edu) writes:
> > > PZ1DYX No listing given....
> > Let me guess that this was a cw contact, and that the op was PZ1DY,
> > who is quite active, and who was sending "thank you" = "TU" = "X" if
> > you run the T and the U together, as many do.
> Inspector Morse would be impressed! ;-)

And, last week a mysterious station signing P8E was heard... and
logged... NAME RON -- QTH NEW BEDFORD, OH ... and he didn't seem as
hot about QSLing as all those in the pileup working him did...

Just Ron, WE8E having some fun... ;^)
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

288. DIPOLES FED BY LADDER LINE - Q

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 19:07:16 UTC
From: MAYNARD@URIACC.URI.EDU
Message-ID: <199401121918.LAA17597@ucsd.edu>
Source record: 272333

Please excuse my laziness in not researching this myself...

I just bought an antenna tuner and want to put up a dipole fed
by 450 ohm ladder line, for use across 160-10 meters. The longest
one I have located commercially is one 135ft long with 100ft of
feed line, for 80-10 meters (much cheaper, incidently, than building
from scratch with current wire prices!). Anyone have an opinion
on my going to ~260 ft (yes, I do have room), especially regarding
performance on higher bands (40-10 meters).

Thanks for reading this, Brian WY2G

289. Mac owners....READ THIS!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 19:21:42 UTC
From: tofi@krksun.krk.fi
Message-ID: <1994Jan12.192142.12327@krk.fi>
Source record: 272335

OK, pals.

Here's a list of Ham related Mac software. The files are in a .HQX format,
so just thorw me some mail and I'll send you the files you want.

DX Map 1.1

The following is from a help field that can be accessed from within the stack.
This stack requires the version of Hypercard to be 2.0 or greater.

This stack enables amateur radio operators to find the location, bearing, and
other information for the 'DXCC' countries of the world. It also displays the
day and night portions of the globe dynamically.

MacDOVE

MacDOVE is a simple FORTRAN program for decoding or converting recorded DOVE
telemetry packets into engineering units on a Macintosh 512K, Plus, SE, SE/30,
or II-series computer. Note that MacDOVE does not decode packets directly
from a TNC but from a file of packets previously recorded. Both the
source code and the application are available from the address below.
The present version of MacDOVE does not use any of the special
window/menu/mouse features of the Mac
and so the source code should be compatible with other machines.

MorseTrainer US-1.0.1b20

MorseTrainer is a program for learning and training Morse code. This is the
first translated version of the program which originally was developed and
localized for Sweden. The program itself can be considered a final version
of v1.0.1 but the translation is probably not perfect, hence a beta-release
instead of final-release.

SunClock

PacketTracker

For the network manager and BBS operator, PacketTracker provides extensive
insight to the operation of the local network and the problems such as
excessive retries on a path.

SPARKS-II

Morse trainer type.

WORLDTIME.sea

1) It tells you what time it is in other cities, taking into account
Daylight Saving Time/Summer Time.
2) It automatically resets your computer's clock at the beginning and end
of Daylight Saving Time/Summer Time.
3) It allows you to change the location of your computer as it is stored
in your computer's memory and reset the clock appropriately.

MORSE CODE TUTOR

Morse Mania

This program was written as a practice program for people already
familiar with the International Morse Code. It allows the user to
practice copying Morse code at various speeds and at different audio
pitches.

MorseMaster

This program can read any TEXT file, but the interval of carriage
returns should be less than 256 characters to send correctly. You can
open large file, but normally the latter part is truncated
(If it is too large, an alert box appears).

Grid

This Macintosh program (MacBinary format) converts between coordinates
(longitude, latitude in degress, minutes, seconds) and the grid square
locator used by radio amateurs, and vice versa. The old European QTH
locator system is supported. The distance and heading between two points
on earth can be calculated. The program will automatically recognize the
coordinate system used: longitude/latitude, worldwide grid square locator
or European QTH locator.

OrbiTrack 2.1b14
Satellite Tracking Program

___ //// _____
|--00 Kristoffer H{ggstr|m (Kauniainen, Finland)
C ^ E-Mail: tofi@krk.fi
___ \ ~/ _____
Nobody knows who's side he was on
It's a risk that you take in no mans land
Nobody knows what made him decide
To run for freedom and to certain suicide -Marillion

290. QSL help pse

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 19:30:32 UTC
From: jcraig@kean.ucs.mun.ca
Message-ID: <1994Jan12.160032.1@kean.ucs.mun.ca>
Source record: 272341

I worked the following on top band, but can't seem to find
managers / CBA's for them...

YS1X
HH2PK
XF4JC
V47WZ

Any help will be appreciated.
73 Joe, VO1NA

291. Re: DIPOLES FED BY LADDER LINE - Q

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 19:52:16 UTC
From: wrb@cbnews.cb.att.com
Message-ID: <CJJ8J7.92A@cbnews.cb.att.com>
Source record: 272334

In article <199401121918.LAA17597@ucsd.edu> MAYNARD@URIACC.URI.EDU writes:
>Please excuse my laziness in not researching this myself...
>
> I just bought an antenna tuner and want to put up a dipole fed
> by 450 ohm ladder line, for use across 160-10 meters. The longest
> one I have located commercially is one 135ft long with 100ft of
> feed line, for 80-10 meters (much cheaper, incidently, than building
> from scratch with current wire prices!). Anyone have an opinion
> on my going to ~260 ft (yes, I do have room), especially regarding
> performance on higher bands (40-10 meters).
>
> Thanks for reading this, Brian WY2G

If you are using a tuner, then 3 basic rules apply:

1) Make it as LONG as possible
2) Put it as HIGH as possible
3) Keep the feed line away from metal (6" or more)

If anyone tells you an antenna must be resonant to work well, punch them in
the head.
--
Wally Blackburn Clinton-Gore - Socialist Leadership
wrb@ccsitn.att.com for the 90s!
Amateur Radio Station AA8DX I'm the NRA.
More people have died in Ted Kennedy's car than from my gun!

292. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 20:22:45 UTC
From: wjc@ll.mit.edu
Message-ID: <1994Jan12.202245.13524@ll.mit.edu>
Source record: 272347

In article <1994Jan11.165851.23593@kodak.rdcs.kodak.com>, ornitz@kodak.rdcs.kodak.com (Barry x24904/ER/167B-TED) writes:

> ...stuff deleted...
>
> This is a common misconception and one that needs to be corrected,
> especially in regard to a discussion on how radio waves interact with
> living cells.
>
> The lowest resonant absorption frequency for water (rotational
> spectra) is 22.235 GHz. Home microwave ovens in the United States
> operate at 2.45 GHz.
>
> ...stuff deleted...
>

I agree with Barry that the common microwave oven frequency of 2.45 GHz does not correspond to a resonance of the water molecule. I also agree that the lowest resonance for water is around 22 GHz.

However, that resonance is exhibited by _gaseous water_.

So far as I know, neither liquid water nor ice exhibit any RF rotational resonances, but I'm not certain.

By the way, the dielectric loss factor of pure, liquid water does show a peak at about 1 GHz at 0 Celsius, moving up to about 10 GHz at +20 Celsius. Sea water shows a rather constant loss factor over that frequency range (pretty much the same at 0 and +20 Celsius), increasing at lower frequencies and falling at higher frequencies. These are my recollections from data presented in an appendix to Volume 3 of _Microwave Remote Sensing_ by Ulaby et. al.

73

Bill Chiarchiaro N1CPK
wjc@ll.mit.edu

293. Re: Fm Broadcast (Legal Part 15 power levels)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 20:27:54 UTC
From: alanb@sr.hp.com
Message-ID: <CJJA6J.Fw6@srgenprp.sr.hp.com>
Source record: 272337

Barry x24904/ER/167B-TED (ornitz@kodak.rdcs.kodak.com) wrote:
: In article <2gv1l8$4jrn@ep130.wg2.waii.com> mjg@ep130.wg2.waii.com
: (Michael Gentle) writes:
: >IF you use less then 100mw and
: >a antenna for less then 5' in length then I beleive that it is legal.

: Fellow hams...
: PLEASE stop propagating these myths.

: The Part 15 rules give the maximum permissible field strength at a specified
: distance from the antenna. For transmissions in the FM broadcast band, the
: numbers are 250 microvolts per meter measured at three meters.

: Many commercial wireless microphones and FM home-broadcaster kits far exceed
: these power levels and are illegal to use by FCC rules.

I haven't looked at the part 15 rules in years, but unless they have
changed, you are allowed to use EITHER the field strength limit OR the
power and antenna length limit.

AL N1AL

294. Re: DIPOLES FED BY LADDER LINE - Q

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 20:32:43 UTC
From: alanb@sr.hp.com
Message-ID: <CJJAEK.G1J@srgenprp.sr.hp.com>
Source record: 272338

MAYNARD@URIACC.URI.EDU (MAYNARD@URIACC.URI.EDU) wrote:

: I just bought an antenna tuner and want to put up a dipole fed
: by 450 ohm ladder line, for use across 160-10 meters. The longest
: one I have located commercially is one 135ft long with 100ft of
: feed line, for 80-10 meters (much cheaper, incidently, than building
: from scratch with current wire prices!). Anyone have an opinion
: on my going to ~260 ft (yes, I do have room), especially regarding
: performance on higher bands (40-10 meters).

The 260-foot antenna would work better on 160 meters. You could probably load up the 135-foot antenna on 160, but efficiency might be poor because of the low radiation resistance.

On the higher bands, the main difference with the 260-foot antenna would be the radiation pattern. On 80 meters, the pattern would be a cloverleaf (maximums at approx. 45-degree angle from the wire) instead of bi-directional perpendicular to the wire. On 40-10 meters, the antenna would tend to be more directional off the ends of the wire than with the 135-foot antenna.

AL N1AL

295. Re: WANTED: Info on Standard C5718DA

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 21:14:17 UTC
From: doc@webrider.central.sun.com
Message-ID: <2h1p7aINN1gv@cronkite.Central.Sun.COM>
Source record: 272343

In article gjp@vtserf.cc.vt.edu, benjy@benjy.cc.vt.edu (Ben E. Cline) writes:
> Hi,
>
> I'm interested in Standard's C5718DA dual-band mobile rig and
> would like to hear from anyone who has experience with it.
> I'm looking for a rig that I can mount under my car seat
> and operate from the mic so that I don't have to mount a
> control head on the dash.

I bought one of these about 4 weeks ago and I LIKE IT!!! I've been getting excellent signal reports, and have heard others using the Standard on the air with excellent sound quality.

One of the main reasons I bought this model is the microphone setup. I do exactly what you're planning on, I put the radio under the seat (I will eventually install it in the trunk) and use the microphone controls which are full featured. The Display on the microphone is very easy to read, the labels are backlit (are actually translucent so light from within the microphone shines thru them), and using the features becomes very easy after a short period of acclimation. How often do you run into a radio where a control head is an option? :^)

I have yet to run across any Intermod problems. In fact one of the reasons I first looked at the Standard was from hearing that they were much less susceptible than most other brands (something to do with them using a different IF). The only Intermod I've heard since I bought this radio has come over the airwaves from someone else.

This model comes packet (9600 baud) ready, but I really can't say anything about that as I don't do packet yet. It has a wide range of scanning capability (100MHz-199.99MHz including AM capability, 250MHz-499.99MHz, and 800MHz-999.99MHz)

So far I, and another user, have only run into two issues that we consider problems. The biggest one is that, at present, when using crossband repeat mode the output won't include a PL tone. The other is that there seems to be no direct way to pull a frequency in memory into VFO mode (Scanners often do this with one or two keystrokes). You instead have to enter the freq. manually (no big deal). We have talked with Standard about these, and Standard is apparently going to have a fix for the PL problem sometime in February (for free of course :). I'm not sure about the Memory->VFO issue yet.

Overall, I'm extremely pleased with the radio. It ain't cheap but works real fine.

73,

--
-- Steve Bunis, Sun Microsystems ***DoD #0795*** 93-ST1100
-- Itasca, IL ***AMA #682049***
-- ***HRCA #HM125617**
-- *** N9VLP ***

296. Learning Morse - which letters to start?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 21:30:46 UTC
From: tjf@beta.lanl.gov
Message-ID: <tjf-120194143046@mamie.lanl.gov>
Source record: 272346

Will wonders never cease? My XYL asked if there was a class she could take to get her license just as one was announced on the local 2m net!

The class instructor said he was teaching only the written material for Codeless Tech license, so I will be the code coach for my wife. Although I've only had my license about a year, I actually learned the code in Junior High School (more than 20 years ago). I don't remember how you go FROM SCRATCH! Seems to me I learned A,N,R,S,E,I,H first, then W,U,M,O,C etc. Is there a preferred way or order to learn the letters from scratch? All I have in the house now are 15-20 WPM tapes and a couple of code programs for Mac for people who already know the code. How should I proceed? My oldest son is learning by sending "secret" messages to me with a homebrew CPO. I started him off with the letter groups I mentioned above, but I am not sure what is best.

Any comments, please post or email!

Thanks,
Tom
KJ5LT

297. Re: Morse Code program

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 21:33:25 UTC
From: furuta@cs.tamu.edu
Message-ID: <2h1qb5$p55@news.tamu.edu>
Source record: 272344

In article <wy1zCJHG1J.1pt@netcom.com>, Scott Ehrlich <wy1z@netcom.com> wrote:
>
>On world.std.com, there is a C program for code in the directory:
>pub/hamradio/unix called superiormorse.shar.

Has anyone managed to eliminate the residual clicks that are generated
along with the characters in the Sun version of this program (see
comment in beepSun.c)? They are quite noticable, especially at higher
speeds.

Also on my wishlist: a version of the program that would produce a
Sun .au file for use by other programs.

--Rick
KE3IV

298. Re: DIPOLES FED BY LADDER LINE - Q

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 22:05:15 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan12.220515.2615@ke4zv.atl.ga.us>
Source record: 272349

In article <199401121918.LAA17597@ucsd.edu> MAYNARD@URIACC.URI.EDU writes:
>Please excuse my laziness in not researching this myself...
>
> I just bought an antenna tuner and want to put up a dipole fed
> by 450 ohm ladder line, for use across 160-10 meters. The longest
> one I have located commercially is one 135ft long with 100ft of
> feed line, for 80-10 meters (much cheaper, incidently, than building
> from scratch with current wire prices!). Anyone have an opinion
> on my going to ~260 ft (yes, I do have room), especially regarding
> performance on higher bands (40-10 meters).

Brian, going to 260 feet may not help much at all at 160 unless you can also get the antenna about 1/2 wave *high*, and that's typically not the case. It would present an easier impedance to match than the 135 footer at 160, but then you'd have a harder impedance to match at 80 meters because you'll have two halfwaves being end fed and that's an extremely high impedance point. 40-10 patterns are going to be a bunch of minor lobes anyway.

For an all band flattop, it's best to *not* make the antenna a resonant length for any of the ham bands. The reason is that on bands where the legs are halfwaves, or multiples of a halfwave, the feed point impedance is going to be extremely high. If you choose a length that's non-resonant, the impedance at the feed point will be complex, but not extreme, on any ham band. That works better with most tuners.

The classic 80-10 flattop has a length of 105 feet. That's non-resonant and works well with open wire feeders and a tuner. Doubling that to 210 feet could be useful to increase capture area and make it more efficient at 160. Performance at 12 and 10 meters could be somewhat worse with the 210 footer than the 105 footer because of the extra minor lobes.

If you want clean pattern gain on 40, 30, 20, 15, 12, or 10 meters, you're going to have to use a resonant design with the legs broken by stubs at the appropriate lengths for a band so that you have a series of broadside halfwaves fed in phase. It won't be a good all band antenna anymore because stubs for one band will be in the wrong place for other bands. There are better wire antennas than this, such as one of the various curtain antennas.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary

Lawrenceville, GA 30244 | |

299. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 23:19:00 UTC
From: OSYSMAS@MVS.OAC.UCLA.EDU
Message-ID: <19940112231936OSYSMAS@MVS.OAC.UCLA.EDU>
Source record: 272359
Cross-posted to: rec.video,rec.radio.amateur.misc,sci.electronics

>Unfortunately publication 432 is out of date here. The nets don't
>work this way anymore, and haven't since the late 1970s, as has been
>noted previously in this thread. Using broadcast colorburst will only
>give you a reference that's the local crystal oscillator at the local
>broadcast outlet. It's likely no more accurate than your own crystal
>oscillator, about 4 ppm. NIST should circulate a retraction of this
>technique because it's likely still misleading folks. (They may have
>issued one, but I haven't seen it.)

See NIST Special Publication 432 (Revised 1990), inside cover
says "Supersedes NBS Spec. Publ. 432 dated September 1979.

Oh, I can't find a mention of TV color signal calibrating at all
there. See the 1979 version (NIST was NBS then), page 10 & 11
section 7 titled "Digital Frame Synchronizers and
TelevisionTechniques". <sic>

This section explains that a frame synchronizer replaces the
original accuracy of the network feed with the accuracy of the
local station reference. It also says that only a few stations
have them, but this will change if the cost of frame
synchronizers drops...

I'd guess a bit of RAM and some timing circuits cost a bit less
now than in 1979. So this implies that TV color carriers are
useless now as a frequency standard. Which probably explains why
this information was dropped from Pub 432.

You're right, the new Pub 432 should probably have made a point
of "retracting" this bit of information. Instead they just
dropped all mention of it.

PS: The old Pub 432 does mention that there may be a special case
where good color references may be available. The old pub
claims that ABC stations in Los Angeles and New York are
co-located with their network studios and use the network
cesium references. Anyone know if this is still true? Or
has their cesium reference outlived it's lifetime and not
been replaced?

300. Morse code program freeware or shareware answer.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-12 23:51:44 UTC
From: jcontrer@buho.dpi.udec.cl
Message-ID: <1994Jan12.235144.24001@halcon.dpi.udec.cl>
Source record: 272339

[No readable article body recovered]

301. ANARTS RTTY NEWS791 09/01/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 00:44:27 UTC
From: dave@eram.esi.com.au
Message-ID: <5107@eram.esi.com.au>
Source record: 272354
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS NEWS BULLETIN 791 09/01/94

SUNDAY BROADCAST SCHEDULES.
3.545 mhz 0930 utc VK2BQS (Jim)
7.045 mhz -3 0030 utc VK2CTD (COL)
14.070 mhz (amtor/fec) 0030 utc VK2DPM (ALAN)
14.091 mhz 0030 utc VK2BQS (JIM)
146.675 mhz 0030/0930 utc VK2JPA (PAT)
144.850 mhz (ax25 bbs) VK2JPA AT VK2RWI
146.675 mhz (rtty mmbbs/repeater) VK2RTY

Views expressed in this news bulletin are not necessarily
those of the Broadcast Officer, the Relay Officers, or of the
Society.

QUESTION.....
Why has Dural been off air in such a state of emergency?

In this emergency that is affecting so many people in the
northern parts of Sydney, why has the WIA Council
(VK2 Division) kept Dural repeaters off air when there is such
a need for communications in this catastrophe ?

I find it incredible that the Council does not respond to this
emergency and put the repeaters back up as a public service
regardless of the reason for taking them off air.

Pat VK2JPA Broadcast Officer ANARTS

Due to the emergency situation in eastern New South Wales, I
am holding back the series on Guidelines for the preparation
of programs for transmission by Amateur Radio Teletype sent to
us by Frank VK2FJL. This will now commence next week - surely
the fires will be gone by then, and the amateurs back at their
sets ...

Spare a thought for any amateurs affected by this desperate
situation. If many are affected, is there some way we who are
safe can help get them back on air ? Thoughts to this end
would be appreciated. Contact Pat VK2JPA at VK2GJB while
VK2RWI is off air, or drop a fax to (02) 622 9604 during
working hours.

Syd, VK2SG, back on air

With the help of Bill, VK2EG, and Bruce, VK2RT, Syd's shack has been moved into his house to make up for his lack of mobility and Syd is back on air, except for CW. Be prepared to hear him on Pactor etc., maybe even a few contacts in contests, depending on his health at the time.

What Syd does need help with is the chain drive for his quad which is on top of a 65 foot free-standing tower.The chain has come off again so he is restricted to a north-east heading. Is there some energetic person out there with the time and expertise to assist ? Contact Syd on (02) 631 2576. Tell him you saw it in the broadcast.

Attention Volunteer Coastal Patrol operators

The Royal Blind Society of New South Wales, in conjunction with the Maritime Services, have produced a tape which consists of frequencies, times and weather forecasts together with ocean conditions, traffic, and many other services which have reference to shipping operations (including safety) that are normally broadcast by the Maritime Services (O.T.C.).

This tape has been produced to assist the blind or dyslectic operators that are assisting with the operations of the Volunteer Coastal Patrol services throughout Australia. The tape is a C60 twin track cassette and is available from the Royal Blind Society of New South Wales for a slight cost.

The tapes are now available, after some delay was overcome.

Please direct all enquiries to Jim Bates at the Royal Blind Society of New South Wales, phone (02) 334 3333, 4 Mitchell Street Enfield Sydney.

Seen in the RTTY Digital Journal and reprinted there from somewhere in a US communications network. Just a bit of light humour ...

To all visitors

WHAT YOU ARE ABOUT TO WITNESS IS AN AMATEUR RADIO STATION, LICENSED AS BY THE FEDERAL COMMUNICATIONS COMMISSION. BEFORE YOU ASK QUESTIONS, CONSIDER THE FOLLOWING -

1. The total cost of this equipment cannot be discussed here as it creates marital conflicts.

2. No, I cannot send a message to your brother in Hong Kong, I suggest you call Western Union.

3. This is strictly a hobby; I do not have the facilities or the time to fix TV sets, radios or Hi-Fi. I suggest you see a serviceman.

4. Yes, the antenna in the backyard is essential to the operation of the equipment.

5. The farthest station we have contacted has been in the Ubangiland.

6. The cards on the wall are called QSL cards. They are confirmation of contacts made with other stations.

7. Oh, no!! Never does this station equipment interfere with television reception.

Furthermore -
IF YOU ARE INVITED TO SPEAK INTO THE MICROPHONE, PLEASE OBSERVE THE FOLLOWING RULES -

1. Speak in a low and soothing tone.
2. Do not agree with me in any manner.
3. Say no bad words and tell no off-colour jokes.

DO NOT TOUCH ANYTHING, TURN ANY KNOBS, OR SIT ON THE EQUIPMENT. I HAVE LOST SEVERAL VISITORS BY ELECTROCUTION IN THE PAST FEW WEEKS.

IPS weekly report
---

31 December - 6 January 1994

Issue no.: 01

Date of issue: 7 January 1994

Date 30 01 02 03 04 05 06
10cm 141 148 146 133 129 137 132
A 16 21 19 13 06 05 (10 estimated)
T 116 51 46 55 73 80 86

Summary of activity

Solar activity was very low 1st and 3rd-4th January, low 31st December and 6th January, moderate on 5th, and high on 2nd with an M6 flare on that day.

The geomagnetic field at Learmonth (WA) was -

31st Quiet to unsettled with active periods 0600-1200 UT
1st Unsettled to active
2nd Quiet to active
3rd Quiet to unsettled, with brief active period 1500-1800 UT
4th Quiet to unsettled

5th Quiet
6th Quiet to unsettled

Ionospheric F2 critical frequencies at Sydney were near normal or enhanced by up to 50 per cent. Strong sporadic E was observed on 31st-4th and obscured the F layer at times each day.

Forecast for the next week (7 - 13 January)

Solar : Low.

Geomagnetic: Quiet with possible active periods 12-13 Jan.

Ionospheric: 10 - 20 per cent enhanced/near normal.

Courtesy of IPS Radio and Space Services

No RTTY DXnotes available, so here is whatever we could find.

ARLD001 DX NEWS

PRATAS TO BE ACTIVE

ON JANUARY 5, 1994, A GROUP OF EXPEDITIONERS FROM TAIWAN AND FINLAND WILL ACTIVATE PRATAS ISLAND, AKA TUNG SHA DAO. FOR THE FIRST TIME IN AMATEUR RADIO HISTORY. THE TEAM WILL CONSIST OF LEADER BV5AF, BV2AP, BV4AS, BV4OB AND OH2BH. THE CALL SIGNS BV0ARL/BV9P OR SIMPLY BV9P WILL BE USED.

THIS INITIAL OPERATION WILL BE APPROXIMATELY FOUR AND A HALF HOURS, FROM 0300Z UNTIL 0730Z, ACCORDING TO BV5AF, AND WILL HOPEFULLY OPEN THE DOOR FOR A LARGER OPERATION IN MARCH. THERE IS CURRENTLY NO DXCC STATUS FOR THAT ISLAND.

Most wanted countries on RTTY, as of August 1993

This is from the DX Bulletin and printed in the RTTY Digital Journal December 1993.

The rarest are - Libya 5A, Heard Island VK0, Yemen 4W, Mount Athos SV/A, Congo TN, Kerguelen FT/X. All respondents to the survey used to supply the above needed those countries.

Other rare countries are - Bhutan A5, Burundi 9U, Nepal 9N, Ghana 9G, Peter Island 3Y, Kermadec ZL8, Andamans VU4, Tromelin FR/T, Macquarie Island VK0, Crozet FT/W, St Peter and Paul Rocks PY0S, Tunisia 3V, Auckland Island ZL9, Afghanistan YA, Guinea 3X, Cocos Islands TI9, Central Kiribati T31, Qatar A7, Bahrain A9, Rwanda 9X, Trindade PY0T, Minami Torishima JD1, Tokelau ZK3, Jan Mayen JX.

Coming events

1994

January 8th-9th ARRL Rtty Roundup

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President (Col) VK2CTD, or the Secretary (Pat) VK2JPA @ VK2RWI

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or by packet to VK2JPA @ VK2RWI.

The Internet address for the Broadcast Officer is : patl@extro.edu.su.oz.au

The Society welcomes news items on any digital subjects from anywhere in the broadcast coverage area. We know we reach New Zealand and many South Pacific islands and we are looking forward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer

That concludes ANARTS News Bulletin 791 09/01/94

Inserted by VK2BQS Jim (Vice-President ANARTS).

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

302. Re: DIPOLES FED BY LADDER LINE - Q

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 01:02:37 UTC
From: drew@trl.oz.au
Message-ID: <drew.104.0@trl.oz.au>
Source record: 272348

In article <199401121918.LAA17597@ucsd.edu> MAYNARD@URIACC.URI.EDU writes:
>From: MAYNARD@URIACC.URI.EDU
>Subject: DIPOLES FED BY LADDER LINE - Q
>Date: 12 Jan 94 19:07:16 GMT
>Please excuse my laziness in not researching this myself...
>
> I just bought an antenna tuner and want to put up a dipole fed
> by 450 ohm ladder line, for use across 160-10 meters. The longest
> one I have located commercially is one 135ft long with 100ft of
> feed line, for 80-10 meters (much cheaper, incidently, than building
> from scratch with current wire prices!). Anyone have an opinion
> on my going to ~260 ft (yes, I do have room), especially regarding
> performance on higher bands (40-10 meters).
>
> Thanks for reading this, Brian WY2G

Brian, IMHO, the "dipole" fed with open wire line, or 450 ohm ladder line is the best, most versatile HF antenna for amateurs who want to operate all HF bands. Some combinations of antenna + feeder will yield easier matches with your tuner on most bands, but some compromise is generally necessary (see Bill Orr's Wire Antenna book). Generally, the more wire you have in the antenna (or radiating part), and the shorter the feedline part- the better. However, feedline lengths of even 100' should not cause significant loss.

If you choose the 260' model, you may care to have yourself a mini vee-beam (effective at about 10.1MHz and above) by placing the "legs" at about 90 degrees, and pointed at your favourite DX direction. Being unterminated, you get long and short path, depending on time of day, propagation etc. Approximate all-round operation is obtained at 1.8 thru 7MHz. My main HF antenna is one of these, the apex only 34' above ground, and the 135' legs each droop down to about 20'. The intersection of the legs points LP to Europe. This is the best DX antenna I have ever had. Even when conditions are poor, I can mix it with the big boys with their kW and rotatable beams etc.

With so much wire in the air- some sort of lighning protection is advisable. It is a good plan to ground the feedline with a "Frankenstein" style knife switch when the antenna is not in use. Also provide a spark-gap to ground for each side of the feedline as extra insurance should you forget to operate the switch.

73, Drew, VK3XU Telecom Australia Research Laboratories.

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the .".

os give more easily matched eursr

303. ARRL NNJ 94-002 NJ DEPE HEARING

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 01:52:48 UTC
From: kb7uv@panix.com
Message-ID: <2h29hg$lh3@panix2.panix.com>
Source record: 272350

SB ARL @ NJNET < NW2L $11721_KB7UV
ARL NNJ 94-002 NJ DEPE HEARING
R:940112/1356 77257@KB7UV.#NLI.NY.USA.NA

Date: Wed, 12 Jan 94 13:56:38 UTC
From: nw2l@kb7uv.#nli.ny.usa.na (Rich Moseson)
Message-ID: <11721_KB7UV> (Astoria, NY)
Reply-To: nw2l@wa2jvm.#nnj.nj.usa.na
To: arl@njnet
Subject: ARL NNJ 94-002 NJ DEPE HEARING

ARL NNJ 94-002 -- NJ DEPE HEARING

HR ARRL NNJ SECTION BULLETIN 94-002
FROM ARRL NNJ SECTION MANAGER RICH MOSESON, NW2L
JANUARY 11, 1994

TO ALL RADIO AMATEURS / NNJ SECTION:

Amateur radio and the ARRL were well-represented at today's hearing by the New Jersey Department of Environmental Protection and Energy on its proposal to regulate RF transmitting sources in the state. DEPE officials had said that amateur radio would be exempted from the proposed registration and fee proposals for now, but did not include an exemption in the proposed regulation, and specifically invited comments on whether amateurs should be subject to them in the future. The public hearing in Trenton on January 11 was attended by approximately 50 people, some 25 percent of whom were hams. None of the approximately 20 speakers supported the proposed regulation.

ARRL General Counsel Chris Imlay, N3AKD, and ARRL Northern New Jersey Section Manager Rich Moseson, NW2L, spoke on behalf of the League and its more than 5,000 members in New Jersey. They were joined by state Army MARS Director Sanford Weinberger, AAA2NJ/N2BOT, and several other hams. Other ARRL leadership volunteers at the hearing included Southern New Jersey Section Traffic Manager Gene Bond, WB2UVB; Middlesex County District Emergency Coordinator Stan Olochwoszcz, N2AYJ; Morristown Emergency Coordinator Harvey Klein, WS2Q; New Jersey Phone Net Manager Dave Popkin, W2CC; Local Government Liaison Bill Sohl, K2UNK, and Hudson Division Assistant Director Ben Friedland, K2PBP.

Testimony was opened by Vivian Lopez, N2NZN, who challenged the state's authority to impose the regulations in the first place. Imlay and Moseson, representing the ARRL, argued that only the FCC had the power to license and regulate radio transmitters, and that applying the proposed regulations to hams would effectively preclude amateur

communications in New Jersey -- a violation of FCC rules. A specific exemption for hams was requested.

Written comments are due by January 20, although the comment period may be extended. A final decision on the proposal must be made by next December.

AR

/EX

--

_____ Andrew Funk, KB7UV _____
| President, Tri-State Amateur Repeater Council (TSARC) |
| ENG Editor/Microwave Control, WCBS-TV Channel 2 News, New York |
| Internet: kb7uv@panix.com Packet: kb7uv@kb7uv.#nli.ny.usa |

304. Re: FM5CW QSL route?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 01:57:19 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.94Jan12205720@gdstech.GRUMMAN.COM>
Source record: 272365

We have a 1991 listing for FM5CW that says to
send via the bureau.
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

305. subscribe

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 02:47:05 UTC
From: yku01089@CAWC.YorkU.CA
Message-ID: <9401122147.ZM9358@rufous.yorku.ca>
Source record: 272351

pease send me info. about ham radios and how to be an operator.

306. Vaccuum Tubes, Lots of them!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 03:07:55 UTC
From: kayd@xanth.CS.ORST.EDU
Message-ID: <2h2dubINNe3g@flop.ENGR.ORST.EDU>
Source record: 272355
Cross-posted to: rec.radio.amateur.misc,misc.forsale

The Oregon State University Amateur Radio Club has a couple thousand vaccuum tubes. These tubes vary from military/commercial, new/used, and in original boxes. We hope to sell the tubes in a lot to form an annuity for the club to use for future developments. I have a list made up that lists the tubes, quantity, quality, and which box they are in. If you are interested, send me mail with the subject "osutubes" for an automatically generated reply containing the inventory. Your message will not be received by me unless it has a different subject.

We only want to sell as a lot.

Darrek Kay
kayd@xanth.cs.orst.edu
(503)737-9410

307. Ramsey Kits Revisited

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 03:50:23 UTC
From: cbr600@tonto.ksu.ksu.edu
Message-ID: <2h2gdvINNppn@tonto.ksu.ksu.edu>
Source record: 272356

Posted for a friend w/out net access:

He's building a Ramsey FX440 kit, and having problems with the transmit.
It appears to receive fine, but according to him, something is wrong with
the transmit buffer. I'm not very knowlegable about the internal workings
of a radio (yet), but any help from anyone working on or has built one of these
would be greatly appreciated. Reply via e-mail to me (until the 14th) or to
steve@matt.ksu.ksu.edu (after that). Thanks for any help!

Jeremy Utley

PS... If you end up mailing to the second address, put on the first line:
For: Van Zander

Thanks again!

Jeremy L. Utley | jlu@cis.ksu.edu
Computing & Infomation Sciences | cbr600@ksu.ksu.edu
Student | cbr600@ksuvm.bitnet
Kansas State University | bxth85a (Prodigy)
A.S. Comp. Sci. & Acctg. | N0YAX@N0OER.#NEKS.KS.USA.NA (Packet Radio)
---

308. Multi-User Dungeons on Packet?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 04:46:00 UTC
From: swood@vela.acs.oakland.edu
Message-ID: <swood.758436360@vela.acs.oakland.edu>
Source record: 272357
Cross-posted to: rec.games.mud.misc,rec.radio.amateur.misc

Would it be possible or plausible to run Multi-User Dungeon (MUD)
on packet radio? Would anyone like to help me hack code to play with
this concept?

swood

--
All Month Rabbit and Crow are legal to hunt all month in Michigan
Current Michigan Canada Goose special late season still open
(Southern Michigan Game Management unit only w/stamp)
<<<<<< Only nine months until bow season!!! >>>>>>

309. cancer from ham radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 06:20:38 UTC
From: taaron@netcom.com
Message-ID: <taaronCJK1MF.3xr@netcom.com>
Source record: 272366

Tell me, if ham radio causes cancer, why is it that all the ham radio club meetings are filled with old people with few health problems other than normal ones for their age?

Travis Wise
KB8FOU
18 yrs old
General class

--

Travis A. Wise KB8FOU
1421 Grace Avenue Senior, Del Mar High School
San Jose, CA 95125-5206 (408) 383-8570
taaron@netcom.com

310. WANTED: 1930's Vacuum Tubes for display

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 08:12:28 UTC
From: rich@comm-data.com
Message-ID: <2h2vpc$cl5@vixen.cso.uiuc.edu>
Source record: 272360
Cross-posted to: rec.radio.amateur.misc,rec.radio.broadcasting

Hello! I'm looking for 1930s era water cooled vacuum tubes.
I'm, trying to help out a German friend's "world-class" tube
collection.

Ideas? comments? Thoughts?
Drope me a line.

Thanks for any help
Rich Biby

311. Repeater Purposes

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 08:45:42 UTC
From: jangus@skyld.tele.com
Message-ID: <758450742snx@skyld.tele.com>
Source record: 272364

In article <2guua8$6op@slinky.cs.nyu.edu> jackson@longlast.cs.nyu.edu writes:

> rush hours, the majority of the calls would be traffic hotspots or drivers
> requesting conditions from drivers along a certain route or on a roadway tens
> of miles away. Perhaps even autopatch to make it easier for more people to
> make calls for assistance. The level of professionalism would certainly be
> an improvement over CB.

Probably, but you can't beat the citizens band for having people (wierd as them are) that seem to know what the traffic conditions are. I guess they aren't too busy with fiddling with the autopatch, or scanning the cellular bands to know whats going on around them. Usually on a repeater, unless it was a regularly scheduled commuter group, nobody has a clue as to what's going on around them.

(The following disclaimer is for the cognitively impaired)

This appears to be the case in the Los Angeles basin in southern Calif. Your milage or quality of users may vary.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

312. Re: Multi-User Dungeons on Packet?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 10:07:53 UTC
From: konlinde@kk.ericsson.se
Message-ID: <9401131007.AA24848@kk133.ericsson.se>
Source record: 272361

> Would it be possible or plausible to run Multi-User Dungeon (MUD)
> on packet radio? Would anyone like to help me hack code to play with
> this concept?

Isn't a DX-cluster a kind of MUD? (No offence intended, DX-ers!)

You might get some ideas by looking at the design of the DX-cluster software.

Anders

313. Re: Mac owners....READ THIS!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 10:39:44 UTC
From: Lars Sundstroem <sund@tde.lth.se>
Message-ID: <2h38dg$gmn@nic.lth.se>
Source record: 272362

In article <1994Jan12.192142.12327@krk.fi> Kristoffer H{ggstr|m,
tofi@krksun.krk.fi writes:
>MorseTrainer US-1.0.1b20
>
>MorseTrainer is a program for learning and training Morse code. This is
the
>first translated version of the program which originally was developed
and
>localized for Sweden. The program itself can be considered a final
version
>of v1.0.1 but the translation is probably not perfect, hence a
beta-release
>instead of final-release.

Latest version of MorseTrainer is US-1.1.1, nothing else.
========

It is available via anonymous ftp at 130.235.32.86.

Version US-1.0.1b20 is not recommended.

Before posting a list of software, please check the version number.

>>>
Lars Sundstrom, Lund University, Dept.of Applied Electronics

P.O. Box 118, S-221 00 LUND, SWEDEN. EMail: sund@tde.lth.se
Phone: Int+ 46 46 10 95 13 Fax: Int+ 46 46 12 99 48

314. Signaling Device Wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 11:07:33 UTC
From: ep208@garnet.berkeley.edu
Message-ID: <2h3a1l$i1t@agate.berkeley.edu>
Source record: 272363

My wife, daughter, and myself have carried pagers for over 10 years.
They are very useful for keeping in touch. Recently we have become
frustrated by the inability to find a public phone which is working,
not limited to outgoing calls, and not in use by a drug dealer. It seems
well less than half of the phones are available. Also, my wife drives about
45 minutes to and from her office and we would like to be in touch with
her during that time.

Since we have HAM licences, at HT for each person seems like a good
possibility. Some sort of digital squelch could be used. But they
both feel the HT is too big and heavy. I have pushed for that solution
for years. I have also suggested our own patch to the phone line and
our own phone-answering machine in the loop.

Pocket portable phones seem a possibility, but the cost nears $100 a month
for each if you consider connect charges, instrument cost, and
instrument protection from theft.

We have developed a series of codes which work fine for us. 1 means
"Everything is fine, I am where I should be, and on schedule."
1514 means "change the time to 15:14."

What they say they want is a device that can receive a few numbers
like the pagers, and one that can send a few like an HT. The notion
of some sort of digital attachment for a small HT comes to mind.
(My interpretation is that they prefer asynchronous (read and send
at different times) rather than synchronous communication like a telephone
which they feel is intrusive. With the pagers you can get a message and
make a decision about when to respond.)

Does anyone have any suggestions?

315. Re: DIPOLES FED BY LADDER LINE - Q

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 13:32:37 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <CJKLMD.41o@freenet.carleton.ca>
Source record: 272367

In a previous article, MAYNARD@URIACC.URI.EDU () says:

>Please excuse my laziness in not researching this myself...
>
> I just bought an antenna tuner and want to put up a dipole fed
> by 450 ohm ladder line, for use across 160-10 meters. The longest
> one I have located commercially is one 135ft long with 100ft of
> feed line

W2FMI's article in the Nov 93 issue of CQ postulated that an 80 metre dipole fed with a quarter wave feed line (at 80 metres) would be the "worst case" scenario for a multi-band antenna.

He goes on in the article to say that that a 102 foot dipole fed with 31 feet on ladder line would not present as high a voltage to the balun than the previous example.

He then suggests that if one were to enlarge the second antenna to 160 foot flat top and 90 feet of ladder line, this would have yet better efficiency on 160 metres and still present manageable (sp?) impedances to the balun on 80 and 40 metres and above. I built the balun he suggested in the articlebut have yet to try it; with a new baby in the house, spare time is a precious commodity indeed!

de VA3RR/AA8LU
in beautiful downtown Ottawa

--

316. Re: DIPOLES FED BY LADDER LINE - Q

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 13:42:58 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-130194083440@136.141.220.39>
Source record: 272375

In article <CJJAEK.G1J@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) wrote, in part:

>
> On the higher bands, the main difference with the 260-foot antenna would be
> the radiation pattern. On 80 meters, the pattern would be a cloverleaf
> (maximums at approx. 45-degree angle from the wire) instead of bi-directional
> perpendicular to the wire. On 40-10 meters, the antenna would tend to be
> more directional off the ends of the wire than with the 135-foot antenna.
>

Don't forget that, to see the bidirectional pattern of a half-wave antenna, or the cloverleaf pattern of a pair of half-wave antennas fed at the center, you've got to be a _significant_ fraction of a wavelength above the ground. We're talking close to a half wavelength here, and that's about 125 feet on 80 meters, and about 250 feet on 160 meters. When I model antennas at realistic heights above real ground on AO-5 (less than a quarter wavelength on 80 and 160 meters), the radiation pattern looks like an _egg_ sitting on its broader end, with the narrower end pointing straight up. In the horizontal plane it's _circular_, not directional at all. (The classic cloud-burner.)

The real world doesn't look like all those pretty pictures in the textbooks.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

317. Never-ending search for FT-530 mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 14:12:42 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCJKnH7.KDq@netcom.com>
Source record: 272368

I'm on the neverending search for any mods for the Yaesu FT-530 HT.

I have the internal mod for expanded tx and rx, but is it all possible to
do anything from the keypad?

Also, what else is there?

What is Yaesu hiding from us?

Thanks much.

Scott

--

```
==============================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
==============================================================================
```

318. Re: cancer from ham radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 15:03:08 UTC
From: kelvin@thed.usup.uk22.bull.co.uk
Message-ID: <kelvin.758473388@thed.usup.uk22.bull.co.uk>
Source record: 272369

In <taaronCJK1MF.3xr@netcom.com> taaron@netcom.com (taaron@netcom.com) writes:

>Tell me, if ham radio causes cancer, why is it that all the ham radio
>club meetings are filled with old people with few health problems other
>than normal ones for their age?

'Cause all the young ones have already died? :-) (I think)

>Travis Wise
>KB8FOU
>18 yrs old
>General class

>--

>Travis A. Wise KB8FOU
>1421 Grace Avenue Senior, Del Mar High School
>San Jose, CA 95125-5206 (408) 383-8570
>taaron@netcom.com

--
Kelvin J. Hill - BULL HN Information System Ltd, Hounslow, England, UK.
Internet - kelvin@thed.usup.uk22.bull.co.uk | CIX - kelvin@cix.compulink.co.uk
"" kelvin@kelvin.usup.uk22.bull.co.uk | AMPRnet - g1emm@g1emm.ampr.org

319. BALUN problem. Was: DIPOLES FED BY LADDER LINE

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 15:17:32 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2h3omc$ag7@vixen.cso.uiuc.edu>
Source record: 272370

>In a previous article, MAYNARD@URIACC.URI.EDU () says:

>>Please excuse my laziness in not researching this myself...
>>
>> I just bought an antenna tuner and want to put up a dipole fed
>> by 450 ohm ladder line, for use across 160-10 meters. The longest
>> one I have located commercially is one 135ft long with 100ft of
>> feed line

One extra question: how to feed such an antenna? If through an unbalanced tuner, shack will be RF hot. If also through a balun, the balun may have excessive losses and even generate harmonic. In my case, I tried to feed undersized dipole on 80 through a 1 KW air balun. The balun gets warm and the performance at 100W out is similar to .5W out with a regular dipol. I think that at SWR 10 and above, which would be normal for a ladder-fed dipole, multi-KW balun is needed to handle just 100W. The best option would be a symetric tuner, which is clumsy to build. Any comments?

Ignacy Misztal, NO9E, SP8FWB

320. Re: Multi-User Dungeons on Packet?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 15:32:21 UTC
From: dcc@clapton.concert.net
Message-ID: <2h3pi6$3p0@inxs.concert.net>
Source record: 272371
Cross-posted to: rec.games.mud.misc,rec.radio.amateur.misc

In article <swood.758436360@vela.acs.oakland.edu>,
Scott Wood <swood@vela.acs.oakland.edu> wrote:
>Would it be possible or plausible to run Multi-User Dungeon (MUD)
>on packet radio? Would anyone like to help me hack code to play with
>this concept?

Don't need to hack, it already exists. Just find some DX Packet-Cluster
software.

73 de KC4WEJ,
Derrick

--
| / _____/ | / _____/ Derrick Cole, KC4WEJ
/ __/ / / / | / / MCNC Information Technologies, RTP
/ / / / | / / cole@concert.net
__/ __/ _______/ __/ __/ _______/ "Janet!Dr.Scott!Janet!Brad!Rocky!"

321. Dipoles Fed By Ladder Line

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 15:49:01 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940113074901_1@ccm.hf.intel.com>
Source record: 272373

Text item: Text_1

>Anyone have an opinion on my going to ~260 ft (yes, I do have room),
>especially regarding performance on higher bands (40-10 meters).
>Brian WY2G

Brian, just one thing to add to the earlier responses. An antenna of
this sort has very little broadside radiation when the length is more
than one wavelength. My North/105' CF has a half-wave resonant frequency
of
around 4.5 MHz. On 17m, the lobes are at N55E,N55W,

322. Re: Portable 2m Antenna for Mountaineering???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 15:54:05 UTC
From: horak@convex.com
Message-ID: <horak.758476445@convex.com>
Source record: 272376
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have hiked several times with my Cushcraft 4 element 2 meter beam. If you need the extra gain from a beam, it works great and is not overly bulky to carry if you pack it into a tube or keep it in the original box. I use wingnuts to speed the assembly process and have a portable tripod to mount the thing. It's sort of home-brewed out of a similar design I saw in the ARRL handbook. Anyway, like someone else said here, the AEA Hotrod is a great little telescopic antenna that outperforms a duck several times over.

David N5OFQ

323. Dipoles fed by ladder line

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 15:57:01 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940113075701_1@ccm.hf.intel.com>
Source record: 272374

Text item: Text_1

>Anyone have an opinion on my going to ~260 ft, especially regarding
>performance on higher bands (40-10 meters). Brian WY2G

Brian, one thing to remember about this kind of antenna is that above around one wavelength, there is almost no broadside radiation. A North/South 105' CF has lobes at N55E, N55W, S55E, and S55W on 17m. When I put it up I aimed it broadside at Europe and heard nothing from Europe. After using ELNEC to view the four lobes, I rotated it 35 degrees and Europe came in like gangbusters.

73, Cecil, kg7bk@indirect.com

324. Good cheap RF-signal generator for home?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 16:15:59 UTC
From: markh@news.plexus.com
Message-ID: <2h3s3v$2ob@sauk.pd.tgi.plexus.com>
Source record: 272372
Cross-posted to: sci.electronics,rec.radio.amateur.misc

Hi I am looking for a good but cheap RF-signal generator
for use at home. It should be able to reach 150 MHz at
least but would prefer 512 Mhz. Thanks in advance.
73 de kf9cs in appleton,wi . ...

325. Unix ham radio control program

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-13 18:39:16 UTC
From: cmoore@mothra.rose.hp.com
Message-ID: <2h44gk$f2n@hpchase.rose.hp.com>
Source record: 272377
Cross-posted to: rec.radio.amateur.misc,comp.os.linux.misc

As an offshoot of my project of writing an X11 logging program, I've decided I'd like to tackle writing a generic radio control program for Unix-like systems. My idea is something like this:
- A server process could be configured with information about what kind(s) of radio(s) you have, what serial ports to use, etc.
- The server would accept connections from other processes that want to interface with the radio.
- The server would communicate with the processes using some kind of generic radio control protocol.

This way other programs can talk to a radio without having to know anything about the details of communicating with it. They just talk to the server in a generic language and the server handles the radio interactions. This brings up the a few questions, and I'd like to solicit input and opinions from the net before I dig into this:
- What kind of functions need to be defined in the generic language? A few things that come to mind are things like 'get frequency', 'set frequency', 'get mode', 'set mode'. What other things might a program want a radio to do (assuming of course that the radio supports it.)
- Are there other things besides radios that might be controlled? Antenna rotators? Antenna switches?
- At some point I'll need details for the various known controllable things, like the command language for Icom, Yaesu, Kenwood, etc. Maybe people on the net can help provide these things for me.

After getting lots of response to my earlier posting about the X11 logging program I'm beginning to think there are lots of people running unix-like systems (mostly Linux) in their ham shacks. I'm hoping that I can come up with something that will serve the needs of a variety of interface requirements so that people can start linking up their unix boxes with their radios.

Chris Moore
N6IYS
cmoore@mothra.rose.hp.com

326. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-17 06:52:43 UTC
From: chandler@beagle.UUCP
Message-ID: <kmBagc1w165w@beagle.UUCP>
Source record: 272252

howi@world.std.com (howie cahn) writes:

> rich@mulvey.com writes:
>
> >..... Personally, I got an astounding deal with
> >the Norcal 40 QRP xcvr kit that I assembled a few months ago. High
> >performance, easy assembly, looks great on a spectrum analyzer, and good
> >support from the distributer. And it cost me exactly $5.00 more than
> >I would have paid for the crappy Ramsey transmitter/receiver pair.
>
> In fairness, you can't compare the prices of Ramsey and Norcal. One's a
> business and the other's a non-profit club with volunteer labor.
>
> howie, wb2cpu

You're absolutely right howie.
One is well thought out and designed, and the kits are meticulously assembled
to ensure the components are correct (NorCal). The other is quickly thrown
together to make a profit (Ramsey). My hats off to N6KR (designer) and
WA6GER (assembler). I can't wait for the new 5 band QRP rig that the
Northern California QRP club it putting together.

Jim Chandler, N0VAH
infopro.com!beagle!chandler
citrus.sac.ca.us!beagle!chandler

327. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-17 09:00:08 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <758972428.F00002@ocitor.fidonet>
Source record: 272141

```
The following files were processed Monday 1-17-94:

HAMANT [ HAM: Antenna design and calculation programs ]
---------------------------------------------------------------------
40MBEAM.ZIP ( 6964 bytes) A Feasible Full-size 40 meter beam
by Frank Kamp, K5DKZ

---------------------------------------------------------------------
6964 bytes in 1 file(s)

HAMLOG [ HAM: Amateur radio logging programs ]
---------------------------------------------------------------------
HLOG223.EXE ( 353848 bytes) HyperLog V2.23 Logging Program

---------------------------------------------------------------------
353848 bytes in 1 file(s)

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
ARLB003.ZIP ( 1849 bytes) Lifetime license sought 01/11/94

ARLB004.ZIP ( 1910 bytes) Licensing plan opposed 01/11/94

ARLB005.ZIP ( 1680 bytes) CAC Studies Rovers

ARLB006.ZIP ( 1207 bytes) Correction to ARLB005 01/13/94

ARLD003.ZIP ( 1417 bytes) Arrl DX Bulletin 01/12/94

ARLD004.ZIP ( 3257 bytes) DX Bulletin 01/13/94

ARLP002.ZIP ( 1963 bytes) ARRL Propagation Bulletin 01/14/94

ARLX002.ZIP ( 1307 bytes) QRP Operation 01/13/94

NEWS0109.ZIP ( 8151 bytes) NewsLine #856 01/09/94

NEWS1225.ZIP ( 8361 bytes) NewLine #854 12/25/93

OPDX142.ZIP ( 4332 bytes) Oh/Pa DX Bulletin 01/10/94

RTDX0107.ZIP ( 3096 bytes) RTTY DX Bulletin 01/07/94

---------------------------------------------------------------------
38530 bytes in 12 file(s)

HAMSAT [ HAM: Satellite tracking and finding programs ]
---------------------------------------------------------------------
AMSAT008.ZIP ( 6950 bytes) AmSat Bulletin #8 01/08/94
```

SPC0110.ZIP (3643 bytes) Space Bulletin 01/10/94

SPC0117.ZIP (4866 bytes) Space Bulletin 01/17/94

15459 bytes in 3 file(s)

HAMSCAN [HAM: Scanner Freqs and Freq database programs]

AZHAMFRQ.ZIP (5532 bytes) Arizonia 2-meter Repeater
Frequencies

VHFDIR10.ZIP (113416 bytes) Terrestrial VHF+ V1.0 - Active
VHF/SHF stations throughout NA - by
K0IFL

118948 bytes in 2 file(s)

Total of 533749 bytes in 19 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - wa5eha
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

328. ARLD003 DXCC update

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-17 18:00:04 UTC
From: lhurder@arrl.org
Message-ID: <$arld003.1994@ampr.org>
Source record: 272314
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
SB DX @ ARL $ARLD003
ARLD003 DXCC update

ZCZC AE01
QST de W1AW
DX Bulletin 3 ARLD003
From ARRL Headquarters
Newington CT January 12, 1994
To all radio amateurs

SB DX ARL ARLD003
ARLD003 DXCC update

Documentation has been received and approved for the following
operations:

Call: Operations Beginning (mm/dd/yy):

C53GK 05/19/92
D2SA 09/15/93 160 through 10 and WARC now authorized
J5TUBA 04/27/93
JT1/KB9IBZ 11/10/92
T5/TU4EC 12/10/92
TR8YA 04/08/92
TU4EC 04/30/92
TU4EF 07/07/92
TU5AX 11/25/92
TU5BA 12/11/92
TU5BD 12/11/92
V26A 10/28/93
VP9/K8PYD 11/22/93
VP9/WB8YJF 11/22/93
XU5DX 01/01/93
XU5SE 01/01/93
YI1RJ 10/22/91
5R8DK 03/17/93
NNNN
/EX
```

329. ARLX002 W1AW QRP operation

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-17 18:00:52 UTC
From: lhurder@arrl.org
Message-ID: <$arlx002.1994@ampr.org>
Source record: 272315
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
SB SPCL @ ARL $ARLX002
ARLX002 W1AW QRP operation

ZCZC AX34
QST de W1AW
Special Bulletin 2 ARLX002
From ARRL Headquarters
Newington CT January 13, 1994
To all radio amateurs

SB SPCL ARL ARLX002
ARLX002 W1AW QRP operation

Members of the QRP club of New England, QRP NE, will be putting W1AW
on the air between 1800 and 2100 UTC, Sunday, January 16. Keep an
eye open for PacketCluster spots and listen for W1AW/QRP on 3560,
7040, 14060, 21060 and 28060 kHz. We hope to work you.
NNNN
/EX
```

330. ARLD004

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-17 18:01:35 UTC
From: lhurder@arrl.org
Message-ID: <$arld004.1994@ampr.org>
Source record: 272319
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ARL $ARLD004
ARLD004 DX news

ZCZC AE02
QST de W1AW
DX Bulletin 4 ARLD004
From ARRL Headquarters
Newington CT January 13, 1994
To all radio amateurs

SB DX ARL ARLD004
ARLD004 DX news

Thanks to DX news contributors Tony, WA4JQS; Stu, K8SJ; Jim, KR1S; Tedd, KB8NW; Chod, VP2ML; The DX Bulletin; and the Ohio/Penn and Yankee Clipper Contest Club PacketCluster Networks.

COUNTDOWN TO PETER 1ST. Hot off the Internet comes the first in a probable series of Peter 1st updates.

At dawn on January 12 the first group of operators left from Minnesota and Belgium on the first leg of the trip to Peter 1st. >From London they will fly to Ascension Island and then to the Falklands.

Their brief stay at Port Stanley will allow them to operate as VP8BZL on 160, 80, 40 and perhaps 20 meters with CW, SSB and RTTY. Plans are to install satellite and EME systems at the QTH of Mario, VP8ALJ.

The entire team plans a February 1 landing on Peter 1st. This operation will be 160 through 10 meters, satellite and EME.

THAILAND. Fred, K3ZO, is in Thailand until February 15. He hopes to be active as HS0ZAR from club station HS0AC. Listen for his 40 meter CW between 7015 and 7030 kHz during morning and evening gray line openings.

Reiner, DL2VK, is active as HS0/DL2VK until January 31. He favors CW but operates other modes including PacTOR. HS0C was worked from New England on 3505 kHz between 2130 and 2145z.

BANGLADESH. Manju, S21AM, was worked 20 meter longpath around 1240z. Manju is a newly licensed Bangladesh national. QSL via PO Box 4000, Dhaka 1000, Bangladesh.

WESTERN MALAYSIA. Neville, 9M2/G3NUG, will be active from three islands off the coast of Western Malaysia during January and February. His schedule is as follows. Pangkor, AS 072, from January 14 to 21; Langkawi, AS 058, from January 22 to 28; and Penang, AS 016, from January 29 to February 10. Listen for him around 14260 and 18140 kHz. QSL via CBA.

SAINT PETER AND SAINT PAUL'S ROCKS. The DXpedition by four Brazilian operators has been delayed until January 20 and will only be for two weeks. The group plans to have two stations going 24 hours a day, and operate 160 through 6 meters with CW, SSB, RTTY and packet. QSL SSB/RTTY/6M contacts via PS7KM. QSL CW contacts via PT7WA.

MONTSERRAT. Stu, K8SJ, will be on as VP2MFA from January 14 through 27. Here is his operating schedule. 1835 kHz at 0400z. 3502 to 3512 kHz from 0300 to 0600z. 7002 to 7012 khz between 0200 and 0300, and 1100 to 1200z. 14002 to 14027 kHz from 1900 to 2100z. 18077, 21025 or 28025 kHz between 1600 and 1700z. QSL via K8SJ 1994 CBA.

REGULAR CATCHES. The following resident amateurs are quite active on the air and are relatively easy catches.

Algeria, 7X4AN, 40 meter CW from 2230 to 2330z, and 3505 kHz at 2100z. Ascension Island, ZD8M, 7001 kHz at 0000z. Botswana, A22MN, 7004 kHz between 2200 and 2400z. Gambia, C53HG, 7013 kHz between 2300 and 0100z. Kuwait, 9K2MU, 3795 kHz at 2200z and 14017 kHz at 1600z. Mayotte, FH5CB, 21290 kHz at 1400z. Qatar, A71CW, 3507 kHz between 2130 and 0030z. Reunion Island, FR5BT, 15 meter CW at 1445z. Rwanda, 9X5HG, 20 meter CW at 1900 and 2300z. 9X5DX, 21024 kHz at 1300z. South Shetlands, 4K1F, 80 meter CW from 0200 to 0500z, and 7002 kHz at 0545z. Sri Lanka, 4S7NB on 14180 kHz and 4S7EA on 14192 kHz, both at 0130z.

W1AW RUNS QRP? Listen for members of the QRP club of New England, QRP NE, operating W1AW between 1800 and 2100z, Sunday, January 16.

THIS WEEKEND ON THE RADIO. The Winter NWQRP Sprint, sponsored by the North West QRP Club, is a CW only event on 3560, 7035 and 14060 kHz. The sprint is from 0100 to 0400z January 15.

The HA DX Contest, sponsored by the Hungarian Radioamateur Society, is from 0000z January 14 until 2400z January 16. This is a CW contest on 80, 40, 20, 15 and 10 meters. Non HA stations send signal report and serial number.

Meet the Novices and Technicians Day, sponsored by the YLRL, is from 1500z January 15 until 0500z January 16. OMs relax, this is a YL only affair in the Novice/Technician HF subbands.

The phone portion of the North American QSO Party, sponsored by the National Contest Journal, runs from 1800z January 15 to 0600z January 16. The exchange is your name and QTH.

Hunting Lions in the Air Contest, sponsored by the Lions Club International, runs from 0900z January 15 until 2100z January 16.

For more information on these events, see page 129 of December QST.
NNNN
/EX

331. Daily Summary of Solar Geophysical Activity for 17 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 03:56:59 UTC
From: oler@rho.uleth.ca
Message-ID: <9401180357.AA21788@rho.uleth.ca>
Source record: 272290
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

17 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 17 JANUARY, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 017, 01/17/94
10.7 FLUX=105.4 90-AVG=102 SSN=034 BKI=4443 2323 BAI=017
BGND-XRAY=B4.6 FLU1=2.5E+06 FLU10=1.1E+04 PKI=4544 2333 PAI=020
BOU-DEV=042,064,043,033,017,025,019,025 DEV-AVG=033 NT SWF=00:000
XRAY-MAX= C9.3 @ 0920UT XRAY-MIN= B3.3 @ 0203UT XRAY-AVG= B7.3
NEUTN-MAX= +002% @ 2115UT NEUTN-MIN= -001% @ 2215UT NEUTN-AVG= +0.2%
PCA-MAX= +0.1DB @ 0835UT PCA-MIN= -0.7DB @ 0005UT PCA-AVG= -0.0DB
BOUTF-MAX=55361NT @ 0342UT BOUTF-MIN=55318NT @ 1836UT BOUTF-AVG=55337NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+059,+000,+000
GOES6-MAX=P:+126NT@ 1758UT GOES6-MIN=N:-080NT@ 0519UT G6-AVG=+083,+033,-033
FLUXFCST=STD:110,115,120;SESC:110,115,120 BAI/PAI-FCST=010,010,010/012,010,007
KFCST=2233 4222 2223 3322 27DAY-AP=012,010 27DAY-KP=3233 3323 2124 3222
WARNINGS=*SWF;*MAJFLR
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 16 JAN 94 was 48.0.
The Full Kp Indices for 16 JAN 94 are: 2+ 3+ 4- 3+ 3+ 3- 3o 2-

SYNOPSIS OF ACTIVITY

Solar activity was high. Region 7654 (N08E55) produced
two impressive flares last night. The first was an M6/1N which
peaked at 16/2325Z. Optical reports indicated a Y-shaped
ribbon characteristic with the flare. Radio emission ran from
245Mhz to 15400Mhz to include a 190 sfu tenflare and 2.2E+05
start-to-peak integrated flux from 8800Mhz. A Type II sweep
with an estimated shock velocity of 400 km/sec was also
reported. The second flare was a C9/1N with weak radio
emission in the upper wavelengths. This flare peaked at
17/0919Z. Weaker C-class flaring has occurred since the C9.
Region 7654 has shown some growth in past 24 hours while

maintaining a relatively complex inversion line. The other spotted Region 7652 (N04E42) has been stable.

Solar activity forecast: solar activity is forecast to be low to moderate. Region 7654 should continue to produce C-class and some M-class activity for the foreseeable future.

STD: Big Bear reported a strong delta configuration within Region 7654, and bright plage particularly along the magnetic inversion line between the opposite polarities in the delta. This region appears to have potential for additional major flare activity and will be monitored closely.

The geomagnetic field has been at quiet to active levels in the middle latitudes for the past 24 hours. High latitudes have been at mostly active levels with some minor storming.

Geophysical activity forecast: the geomagnetic field is expected to be mostly unsettled for the next three days.

Event probabilities 18 jan-20 jan

Class M 60/60/60
Class X 05/05/05
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 18 jan-20 jan

A. Middle Latitudes
Active 30/25/20
Minor Storm 10/05/01
Major-Severe Storm 01/01/01

B. High Latitudes
Active 30/30/20
Minor Storm 10/05/05
Major-Severe Storm 01/01/01

HF propagation conditions remained unchanged since yesterday. All regions observed generally near-normal propagation, except for high and polar latitude night-sector paths were effects from periods of enhanced geomagnetic and auroral activity produced poor to occasionally very poor propagation. Similar conditions are expected over the next 72 hours. There is also a moderate risk for SWF activity over daylit paths.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 17/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE

7652 N04E42 218 0150 HSX 02 001 ALPHA
7654 N08E55 205 0560 DKO 07 013 BETA-GAMMA-DELTA
7651 S06W89 352 PLAGE
7655 S07W37 300 PLAGE
REGIONS DUE TO RETURN 18 JANUARY TO 20 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 17 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 17 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 17/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
57 N32E24 S03E12 N20E10 N32E24 254 ISO NEG 005 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
16 Jan: 0100 0110 0115 C1.1
0647 0709 0725 C8.5 54 38 54
1129 1142 1148 B9.0
1746 1751 1755 C1.4 SF 7654 N03E71
2236 2239 2241 B4.6

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7654: 1 0 0 1 0 0 0 0 001 (16.7)
Uncorrellated: 2 1 0 0 0 0 0 0 005 (83.3)

Total Events: 006 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
16 Jan: 0647 0709 0725 C8.5 III
2306 2325 2336 M6.1 II

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

332. Re: QRD?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 14:16:19 UTC
From: root@jackatak.raider.net
Message-ID: <wTqcgc2w165w@jackatak.raider.net>
Source record: 272322

gleason@mwk.com writes:

> I was listening to a folk music CD yesterday, and heard a song
> that had some morse code at the beginning...it used a Q signal
> I wasn't familiar with, and couldn't find in the ham doccos I
> had laying around...anyone know what "QRD" means?

QRD? - Where are you bound and where are you from?
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

333. Re: LA Disaster Freq's?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 14:27:54 UTC
From: btoback@netcom.com
Message-ID: <btobackCJtxII.8MG@netcom.com>
Source record: 272279

In article <CJsGAI.DDz@srgenprp.sr.hp.com>, bsplaine@sr.hp.com (Bill Splaine) writes:
> Does anyone know what the disaster freq's are for Health & Welfare Traffic?

7.268 7.275 3.952 3.970 224.64 -- from packet message.

- Bruce Toback

334. ARLX003 Girl Scout Thinking Day

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 15:22:28 UTC
From: lhurder@arrl.org
Message-ID: <$arlx003.1994@ampr.org>
Source record: 272212
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB SPCL @ ARL $ARLX003
ARLX003 Girl Scout Thinking Day

ZCZC AX35
QST de W1AW
Special Bulletin 3 ARLX003
From ARRL Headquarters
Newington CT January 17, 1994
To all radio amateurs

SB SPCL ARL ARLX003
ARLX003 Girl Scout Thinking Day

THE GIRL SCOUT'S THINKING DAY IS FEBRUARY 22. GIRL SCOUTS AND GIRL
GUIDES THE WORLD OVER USE THINKING DAY TO REFLECT ON INTERNATIONAL
FRIENDSHIP AND WORLD PEACE. WHY NOT CONTACT YOUR LOCAL GIRL SCOUT
COUNCIL AND INVITE TROOP LEADERS TO BRING THE GIRLS TO YOUR STATION
FOR A FEW QSOS? CONTACT ARRL FOR OUR FREE BROCHURES ABOUT GIRL SCOUTS
AND HAM RADIO TO SEND HOME WITH THE YOUNG LADIES.
NNNN
/EX

335. Re: I need a terminal program for 2 TNCs at once

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 15:28:42 UTC
From: harding@orygun.nas.nasa.gov
Message-ID: <CJu0Bu.1F0@nas.nasa.gov>
Source record: 272302
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

DAVE CASE - KA1NCN (CASEDA@ECSUC.CTSTATEU.EDU) wrote:

: I am looking for a TERMINAL (not a logging) program that can handle
: two TNCs at once (one through each of two COM ports).
: Preferable FTP-able, but I can send you a disk if you have it.
: 73
: Dave/KA1NCN

xpcom140.zip is now available at HAM-server. Send email to:

HAM-server@grafex.sbay.org

In the text, place:

get \hamradio\index.txt
help
quit

I had to go to Australia to find this one.

73 de KA6ETB
--
harding@orygun.nas.nasa.gov steveh@grafex.sbay.org
Send email to HAM-server@GRAFex.sbay.org with HELP as text for amateur
radio related info.
I'm a card carrying S.N.O.B. and proud of it!

336. E-mail of Kewnood' service

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 15:31:08 UTC
From: avale@bart.inescn.pt
Message-ID: <CJu0Fy.n55@animal.inescn.pt>
Source record: 272286

Hi,

Anyone know any E-mail of Kenwood' Service.

Thanks

CT1DZY

avale@inescn.pt

337. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 16:34:17 UTC
From: scott migaldi <scottm@chop.isca.uiowa.edu>
Message-ID: <758910610-0-3065@chop.isca.uiowa.edu>
Source record: 272295

In note <940118080104_2@ccm.hf.intel.com>, Cecil_A_Moore@ccm.hf.INTel.COM (
Cecil A Moore) writes:
>
>Text item: Text_1
>
>> That's all well and fine, but do you honestly believe that consumers
>>have an obligation to do the product engineering that the manufacturer
>>should have done in the first place?
>>Rich Mulvey Amateur Radio: N2VDS Rochester, NY
>
>As a matter of fact, I do. I went through the exact same thing with
>Harley Davidson during the '70s. Harley's were lousey then and now
>they are the most successful motorcycle company in the world. If
>everyone had your attitude, Harley would no longer exist.
>
>73, Cecil, kg7bk@indirect.com
>
That is not product engineering! What the consumers did was to voice their
complaints about quality and ergonomics to the manufacturer. Because the
manufacturer responded to the suggestions in a positive manner and took the
corective measures the product was improved. However, it was not the public
that did the redesign it was the company.

The opinions in this post are mine and my cat's, not my employer's.

338. ARLB004 Licensing plan opposed

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 16:42:00 UTC
From: marcbg@netcom.com
Message-ID: <$arlb004.1994@ampr.org>
Source record: 272304
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

SB QST @ ARL $ARLB004
ARLB004 Licensing plan opposed

ZCZC AG68
QST de W1AW
ARRL Bulletin 4 ARLB004
>From ARRL Headquarters
Newington CT January 11, 1994
To all radio amateurs

SB QST ARL ARLB004
ARLB004 Licensing plan opposed

The ARRL has filed comments opposing an FCC proposal to grant immediate on-the-air privileges to amateur examinees before a license is issued by the Commission, preferring the early implementation of electronic filing as a better way to address the problem of excessive delays.

The League said it stood by its comments already made, on a petition for rule making that resulted in the FCC's proposal, in PR Docket 93-267. The ARRL told the FCC that its Notice of Proposed Rule Making, issued November 4, did not seem to consider the League's comments made last summer.

At that time, the ARRL said in response to a petition by the Western Carolina Amateur Radio Society-VEC that such a system was both unlawful and a would be detrimental to enforcement. The League said that the FCC had, as recently as 1987, denied such a concept and that the absence of an up-to-date database of such temporary call signs would make both self-regulation by amateurs themselves and rules enforcement by the Commission more difficult.

The League now has added that suggestions in the NPRM that precedents for such a plan exist in other services are incorrect; has reiterated its opinion that such a plan is inconsistent with the international radio regulations; and has emphasized that electronic filing of applications with the FCC would accomplish the same goal, of reducing the wait to get on the air, while maintaining total FCC oversight of licensing.

The reply comment date for this proposal is February 10, 1994.
NNNN
/EX

--
Marc B. Grant 214-231-3998
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

339. ARLB005 CAC studies rovers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 16:44:22 UTC
From: marcbg@netcom.com
Message-ID: <$arlb005.1994@ampr.org>
Source record: 272305
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

SB QST @ ARL $ARLB005
ARLB005 CAC studies rovers

ZCZC AG69
QST de W1AW
ARRL Bulletin 5 ARLB005
From ARRL Headquarters
Newington CT January 12, 1994
To all radio amateurs

SB QST ARL ARLB005
ARLB005 CAC studies rovers

CAC studies rovers

The ARRL Contest Advisory Committee (CAC) is studying the scoring for rovers in VHF contests. In particular they are looking at the impact of rover scoring on club competition in the January VHF Sweepstakes. The committee invites input on the following proposal:

''Rovers are not eligible for Club Aggregate Competition. Rovers may not engage in the practice of Grid Circling, which is defined as the premeditated (not coincidental) act of two or more Rover stations roving to the same locations at the same times and working each other, regardless of whether or not they work anyone else. This specifically includes family members traveling in the same or different vehicles.''

The following may also be included in the proposal:

''Rovers who are suspected of Grid Circling will be given a chance to demonstrate they were not before their logs are disqualified.''

Comments may be sent to: ARRL - CAC, 225 Main Street, Newington, CT 06111. Email comments may be directed to Internet Address: cacarrl.org
NNNN
/EX

--
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marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

340. ARLB006 Correction to ARLB005

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 16:45:18 UTC
From: marcbg@netcom.com
Message-ID: <$arlb006.1994@ampr.org>
Source record: 272306
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

```
SB QST @ ARL $ARLB006
ARLB006 Correction to ARLB005

ZCZC AG70
QST de W1AW
ARRL Bulletin 6 ARLB006
From ARRL Headquarters
Newington CT January 13, 1994
To all radio amateurs

SB QST ARL ARLB006
ARLB006 Correction to ARLB005

Correction to ARLB005

The Internet Address given in ARLB005 shoud read cac@arrl.org with
no spaces in the address.
NNNN
/EX

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marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX
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341. ARLB007 Earthquake 1

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 16:45:59 UTC
From: marcbg@netcom.com
Message-ID: <$arlb007.1994@ampr.org>
Source record: 272307
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

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SB QST @ ARL $ARLB007
ARLB007 Earthquake 1

ZCZC AG71
QST de W1AW
ARRL Bulletin 7 ARLB007
>From ARRL Headquarters
Newington CT January 17, 1994
To all radio amateurs

SB QST ARL ARLB007
ARLB007 Earthquake 1

Amateur Radio Emergency Service (ARES) and Radio Amateur Civil
Emergency Service (RACES) operators are currently establishing
emergency communication in the aftermath of this morning's
earthquake in the San Fernando Valley. Operators are assisting
police, fire and other local emergency management officials with
local VHF communications.

Amateurs are advised that operators in the affected areas must give
priority to meeting immediate emergency communications demands.
Amateurs must not transmit on emergency net frequencies, except when
directed to do so by net control stations. When the situation has
been fully assessed and order restored, operators may be able to
provide health and welfare message services out of the affected
areas. Priority will be given to outgoing messages since most
amateurs in the affected areas will be unable to deliver incoming
messages until phone service is restored and roads repaired. Welfare
inquiry traffic should not be accepted from the public until
authorities in the affected areas indicate they are able to process
such inquiries.
NNNN
/EX

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Marc B. Grant 214-231-3998
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX
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342. ARLP002 Propagation de KT7H

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 16:47:00 UTC
From: marcbg@netcom.com
Message-ID: <$arlp002.1994@ampr.org>
Source record: 272308
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

SB PROP @ ARL $ARLP002
ARLP002 Propagation de KT7H

ZCZC AP16
QST de W1AW
Propagation Forecast Bulletin 2 ARLP002
>From Tad Cook, KT7H
Seattle, WA January 14, 1994
To all radio amateurs

SB PROP ARL ARLP002
ARLP002 Propagation de KT7H

Solar activity was down a bit last week after the significant rise in flux the week before. Average flux was down over 24 points and finally dropped below 100 on January 12. A and K indices dropped also, which signified quiet geomagnetic conditions and good propagation on 80 and 160 meters. The A index was single digits on most days and even reached zero on January 9 and 10.

By the time this bulletin was written geomagnetic conditions were active again, but are expected to quiet down, and then become active once more around January 25. Solar flux is also expected to rise again, peaking near 130 around January 26, and then dipping below 100 again after February 5.

Sunspot Numbers from January 6 through 12 were 144, 135, 119, 98, 74, 56 and 66, with a mean of 98.9. 10.7 cm flux was 132.1, 126.3, 122.9, 117, 110.1, 101.1 and 97.8, with a mean of 115.3

The path projection for this week is from Tulsa, Oklahoma to West Malaysia.

80 and 75 meters should be open from 1130 to 1400z, peaking around 1230 to 1300. 40 meters looks good from 1100 to 1400, and 30 meters from 1400 to 1530 and again around 2330. 20 meters should be open from 1530 to 2000, with the best conditions early in the opening, and again around 2300 to 0000. 17 meters looks good from 1630 to 1830, and 15 meters around 1730. On some days 12 meters may be open around 1700 to 1830, and there is a slight chance of an opening on 10 meters around 1800 to 1830. Tulsa's sunset is the same time as West Malaysia's sunrise at this time of year, and there is a chance of openings around 2330 on 15 through 30 meters. The odds are better on the low end of that range of frequencies.
NNNN

/EX

--
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marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

343. Mods by e-mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 17:40:20 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCJu6F9.FJw@netcom.com>
Source record: 272281
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Many people have informed me that they cannot connect to world.std.com via anonymous FTP to retrieve the mods they want.

If you cannot connect to the hostname world.std.com, try connecting to its IP address of: 192.74.137.5

If this still fails, e-mail me direct your mod requests, and I will, in turn, e-mail back the mods you requested.

Scott

--
```
==========================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
==========================================================================
```

344. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 17:50:12 UTC
From: Charles.R.Hohenstein.1@nd.edu
Message-ID: <Charles.R.Hohenstein.1-180194124857@mac22.hesburgh.lab.nd.edu>
Source record: 272288

In article <Anthony_Pelliccio-180194095831@138.16.64.8>,
Anthony_Pelliccio@brown.edu (Tony Pelliccio) wrote:
> >
> Can I ask a question? Did you actually sit there and post this to every
> single Usenet group? Enough of your wahoo bs... take this to a more
> appropriate forum since this is for amateur radio. Who knows, maybe one day
> a Ham will have a QSO with God himself.
>
Yes, but would this QSO be voice or CW?

345. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 18:57:30 UTC
From: andy@clark.net
Message-ID: <2hhbeq$5lu@clarknet.clark.net>
Source record: 272285

Clarence L. Thomas IV (clarence@orion.cc.andrews.edu) wrote:
: The earthquake in Los Angeles, California, the flood in Europe, the seemingly
: unstoppable war in the former Yugoslavia, the devastating fires in Australia,
: the flood in the Midwest of the United States of America, the devastating fires
: near Los Angeles, California, the rapid and appalling increase in violence in
: cities, towns, villages all over the world, the famines, the diseases, the rapid
: decline of the family unit, and the destructive earthquake in India (in 1993)
: are signs that this world's history is coming to a climax. The human race
: has trampled on God's Constitution, as given in Exodus 20:1-17 (King James
: Version Bible), and Jesus is coming to set things right. These rapidly
: accelerating signs are an indication that Jesus is coming soon (Matthew 24).

: God's Holy Spirit is gradually withdrawing its protection from the earth
: and the devastating events you see are demonstrations of Satan's power. All
: those who are not guarded by God are in danger of forever losing eternal life.

: If you want to know what's about to happen, please study the books of Daniel
: and Revelation which are located in God's Word, the Bible. They are not
: sealed or closed books. They can and must be understood by all. Every word
: in the Bible from Genesis to Revelation is true. The Bible and the Bible only
: must be your guide.

: When God's Law (the Constitution for the Universe) is consistently ignored,
: disregarded, changed, and questioned, He permits certain events to occur to
: wake us up. I would urge all, wherever you are and regardless of the
: circumstances, to directly call on Jesus and ask Him to intervene in your life.
: Jesus who created this planet and every living creature in it and on it, died
: on the cross, was raised from the dead by God the Father, and is now in Heaven
: interceding for you. Jesus is the only One who can rescue us from the slavery,
: misery, and death Satan is causing us.

: For reference I'm including God's Constitution as given in the King James
: Version Bible. Please note that when God says the seventh day, he means Sabbath
: (the 7th day of the week) not Sunday (1st day of the week).

: Commandment #1: Exodus 20:1-3 (KJV) And God
: spake all these words, saying, I am
: the LORD thy God, which have brought
: thee out of the land of Egypt, out
: of the house of bondage. Thou shalt have
: no other gods before me.

: Commandment #2: Exodus 20:4-6 (KJV) Thou shalt not make
: unto thee any graven image, or any
: likeness of any thing that is in heaven
: above, or that is in the earth beneath,

: or that is in the water under the earth.
: And shewing mercy unto thousands of them
: that love me, and keep my commandments.

: Commandment #3: Exodus 20:7 (KJV) Thou shalt not take
: the name of the LORD thy God in vain;
: for the LORD will not hold him
: guiltless that taketh his name in vain.

: Commandment #4: Exodus 20:8-11 (KJV) Remember the sabbath
: day, to keep it holy. Six days shalt thou
: labour, and do all thy work: But the
: seventh day is the sabbath of the LORD
: thy God: in it thou shalt not do any
: work, thou, nor thy son, nor thy daughter,
: thy manservant, nor thy maidservant, nor
: thy cattle, nor thy stranger that is
: within thy gates: For in six days the
: LORD made heaven and earth, the sea, and
: all that in them is, and rested the seventh
: day: wherefore the LORD blessed the sabbath
: day, and hallowed it.

: Commandment #5: Exodus 20:12 (KJV) Honour thy father and thy
: mother: that thy days may be long upon the
: land which the LORD thy God giveth thee.

: Commandment #6: Exodus 20:13 (KJV) Thou shalt not kill.

: Commandment #7: Exodus 20:14 (KJV) Thou shalt not commit
: adultery.

: Commandment #8: Exodus 20:15 (KJV) Thou shalt not steal.

: Commandment #9: Exodus 20:16 (KJV) Thou shalt not bear
: false witness against thy neighbour.

: Commandment #10: Exodus 20:17 (KJV) Thou shalt not covet
: thy neighbour's house, thou shalt not
: covet thy neighbour's wife, nor his
: manservant, nor his maidservant, nor
: his ox, nor his ass, nor any thing that
: is thy neighbour's.

: I also recommend that the following books be obtained and closely studied:

: The Great Controversy
: By Ellen G. White
: Review and Herald Publishing Association
: Hagerstown, MD 21740

: The Desire of the Ages
: By Ellen G. White
: Review and Herald Publishing Association

: Hagerstown, MD 21740

: Patriarchs and Prophets
: By Ellen G. White
: Review and Hearld Publishing Association
: Hagerstown, MD 21740

: Daniel and the Revelation
: By Uriah Smith
: Review and Herald Publishing Association
: Hagerstown, MD 21740
: -------
: Clarence L. Thomas IV
: Phone: 616-471-6116
: E-mail: thomas@redwood.cc.andrews.edu

Oh, it's just a coincidence.

346. Ham call CDROMS & SunOS/Solaris

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 19:25:12 UTC
From: ken@boxhill.com
Message-ID: <2hhd2o$o9n@boxhill.com>
Source record: 272296

I am considering purchasing one of the popular ham-related
CDROMs on the market such as Buckmaster or QRZ!.

How useful are these to the non-Intel/DOS/Microsoft
population out there who use Sun SPARC SunOS/Solaris?

I wish to use them for their callsign databases.

Can I mount these CDROMs from SunOS/Solaris? (ISO9660?)
Is the callsign database contained therein usable without
any of the x86 .EXEcutables that may be there?
Is the callsign database in a reasonably massageable format
that a reasonable C program could grok?
Which of the CDROMs out there would be most appropriate?
(Buckmaster & QRZ! are the only two that come to mind)

Thanks for any help.
Appreciate a cc: ken@boxhill.com to posted replies.

73 de Ken

Ken Stamm N2TIA BBBB H H i ll ll
(ken@boxhill.com) B B H H l l
BoxHill Systems Corporation BBBB ooo x x HHHH ii l l
161 Avenue of the Americas B B o o x H H i l l
New York, NY 10013 BBBB ooo x x H H iii lll lll
Tel: (212)989-HILL (4455)
Fax: (212)989-6817 S y s t e m s C o r p o r a t i o n

347. Re: Power Lines Cause Cancer? Maybe Not...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 20:17:44 UTC
From: alanb@sr.hp.com
Message-ID: <CJuDpL.87u@srgenprp.sr.hp.com>
Source record: 272280

Leland Van Koten (LEEVANKOTEN@delphi.com) wrote:
:
: Maybe the problem is that the news media ignore the fact that
: "statistical significance" is generally defined as an observation (in this
: case, the number of cancers) that is sufficiently different from the expected
: level that there is only a 5% chance of it being strictly coincidental.
:
: Of course, that means that there IS a 5% chance that a result that is only
: marginally statisically significant will be due to chance. If you look at
: every possible cause of death in ANY group, you will probably see
: "statistically significant" excesses in one or more causes of death, purely
: by chance. It's only when you tend to see the same thing in multiple studies,
: have eliminated confounding variables, and have some plausible biological
: explanation for the observation, that it makes sense to talk about
: causation. Unfortunately, of course, those concepts don't make for great
: sound bites on the evening news.

Right on. A good example is the famous Milham study of ham radio operators.
Dr. Milham looked at something like 25-30 causes of death and found a
statistically significant increased death rate in one, as I recall.
I did a Monte Carlo analysis, using his death rate data, and assuming
a population with average death rates from each cause, and found that
you can expect one or two "statistically significant" increased death
rates, purely by chance.

Not to mention errors of interpretation and systematic experimental
error. For example, even if the reported amateurs' increased death rate
for one type of cancer turns out not to be a statistical artifact, it
could easily be due to other factors than exposure to RF fields.
(For example, exposure to solder flux fumes, chemical degreasers, and
other chemicals used by workers in the electronic field.)

AL N1AL

348. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 20:18:20 UTC
From: blake@lonestar.utsa.edu
Message-ID: <1994Jan18.201820.13828@ringer.cs.utsa.edu>
Source record: 272278
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc

I remember reading somewhere that the Lost Ark of the Covenant was really an extraterrestrial sub-space transceiver, left behind by the same beings that gave some of their construction and architecture expertise to the Egyptians, Mayans, etc.

--
O	Blake Schreckenbach,	"It's a 106 miles to Chicago, we've got a full	O
O	KC5DRP	tank of gas, half a packet of cigarettes, It's	O
O	University of Texas	dark, and we're wearing sunglasses. Hit it."	O
O| at San Antonio	-- Jake & Elwood Blues	blake@lonestar.utsa.edu |O

349. Getting my FT-101 tuned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 20:21:44 UTC
From: asrini@kpc.com
Message-ID: <1994Jan18.202144.15296@kpc.com>
Source record: 272283

Hello,
Could someone tell me where I can get my FT-101 tuned? I bought
it used for my brother in India and I'd like to get it tuned locally
before shipping it. Does Yaesu tune their old radios anymore? If so can
I get a ph no?

Ashok Srinivasan
(ham-to-be)

350. Re: Dipole Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 20:33:54 UTC
From: alanb@sr.hp.com
Message-ID: <CJuEGJ.8oK@srgenprp.sr.hp.com>
Source record: 272282

Cecil Moore (kg7bk@indirect.com) wrote:
: Alan Bloom (alanb@sr.hp.com) wrote:
: : However, after you run through a few feet of twinlead/ladder line,
: : the impedance will no longer be so high anyway, so I don't think
: : it's much of a consideration. AL N1AL

: Al, if the impedence were 50 ohms at the antenna fed with 450 ohm
: ladder-line, the impedence would go straight up to a maximum of 4000
: ohms a quarter-wavelength down the transmission line from the antenna.
: I think you know better than what you said above.

No, I meant what I said. The questioner was talking about a 260-foot
center-fed antenna on 80 meters, which has a very high feedpoint impedance.
The longer the feedline (up to a quarter wave), the lower the impedance
at the other end.

However you bring up a good point. What matters is not the magnitude of
the feedpoint impedance, but the SWR. For example, with 450 ohm feedline,
a feedpoint impedance of 4500 ohms results in a 10:1 SWR. But if your
transmission line is long enough (over 1/2 wave), ANY impedance that
gives 10:1 SWR will result in a 4500 ohm impedance somewhere along the
feedline. For example, if the antenna is 45 ohms, you will get 4500 ohms
1/4 wavelength from the feedpoint.

If your antenna tuner "likes" low impedances (less than the feedline
impedance), then you do well to choose an antenna length and feedline
length that result in a low impedance AT THE TRANSMITTER end of the
feedline. That may require either a high or low impedance at the antenna.

Antenna tuners like the Johnson Matchbox, however, like high impedances.
A good antenna for a Matchbox is a dipole that is 1/2-wave long at the
lowest band in use, with 1/4-wave balanced feedline. For example, a
135-foot center-fed dipole fed with 60 feet of ladder line. This presents
a high feedpoint impedance on 80, 40, 20, 15 and 10 meters.

AL N1AL

351. Kantronics and VIC-20

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 20:59:12 UTC
From: sivyerb@govonca.gov.on.ca
Message-ID: <1994Jan18.205912.18621@govonca.gov.on.ca>
Source record: 272287

I recently resurected an old Kantronics interface which I gave away to a ham friend. I have lost the documentation for the unit.

I am looking for a list of VIC-20 commands for this unit. For example how to change speeds, change from transmit to receive and back. There was also a way to store messages and send them. He will be using the unit for CW only.

Any help greatly appreciated.

E-Mail replies preferred.

Bob Sivyer
VA3LDU
London, Ontario

Internet: sivyerb@gov.on.ca

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****

Bob Sivyer Phone:(519-661-2714)
Systems Programmer/Analyst Internet: sivyerb@gov.on.ca
West Science and Technology Transfer Unit EPO: sivyerbo@EPO@MHS@EPO
Ministry of Natural Resources
London, Ontario
N6A 4L6 Ham Radio: VA3SI & VE3LDU

****

352. Gin Pole Dealers???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 21:04:02 UTC
From: galen@picea.CFNR.ColoState.EDU
Message-ID: <CJuFuq.14wz@yuma.ACNS.ColoState.EDU>
Source record: 272284
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Anybody know who sells gin poles and related hardware? I'm looking for
all the parts except the pipe, since I have some aluminum pipe and don't
want to pay trucking for something so light.
Antenna season approaches....
galen, KF0YJ

353. Sony 2001 mods?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 22:36:06 UTC
From: tjenkins@pnet16.cts.com
Message-ID: <CJuK47.Dn2@nctams1.uucp>
Source record: 272299

Over the past few weeks, I've listened to my newly aquired 2010. Super radio.
Are there any mods/installations that I should be aware of?

--Tom

UUCP: nctams1.navy.mil!pnet16!tjenkins
INET: tjenkins@pnet16.cts.com

354. ANARTS RTTY NEWS BULLETIN 792 16/01/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 23:44:38 UTC
From: dave@eram.esi.com.au
Message-ID: <5121@eram.esi.com.au>
Source record: 272209
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS NEWS BULLETIN 792 16/01/94

SUNDAY BROADCAST SCHEDULES.
3.545 mhz 0930 utc VK2BQS (Jim)
7.045 mhz -3 0030 utc VK2CTD (COL)
14.070 mhz (amtor/fec) 0030 utc VK2DPM (ALAN)
14.091 mhz 0030 utc VK2BQS (JIM)
146.675 mhz 0030/0930 utc VK2JPA (PAT)
144.850 mhz (ax25 bbs) VK2JPA AT VK2RWI
146.675 mhz (rtty mmbbs/repeater) VK2RTY

Views expressed in this news bulletin are not necessarily
those of the Broadcast Officer, the Relay Officers, or of the
Society.

Thanks to all the helpers
==========
ANARTS says thanks to all the helpers who came to fight the
fires and to man the communications where needed. Had it not
been for all the assistance from other states, we would have
had a much harder time of it. When the usual communications
could not cope, about 140 WICEN members and other amateur
radio operators stepped in and held them together, often
risking their lives as the fires raced through at a rate
beyond expectation. They were even coordinating helicopter
operations at some places, I hear.

Our heartfelt thanks to you all.

Guidelines for the preparation of programs for transmission by
---------- Amateur Radio Teletype : By
FRANK VK2FJL.

Due to the diversity of RTTY equipment in common use
among Radio Amateurs, it is desirable that a few simple
guidelines be observed in order to ensure that transmitted
data is received as it is intended by the variety of
receiving equipment in use.

For instance - it is known that at least four
different keyboard layouts using different keys for the upper
case or upshift characters are in use by Amateur RTTY

stations. Certain characters are therefore incompatible and their use should be avoided. Indeed characters used on some machines are not used at all on others. Some examples are the exclamation mark, the commercial at, the ampersand, semi-colon and quotes.

Also, some RTTY'ers use `hard copy' teleprinter machines of various types, the most common being teletype (both CCITT and USA keyboard versions) Siemens, Creed and Olivetti. Others use `Glass' or computers which run a variety of RTTY programs, the main difference here being that computers reset almost instantly to the beginning of a new line, whilst the mechanical machines require longer time (usually 2-3 characters) for the carriage to fly back to the other end, recover, and prepare to `do it again'. These machines require a separate (CR) and (LF) to be received at the end of each line, whereas the computer only needs the (CR). It does not see the (LF) and automatically inserts one for itself everytime it sees a (CR). Line lengths also vary for different equipment : e.g 24, 32, 64, 69, 72, 76, and 80 or even more characters per line.

These mechanical differences, as well as the need for uniformity of layout, e.g. in broadcast production, necessitate the publication of a standard or protocol for the preparation of RTTY material.

Uniformity will also result in the perpetuation of a higher standard of transmitted RTTY, of which the individual amateur can be justly proud.

This `punch tape protocol' is recommended for use by all who prepare RTTY pictures, stories, programs, text or broadcast items for re-transmission, or for those who just enjoy having a higher standard associated with their callsign.

(1) END-OF-LINE PROTOCOL.

At the end of each line type (CR) and (LF).
Always type (CR) before (LF) - never the other way around.
For multiple line feeds type (CR)(LF)(CR)(LF)(CR)(LF), etc.
following the last (LF) add (LTRS) or (FIGS) as applicable.
For single line feed two (FIGS) or (LTRS) are recommended,
this ensures adequate non-printing characters following the
first (CR) for mechanical machines.

more next week

IPS weekly report
---
7 January - 13 January 1994

Issue no.: 02

Date of issue: 14 January 1994

Date 07 08 09 10 11 12 13
10cm 126 123 117 110 101 98 95
A 05 05 02 03 16 20 (20 estimated)
T 68 89 53 77 72 30 59

Summary of activity

Solar activity was very low 8th, and 10th - 13th January, low on 9th, and moderate on 7th. There was an M1 flare on 7th.

The geomagnetic field at Learmonth (WA) was quiet 7th - 10th, active on 11th, unsettled to active on 12th, and mostly quiet on 13th January apart from active to minor storm levels 1200 - 1800 UT.

Ionospheric F2 critical frequencies at Sydney were mostly enhanced 10 to 40 per cent except for a short 15 per cent depressed period on 11th, and near normal on 12th and most of 13th.
Forecast for the next week (14 - 20 January)

Solar : Low to moderate.

Geomagnetic: Quiet to unsettled.

Ionospheric: Mostly 10 - 20 per cent above monthly predicted values.

Courtesy of IPS Radio and Space Services

VK2SG RTTY DX NOTES FOR WEEKENDING JAN. 7, 1994 (BID RTDX0107)

A Happy New Year to you all, and may the good DXcome to your shack with a 599 signal. May all the good wishes that you have sent to your friends be returned to you manyfold. We all hope for a Peaceful and Happy Year. Surely this week has been a good start for 1994.

Our thanks this week go to: ZS5S, W2JGR WB2CJL, BV5AF, SP5AA, I5ICY, OH2BBF, DJ3IW and the Central Eu Dx-Cluster node DB0SPC, and NJ0M node of the Twin Cities Dx Packet Cluster.

BANDPASS:

FRIDAY 31

0109-14083 HL9DG 1240-21087 UN5PR
1305-14089 RA2FB 1312-21089 KG4HG
1400-14091 LX1DA 1403-21083 4O9S Qsl YU7KMN
1510-21086 CU1AC 1534-21090 S57JZ
1552-14091 YL2KF 1600-14084 OM3TZW

1626-14088 4X6UO 1652-14082 VQ9WL
1912-21083 CH2STN Jesus Is. 2013-21089 J88BS
2215-21084 C6A/AA5AU 2250-14087 9Y4/I5JHW
2348-14083 XF4CI Revilla G.

SATURDAY 1 (HAPPY NEW YEAR)

0024-14080 XF4CI 0031-14083 V31JU
0804-14083 S92ZM 0849-21081 OH0MFP
0920-12084 4X85TA 1303-14088 S21A
1425-21090 J88BS 1523-28085 V50CM Qsl BOX
1500 Tsumeb Namibia
1601-21082 C6A/AA5AU 1645-28087 PJ0/N9FTC
1652-14082 5R8DG 1722-21085 TI2YO
1853-14983 HI8LEZ 2133--3588 UN7RX
2246-14091 9Y4/I5JHW Qsl I5JHW 2317-14086 VQ9WL
2337-14083 HL5AWS

SUNDAY 2

0028-14090 KG4CB 0905-21088 A45ZX
1134-14090 ER5OK 1153-14085 EY8CQ
1250-21086 UX0KN 1254-14087 UT2UZ
1320-21089 FG5FI 1323-28082 V50CM
1347-21088 PJ0/N9FTC 1352-21091 KG4HG
1356-14090 LI3OWG FER PFX (Olympic World Games)
1420-14088 SV5AZP 1445-21073 C91BN ARQ
1534-21086 CU1AC 1557-21086 HJ6SQQ
1610-28089 PJ0/N9FTC 1617-21085 C6A/AA5AU
1713-14085 J28JJ Qsl BOX 1076 Djibouti

MONDAY 3

0152--3585 C6A/AA5AU 0201-10122 C6A/AA5AU
0915-14088 UH8AAB 1157-14082 EY8CQ
1316-28088 OH0MFP 1355-21090 ET3YU
1407-14087 ER1PE Rev. 1420-14085 LI3OWG
1430-14081 4U1ITU Qsl DK7UY 1431-21085 4X/OK1FGC

TUESDAY 4

0051-14084 XF4CI 0140--7082 C6A/AA5AU
0752-14088 HP2CWB 0846-14083 UT5RP
1114-21089 4U1ITU 1119-21086 CU1AC
1120-21090 UH8AAB 1145-14084 EY8CQ
1239-21086 PJ0/N9FTC 1418-14086 LI3OWG
1450-14084 S53MJ 1500-14087 CN8LU
1628-14084 FR5GS 1631-21079 XF4CI
1636-18105 4U1ITU 1907-14085 7P8SR
2243-14088 C6A/AA5AU

WEDNESDAY 5

1104-14085 4Z85TA 1256-21083 4X/OK1FGC
1313-14088 VP5/WA0VQR 1315-14089 US5TCP
1341-14086 EA9DX 1602--7043 4U1ITU

THURSDAY 6

0606-14084 4Z85TA 0726-14087 LZ1DB
1114-14084 YL1ZE 1332-14088 5B4VX
1416-21083 4U1ITU 1312-21087 VP5/WA0VQR
1422-14088 9H1EL 1450-14089 S53MJ
1606-14084 J28JJ

NOTES OF INTEREST:
Regarding the RTTY Roundup contest Eric, OH2BBF/OH0BBF fired a big way 1800z sharp on Jan. 1st. After an hour and two QSOs switched to CW. He realized that was something wrong with the contest. The OH league magazine says "first weekend in Jan", CQ Magazine contest calendar says 1-2 Jan. 1994...He is sorry could not make another trip for the contest and informs that he is looking forward to be there again in the major RTTY contest. (what a pity).

PRATAS IS. The first trip into this Island now is over. BV9P has been active only on Jan. 5th from 0300z to 0700z on 14, 18, and 21 Mhz CW and SSB. Operators were BV2AP, BV4AS, BV4OB, BV5AF, OH2BH. Bolon, BV5AF President of CTARL informs that the 2nd BV9P DXped team will be available on air during March 1994. (we all wish for a longer stay and RTTY as well).

Send your bandpass and notes for next week to Bob, WB2CJL at W5KSI.#NOLA.LA.USA.NA or ZS5S.ZAF.AF.

GL de (DX2) Luciano, I5FLN AT ZS5S.ZAF.AF

[via HF AMTOR]

Coming events

1994

February 4th ANARTS meeting

12th-13th EA WW RTTY
Contest

March 19th-20th BARTG WW RTTY
Contest

April 16th-17th SARTG WW AMTOR
Contest

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President (Col) VK2CTD, or the Secretary (Pat) VK2JPA @ VK2RWI

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or by packet to VK2JPA @ VK2RWI.

The Internet address for the Broadcast Officer is :

patl@extro.edu.su.oz.au [???]

The Society welcomes news items on any digital subjects from anywhere in the broadcast coverage area. We know we reach New Zealand and many South Pacific islands, we are looking forward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer

That concludes ANARTS NEWS792 16/01/94.

Inserted by VK2BQS Jim, Vice-President ANARTS.

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

355. VK2WI Weekly News, 9th January, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-18 23:56:18 UTC
From: dave@eram.esi.com.au
Message-ID: <5122@eram.esi.com.au>
Source record: 272208
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[Taken from Packet Radio]

MEMBERSHIP RECRUITMENT & RETENTION CAMPAIGN

HOW WOULD YOU LIKE TO WIN A BRAND NEW RIG?

Members who renew, or non-members who join up between the 1st of December 1993 and the 28th of February 1994 will be eligible to win a new rig from Kenwood.

First prize will be a TM-241A 2m, 50 watt mobile rig, while second prize will be one of the very new TH-28A 2m, 5 watt handheld rigs. Total value of the prizes is over $1400.

There are no special forms to fill in or convoluted quizzes to answer - all you have to do is either join, if you're a non-member, or renew if you're a member. If your renewal does not fall within this period, no matter - you can renew early! If you do renew early, please do it through our Administrative Secretary, Margaret Morris, NOT through the Federal Office in Victoria.

Both prizes will be awarded by way of a draw and presented to the winners at the earliest opportunity this year after the close of the promotion.

Thanks go to Kenwood Electronics Australia who have generously sponsored the promotion by donating the prizes.

So, if your membership renewal falls due between 1st December this year and 28th February next year, or if you're considering joining - DO IT - you could be one of two lucky winners.

All grades of membership are eligible. Members currently on a three-year term will be included in the draw, as will life members.

THE DIVISION'S DURAL STATION CLOSED

Two recent events have brought about the closure of the Division's Dural station.

On Friday, December 31st, the Division was served with a letter from Solicitors Marshall Marks Kennedy, acting for Ms Val Bergman.

The letter alleged that she was seriously affronted by two packet radio bulletins which named her, transmitted to the Division's Bulletin Board VK2RWI on the 28th of December under the callsign of David Horsfall VK2KFU.

The solicitor's letter also alleged that these two bulletins were part of a series and that she believed she was being harassed by Mr Horsfall.

We must point out at this stage that Val Bergman is married to the Divisional Secretary, Roger Harrison.

In addition, the solicitor said that the bulletins were defamatory of her and pointed out that, under the Radiocommunications Act, the Division's station licence was subject to a condition that th station could not be operated, or permitted to be operated, in such a manner.

The Division was given until 5.00 pm on Friday the 7th of January to undertake to prevent such transmissions via the VK2RWI BBS in the future, or else the Division may receive an injunction to stop its operation. In addition, an action seeking damages for defamation was threatened.

This action is very serious indeed, not only for the Division, but consequently for all packet radio BBS operators, users of packet radio and the entire amateur radio service.

The point is that the Division, and any packet BBS operator, is a "knowing publisher" of whatever is posted to the packet BBS. Anyone who may be knowingly involved in the publication of defamatory material can be enjoined in a defamation action. And juries in recent defamation cases in NSW have awarded astonishingly high sums in damages.

This resulted in a decision to take the VK2RWI packet BBS off-air for the time being. Vice-President John Robinson VK2XY handled this legal business for the Division as Secretary Roger Harrison declined owing to his relationship with Val Bergman.

As if that weren't serious enough for the Division, on Sunday morning the 2nd of January, there was a broadcast made from Dural, which was purported to be an "official" broadcast. The text of that broadcast was also transmitted as a series of bulletins to the packet radio network under the callsign of VK2WI. These voice and packet broadcasts were unauthorised and contain material which is untrue.

In view of these serious events, and following considerable discussion among the President, Vice-President, Secretary, and two other Councillors, being a majority of the Council including the executive, the Institute's packet radio bulletin board system VK2RWI, was taken off the air on Sunday 2nd January 1994 and the equipment dismantled and removed from the Institute's property at 63 Quarry Rd, Dural.

In addition, the other transmitting equipment at Dural has been secured against unauthorised use and the building secured against unauthorised entry by other persons. A notice detailing the closure of the station has been posted on the door of the building, and the same notice has been transmitted to the packet radio network in New South Wales. The Division's solicitors have advised that the station closure was an appropriate action in view of all the circumstances which, apart from

the action over the packet BBS, involved breach of the Division's station licences.

Those involved in the unauthorised broadcast of the 2nd of January include: Councillor Cesar Miranda VK2TCM, Steve Pullan VK2QZ and David Horsfall VK2KFU.

However, yesterday afternoon, the VK2RWI voice repeater was restored to operation for the use of WICEN in support of bushfire operations around Sydney.

DIVISIONAL NEWS.

Council, or at least the majority of Council, regrets that the actions of a few have disadvantaged the majority of members.

A major goal of most of those elected to this Council last May was to clean up the Division's operations, policies and procedures; to put the Division on a proper footing in all aspects of its operations.

It is very sad for the Institute that we have been forced to take these steps owing to the acts of people who, for quite erroneous reasons, believe that they have rights superior to the other members of the Institute and superior to the management of the Division, which is a company.

This Council has had to battle many such acts by some members and, worse still, some Councillors, since the AGM last May, and it has continued despite the caution about acting within the law President Terry Ryeland gave to people in his speech on the last broadcast for 1993 on December the 19th, and his plea for reason and sanity to prevail. They should heed not just the law, but the spirit of The Amateur's Code. The actions of just a small group of people, including some Councillors, have virtually hijacked the business of the Council and simply wasted the resources of the Division, the efforts of volunteers and interfered with the proper management of the Division - all without a skerrick of mandate from the membership.

It's time it ceased.

Honourable people offer assistance to the Division when the organisation needs it, not interference with its business. Thanks must go to those Councillors and volunteers who maintain the Division's operations for the benefit of the whole membership.

The agreement which was drawn up at the recent ATV forum, held on the 17th of December was delivered to Council by Peter O'Connell VK2EMU, who chaired that forum. Council discussed aspects of the agreement which has been referred to the new Technical Advisory Committee.

Council noted a letter of resignation from the broadcast coordinator, Steve Pullan VK2QZ.

The broadcast team and arrangements for broadcasts are to be re-formed. Broadcast team members will be advised this coming week.

And that's it for Divisional news.

Message from the President Terry Ryeland VK2UX.

"The efficient conduct of the Division's business is being adversely affected ..... and I call upon ALL COUNCILLORS - AND all Divisional volunteer workers - to bear in mind the interests of the members and the Division. They come first.

"In taking up our positions, we all owe a duty to the Division and the members, and we should not allow any dispute or difference of view or opinion to affect the discharge of those duties.

"I remind Councillors and Office Bearers that your actions are subject to the general law, including law relating to defamation.

"There are constructive ways to resolve differences, and that does not include the unruly disruption of Council meetings.

"Council meetings are the primary forum for conducting the Division's business. Let us get back to that business - the business of providing services to members and to the amateur radio community at large.

"Differences can be aired at private committee meetings. The resolution of conflict is best done through constructive action, not destructive disputes.

"Let us take this opportunity to take heed of the spirit of the season, and look to our duties and our differences and resolve to act in the interests of the members and the Division and to put value and pride in belonging to this could-be-great organisation."

COUNCIL MEETING IN WOLLONGONG

Following a requisition by Councillor John Simon VK2XGJ, Council held a meeting on Tuesday January the 4th at Wollongong SES Headquarters.

John nominated the date, the time and the place of the meeting, as he is quite properly able to do under the Corporations Law. He was aware that the Institute has some deadlines to meet regarding the business of the Division and, with that in mind, requisitioned the meeting under Articles 29 and 30 of the Division's Articles of Association. Notices were posted on December the 29th.

On Friday, December 31st, the Division was served with a letter from a solicitor, John Gillmour, acting for Councillors Cesar Miranda VK2TCM, Roger Henley VK2ZIG and Bob Yorston VK2CAN.

The solicitor acting for these three Councillors sought to prevent the meeting going ahead.

The letter was referred to the Division's solicitors who replied, pointing out that the meeting was properly requisitioned, notices were properly served and the Council had urgent business to consider by or before that date.

An action to injunct the holding of the meeting, threatened by the solicitor for Councillors Miranda, Henley and Yorston, did not eventuate, and the meeting went ahead as planned.

Present were: Terry Ryeland VK2UX,
John Simon VK2XGJ,
John Robinson VK2XY,
Julie Kentwell VK2XBR
and Roger Harrison VK2ZTB.

Councillors Cesar Miranda VK2TCM, Roger Henley VK2ZIG and Tim Mills VK2ZTM were absent. No notification of their absence was lodged either at the Division or with the Secretary. Councillor Bob Yorston had notified his absence to the Division on the 21st of December.

There were 17 visitors present, coming from the Illawarra region, the South Coast, the Blue Mountains and Sydney.

Council first dealt with the business before the meeting adjourned from the 17th of December, which was requisitioned by Councillors Cesar Miranda VK2TCM, Roger Henley VK2ZIG, Bob Yorston VK2CAN and Tim Mills VK2ZTM.

That business involved a motion of no confidence in the Secretary Roger Harrison VK2ZTB and a motion seeking to dismiss him from all positions. That meeting was adjourned by President Terry Ryeland when it became unruly.

The motion of no confidence was defeated by a vote of five-zero. Terry Ryeland, on advice from Institute solicitor David Lewarne, ruled the motion to dismiss the Secretary out of order as it contravened Article 51 of the Division's Articles of Association.

The reasons for the no confidence motion and dismissal advanced by Councillors Henley and Miranda were found to be unsubstantiated.

Also, at the meeting of January 4th, Council set the date for the Extraordinary General Meeting which was requisitioned on the 5th of December.

The EGM will be held on Saturday the 26th of February, at the Doonside Community Centre, where the November EGM was held. It will open at 2.00 pm, or 1400 hours local time. Official notice of the EGM will appear in the February issue of AR magazine.

Note that the 26th is the day before the Central Coast Field Day at Wyong.

Another important item on the agenda was the Division's insurances. The insurance schedule is to be referred to an assessor in order that all

the values of property to be insured are up to date. Council is due to finalise choice of insurance broker and insurer at its meeting scheduled for the 21st of January.

Council noted a letter of resignation from the Chairman of the NSW Technical Advisory Committee, Cesar Miranda VK2TCM. In his letter, Mr Miranda alleged that Council was exercising too much control over NTAC.

Council, while accepting Mr Miranda's resignation, did not accept the reason. It was pointed out that quite a number of applications regarding repeaters were waiting to be passed to Council for approval before sending to the SMA, some being outstanding for more than four months. It was also revealed that there were a series of letters of complaint to the Division from three affiliated radio clubs about inaction by NTAC.

Council pointed out that there were TEN Council meetings between the start of October and the end of December at which approvals could have been placed before Council. It was also pointed out that an NTAC Report is also on the standard agenda for each Council meeting, providing an opportunity for approvals to be passed by Council.

No action was taken by Cesar Miranda, the then Chairman of NTAC to put approvals before Council. Hence, his allegation of "control" of NTAC by the Council was rejected as untrue.

He did not submit approvals for the meeting of January the 4th.

As a result, Council then appointed John Simon VK2XGJ as Chairman of NTAC. He was given the responsibility to obtain all outstanding repeater applications and all NTAC files, to find willing volunteers to serve as members of NTAC and to report to the Council meeting scheduled for the 21st of January.

Telecom donates FM-828 transceivers to the VK2 Division.

On a happier note, the donation of more than 500 FM828 VHF transceivers to the Division by Telecom was announced at Council's January 4th meeting in Wollongong.

The official handover took place on the 21st of December. Well-known amateur Dick Smith VK2DIK accepted the donation on behalf of the Division, from Mr Charles Zoi, manager of Telecom marketing in Sydney.

The ceremony took place at the headquarters of Australian Geographic in Terrey Hills. Vice-President John Robinson VK2XY and Secretary Roger Harrison VK2ZTB attended for the Division.

Council will determine the disposal of the FM828s at its meeting on the 21st of January.

WICEN News

As listeners may already be aware, WICEN has been active in providing support for bushfire fighting operations.

According to information gained earlier this evening, WICEN has been called out on the South Coast, in Sydney South, Sydney North, in the Hunter region and the Central Coast. Apparently, Mid-North Coast WICEN is on standby.

State Emergency Services communications has failed in the Central Coast and WICEN has completely taken over communications for them.

Thanks to John Howard, WICEN State Coordinator, for that news.

IPS REPORT

Here is the IPS Weekly Report, courtesy of IPS Radio & Space Services.

This report was issued on the 7th of January and covers 31st December to the January 6th.

First the ionospheric indices:

These are for 31 December, 1st, 2nd, 3rd, 4th, 5th and 6th January,

The 10 centimetre flux: 141 148 146 133 129 137 132

Now the A index: 16 21 19 13 6 5 10

Finally, the T index: 116 51 46 55 73 80 86

Summary of activity: solar activity was low on New Year's eve, very low on New Year's day, high with an M-class solar flare on January the 2nd, and low on January the 3rd. On January 4th, solar activity was again very low, rising to moderate on the 5th and returning to low on January the 6th.

Ionospheric critical frequencies were enhanced by at least 15 per cent and up to 30 to 50 per cent from December 31st through to January 6th. Strong sporadic E was observed every day from December 31st through to January 4th.

Forecast for the next week, 7 to 13 January is as follows:

Solar activity - low,

Geomagnetic activity - quiet with a possible active period on 12th-13th January. Ionospheric critical frequencies are expected to be near normal or enhanced by 10 to 20 per cent.

Thanks to the IPS Radio & Space Services for that report.

COMING EVENTS

VK2 Divisional Office re-opens . . . . . Monday the 10th
Next Divisional Council meeting . . . . . 21st January
Divisional Trash & Treasure Sale. . . . . 23rd January
Packet Radio users meeting at Amateur Radio House . . . 23rd January

WICEN (NSW) Committee meeting. . . . . 12th February
AATC meeting . . . . . 13th February
Divisional EGM. . . . . 26th February
Central Coast Field Day at Wyong. . . . . 27th February
Closing date for the Division's AGM. . . . . 27th February
Daylight Saving ends. . . . . 6th March
Bungonia Cave Rescue (WICEN) . . . . . 19th & 20th March
AATC Workshop . . . . . 20th March

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

356. VK2WI Weekly News, 16th January, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 00:05:26 UTC
From: dave@eram.esi.com.au
Message-ID: <5123@eram.esi.com.au>
Source record: 272207
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[Taken from Packet Radio]

SILENT KEY

We record the passing of Reginal V. Bulman VK2YL

Reg passed away suddenly in Armidale Hospital on the 16th of December, following an extended illness. Apart from his last call, Reg previously held the callsigns VK9RL and VK4YL.

Born in Tasmania in 1912, he became interested in radio in 1921, at the age of nine. His interest was sparked by an Uncle who was an Infantry Signalman in World War 1.

After leaving college in 1930, Reg was employed installing and servicing radio receivers, as well as doing electrical wiring of homes and businesses. In 1938, he attended a Radio Mechanics course plus a course for his Amateur Operators Certificate of Proficiency.

He joined the Citizens Military Forces as a signalman in 1940, later being transferred to the RAAF as a radio mechanic. Reg served in New Guinea during World War 2.

After the war, Reg joined the then PMG (now known as Telecom), with whom he remained for 22 years.

Reg's widow, Elsie, writes:
"I shall always cherish many happy memories of Reg's generous help with his technical skills, to me, and the community at large; unforgettable times with tape recorders, cameras and projectors, the Scout Jamboree-of-the-air. He must have made a multitude of friends in the ham world."

Item submitted by Reg's wife, Elsie Bulman.

MEMBERSHIP RECRUITMENT & RETENTION CAMPAIGN

HOW WOULD YOU LIKE TO WIN A BRAND NEW RIG?
Members who renew, or non-members who join up between the 1st of December 1993 and the 28th of February 1994 will be eligible to win a new rig from Kenwood.

First prize will be a TM-241A 2m, 50 watt mobile rig, while second prize will be one of the very new TH-28A 2m, 5 watt handheld rigs. Total value of the prizes is over $1400.

There are no special forms to fill in or convoluted quizzes to answer - all you have to do is either join, if you're a non-member, or renew if you're already a member. If your renewal does not fall within this period, no matter - you can renew early! If you do renew early, please do it through our Administrative Secretary, Margaret Morris, NOT through the Federal Office in Victoria.

Both prizes will be awarded by way of a draw and presented to the winners at the earliest opportunity this year after the close of the promotion.

Thanks go to Kenwood Electronics Australia who have generously sponsored the promotion by donating the prizes.

So, if your membership renewal falls due between 1st December this year and 28th February next year, or if you're considering joining - DO IT - you could be one of two lucky winners.

All grades of membership are eligible. Members currently on a three-year term will be included in the draw, as will life members.

A reminder about the Extraordinary General Meeting.

The EGM will be held on Saturday the 26th of February, at Doonside Community Centre, where the November EGM was held. It will open at 2.00 pm, or 1400 hours local time. Official notice of the EGM will appear in the February issue of AR magazine.

Note that the 26th is the day before the Central Coast Field Day at Wyong.

UK MORSE CODE SURVEY:
Through late-1992 to March 1993, The Radio Society of Great Britain conducted a survey concerning the requirement of Morse Code as part of the British licensing examinations, particularly canvassing opinions on a "Code-free" HF licence. The RSGB has published a detailed, three-page report in its December 1993 issue of the society journal, Radio Communication. It makes fascinating reading.

By the closing date of March 8th last year, the survey had generated a total of 1413 replies from the UK and 86 from outside the country. The report, titled "To Key or Not to Key?", noted that the raw data, "...shows that on this occasion there is a two-to-one majority in favour of retaining the Morse test as a means of access to the amateur bands below 30 MHz."

The report further noted that the majority of those wishing to retain the Morse test were Class A licensees (who have full priviliges, equating to our full licensees), while the majority of those wanting to do away with it were Class B licensees (limited, no-code, VHF and up). In addition, "...of the 86 letters received from overseas there is a much higher proportion in favour of retaining the Morse test," the report noted.

Of those replies expressing a view, 67.5% voted 'no' to a code-free HF licence, while 32.5% voted 'yes'. More shortwave listeners replying to the survey voted 'yes' to retaining the Morse test than voted 'no'.

In summing up, the report said, "Gone are the days when a knowledge of Morse code was considered essential for communication between radio amateurs.

"However, CW has been used, even in recent years, by other Services to communicate with amateurs and it is used, for example, to identify marine and aviation beacons.

"For a long time, it has been accepted that the Morse test does provide a limiting effect on the number of radio amateurs using the finite resource of the HF amateur bands."

Further, the report concluded that Morse code proficiency demonstrates a practical skill, "...which is certainly relevant to amateur radio, but acquiring this skill will put some at a disadvantage.

"However, few would dispute the fact that practical skills are an important facet of amateur radio."

Noting that relevant knowledge and practical skills are required, the report said, "There are some useful arguments both for and against a Code Free Licence.

"It is primarily up to the amateur community World-wide, and its representatives, to determine what qualifications are necessary and what standards need to be met to gain different types of transmitting licence."

The RSGB pointed out that the views expressed in the report do not represent RSGB policy. A ten-point table of "perceived benefits of Morse Code" was included with the report in Radio Communication magazine and cited the mode's narrow bandwidth advantages; its ideal nature for low power communications; advantages for beginners in simple, low cost equipment; the use of Morse in developing nations; lack of language difficulties and its advantage as the lowest common denominator for emergency communications.

IPS REPORT

Here is the IPS Weekly Report, courtesy of IPS Radio & Space Services.

This report was issued on the 14th of January and covers the 7th to the 13th of January.

First the ionospheric indices:

These are for January 7th, 8th, 9th, 10th, 11th, 12th and 13th respictively.

The 10 centimetre flux: 126 123 117 110 101 98 95

Now the A index: 5 5 2 3 16 20 20 forecast.

Finally, the T index: 68 89 53 77 72 30 59

Summary of activity:
solar activity was moderate on the 7th with an M-class solar flare at 0943UT. It was active to very low on the 8th and low on the 9th. Activity fell to very low from the 10th through the 13th.

Ionospheric critical frequencies over Sydney were enhanced by between 10 per cent and up to 40 per cent from the 7th through the 11th when the critical frequencies fell to predicted monthly values before falling to 15 per cent depressed after 1700UT. On the 12th they rose to near predicted monthly values and were enhanced by 15 to 40 per cent for a period on the 13th.

Forecast for the next week, 14 to 20 January is as follows:
solar activity - low to moderate,
geomagnetic activity - quiet to unsettled.
Ionospheric critical frequencies will be mostly 10 to 20 per cent above monthly predicted values.

Thanks to the IPS Radio & Space Services for that report.

CLASSES
Get your ticket! Classes for those wanting to study for their licence examination will be held at Amateur Radio House again this year, starting on Monday February 7th. Be there at 7.00 pm.

The classes are conducted each Monday night over a period of 40 weeks, public holidays excepted. A licence exam is scheduled for just after the course ends.

EXAMINATIONS

The next licence examinations to be conducted at Amateur Radio House in Parramatta will be on February 20th. Avoid the rush, get your applications in now.

This year, apart from February 20th, examinations will be held on the 9th of April (the day before the Divisional AGM), the 15th of May, the 26th of June, the 7th of August, 18th September, 30th October and the 11th of December.

Thanks to Jim Walker VK2XJW for that information on classes and exams.

DIVISIONAL NEWS

For the benefit of those who missed last week's broadcast, in part or in whole, either because we only went out on limited frequencies or because the transmissions suffered from deliberate jamming, particularly to the evening broadcast, we are repeating much of the information broadcast last week.

For those who know "the whole story", please bear with us.

CLOSURE OF THE DURAL STATION

Two recent events have brought about the closure of the Division's Dural station. On Friday, December 31st, the Division was served with a letter from Solicitors Marshall Marks Kennedy, acting for Ms Val Bergman.

The letter alleged that she was seriously affronted by two packet radio bulletins which named her, transmitted to the Division's Bulletin Board VK2RWI on the 28th of December under the callsign of David Horsfall VK2KFU.

We must point out at this stage that Val Bergman is married to the Divisional Secretary, Roger Harrison. Val's full surname is Bergman-Harrison.

In addition, the solicitor said that the bulletins were defamatory of her and pointed out that, under the Radiocommunications Act, the Division's station licence was subject to a condition that the station could not be operated, or permitted to be operated, in such a manner.

The Division was given until 5.00 pm on Friday the 7th of January to undertake to prevent such transmissions via the VK2RWI BBS in the future, or else an injunction to stop its operation would be sought. In addition, an action seeking damages for defamation was threatened.

This resulted in a decision to take the VK2RWI packet BBS off-air for the time being. Vice-President John Robinson VK2XY handled this legal business for the Division as Secretary Roger Harrison declined owing to his relationship with Val Bergman.

This action is very serious indeed, not only for the Division, but consequently for all packet radio BBS operators, users of packet radio and the entire amateur radio service.

So what is a defamation?

It is anything in writing which attacks or injures the "good name" or reputation of someone, either directly or by inference.

One of the packet bulletins complained of, alleged that she had sold a secondhand 9-pin dot-matrix printer to the Division for the unrealistically high figure of $350. The allegation made in the packet bulletin, under the callsign of David Horsfall VK2KFU, is known to be totally untrue, as the Division's accounts will testify.

Other bulletins were complained of but the one just detailed illustrates the issue.

The Division, and any other packet BBS operator, is a "knowing publisher" of whatever is posted to the packet BBS. Anyone who may be knowingly involved in the publication of defamatory material can be enjoined in a defamation action and thus includes ALL BBS Sysops who may subsequently carry defamatory items on their BBSes.

That action only affected the VK2RWI packet bulletin board.

However, on Sunday morning the 2nd of January, there was a broadcast made from Dural, which was purported to be an "official" broadcast. The text of that broadcast was also transmitted as a series of bulletins to the packet radio network under the callsign of VK2WI.

Those involved in that broadcast of the 2nd of January include:
Councillor Cesar Miranda VK2TCM,
Steve Pullan VK2QZ
and David Horsfall VK2KFU.

No broadcast was scheduled for the 2nd of January. Indeed, the then Broadcast Coordinator Steve Pullan VK2QZ [sic] had informed Council that the first broadcast for the year would be on January the 9th.

[NB: VK2QZ is _not_ the Broadcast Coordinator. DH]

These voice and packet broadcasts contained material which is untrue and would likely mislead members and other listeners. The fact that the Divisional News content was purported to be "official" could also mislead members and other listeners as to the Division's true position and actions.

For example, the resignation of the Chairman of NTAC was not known to Council prior to the broadcast and the reason he gave, saying that Council was exercising too much control over NTAC, is quite untrue, as came out at Council's meeting in Wollongong on the 4th of January.

No control was exercised by Council. Over the three months from October to December last year, there were ten Council meetings at which he could have raised and had passed repeater applications and did not do so.

The fact that no broadcast was scheduled and that material was broadcast of which neither the responsible Executive Officers or the Council had any knowledge in the ordinary course of business before it was broadcast, in addition to untrue material likely to mislead listeners, the broadcast was therefore unauthorised.

This is a breach of the Division's licence conditions.

Unconditional authority is not given to those appointed to organise broadcasts.

We might also point out that unauthorised use by an amateur of anyone else's callsign is a breach of their own licence conditions.

In view of these serious events, and following considerable discussion among the President, Vice-President, Secretary, and two other Councillors, being a majority of the Council including the executive, firstly, the Institute's packet radio bulletin board system VK2RWI, was removed from Dural on Sunday 2nd January 1994.

In addition, the other transmitting equipment at Dural was secured against unauthorised use and the lock to the building changed as the broadcast of the 2nd of January was not the first occasion there was an

unauthorised broadcast. Others were made on the 12th and 19th of December.

A notice detailing the closure of the station has been posted on the door of the building, and the same notice has been transmitted to the packet radio network in New South Wales.

The Division's solicitors have advised that the station closure was an appropriate action in view of all the circumstances.

However, the VK2RWI voice repeater was restored to operation on Saturdy the 8th of January for the use of WICEN in support of bushfire operations around Sydney.

We aim to have the Dural station back in operation as soon as possible. The broadcast team and arrangements for broadcasts are to be re-formed. More details on action plans for Dural will be given in coming broadcasts.

It is unfortunate and regrettable that we have been forced to take these steps owing to the acts of people who, for quite erroneous reasons, believe that they have rights superior to the other members of the Institute and superior to the management of the Division, which is a company.

Next Council meeting

The next Council meeting will be on Friday the 21st of February [sic].

Following an invitation from the Westlakes Radio Club, the meeting will be held at the Westlakes Club rooms, at 1 York Street, Teralba, just south of Newcastle.

The Club's invitation to Council was received on the 5th of January. Notices to all Councillors were posted at the end of last week.

Listeners may be aware that Westlakes operates the VK2 Inwards and Outwards QSL Bureau on behalf of the Division. Council has not made an official visit to Westlakes for some years.

COMING EVENTS

Next Divisional Council meeting . . . . . 21st January
- note that it will be held at the Westlakes Club in Teralba.
Divisional Trash & Treasure Sale . . . . . 23rd January
Packet Radio users meeting at Amateur Radio House. . . 23rd January
Amateur Licence Classes at Parramatta, start . . . 7th February
WICEN (NSW) Committee meeting. . . . . 12th February
AATC meeting . . . . . 13th February
Licence Examinations at Parrammatta . . . . . 20th February
Divisional EGM . . . . . 26th February
Central Coast Field Day at Wyong. . . . . 27th February
Closing date for the Division's AGM . . . . . 27th February
Daylight Saving ends . . . . . 6th March

Bungonia Cave Rescue (WICEN). . . . . 19th & 20th March
AATC Workshop. . . . . 20th March
Divisional Annual General Meeting . . . . . 10th April

The Councillor on duty at Parramatta next Wednesday the 19th of January,
is Julie Kentwell VK2XBR.

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

357. re:los angeles disaster freqs

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 00:59:32 UTC
From: rclark@easyst.com
Message-ID: <gate.JicDgc1w164w@easyst.com>
Source record: 272180

ok several red cross,ares,dcs, and races groups are involved with
comms for the northridge quake here in s.calif...
they are:
147.225 castro pk
147.270 mt. disappoinment
145.300 mt. disappointment
147.705 oat mtn. used for quake reporting as well.
224.360 loop cyn/sylmar area
freqs are very busy at times passing only emergency traffic....please
look for my 2nd msg on here concerning health and welfare packet
msgs into this area...thanks, richard n6uzs rclark@easyst.com

358. health/welfare msgs for losangeles

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 01:07:34 UTC
From: rclark@easyst.com
Message-ID: <gate.TycDgc1w164w@easyst.com>
Source record: 272311

for those of you wishing to send any health and welfare (h & w)
messages into the affected areas of the quake into the san
fernando valley area of southern california please read on..
please address all packet msgs as follows:
st zipcode @ k6ve.#soca.ca.usa or
st zipcode @ w8akf.#soca.ca.usa
please use standard arrl numbered radiograms for your message...
a zipcode is required to send your msg along with name,address,
and phone number of party you wish to get msg to....please title
any msgs with the following text...
subject: qtc cityname/phone prefix
this will aid you in getting the msg noticed faster for that area..

*** note *** for those of you wishing to send a msg to the affected
areas and do not have packet ability please forward your
msgs to me and i will relay them over to the local packet nets...
i am 50 miles south of the affected area and we suffered no damage
here in orange,california...

73 all de richard n6uzs rclark@easyst.com or n6uzs@gw.wa9l.ampr.org

359. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 02:18:02 UTC
From: kchen@apple.com
Message-ID: <2hi58r$kcp@apple.com>
Source record: 272310

Charles.R.Hohenstein.1@nd.edu (Charles R. Hohenstein) writes:

>In article <Anthony_Pelliccio-180194095831@138.16.64.8>,
>Anthony_Pelliccio@brown.edu (Tony Pelliccio) wrote:
>> >
>> Can I ask a question? Did you actually sit there and post this to every
>> single Usenet group? Enough of your wahoo bs... take this to a more
>> appropriate forum since this is for amateur radio. Who knows, maybe one day
>> a Ham will have a QSO with God himself.
>>
>Yes, but would this QSO be voice or CW?

QLL? Can you send in Latin?
QLL Please use Latin.

LXXIII,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

360. ICOM-R1 frequency shift?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 02:33:39 UTC
From: daniel@synchrods.com
Message-ID: <9401190233.AA08008@synchrods.synchrods.com>
Source record: 272313

Sometime ago a problem appeared in my ICOM R1 receiver. If I move the tuning knob while the radio is off, one of the memories (it only has 2) will be shifted by -16 kHz, in other words if it was tuned at 6060 it will appear at 6044 next time I'll turn it on. The other memory is fine, remaining at whatever frequency was. If I don't move the knob, the frequency will remain undisturbed. Did anybody experience anything like this? Thanks,

Dan.

361. Re: Help

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 03:02:12 UTC
From: gt0265d@prism.gatech.EDU
Message-ID: <132632@hydra.gatech.EDU>
Source record: 272312

In addition to N2VDS's good reply, don't forget also that the morse test is strictly a LISTENING test, so if your friend can write or (as is commonplace nowadays) do a multiple-choice test then he just has to listen to the test to take it. Also, I believe that VE's are required to make any reasonable accomodations for handicapped people, provided they are notified in advance. Best of luck to your friend in his endeavor!

73's,


```
*******************************************************************************
* Mike "Gator" Whaley K Chief of Aerospace Engineering *
* whaley@hibiscus.gatech.edu D George P. Burdell Engineering Inc. *
* gt0265d@prism.gatech.edu 4 *
* Georgia Tech Box 40265 U "Ipecac- isn't that a Genesis album?" *
* Atlanta, GA 30332 G --- Joel, MST 3K *
* (404) 206-0958 I *
*******************************************************************************
* I absolutely refuse to put a disclaimer here: All opinions expressed above *
* are EXACTLY what Georgia Tech would tell you, VERBATIM, with NO DIFFERENCES.*
*******************************************************************************
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*******************************************************************************
* Mike "Gator" Whaley K V.P. of Aerospace Engineering *
* whaley@hibiscus.gatech.edu D George P. Burdell Engineering Inc. *
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362. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 03:03:36 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan19.030336.2252@ke4zv.atl.ga.us>
Source record: 272292

In article <CJu4CH.yuI@yuma.ACNS.ColoState.EDU> galen@picea.CFNR.ColoState.EDU (Galen Watts) writes:
>In article <940118080104_2@ccm.hf.intel.com> Cecil_A_Moore@ccm.hf.INTel.COM (Cecil A Moore) writes:
>>> That's all well and fine, but do you honestly believe that consumers
>>>have an obligation to do the product engineering that the manufacturer
>>>should have done in the first place?
>>>Rich Mulvey Amateur Radio: N2VDS Rochester, NY
>>
>>As a matter of fact, I do. I went through the exact same thing with
>>Harley Davidson during the '70s. Harley's were lousey then and now
>>they are the most successful motorcycle company in the world. If
>>everyone had your attitude, Harley would no longer exist.
>>73, Cecil, kg7bk@indirect.com
>
>Didn't H-D change ownership around this time? I seem to remeber Hogs were'nt
>a good buy in the 70's and early 80's but after Americans bought it back from
>the Japanese parent company, quality shot thru the roof.

Not Japanese, it was AMF. What a bowling pin setting machine company thought they knew about motorcycles I don't know, and apparently neither did they.

>I believe kits should be engineered better than assembled gear, since there
>are more variables and less quality control with kit assembling as opposed
>to factory assembling and testing.
>
>Many people buy kits because they can't afford assembled. If they can't afford
>assembled, how can they afford the test gear to get a poorly designed kit to
>work?

Heath idiot proofed their kits. They weren't better designed than their competition, and they certainly weren't cheaper, but they were designed to be easily built without tricky alignment or the need for special test equipment. If you want cheaper than assembled equipment, you are going to get kits that aren't perfect. Today's assembled gear costs less than a quality kit, as Heath discovered to their bankruptcy. The original Heathkits were paper bags of parts and a mimeographed sheet of instructions. In the days of simple hand wired tube factory gear, that was cheaper than assembled. But today with complex machine assembled products, a kit that's going to work as well, and is fool proof to assemble, is going to cost *more* to produce and market.

People who buy kits thinking they'll save money are fooling themselves. With a quality kit you're going to pay *more* for the priviledge of doing the

assembly, or you're going to get a kit that requires you to be your own test engineer, and sometimes redesign engineer. That's not bad. It forces you to learn a lot more than the "insert leads A and B in terminal 3, solder two" of Heathkit days where all you learned was how to follow directions. Think of a kit as a more convienent way to do homebrew construction.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

363. FT-530 Receive Problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 03:15:30 UTC
From: leber@panther.warm.inmet.com
Message-ID: <CJux1u.EDx@inmet.camb.inmet.com>
Source record: 272181

OK 530 owners, in the past, I've seen posts about receive problems in the 2 m. range. I need some feedback (no pun intended) about this.

Some background:
I bought a new 530 recently. It exhibits interference on the output of a local repeater (145.130). A fellow local Ham had a similar experience on the same frequency. I talked to Yaesu about it, explained that I had heard of others having problems, etc. They said to send it in. I did. When it was returned, the problem was still there.

The work order read as follows:
"Performed 2M update modification, shielded the RF unit, added flex cable to the antenna BND connector, installed upgraded VFO knob, adjusted and tested unit to factory specifications"

(They also performed the extended receive mod at no charge at my request while they had it open. Nice guys.)

The problem: a noise resembling fast ignition noise centered around 145.14 or so, extending up and down from about .125 to .150. If I sweep upward, the noise seems to come and go about every 500 kHz. While it can be difficult to hear in the white noise of dead air, it can become quite pronounced when heard over a carrier of less than full quieting on the same frequency.

This noise is also heard in other HT's held in close proximity to the 530, and ceases when the 530 is shut down, so it pretty much has to be coming from the 530.

Has anyone else experienced this? I have talked to 3 other 530 owners, and 2 who owned older (~1 year old) units have no problem, while the other, who purchased his about the same time I did, had the same symptoms. He has returned his unit to Yaesu also, but has not received it back yet.

I have talked to the Tech. Support Supervisor at Yaesu, and he is looking into it. (Things are a bit hectic out there. They are near the earthquake zone, and while they did not have structural damage, the parts department was pretty much trashed).

I'm trying to get a feel for whether this is a problem with all recent production 530's, or just a few, one run, etc.

Can anyone help? Thanks and 73.
Tom, N3QKV

--

Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
"One step ahead, one step behind...Pretty soon you gotta' run to stay even."

364. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 03:16:57 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan19.031657.2377@ke4zv.atl.ga.us>
Source record: 272293

In article <940118.46856.LEEVANKOTEN@delphi.com> Leland Van Koten <LEEVANKOTEN@delphi.com> writes:
>
>Thanks for the very informative post. Although it is impossible to say with
>certainty that there is NO risk, from EMR, it is clear that if there IS a risk,
>it is a very low one. When one compares the possible risk from EMR to very
>clear and significant risks that we all take every day, any risk is obviously
>insignificant.

That's absolutely true. People need to get a grasp of proportion when it comes to evaluating risks. There's no such thing as a risk free activity or product, but ham radio is safer than skydiving, or driving a car. It's probably safer than drinking milk, certainly safer than taking asprin. This is a case similar to nuclear power. The risks of nuclear power are tiny compared to the known risks of coal fired generation, yet the latter is accepted while the former is feared. The *possibility* of an invisible threat frightens the ignorant more than the visible threat of the known.

>Interestingly, a clearly documented producer of cancer in both animals and
>humans is excess caloric intake, and when I look around a lot of hamfests, if
>there is excess cancer in hams, that may be the reason rather than exposure to
>EMR.

Actually, it's dietary fat intake that's the supposed risk factor, not the calories themselves. On the other hand, Eskimos have the lowest incidence of heart disease and colon cancer of any studied group, and their diet is extremely high in fat. Go figure.

>None of the power line studies of which I am aware have been
>adequately controlled for such things as socio-economic status, etc., but
>places such as New Jersey are apparently nevertheless rushing to impose taxes
>on emitters of EMR on the theory that EMR is carcinogenic. I have even heard
>predictions that EMR litigation will be the "new asbestos litigation."
>
>Let's hope that the news media don't feed the sense of hysteria that many
>people feel when confronted by something they don't understand, and that we dt
>end up spending billions of dollars dealing with a problem that may not even
>exist.

This is one case where the media, at least the electronic media, is going to tread very lightly. Their own ox is being gored here.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary

534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

365. Re: Gin Pole Dealers???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 03:31:01 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan19.033101.2467@ke4zv.atl.ga.us>
Source record: 272294
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <CJuFuq.14wz@yuma.ACNS.ColoState.EDU> galen@picea.CFNR.ColoState.EDU (Galen Watts) writes:
>Anybody know who sells gin poles and related hardware? I'm looking for
>all the parts except the pipe, since I have some aluminum pipe and don't
>want to pay trucking for something so light.
>Antenna season approaches....

Well of course Rohn sells gin poles and hardware. They're rather proud of them, however, got to pay that liability insurance. I bought a kit from a fellow in the flea market at Dayton last year. Good sturdy construction, but not quite as slickly engineered as Rohn's product. Only cost $49 though, I couldn't build one myself that I'd trust for less. It's your life of course, but Rohn makes the best. Unless you have access to magnaflux equipment, which I do, I'd be somewhat leery of using the product of some garage shop. Fall on your head it might.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

366. DSP Audio Filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 04:18:16 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.758953096@BIX.com>
Source record: 272316

Yesterday, I spent a good part of the day at the HRO store in Salem, NH and came away rather impressed with the "digital" audio filtering in the Yaesu FT-990. Never mind that the 990's filtering isn't really digital -- it was, nonetheless, impressively effective at cleaning out all the junk in a CW signal so that all remained was a nice, clean tone.

That's got me thinking that perhaps one of the genuine DSP-based filters like the Timewave DSP-59 might be even more amazing. The ads claim the ability to filter out white (uncorrelated) noise + do tight bandpass filtering. I'd love to hear comments from anyone who's got one or from others who've actually listened to the effects. (Unfortunately, HRO did not have one there on display for me to try yesterday.) Are they worth the money? At $169 for the basic DSP-9 or $299 for the DSP-59, we're talking the kind of money that could buy one or two xtal filters... this is apples and oranges, but just so I get a feel for their relative effectiveness, which offers more bang for the buck, do you think?

367. Yaesu FT-890AT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 04:28:31 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.758953711@BIX.com>
Source record: 272317

After playing with it for some time yesterday at the local HRO, I came away strongly leaning toward the Yaesu FT-890AT. I should tell you I'm just getting started again with ham radio after having been away from all this since high school 25 years ago. My interest, at least initially, is just building up skill levels, meaning, particularly, CW. I'm a software type so I'm also intrigued by computer control and data (rtty and packet).

What struck me about the 890 was several positive points: I liked the physical packaging a LOT. Very nice, attractively laid-out control panel (though w/o a 10-key pad). Very small footprint, meaning I wouldn't be struggling to figure out how to make room for it. Operation seemed to be quite simple and I did like what I could see of its performance, comparing it there against more expensive units like the 990 and 1000. And finally, while I'm not really price-sensitive (meaning that if I could convince myself I really, really, just HAD to have the most expensive thing there, price would not stop me), it certainly does strike me that it might be nice to leave some money instead for a 2m rig + TNC for the local packet BBS and other goodies.

I have looked thru the QST Reviews (btw, if there are some of you who are thinking of buying a rig but haven't bought the 2 volumes of collected QST reviews, you should buy them now) and the 890 certainly does seem to get good marks.

But let me ask the real question: is there any reason I _shouldn't_ buy the 890? Are there some shortcomings (like maybe the lack of an adjustable IF bandwidth or whatever) that you think I should be giving thought to before I go off and buy this unit? Have any of you bought one and been dissatisfied? Why? Any comments would be much appreciated!

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715

368. Daily Summary of Solar Geophysical Activity for 18 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 04:37:02 UTC
From: oler@rho.uleth.ca
Message-ID: <9401190437.AA27851@rho.uleth.ca>
Source record: 272211
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

18 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 18 JANUARY, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 018, 01/18/94
10.7 FLUX=100.7 90-AVG=102 SSN=043 BKI=3333 5522 BAI=021
BGND-XRAY=B2.2 FLU1=7.0E+06 FLU10=1.0E+04 PKI=3333 5533 PAI=022
BOU-DEV=033,031,027,024,084,109,017,017 DEV-AVG=042 NT SWF=00:000
XRAY-MAX= C2.8 @ 0423UT XRAY-MIN= B1.9 @ 1530UT XRAY-AVG= B4.4
NEUTN-MAX= +002% @ 1705UT NEUTN-MIN= -002% @ 1210UT NEUTN-AVG= -0.0%
PCA-MAX= +0.1DB @ 1815UT PCA-MIN= -0.2DB @ 0745UT PCA-AVG= +0.0DB
BOUTF-MAX=55351NT @ 0543UT BOUTF-MIN=55320NT @ 1706UT BOUTF-AVG=55339NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+067,+000,+000
GOES6-MAX=P:+121NT@ 2028UT GOES6-MIN=N:-064NT@ 0808UT G6-AVG=+090,+029,-030
FLUXFCST=STD:105,107,110;SESC:105,107,110 BAI/PAI-FCST=015,010,015/020,015,015
KFCST=3345 4322 2343 3332 27DAY-AP=010,010 27DAY-KP=2124 3222 2313 3223
WARNINGS=*SWF;*MAJFLR;
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 17 JAN 94 is not available.
The Full Kp Indices for 17 JAN 94 are: 4o 5- 4- 4- 2- 3o 3o 3+

SYNOPSIS OF ACTIVITY

Solar activity was low. Region 7654 (N08E46) remains the
most active region on the disk. Five optically uncorrelated
C-class flares were observed this period, most likely
originating from this region. Magnetic inversion line analysis
indicates 7654 has developed a beta-gamma-delta configuration
while maintaining its overall size and shape. Region 7656
(S22W08) was numbered this period as an AXX spot group. All
other regions quiet and stable.

Solar activity forecast: solar activity is expected to be
low. Region 7654 is forecast to continue producing C-class,

and possibly M-class activity.

STD: The National Solar Observatory has confirmed that Region 7654 is associated with extremely intense Ca XV emissions. Intense emissions were observed on 16 and 17 January. These emissions reduced to moderate levels today. The group has been relatively quiet over the last 24 hours, but remains capable of producing potentially strong activity.

The geomagnetic field has been at mostly unsettled levels with some minor storming experienced from 18/14Z-17Z at middle latitudes. Levels have been quiet to unsettled since. High latitudes were at mostly unsettled to active levels with some major to severe storm levels recorded from 18/14Z-17Z. Levels have calmed down to mostly unsettled to active since.

Geophysical activity forecast: the geomagnetic field is expected to be mostly unsettled at middle latitudes with unsettled to active levels expected at higher latitudes.

Event probabilities 19 jan-21 jan

Class M 40/40/40
Class X 05/05/05
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 19 jan-21 jan

A. Middle Latitudes
Active 25/20/25
Minor Storm 05/01/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 35/25/30
Minor Storm 15/10/10
Major-Severe Storm 05/01/05

HF propagation conditions were again near-normal over the low and middle latitudes today, and below-normal to near-normal over the high and polar latitudes. High and polar latitude paths (particularly night-sector transauroral circuits) observed additional periods of minor signal degradation. No changes are expected. Middle and low latitude paths should continue to see near-normal propagation, while high and polar latitude paths are expected to see periods of minor signal degradation during night-sector signal transits. There remains a moderate risk for potentially strong SWF activity on daylit circuits.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 18/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N04E30 220 0110 HSX 02 001 ALPHA
7654 N08E44 206 0580 DKC 07 011 BETA-GAMMA-DELTA
7656 S22W10 260 0000 AXX 00 001 ALPHA
7655 S07W50 300 PLAGE
REGIONS DUE TO RETURN 19 JANUARY TO 21 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 18 JANUARY, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1810 1810 1810 120
2201 2201 2202 190
2314 2315 2315 130

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 18 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
18/ 0044 0124 0208 LDE C1.7 84

INFERRED CORONAL HOLES. LOCATIONS VALID AT 18/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
57 N23E11 N05E03 N10W02 N23E11 254 ISO NEG 002 10830A
58 N36E88 S11E73 N00E64 N36E88 186 ISO POS 012 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
17 Jan: 0033 0039 0045 C1.1
0204 0207 0209 B5.5
0221 0224 0228 B6.2
0242 0247 0250 B7.7
0603 0608 0612 C1.6
0718 0724 0745 B7.8 32 40
0910 0919 0925 C9.3 1N 7654 N06E65 40 36 110
1301 1309 1319 C2.3 SF 7654 N08E68
1351 1353 1405 SF 7654 N07E62
1857 1901 1905 C1.5 SF 7654 N09E58 28 57 68
2116 2117 2129 SF 7654 N05E58
2347 2357 0003 C3.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7654: 3 0 0 4 1 0 0 0 005 (41.7)
Uncorrellated: 3 0 0 0 0 0 0 0 007 (58.3)

Total Events: 012 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
17 Jan: 0718 0724 0745 B7.8 III
1857 1901 1905 C1.5 SF 7654 N09E58 V

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

369. Re: Wanted: Morse code software

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 04:47:51 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.758954871@BIX.com>
Source record: 272289

If you're looking for a good software package for Morse code training, be sure to look into SuperMorse by Lee Murrah, WD5CID. It's a shareware product available on a lot of BBoards or direct from the author at 10 Cottage Grove Woods, SE, Cedar Rapids, IA 52403 if you send him a formatted diskette and a self-addressed stamped mailer. Suggested registration fee is $20.

I found SuperMorse very helpful in getting me started with the basics of learning the characters, though I admit my wife quickly got pretty fed up listening to the sound coming the speaker on my PC, forcing me to do a quickie mod to put in a headphone jack.

But I do admit that after a while, it seemed like SM was training me really well to press keys but not so well to actually recognize the sounds of the characters. On the whole, I think the ARRL tapes really have done a better job of pushing me along with a series of drills, each just a little bit faster than the previous. After only a little over a month, I'm now finding that I can pretty comfortably copy up to about 8 wpm on ordinary text and then lose it at about 9 wpm. But each day, it gets a little better. (Still can't do very well on the random character drills, of course, but that's to be expected, I suppose.) Frankly, I didn't really expect to be doing that well so quickly and view that as quite a good testament to the quality of the ARRL tapes. Start with the "Your Introduction to Morse Code" and the "Increasing Your Code Speed: 5 to 10 WPM" tapes. I think you'll be quite pleased with the results.

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715

370. ATV on 902-928 Mhz

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 04:57:51 UTC
From: rswensen@pegasus.cc.ucf.edu
Message-ID: <2hiekf$j4q@pegasus.cc.ucf.edu>
Source record: 272318

Is there a specific group that deals with ATV around here? or am I too dumb to find it? I am looking for anyone with experience modifying 900 Mhz part 15 video broadcasters for use with ATV. If anyone could be so kind as to direct me to an appropriate forum I would be grateful.

Reginald Swensen
N3GUN
rswensen@pegasus.cc.ucf.edu

371. Re: Contest Logger

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 05:15:57 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.758956557@BIX.com>
Source record: 272320

Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US (Angelo Glorioso Iii) writes:
> I am looking for a Contest logger that will support ARRL format for
>electronic filing for ARRL RTTY ROUND-UP contest. If you know of one,
>please let me know where I can ftp it??

I'm told the standard by which all others are judged is CT by Ken
Wolff, K1EA, at 221 Old Littleton Road, Harvard, MA 01451. I don't
know if it's available for download anywhere, but I'm sure you could
contact Mr. Wolff directly.

372. Re: New QRZ Ham Radio CDROM

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 05:24:05 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.758957045@BIX.com>
Source record: 272291

Fred, your QRZ! CD is super! I love it. But I found that (under NT on my DEC Alpha) the fonts used in the Windows GUI front-end to your callsign database were really only marginally readable. The DOS character mode version was much more usable, simply because it was more legible. What's going on? What kind of font did you use and can you fix it in your next release, perhaps?

But let me stress for the benefit of those who have not yet seen the QRZ! CD that this really is a minor complaint. The WinHelp wrapper is very good. You've done it again (just as you have with every other CD I've ever bought from you)! A great value. Keep it up!

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715

373. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 05:50:31 UTC
From: jhulten@u.washington.edu
Message-ID: <2hihn7$1vs@news.u.washington.edu>
Source record: 272297

Actually, I would think the instances of brain tumors from rf in Hams
would be low because we all understand the dangers. I would think
looking at the use of cellular phones (by people who don't have a clue)
and see if you can correlate cell phone use with brain tumors. I can see
twenty years from now a ton of lawsuits against McCaw Cellular because
the product didn't carry a warning label..

SURGEON GENERAL WARNING!
Using cellular phones may
cause brain cancer!!!

:)

==
= Jeffrey E. Hulten N 7 Y H L (Tech +) =
= jhulten@u.washington.edu Media Services =
= Bothell, WA 98012 University of Washington - Bothell =
= PGP Public Key availible via Finger or Keyservers. =
= Fingerprint : 89 95 AA BD BD 4F CE AE FD FC B7 AD F8 C5 AF 40 =
==

374. KENWOOD TS140S

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 06:45:02 UTC
From: demetre@phaethon.intranet.gr
Message-ID: <2hikte$no0@helios.intranet.gr>
Source record: 272300

Hello netters,

Does anyone know of a conversion for the KENWOOD TS140S HF radio
to permit the squelch to work on AM as well as FM ???
Please reply via e-mail...

73's

375. Ham Radio FTP area on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 06:54:52 UTC
From: wy1z@netcom.com
Message-ID: <rec.radio.info-ham.radio.ftp_758962491@ve6mgs.ampr.ab.ca>
Source record: 272221
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info,rec.radio.scanner

This is a periodic reminder that the Boston Amateur Radio Club maintains an FTP area on world.std.com (192.74.137.5) in pub/hamradio.

This area is accessible via: anonymous ftp, gopher, and World Wide Web (and possibly other methods I'm not yet aware of). World is not *fsp*-able yet (I asked them).

Via Gopher, the easiest path to the area is by selecting the following from World's main menu:

18. Membership and Professional Associations

3. Boston Amateur Radio Club

And go from there...

Please feel free to browse through the area.

If anyone has any questions about it, please do not hesitate to e-mail me.

Also, up-to-date copies of the files on the ARRL's information server (info@arrl.org) are available in the directory pub/hamradio/ARRL/Server-files.

All text files are uncompressed, so they are both retrievable and viewable via Gopher and World Wide Web. (If you have any troubles with any text file, please e-mail me).

Source code for programs is always welcome. It can permit people to use those programs on other computers with other operating systems.

Scott

376. Re: safety of HT antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 07:40:44 UTC
From: craig@orb.apana.org.au
Message-ID: <2hio5sINN5uu@orb.apana.org.au>
Source record: 272157
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,aus.radio

In <wa2iseCJoqAx.CI3@netcom.com> wa2ise@netcom.com (Robert Casey) writes:

>One solution (which you may have thought of, or seen used) is to get a
>magnetic mount 2 meter antenna, if your talkie has a BNC connector for
>its rubber duckie. When you're in the locomotive, stick the magmount
>up in the air a few feet from the window (away from immediately nearby
>objects, a broad somewhat flat area is best, have antenna vertical).

Yes, I did think of this solution, although for mobile use when I'm on
a train it would not be so good since the antenna would always be
collecting bits of tree or tunnel or bridge or......

In a car it's ideal though.

>(I would have thought the locos would have had built in dashboard radios,
>and an AM/FM cassette player? :-)). Anyway, this would get the RF away
>from your body, and probably improve reception. A 2 meter antenna should
>work reasonably well on radios on 160 MHz.

I wish we had radios and the like as standard fittings, but they aren't.
Unlike truckies, who have CB's, radios, TV's, etc, we have nothing other
than the ridiculous fixed-frequency handheld and my Sony Walkman!

(Now if only I could work out a way to put an external antenna on that
Walkman so I can get better reception from narrowcast FM stations!)....

>Wave to the guy with the camera, he likes to photograph freight trains and
>box cars (he's my brother).

I usually do!

Craig, the Freight Raver.

--
Craig Dewick [Freight Raver Craig] (craig@orb.apana.org.au).
- Swimming in the MUSIQUARIUM of Life -
Always striving for a secure long-term future in an insecure short-term world.

377. Re: safety of HT antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 07:44:45 UTC
From: craig@orb.apana.org.au
Message-ID: <2hioddINN5vm@orb.apana.org.au>
Source record: 272156
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,aus.radio

In <1994Jan15.200143.314@cs.brown.edu> rn@cs.brown.edu (Robert H.B. Netzer) writes:

>There's one very simple thing you can do: buy an external speaker-mic for your
>HT, and always use it. This will let you hold the rig a good foot or two from
>most parts of your body (except the arm holding the rig).

I didn't think of that one! But it's a good suggestion, and very practical
too!

I suppose this along with the other suggestion I've seen so far of a
magnetic mount mobile antenna would make seperating the radiating
element from me much easier in some situations.

What we really need to do is wear German steel world war 2 helmets,
plug the antenna into a socket on top of the helmet, and connect the
earth to the helmet itself. Instant groundplane and good shielding for
one's precious cranial matter!

And if we really get serious about earthing, connect a lead from the
helmet to a copper stake that can be thrust into the soil in a convenient
spot.

Craig, the Freight Raver.

--
Craig Dewick [Freight Raver Craig] (craig@orb.apana.org.au).
- Swimming in the MUSIQUARIUM of Life -
Always striving for a secure long-term future in an insecure short-term world.

378. Are there any RS232C cards for PCMCIA?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 08:29:22 UTC
From: kitagawa@ee.ES.Osaka-U.AC.JP
Message-ID: <KITAGAWA.94Jan19172922@qed.laser.ee.es.osaka-u.ac.jp>
Source record: 272301
Cross-posted to: comp.sys.laptops,rec.radio.amateur.misc

I am going to buy a laptop or sub-note with only one serial port. But
I need two or even three serial ports in the future. Are there any
RS232C cards for PCMCIA slot? I know there are fax/data modem cards
and Ethernet cards. But so far I couldn't find any serial port card.
If you know, please tell me the model, price, dealer, spec, etc.

I'm also looking for PCMCIA Ethernet cards for 10base-2 (Coax)
[NOT 10base-T].

Thanks in advance.

FYI (to Hams only, probably contesters only):
Why do I need so many serial ports? Yes, I want to run CT (by K1EA) in
multi-multi station. I hope CT ver.9 should support Ethernet.

masa

*--- **** ***-- *--* *-* *-* QRZ? de JH3PRR
Masahiro Kitagawa <kitagawa@ee.es.osaka-u.ac.jp>

379. more on nts welfare msgs to losangeles

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 11:26:00 UTC
From: rclark@easyst.com
Message-ID: <gate.sD6Dgc1w164w@easyst.com>
Source record: 272298

i stand corrected by someone on sending packet nts msgs into the
los angeles area...if you are outside of california please address
your nts msgs in the following format for packet:
outside california:
st zipcode @ ntsca
qtc cityname,phone prefix
the rest of the msg is in standard arrl radiogram format....

for inside california:
sysops can point all mail bound for san fernando valley/northridge
area to w8akf.#soca.ca.usa or k6ve.#soca.ca.usa....
the major and only bbs for that area is wb6wfh and his system is down
for the next several days i would imagine...he lives at ground zero
of this 6.6 shaker...so once again the format for internal calif. mail:
st zipcode @ w8akf.#soca.ca.usa or
st zipcode @ k6ve.#soca.ca.usa
this is what w8akf has sent out on our local packet bbs network...

thanks for reading....73 de richard n6uzs rclark@easyst.com

380. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADI

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 11:33:13 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9401190624591.gilbaronw0mn.DLITE@delphi.com>
Source record: 272303

>Let's hope that the news media don't feed the sense of hysteria that many
>people feel when confronted by something they don't understand, and that we

Did you see Wayne Greens drivel in his latest editorial in 73 on this subject. It almost makes me ashamed that I have a lifetime subscription. He even says it can do good too. It can cure aids he says. Very easily he says. Why doesn't he develop it and make his millions?

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

381. Re: Kantronics and VIC-20

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 13:26:10 UTC
From: kleite@sentry.ndhm.gtegsc.com
Message-ID: <kleite-190194082610@157.176.173.2>
Source record: 272309

In article <1994Jan18.205912.18621@govonca.gov.on.ca>,
sivyerb@govonca.gov.on.ca (Bob Sivyer) wrote:

> I recently resurected an old Kantronics interface which I gave away to a ham
> friend. I have lost the documentation for the unit.
>
> I am looking for a list of VIC-20 commands for this unit. For example how
> to change speeds, change from transmit to receive and back. There was also
> a way to store messages and send them. He will be using the unit for CW
> only.
>
> Any help greatly appreciated.
>
> E-Mail replies preferred.
>
> Bob Sivyer
> VA3LDU
> London, Ontario
>
> Internet: sivyerb@gov.on.ca
>
> Bob,
Let me check, but at one time I used the exact setup on my HF radio.I
still think I have the original book, I also have the interface too ...try
and find out the model number and I will check.

Keith ka1aqb

kleite@sentry.ndhm.gtegsc.com

> --
> **
>
> Bob Sivyer Phone:(519-661-2714)
> Systems Programmer/Analyst Internet: sivyerb@gov.on.ca
> West Science and Technology Transfer Unit EPO: sivyerbo@EPO@MHS@EPO
> Ministry of Natural Resources
> London, Ontario
> N6A 4L6 Ham Radio: VA3SI & VE3LDU
>
> **

382. Re: QSL help pse

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 14:18:44 UTC
From: etjfonte@ci.ua.pt
Message-ID: <CJvrrA.1LJ@news.ci.ua.pt>
Source record: 272186

jcraig@kean.ucs.mun.ca wrote:
: I worked the following on top band, but can't seem to find
: managers / CBA's for them...

: YS1X
for this I have DL9ZB in 1986 but now I don't now...
: HH2PK
HH2PK - Patrick , POBox 1095 , Port-au-Prince , Haiti.
: XF4JC
: V47WZ
For this two I don't know nothing...

73's de CT1ENQ

--
|---|
Jose' Miguel M.B.Fonte	Universidade de Aveiro - PORTUGAL
	Departamento de Electronica e Telecom.
E-mail : etjfonte@ci.ua.pt	--
	Ham callsign : CT1ENQ "always QRV"

383. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 14:27:00 UTC
From: Anthony_Pelliccio@brown.edu
Message-ID: <Anthony_Pelliccio-190194092755@138.16.64.8>
Source record: 272321

In article <Charles.R.Hohenstein.1-180194124857@mac22.hesburgh.lab.nd.edu>,
Charles.R.Hohenstein.1@nd.edu (Charles R. Hohenstein) wrote:

> In article <Anthony_Pelliccio-180194095831@138.16.64.8>,
> Anthony_Pelliccio@brown.edu (Tony Pelliccio) wrote:
> > >
> > Can I ask a question? Did you actually sit there and post this to every
> > single Usenet group? Enough of your wahoo bs... take this to a more
> > appropriate forum since this is for amateur radio. Who knows, maybe one day
> > a Ham will have a QSO with God himself.
> >
> Yes, but would this QSO be voice or CW?

CW of course, only you'd better be able to copy at speeds greater than
1e+99999 per minute or you won't understand a thing.

Let's face it, God pre-dates amateur radio by quite a few millenia so he's
probably using a spark-gap generator and touching two wires together.

Tony
--
== Tony Pelliccio, KD1NR
== Anthony_Pelliccio@Brown.edu
== Brown University Alumni & Development Computing Services
== Box 1908
== Providence, RI 02912
== (401) 863-1880

384. Re: Fs in callbook

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 14:38:08 UTC
From: bagdy@hplvec.LVLD.HP.COM
Message-ID: <21870058@hplvec.LVLD.HP.COM>
Source record: 272139

According to "10-10 International News", January 1994, pg. 24:

FD1xxx and FE1xxx

have CHANGED TO: F5xxx

Regards,
Mark Bagdy
bagdy@hpmtaa.lvld.hp.com

385. Re: Boatanchors "forum" (correction)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 14:48:41 UTC
From: gc@cen.com
Message-ID: <2hjh89$k1k@skates.gsfc.nasa.gov>
Source record: 272324

In article <Pine.3.05.9401181853.C17353-9100000@booz.bah.com> k1zat@bah.COM (J. D. Delancy) writes:
>Interested in what other people have for "boatanchors"? Been
>looking for a type 80 tube to go in your 1927 Oceananic
>receiver? This and lots more. Check out the boatanchors
>"forum" on internet e-mail.
>
>Subscribe to: boatanchors@gnu.ai.mit.edu
>
>
This is incorrect. The correct address to use for
subscribing to the boatanchors list is:

boatanchors-request@gnu.ai.mit.edu

Also, the purpose of the list is to discuss vacuum-tube
communications equipment.

386. Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 14:49:48 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199401191501.HAA03832@ucsd.edu>
Source record: 272323

>Didn't H-D change ownership around this time? I seem to remeber Hogs were'nt
>a good buy in the 70's and early 80's but after Americans bought it back from
>the Japanese parent company, quality shot thru the roof.

Actually, HD was owned for a time by the American Machine and Foundry company
and that was a mixed blessing...kept the company going, but the overhead of
the corporation also contributed to mediocre bikes. Probably because AMF was
a very diverse company making all sorts of stuff (can imagine the difficulty
of selling Motorcycle R&D to a corporate boss that came up through something
like Cuno filters, Bowling Products or Potter & Brumfield relays and who
probably thought Harley-Davidson was the division that made Roadmaster
Bicycles....)

bill wb9ivr

387. Novice Class!!!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 15:12:00 UTC
From: Dave.Hockaday%f160.n151.z1@psybbs.durham.nc.us
Message-ID: <759092438.AA07555@psybbs.durham.nc.us>
Source record: 272239

NOVICE CLASS SCHEDULED TO START MARCH 31...
PREREGISTRATION REQUIRED...
HANDS ON TRAINING/CONSTRUCTION OF FIRST STATION
LEARN THE THEORY!!!

TEARA (Triangle East Amateur Radio Association) is scheduling a Novice Class amateur radio class to begin March 31. This isn't your average amateur radio class...We're NOT teaching the technician elements in this class, we're trying to teach CW and technical skills through hands on experience/classroom radio theory classes.
First, soldering skills will be taught. The students will receive a soldering iron and simple tools required in the class as part of their student package.
Simple DC power supply theory will be taught and a basic 12 volt supply capable of powering the RX and TX later in the class will be assembled and tested.
Next, All students will build a 40 meter CW/SSB rx in the classroom. Superhet receiver theory and soldering/assembly skills will be taught. This RX will allow the student to listen to CW on the air along with the CW tapes and classroom practice. The rx is a commercially available monoband 40 meter rx.
The last stage of the program will revolve around the construction of a simple 40 meter CW TX. Transmitter theory will be taught, and crystals will be supplied for the transmitter.
Simple antenna construction will be covered, and the students will prepare their new novice station for the day that their ticket arrives.
This class is not restricted to new prospective hams, and licensed hams who would like to learn radio theory may find this a rewarding class to enroll in. It will allow a person to learn CW, basic radio theory, and learn some hands on construction techniques that will be helpful throughout their ham career.
This class was actually spurrred from questions over the last year or so from new hams who wish to learn how radio works, construction, etc. This definately becomming a lost art, but is how many of us got out start 20 years or so ago. This not a cheap class, as a student will receive: Soldering iron, solder, basic tools, kits for a 12 vold dc power supply, RX kit TX kit, study materials, and CW tapes.
If you're interested, drop a note here or call (919) 554-2154 and ask for Dave. 73 de WB4IUY

X OLX 2.1 X Hello, I am part number ||X||||X||X||X||

388. QST Article on Balloon Tracking using GPS Rcvr

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 15:31:59 UTC
From: hpeach@ca.uky.edu
Message-ID: <hpeach.52.000F88EE@ca.uky.edu>
Source record: 272192

Several months ago there was an article in QST about a guy that was tracking balloons using data from a GPS receiver, transmitted back to a ground station. He had written a spreadsheet in MS-Excell that would graph the balloon's flight path based on the points reported back by the GPS receiver. Does anyone have a copy of his spreadsheet or the algorithim he used? Please e-mail me at <hpeach@ca.uky.edu>.

Harold
hpeach@ca.uky.edu

389. More on LA traffic frequencies

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 15:39:17 UTC
From: waco@cbnewst.cb.att.com
Message-ID: <CJvvHK.7As@cbnewst.cb.att.com>
Source record: 272327

Tuesday there were three 20M nets passing traffic into a couple of area
codes in the area affected by the earthquake that I am aware of:

14.267.7 -- 4U1UN net -- 818 area code

14.245 -- also 818 area code

14.275 -- 213 area code

73,

John, WB9VGJ

==========
John L. Broughton | snail mail: Room 1K-322
AT&T | 1200 E. Warrenville Rd.
| P.O. Box 3045
| Naperville, IL 60566-7045
| (708) 713-4319
| e-mail: john.l.broughton@att.com
| att!john.l.broughton
| air mail: WB9VGJ
==========

390. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 15:49:07 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1994Jan19.154907.17558@rsg1.er.usgs.gov>
Source record: 272325

In article <2hgr88$a0m@slinky.cs.nyu.edu>, jackson@longlast.cs.nyu.edu (Steven Jackson) writes:
|> Hello all, and good luck to the LA residents.
|>
|> What kind of communications did amateurs take part in during the emergency
|> out there? I love to speculate (the less you know, the more you guess) but
|> I would like to know for sure what kind of things kick into action when
|> something like that strikes.
|>
|> If anyone has any interesting stories about communications they provided in
|> ANY band or format, I'd love to hear about them.
|>

I saw a news story where the announcer was suprised to find that cellular phone service was disrupted as well. People tend to forget that the cellular system must tie into (and depend on) the land-line phone system as well as power and is no more reliable than the land-line phone system...

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

391. Internet Call Sign Servers.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 16:01:48 UTC
From: gosset@pbr322.ceingebi.unam.MX
Message-ID: <9401191601.AA09356@pbr322.ceingebi.unam.mx>
Source record: 272326

Hello everyone:

These are two Internet accessible on line call sign servers:

telnet callsign.cs.buffalo.edu 3000

and

telnet ns.risc.net login: hamradio (BuckMaster and Buffalo Callbooks)

73 & DX de XE1RGL.

392. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 16:13:22 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2hjm72$mhh@news.acns.nwu.edu>
Source record: 272178

In article <2hi58r$kcp@apple.com>, Kok Chen <kchen@apple.com> wrote:
>Charles.R.Hohenstein.1@nd.edu (Charles R. Hohenstein) writes:
>
>>In article <Anthony_Pelliccio-180194095831@138.16.64.8>,
>>Anthony_Pelliccio@brown.edu (Tony Pelliccio) wrote:
>>> >
>>> Can I ask a question? Did you actually sit there and post this to every
>>> single Usenet group? Enough of your wahoo bs... take this to a more
>>> appropriate forum since this is for amateur radio. Who knows, maybe one day
>>> a Ham will have a QSO with God himself.
>>>
>>Yes, but would this QSO be voice or CW?
>
>
>QLL? Can you send in Latin?
>QLL Please use Latin.

And I thought QSL meant `Please use Latin?' No wonder I have been
having difficulties.

CW ad extremum.

Rajiv
aa9ch
r-dewan@nwu.edu

393. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 16:31:17 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2hjn8lINNua@abyss.West.Sun.COM>
Source record: 272179

In article <1994Jan19.154907.17558@rsg1.er.usgs.gov> bodoh@dgg.cr.usgs.gov (Tom Bodoh) writes:
>I saw a news story where the announcer was suprised to find that cellular
>phone service was disrupted as well. People tend to forget that the
>cellular system must tie into (and depend on) the land-line phone system
>as well as power and is no more reliable than the land-line phone system...

The couple of cell sites I've been to had backup generators that start
when power is disabled, or a big battery.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

394. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 16:34:33 UTC
From: mack@ncifcrf.gov
Message-ID: <CJvy1M.Czz@ncifcrf.gov>
Source record: 272206

In article <2hi58r$kcp@apple.com> kchen@apple.com (Kok Chen) writes:
>Charles.R.Hohenstein.1@nd.edu (Charles R. Hohenstein) writes:
>
>>In article <Anthony_Pelliccio-180194095831@138.16.64.8>,
>>Anthony_Pelliccio@brown.edu (Tony Pelliccio) wrote:
>>> >
>>> Can I ask a question? Did you actually sit there and post this to every
>>> single Usenet group? Enough of your wahoo bs... take this to a more
>>> appropriate forum since this is for amateur radio. Who knows, maybe one day
>>> a Ham will have a QSO with God himself.
>>>
>>Yes, but would this QSO be voice or CW?
>
>
>QLL? Can you send in Latin?
>QLL Please use Latin.
>
>
>LXXIII,
>
>Kok Chen, AA6TY kchen@apple.com
>Apple Computer, Inc.

There is an Andrew's college in the 616 area. I left a message with
the Presidents secretary - they're closed for the day (cold weather), telling
her of Clarence Thomas. I'll call again tomorrow. In the mean time the
phone number for the president of Andrew's College in Berrian Springs is
(616)-471-3100

Joe NA3T
Joseph Mack
mack@ncifcrf.gov

395. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 16:43:02 UTC
From: jackson@longlast.cs.nyu.edu
Message-ID: <2hjnum$e2p@slinky.cs.nyu.edu>
Source record: 272129

|> I saw a news story where the announcer was suprised to find that cellular
|> phone service was disrupted as well.

Hi Tom.. that 2025 has been a lifesaver with all the ice storms we are having out here. Back to the story..

Actually, my sister, who attends Southern Cal and lives on the edge of campus, lost AC and phones immediately while her house was being wrecked. Her boyfriend is a computer consultant at the school. They give out cell phones to students in labs when they need help and he had one at the house. She called our house at 7:35ET, about 4 minutes after it hit. They then spent the next half-hour passing the cell phone around the house so all the residents (big house, lots of friends) could call home.

I don't know how long it was before cellular went out, but I sure was thankful it was around at least for a while. Or maybe you were talking about the Northridge area since it was closer to the epicenter.

I have been reading Gordon West's No-Code Plus to study for my Tech+, and he mentions using solar panels to provide comms in case of AC failure. This quake is what prompted my original question.. just what do people do on packet or other modes (if anything)?

I always pictured people without phone service writing their names down on a sheet of paper with the area code and telephone number of a relative someone could call. They can do this at, say, a Red Cross center manned with an instant packet station. Suppose, then, that each state could have a single "contact manager" who would agree to receive lists of people within his/her state that need to be contacted. The manager would then re-send appropriate messages to "area code managers" to keep long distance charges down.

Even if the state contact manager level was skipped, each area code manager could easily keep a listing of area code on the left and packet address on the right, to cover emergency comms that spring up in any area of the nation. We're talking one sheet of paper.

Of course, I'm not familiar with AX.25 and other Amateur packet radio, so I don't know how long it would take for a message to propogate from West to East.

But you're right, of course. I would guess that 97% of the general public has at least one misconception about some facet of cellular communication. I once stumbled across a conversation from the NJ Turnpike and when the person called Virginia, the response on the other end was, "I didn't know that thing could reach this far!" OOOOkayyyy.

Someone please explain the "one way in" messages that were described here earlier. Maybe I read it wrong, but it seems to mention mail going into the

Los Angeles/San Fernando valley area. What kind of messages would go IN?
"Hey Bob, we're worried about you out here.." or "Hey Bob, in case you don't
have AC, the news says it really hit the fan by you.." or "Hey Bob, don't take
the 5 or the 14 hyar hyar hyar.." I don't get it.
--
Steven Jackson New York University
Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012
"Commercial sign in 5, 4, 3, 2... commercial sign now"

396. Latest verison of SuperMorse

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 16:54:02 UTC
From: drumhell@claudette.nrl.navy.mil
Message-ID: <CJvyy3.Hz6@ra.nrl.navy.mil>
Source record: 272182

It appears that the program SuperMorse is up to verion 4.01. Does anybody know of an ftp site that would have it?

-Dave
--
David Drumheller phone: (202) 767-3524
Acoustics Division, Code 7140 fax: (202) 404-7732
Naval Research Laboratory
Washington, DC 20375-5350 e-mail: drumhell@claudette.nrl.navy.mil

397. Re: Getting my FT-101 tuned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 17:04:46 UTC
From: pineapp@netcom.com
Message-ID: <pineappCJvzFy.6wM@netcom.com>
Source record: 272202

Contact Robert Hall Electronics. He is located on McKee Road in San
Jose. I do not have the number, but he has a posting on HRO Bulliten
Board.

In article <1994Jan18.202144.15296@kpc.com> asrini@kpc.com (Ashok Srinivasan) writes:
>
>Hello,
> Could someone tell me where I can get my FT-101 tuned? I bought
>it used for my brother in India and I'd like to get it tuned locally
>before shipping it. Does Yaesu tune their old radios anymore? If so can
>I get a ph no?
>
>
>Ashok Srinivasan
>(ham-to-be)

--
.--+-------------------------.
INTERNET: pineapp@netcom.com (DC436)	Daniel Curry WB6STW
AMPRNET : dan@wb6stw.ampr.org [44.4.20.144]	E-:-) Ham Radio Operator
AX.25 : wb6stw@n0ary.#NOCAL.CA.USA.NA	Redwood City, CA USA
'--+-------------------------'

398. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 17:12:19 UTC
From: kg7bk@indirect.com
Message-ID: <CJvzsK.M2H@news.direct.net>
Source record: 272187

scott migaldi (scottm@chop.isca.uiowa.edu) wrote:
: However, it was not the public that did the redesign it was the company.

On the contrary, you underestimate Harley customers. Harley's redesign included some of my engineering suggestions. Ramsey's mods include some of my engineering suggestions. All the motorcycle experts in the USA do not work for Harley. All the radio experts in the USA do not work for Ramsey... If someone is capable of helping an American company put out a better product, is it better to sit and bitch or do something constructive?

73, Cecil, kg7bk@indirect.com

399. Ham Radio Wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 17:23:28 UTC
From: dlh@acpub.duke.edu
Message-ID: <2hjqag$m75@news.duke.edu>
Source record: 272184
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc

My father is looking to buy a HAM radio.

He specifically wants an all band transciever.

10 thru 80 meters

with no less than 100 watts output.

please reply via-e-mail or call:

Melvin Hamilton
(919)596-5339

thanks in advance,

--

____
Darryl Hamilton |Duke University
dlh@rogue.geo.duke.edu|Department of Geology
_____________________|_____________________

400. Re: Are there any RS232C cards for PCMCIA?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 17:29:25 UTC
From: burba@xylogics.com
Message-ID: <burba.16.00117E09@xylogics.com>
Source record: 272199
Cross-posted to: comp.sys.laptops,rec.radio.amateur.misc

In article <KITAGAWA.94Jan19172922@qed.laser.ee.es.osaka-u.ac.jp>
kitagawa@ee.ES.Osaka-U.AC.JP (Masahiro KITAGAWA) writes:

>I am going to buy a laptop or sub-note with only one serial port. But
>I need two or even three serial ports in the future. Are there any
>RS232C cards for PCMCIA slot? I know there are fax/data modem cards
>and Ethernet cards. But so far I couldn't find any serial port card.
>If you know, please tell me the model, price, dealer, spec, etc.

>I'm also looking for PCMCIA Ethernet cards for 10base-2 (Coax)
>[NOT 10base-T].

Check with Socket Communications, 2501 Technology Drive, Hayward CA 94545
Voice 510.670.0300 FAX 510.670.0333

I seem to remember something in one of their flyers about PCMCIA serial ports.
I know they have ethernet cards that are NE2000 compatible. I am using two of
them. They have a combo card that does 10base-T and 10base-2.

==
Terry Burba, CNE burba@xylogics.com
Applications Engineer CIS 72234,2454
Xylogics Technical Support 617-272-8140 x238
==

401. Best logging program?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 17:37:01 UTC
From: blw7149@cs.tamu.edu
Message-ID: <2hjr3u$2g3@news.tamu.edu>
Source record: 272130

What is the "best" and/or "most functionally complete" logging program available? The best one I've found is Hyperlog. I need something for long term logging versus contesting, etc. Hyperlog is good but I'd like to find something for Windows.

If there isn't anything comparable for Windows/OS2, I wonder how much business would be out there for such a program? (may be a good project to start)

Thanks and 73,

Brandon AB5LV

402. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 17:41:40 UTC
From: kg7bk@indirect.com
Message-ID: <CJw15H.MKy@news.direct.net>
Source record: 272193

Dana Myers (myers@sunspot.West.Sun.COM) wrote:

: The previous point, that H-D product was poor in the 70s and became
: good in the 80s because customers helped the factory improve the
: product is not realistic. H-D product improved as soon as the management
: cared to spend rthe effort to make a good product.

And why did they spend the effort? They were forced to by the customers.
Customers -were- the reason for the improvements.

: According to John Ramsey, many kits are sent back to the factory when
: the builder can't get it to work. He told me horror stories of people
: using pipe solder, etc.

That doesn't sound like Ramsey's fault. Should the instructions say "Don't
hit this transceiver with a hammer."?

: I stand by my assertion that Ramsey kits are poorly engineered with
: respect to performance.

They are not as well engineered as they might have been. So the constructive
thing to do is sit and bitch and moan about how bad they are...right?

: if you get a batch that is right on value or 10% high, you'll have a
: deaf receiver.

That's why Ramsey offers a free variable cap upgrade PCB.

: ...mentality is straight out of the 11m linear amplifier crowd,
: where these guys splatter onto 10m and claim nothing is wrong

A Ham running a KW on 20m gets away with splattering 5w onto 10m.
Why doesn't the FCC care about that?

: John is happy to help you make your radio work
: better when it has design flaws, but he's not ready to upgrade the
: design so people won't have problems.
: * Dana H. Myers KK6JQ

Instead of ragging on Internet which Ramsey may not see, how about
convincing John that he needs to upgrade the designs? If more hams
buy his designs after the upgrade you can bet he will do it. But, like
the Corvair, bad publicity can destroy a product even though it was
upgraded to a very good product.

73, Cecil, kg7bk@indirect.com

403. Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 18:11:19 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199401191826.KAA04226@ucsd.edu>
Source record: 272189

>I remember reading somewhere that the Lost Ark of the Covenant was really an
>extraterrestrial sub-space transceiver, left behind by the same beings that
>gave some of their construction and architecture expertise to the Egyptians,
>Mayans, etc.

yeah, but the dummies lost the instructions and the power supply batteries
have died from being left on a gold plated, brine-filled, rubber-wheeled Radio
Flyer blocked on 2 x 4's sitting on a concrete floor.....of course, the
Top Men working on the problem since the 1940's should be producing an
answer before too much longer. They were going to try a fresh-from-the-catalog
Sears Die-Hard for power last anyone said...the only problem was whether to
get the 600 cold-cranking amp battery or the 500 amp model...

It's also important to remember that the Ark of the Covenant had an almost
identical twin device known as the Vessel of the Agreement that controls the
weather and other geologic phenomenona and can be used to prevent earthquakes,
floods, hurricanes, violent changes in temperature, etc. improperly used, it
can create these same effects.

bill n. wb9ivr

(pies gratefully accepted at the rear entrance...make mine pumpkin).

404. Satellite progs wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 18:19:45 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCJw2wy.B3n@netcom.com>
Source record: 272203
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

I'm looking for any site carrying the following satellite programs:

P3?.? Not completely sure of the filename, but it begins with P3.

Also, PB and PG something.

This is a relay for a ham friend who does not have Internet access.

And now for something completely different, how do I go about getting
an AMSAT account?

Thanks much!

73,
Scott

--

```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
================================================================================
```

405. VE sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 18:22:36 UTC
From: ron@etch-eshop.Berkeley.EDU
Message-ID: <2hjtpc$ljh@agate.berkeley.edu>
Source record: 272133

Hello ,

Does anyone happen to know a name & phone # of the North Bay
radio club ? I live in the Vallejo/Fairfield area, and I've heard
there is a local club.

What I'm looking for is, a VE session localy.

Thanks,

ron@etcheshop.Berkeley.EDU

406. Re: Requesting Yaesu FT-530 info

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 18:30:02 UTC
From: pas@jupitercmc.ca
Message-ID: <1994Jan19.183002.3945@venus.cmc.ca>
Source record: 272224

In article <CJtzo7.9B7@murdoch.acc.Virginia.EDU>, jeg7e@lambda.itc.Virginia.EDU (Jon Gefaell) writes:
|> You may have heard this, but it's wrong. The FT530 does not
|> tx in AM.

OK. As I had said in my post, I had heard it could but had
not verified this.

|> Besides beling illegal (which might make one a bit more circumspect)
|> it is functionaly impossible with the FT530. This radio does not allow
|> user selection of step rates in the 800-950Mc band. 12.5Kc is enforced
|> and cannot be changed.
|> If you can tell me how you may have overcome this limitation, PLEASE DO.

I have been able to search cell phone frequencies using the 12.5Khz
step. One has to bump the frequency on occasion as the FT530
will stop searching one step short of the center frequency. This
does not prevent you from listening however.

I agree, transmission in AM mode is illegal if you do not have
gov't approved equipment and licensing. Listening to cell
phones is legal for me in Canada (although rather boring)...

Regards,
Peter

Peter A. Stokes _____ Voice & Voice mail: (613) 545-2923
Engineering Applications Support _____ FAX: (613) 548-8104
Canadian Microelectronics Corporation _____ Net: stokes@cmc.ca
Kingston, Ontario, CANADA _____ Radio: VE3ZXT

407. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 18:32:48 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.94Jan19133248@prince.cs.columbia.edu>
Source record: 272196

Anthony_Pelliccio@brown.edu (Tony Pelliccio) writes:

> Let's face it, God pre-dates amateur radio by quite a few millenia so he's
> probably using a spark-gap generator and touching two wires together.

Who needs a spark-gap generator? Radio waves are electromagnetic
waves, just like light. All He needs to do is to say, "Let there be
radio waves," and there will be radio waves. :-)
-Steve

408. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 18:46:49 UTC
From: blake@lonestar.utsa.edu
Message-ID: <1994Jan19.184649.17442@ringer.cs.utsa.edu>
Source record: 272215

In article <199401191826.KAA04226@ucsd.edu>
William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM writes:

>>I remember reading somewhere that the Lost Ark of the Covenant was really an
>>extraterrestrial sub-space transceiver, left behind by the same beings that
>>gave some of their construction and architecture expertise to the Egyptians,
>>Mayans, etc.
>
>yeah, but the dummies lost the instructions and the power supply batteries
>have died from being left on a gold plated, brine-filled, rubber-wheeled Radio
>Flyer blocked on 2 x 4's sitting on a concrete floor.....of course, the
>Top Men working on the problem since the 1940's should be producing an
>answer before too much longer. They were going to try a fresh-from-the-catalog
>Sears Die-Hard for power last anyone said...the only problem was whether to
>get the 600 cold-cranking amp battery or the 500 amp model...

I think it ran on a Mr. Fusion (tm) portable fusion generator. The instructions
said not to open the mini-reactor case, otherwise a mini-hydrogen bomb like
detonation would occur, hence, the brilliant, destructive light.

--
O	Blake Schreckenbach,	"It's a 106 miles to Chicago, we've got a full	O
O	KC5DRP	tank of gas, half a packet of cigarettes, It's	O
O	University of Texas	dark, and we're wearing sunglasses. Hit it."	O
O| at San Antonio	-- Jake & Elwood Blues	blake@lonestar.utsa.edu |O

409. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 18:55:33 UTC
From: dave@llondel.demon.co.uk
Message-ID: <759030933snx@llondel.demon.co.uk>
Source record: 272138
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc

In article <1994Jan18.201820.13828@ringer.cs.utsa.edu> blake@lonestar.utsa.edu (M Blake Schreckenbach) writes:
>I remember reading somewhere that the Lost Ark of the Covenant was really an
>extraterrestrial sub-space transceiver, left behind by the same beings that
>gave some of their construction and architecture expertise to the Egyptians,
>Mayans, etc.
>
No... read the description more carefully. You will find that the Ark of
the Covenant is basically a *large* capacitor (wooden box with metal inside
and metal outside). Penalty for unauthorised contact was a lightning bolt,
although presumably you got let off if it was raining :-)

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

410. CALL SIGN SERVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 18:56:00 UTC
From: berwyn@dialup.oar.NET
Message-ID: <199401191856.NAA24159@dialup.oar.net>
Source record: 272219

Does anyone know where the call sign dtabase server exists ?

I believe it is on DEWIE.DEL.EDU . . . does anyone know ?

Thanks

berwyn@oar.net

411. Low Power VCO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 19:14:42 UTC
From: daan220@draco.dartmouth.edu
Message-ID: <2hk0r2$kht@dartvax.dartmouth.edu>
Source record: 272222

Frequency Range: 138-153 MHz
Power Supply: 3 Vdc @ 3 mAmp or
5 Vdc @ 1-2 mAmp
Output (Power): +8 - +10 dBM (50 Ohm Load Resistance)
Control Voltage: 1 - 3 Volts
Op. Temp. Range: -45 to +70 degrees Celcius

Has anyone been able to find a VCO that meets these specifications? Or just one that is reasonable in meeting them closely? Trade-offs are control voltage, output, and power supply. Total power consumption w/o output should range b/w 10 and 15 mWatts.

Need to find someone who may supply this VCO, give app notes, or gave name of a vendor who can meet these specs. Also, design schematics could help us build it ourselves. Help!

Daan Goedkoop
PLL Group/ES 295
for
Lockheed / Sanders
Nashua, NH

412. Re: Anyone know of a callsign server?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 19:16:59 UTC
From: wpns@newshost.pictel.com
Message-ID: <1994Jan19.191659.1824@newshost.pictel.com>
Source record: 272154

apollyon@crash.cts.com (Shannon O. Sullivan) writes:
> telnet callsign.cs.buffalo.edu port 2000

Someone also mentioned port 3000, and 'callsign' used to be 'marvin',
but none of the above work any more. Did the internet callbook go
away, move somewhere else, or is our net connection broken? All I get
is 'unknown host' errors.

--
Willie Smith wpns@pictel.com N1JBJ@amsat.org
Some people you don't have to satirize, you just quote em - Tom Paxton

413. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 19:26:54 UTC
From: jeffj@cbnewsm.cb.att.com
Message-ID: <CJw610.AJ4@cbnewsm.cb.att.com>
Source record: 272185

In article <Anthony_Pelliccio-180194095831@138.16.64.8> Anthony_Pelliccio@brown.edu (Tony Pelliccio) writes:
>In article <2hfehn$t1o@orion.cc.andrews.edu>, clarence@orion.cc.andrews.edu
>(Clarence L. Thomas IV) wrote:
>
>> are signs that this world's history is coming to a climax. The human race
>> has trampled on God's Constitution, as given in Exodus 20:1-17 (King James
>> Version Bible), and Jesus is coming to set things right. These rapidly
>> accelerating signs are an indication that Jesus is coming soon (Matthew 24).
>
>since this is for amateur radio. Who knows, maybe one day
>a Ham will have a QSO with God himself.

Aren't silent keys already doing this? 8-)

Jeff

--
Jeff Jones AB6MB | Vote out those who voted for the North American
jeffj@seeker.mystic.com | Free Trade Agreement!
Infolinc BBS 510-778-5929 |

414. Re: FT-530 Receive Problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 19:29:26 UTC
From: leber@panther.warm.inmet.com
Message-ID: <CJw653.MxC@inmet.camb.inmet.com>
Source record: 272217

A followup: the Tech. Support Supervisor called me this morning. He discussed the problem with Tokyo, and can't figure out why the fix they made didn't kill all interference. He seems genuinely concerned about it and assures me that this is not typical performance. He is going to have UPS pick the rig up at no expense to me, and they are going to put a priority on getting it fixed right. He suspects there may be a grounding problem, but can't be sure, and doesn't understand how the unit could have gotten past the final checks after the repair.

In any case, he says they will make it right. I'll keep you posted. If you are having the same problem (and one person has already contacted me to say they are), give Yaesu/Cerritos CA a call about it, and mention that you have heard about my situation. The additional data may help us all out.

These are great radios. Let's make sure they are working to the best of their capabilities. If anyone else has experiences to share about this problem and their conatcs with Yaesu about it, let me know. Thanks.

Tom

--

Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
"One step ahead, one step behind...Pretty soon you gotta' run to stay even."

415. Kenwood TS430 Mod

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 19:31:04 UTC
From: henrys@netcom.com
Message-ID: <henrysCJw67u.2pD@netcom.com>
Source record: 272213
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

I am planning on using my Kenwood TS430 with a 6 meter transverter.

I would be nice if it could tune above 30 MHZ.

Does anybody know of a Mod that will allow a TS430 to tune above
30 MHZ

Thanks

Smitty, NA5K
--

| Henry B. Smith - NA5K henrys@netcom.com |
| Dallas, Texas |

| |
| "I'm not sure I understand everything that I know" |

416. Re: Latest verison of SuperMorse

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 19:34:26 UTC
From: wjturner@iastate.edu
Message-ID: <2hk202$2a9@news.iastate.edu>
Source record: 272216

In article <CJvyy3.Hz6@ra.nrl.navy.mil> drumhell@claudette.nrl.navy.mil (David Drumheller) writes:
> It appears that the program SuperMorse is up to verion 4.01. Does
>anybody know of an ftp site that would have it?

wuarchive.wustl.edu has SuperMorse *4.04* in /mirrors/msdos/hamradio.

73, Will N0RDV/AE (Since Sunday... :-)
--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

417. Bencher Straight key

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 19:54:01 UTC
From: JMG@tntech.edu
Message-ID: <01H7VATOOHO2DIZXBB@tntech.edu>
Source record: 272220

anyone see one of the new Bencher Straight Keys in person.. look interesting.

73

Jeff, AC4HF

418. Re: 51' Tower For Sale w/ House

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:03:24 UTC
From: kurt@cs.tamu.edu
Message-ID: <2hk3mc$5j@news.tamu.edu>
Source record: 272135
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy

```
[ Description of 51' tower and its accessories (a house) ]
> Asking $219,950

Wow! That's the most expensive 51' tower I've ever seen! Nice accessories,
though.... 8-}
kf
--
Kurt Freiberger, wb5bbw kurt@cs.tamu.edu 409/847-8607 fax:409/847-8578
Dept. of Computer Science, Texas A&M University DoD #264: BMW R80/7 pilot
"Even MY hypocrisy has its limits." - "Doc" Holliday, in Tombstone
*** Not an official document of Texas A&M University ***
```

419. What could this mean?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:03:45 UTC
From: jfh@netcom.com
Message-ID: <jfhCJw7qA.29r@netcom.com>
Source record: 272204

The following paragraph appeared in an article in today's San Francisco Chronicle about what local companies are doing to help prepare for the next earthquake:

Finally, in an attempt to encourage the use of amateur (Ham) radios, which are used by many relief agencies during an emergency, Pacific Bell has reduced the cost of operating a Ham radio to the basic service rate of $8.35 a month. Ham radios are licensed through the phone company.

I called PacBel to ask about this. They didn't have any idea. They realize that they don't license amateur radios, and they also don't rent any kind of amateur equipment. I thought they might be referring to a special rate for phone patches, but they denied knowing anything about that either.

Any ideas? Do other phone companies do anything to encourage amateur radio?

--

Jack Hamilton POB 281107 SF CA 94128 USA
jfh@netcom.com kd6ttl@w6pw.#nocal.ca.us.na

420. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:10:43 UTC
From: alanb@sr.hp.com
Message-ID: <CJw81v.934@srgenprp.sr.hp.com>
Source record: 272132

Dana Myers (myers@sunspot.West.Sun.COM) wrote:
: In article <1994Jan19.154907.17558@rsg1.er.usgs.gov> bodoh@dgg.cr.usgs.gov (Tom Bodoh) writes:
: >I saw a news story where the announcer was suprised to find that cellular
: >phone service was disrupted as well. People tend to forget that the
: >cellular system must tie into (and depend on) the land-line phone system
: >as well as power and is no more reliable than the land-line phone system...

: The couple of cell sites I've been to had backup generators that start
: when power is disabled, or a big battery.

I don't think power is the problem with either cellular or land-line phones.
(They both have emergency backup power.) The problem is simple overload
of capacity.

AL N1AL

421. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:16:35 UTC
From: alanb@sr.hp.com
Message-ID: <CJw8Bo.9AK@srgenprp.sr.hp.com>
Source record: 272134

Steven Jackson (jackson@longlast.cs.nyu.edu) wrote:

: Someone please explain the "one way in" messages that were described here
: earlier. Maybe I read it wrong, but it seems to mention mail going into the
: Los Angeles/San Fernando valley area. What kind of messages would go IN?
: "Hey Bob, we're worried about you out here.." or "Hey Bob, in case you don't
: have AC, the news says it really hit the fan by you.." or "Hey Bob, don't take
: the 5 or the 14 hyar hyar hyar.." I don't get it.

The messages in question are of the type: "Dear Mom and Dad. Are you
still alive? Is your house still standing?"

The problem is that it is almost impossible to deliver such messages in
a disaster area, since phone service is almost invariable down and the
roads are in disrepair. Incoming H&W (Health and Welfare) messages always
have lowest priority. Direct disaster-relief communications have highest
priority, followed by outgoing H&W messages. (Dear ___, your parents are
OK and living in a shelter at ___)

AL N1AL

422. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:24:25 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2hk4tpINN125@abyss.West.Sun.COM>
Source record: 272194

In article <CJw15H.MKy@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>Dana Myers (myers@sunspot.West.Sun.COM) wrote:
>
>: The previous point, that H-D product was poor in the 70s and became
>: good in the 80s because customers helped the factory improve the
>: product is not realistic. H-D product improved as soon as the management
>: cared to spend rthe effort to make a good product.
>
>And why did they spend the effort? They were forced to by the customers.
>Customers -were- the reason for the improvements.

C'mon, this is circular logic. Of course customers were the reason for
H-D improving their products. However, you can not deny that H-D
products improved considerably only after the management became
committed to improving the products.

>: I stand by my assertion that Ramsey kits are poorly engineered with
>: respect to performance.
>
>They are not as well engineered as they might have been. So the constructive
>thing to do is sit and bitch and moan about how bad they are...right?

Funny you should mention that; I've spent quite a bit of effort understanding
exactly what the shortcomings of the Ramsey radios re, in particular the
FX-440. I've posted constructive criticism to the Usenet, and, guess
what, John Ramsey called me up! It turns out he wasn't interested in
a thing I had to say, other than to prove to me I was wrong.

>: if you get a batch that is right on value or 10% high, you'll have a
>: deaf receiver.
>
>That's why Ramsey offers a free variable cap upgrade PCB.

Great. How many people know they need the upgrade PCB when they
don't have the equipment to evaluate the performance of the receiver?

>: ...mentality is straight out of the 11m linear amplifier crowd,
>: where these guys splatter onto 10m and claim nothing is wrong
>
>A Ham running a KW on 20m gets away with splattering 5w onto 10m.
>Why doesn't the FCC care about that?

Of course the FCC cares about that, Cecil. You're starting to sound
just like John; tryingto change the subject and confuse the issues to
avoid the hard problems. Why don't you address my real point, which
is: Just because you can talk to someone with a radio, doesn't mean

the radio is adequately working.

>: John is happy to help you make your radio work
>: better when it has design flaws, but he's not ready to upgrade the
>: design so people won't have problems.
>
>Instead of ragging on Internet which Ramsey may not see, how about
>convincing John that he needs to upgrade the designs? If more hams
>buy his designs after the upgrade you can bet he will do it. But, like
>the Corvair, bad publicity can destroy a product even though it was
>upgraded to a very good product.

I returned John's call and spent 1 hour of my time and $$ listening
to John's excuses. I was told that "no improvement can be made to the
Ramsey radios because no one could build them then". I tried, vainly,
to convince John that he needs to sell kits that include the upgrades
rather than expecting people to realize something is wrong and call him.
At the very least, he needs to include documentation in his manuals which
says "when you build this kit, it stands a good chance of not working
well. Please call New York at long-distance rates on your bill and ask
for the free upgrades which will make your radio work the way you expected
it to".

John flat out told me that his designs have been tested and are optimum
given the fact they need to be built from a kit by people who don't
know anything about radio. He shot down every design alternative I
mentioned with "no one could build it". He bad-mouthed other customers
of his *by name*. Maybe he'll start bad-mouthing me by name, too.

Cecil, rather than trying to convince to stop picking on Ramsey kits
for theire technical shortcomings, why don't you convince your buddy
John Ramsey to spend some hard earned cash going to a course on
customer relations? Then he'd have a chance of addressing the real
reasons why his products get bad press.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

423. Re: DSP Audio Filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:25:37 UTC
From: alanb@sr.hp.com
Message-ID: <CJw8qq.9KG@srgenprp.sr.hp.com>
Source record: 272190

hamilton on BIX (hamilton@BIX.com) wrote:

: That's got me thinking that perhaps one of the genuine DSP-based filters
: like the Timewave DSP-59 might be even more amazing. The ads claim the
: ability to filter out white (uncorrelated) noise + do tight bandpass
: filtering. I'd love to hear comments from anyone who's got one or
: from others who've actually listened to the effects.

I built one of the original W9GR DSP filters with the multi-filter upgrade. It works fine. The noise-reducing filter greatly reduces fatigue by reducing noise on medium-strength signals. The narrowband CW/RTTY/AMTOR/etc. filters do a great job, for an audio filter.

Of course any audio filter, analog or digital, has a fundamental limitation: Signals within the radio's IF passband, but outside the audio filter's passband, can still "pump" the receiver AGC. Even though you can't hear the interfering signal, it will reduce receiver gain, which reduces the level of the signal you are trying to receive.

But the filters still are useful, especially for operators who are not experienced at employing their "biological filter" to receive signals in the presence of noise and interference. If you've got the money, they are worth it.

AL N1AL

424. Company Emergency Plans?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:35:10 UTC
From: eamurashie@mail.beckman.com
Message-ID: <eamurashie.34@mail.beckman.com>
Source record: 272197

Here at Beckman we just started a Ham Radio Club. We felt that one way
of getting more backing from the company is to have an emergency plan
for the club that can be added to the company's disater team's plan.
Has anyone written such a plan for their club at their company that they
might share with us? Or in general terms what does your club do for the
company in an emergency? Your help would greatly be appreciated. Thanks
in advance.
Ed Murashie

Ed Murashie US Mail : Beckman Instruments Inc.
phone: (714) 993-8895 Diagnostic System Group
fax: (714) 961-3759 200 S. Kraemer Blvd W-361
Internet: eamurashie@ccgate.dp.beckman.com Brea, Ca 92621

425. Seeking Opinions of Memory Keyers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:39:04 UTC
From: wstrahl@cbnewsg.cb.att.com
Message-ID: <CJw9D5.J35@cbfsb.cb.att.com>
Source record: 272218

I am seeking net opinions re: the current crop of contest-style
memory keyers. I am very pleased with my present 6502-based
Kansas City Contest Keyer. I am considering getting another
keyer and was wondering if any of the newer ones are 'better'.
It must have at least 4 message memories, serial numbering, message
sending via remote buttons on the paddle, and a speed KNOB.
What should I be considering, MFJ, Logitek, ???
Your opinions appreciated.

Wayne Strahl - W9II wstrahl@cbnewsg.att.com

426. Engine Noise

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:50:08 UTC
From: ksmith@theodolite.ae.calpoly.edu
Message-ID: <1994Jan19.205008.14420@cs.yale.edu>
Source record: 272210

I recently did a tuneup on my 1990 Isuzu Trooper, and I'm noticing MAJOR engine noise in both my scanner and 2m/440 rig. I've determined that the problem is _NOT_ the spark plug wires, and this leaves only the spark plugs themselves, or perhaps the distributor cap.

I used Autolite Platinum plugs. Has anyone experienced noise problems with these? The problem is definately coming in via antenna leads or directly into the radios (ie: NOT the power cables), since I've been able to duplicate the problem when using the HT in the car.

Help!

KD6RCT

427. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:50:17 UTC
From: mack@helix.nih.gov
Message-ID: <1994Jan19.205017.9944@alw.nih.gov>
Source record: 272183

In article <wier-180194220223@198.213.12.249> wier@merlin.etsu.edu (Bob Wier) writes:
>In article <wa2iseCJt9F4.I73@netcom.com>, wa2ise@netcom.com (Robert Casey)
>wrote:
>
>> I'll take this under advisement.
>
>Apparently the mail to root/postmaster worked. I've had word recently that
>the message has been cancelled and should disappear from the newgroups
>shortly. Course fat lot of good that does on the mailing lists...
>
>As far as I can determine, the only place that didn't get 'em were the
>alt. newsgroups - maybe andrews.edu doesn't allow them...it would be nice
>to see an apology, but I guess that's too much to ask...
>

Oh I don't think so. Why don't you ask the President of Andrew's
College
at (616)-471-3100.

Joe Mack NA3T
mack@ncifcrf.gov

>
> ======== insert usual disclaimers here ============
>keeper of the Adobe Photoshop, MC68HC11, ICOM mailing lists
> Bob Wier, East Texas State U., Commerce, Texas
> wier@merlin.etsu.edu (watch for address change)

428. Recommendations for 2m/440 base verticals?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 20:58:34 UTC
From: ken@boxhill.com
Message-ID: <2hk6tq$3h4@boxhill.com>
Source record: 272191

Hi all! I'm looking for recommendations for 2m/440 dual band
base vertical gain antennas, such as the following:

Comet CA-2x4 series
Diamond X-500 and X-700 series
Cushcraft ARX-270 and AR-270 series (I hope I get a reply from Gary KE4ZV :-)

Naturally, comments, flames or smileys regarding these or any other
models are welcome. (these just seem to be common on the market)

I plan on mast mounting approx 25' above ground, and am looking
for durability and good design and construction, with inflated gain figures
as a secondary consideration.

Since this may be of interest to other hams, I'll summarize & post.

Would appreciate a cc: to ken@boxhill.com in case I miss a reply on the group.

73 and thanks!

Ken Stamm N2TIA BBBB H H i ll ll
(ken@boxhill.com) B B H H l l
BoxHill Systems Corporation BBBB ooo x x HHHH ii l l
161 Avenue of the Americas B B o o x H H i l l
New York, NY 10013 BBBB ooo x x H H iii lll lll
Tel: (212)989-HILL (4455)
Fax: (212)989-6817 S y s t e m s C o r p o r a t i o n

429. Re: Ham call CDROMS & SunOS/Solaris

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 21:10:33 UTC
From: furuta@cs.tamu.edu
Message-ID: <2hk7k9$8ev@news.tamu.edu>
Source record: 272188

The QRZ! CDROM includes a version that can be searched on Unix machines and binaries for the Sun. I'm running it on SUNOS 4.1.3.

--Rick
KE3IV

430. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 22:10:45 UTC
From: kg7bk@indirect.com
Message-ID: <CJwDLy.4wz@news.direct.net>
Source record: 272195

Dana Myers (myers@sunspot.West.Sun.COM) wrote:
: >That's why Ramsey offers a free variable cap upgrade PCB.
: Great. How many people know they need the upgrade PCB when they
: don't have the equipment to evaluate the performance of the receiver?

Dana, most people don't have the equipment to evaluate the performance of Japanese receivers, either. If something is wrong, it needs to be fixed. My IC24AT had a problem and someone fixed it for me.

: Cecil, rather than trying to convince to stop picking on Ramsey kits
: for theire technical shortcomings, why don't you convince your buddy
: John Ramsey to spend some hard earned cash going to a course on
: customer relations? * Dana H. Myers KK6JQ, DoD 466

Just for the record, my major connection to Ramsey is a magazine article. I have never met or talked to John Ramsey in person or on the phone. I'm a tinkerer and the FX kits allow me to tinker. It gives me pleasure to invent improvements and share them.

73, Cecil, kg7bk@indirect.com

431. Re: Gin Pole Dealers???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 22:20:41 UTC
From: engberg@edfue0.ctis.af.mil
Message-ID: <2hkbnp$hki@iris.mbvlab.wpafb.af.mil>
Source record: 272198
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Check with Texas Towers.
--

Bob Engberg
phone: 907-552-7172
e-mail: engberg@ctis.af.mil
packet: K0MVL@KL7AA
snail: Science Applications International Corp.
911 W. 8th Ave., Suite 401
Anchorage, AK 99501

432. Re: Best logging program?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 22:39:40 UTC
From: engberg@edfue0.ctis.af.mil
Message-ID: <2hkcrc$hki@iris.mbvlab.wpafb.af.mil>
Source record: 272200

I've been using Microsoft WORKS for logging. It has Database, Spreadsheet, and Wordprocessor. The Wordprocessor easily prints labels with all the pertanent info needed for a QSL card. The Spreadsheet is nice to use for a checklist of countries/states worked.

The advantage of using a DB manager like this is that you can roll your own. If you want a report of all stations worked in 1990, or all contacts except US, or all 3Y contacts on all bands, these are easy to produce.

A side advantage is that you learn to do other things with your computer.

73,

Bob Engberg
phone: 907-552-7172
e-mail: engberg@ctis.af.mil
packet: K0MVL@KL7AA
snail: Science Applications International Corp.
911 W. 8th Ave., Suite 401
Anchorage, AK 99501

433. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 22:45:06 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2hkd5iINN15h@abyss.West.Sun.COM>
Source record: 272201

In article <CJwDLy.4wz@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>Dana Myers (myers@sunspot.West.Sun.COM) wrote:
>: >That's why Ramsey offers a free variable cap upgrade PCB.
>: Great. How many people know they need the upgrade PCB when they
>: don't have the equipment to evaluate the performance of the receiver?
>
>Dana, most people don't have the equipment to evaluate the performance
>of Japanese receivers, either. If something is wrong, it needs to be
>fixed. My IC24AT had a problem and someone fixed it for me.

The difference is that the IC24AT was factory built and then adjusted
by the factory to specified tolerances. Selling a kit which is highly
sensitive to component tolerances without providing an adjustment
method is considerably different. I've been insisting that people
who attempt to build and operate VHF and UHF amateur gear really need
to verify the performance of the home-built (including kits) gear,
since VHF/UHF gear is generally more sensitive to component and
construction tolerances than HF gear. John Ramsey tries to sell
kits that a person can tune with a VOM; this is asking for trouble
if he doesn't go out of his way to engineer the kit to reduce the
influence of component and construction tolerances.

>: Cecil, rather than trying to convince to stop picking on Ramsey kits
>: for theire technical shortcomings, why don't you convince your buddy
>: John Ramsey to spend some hard earned cash going to a course on
>: customer relations? * Dana H. Myers KK6JQ, DoD 466
>
>Just for the record, my major connection to Ramsey is a magazine article.
>I have never met or talked to John Ramsey in person or on the phone. I'm
>a tinkerer and the FX kits allow me to tinker. It gives me pleasure to
>invent improvements and share them.

I thought you wrote him a letter and he responsed (?). I like to tinker,
too. I buy really good radios (like Micor, Custom MVP, etc.) and use them
as a platform for careful experimentation. For the $200 an FX-440 with
cabinet costs, you can buy a Micor, some rocks, the manual, and a handful
of PLL synth chips and go to town...

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

434. Re: Morse Code program

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 23:26:36 UTC
From: murray@sun13.scri.fsu.edu
Message-ID: <13345@sun13.scri.fsu.edu>
Source record: 272137

By the way, I've written an SGI Indigo interface for morse.c. I've sent it to the author for inclusion with morse.c, but if anyone wants it in the meantime...

(works only for SGIs with Audio Library - i.e. the ones with /usr/lib/libaudio.a not the ones that just let you write bits to /dev/audio. Indigos, 4D/30s and 4D/35s for sure, 4D/20s and 4D/25s for sure not. Don't know about any others, although machines more recent than the Indigo probably have it)

Anyone else improved on QSO.c? ("I am a airline pilot."?? Puh-leeeze!)

John KD4BTL
--
Disclaimer: Opinions mine. Brainless, knee-jerk reactions are your problem.
John R. Murray murray@vs6.scri.fsu.edu | Hello, I am a damaged .signature
Supercomputer Computations Research Inst| virus. Copy me into yours, and
Moderator comp.graphics.research | join in the !rm -rf un *;A#$!&zQ *^P%o

435. Radio Clubs Near London wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-19 23:46:28 UTC
From: turini@gdls.com
Message-ID: <2hkgok$r3@gdls.com>
Source record: 272223

Well, after months of screwing around I've been given 2 day's notice to ship out to London.

Question is, are there any clubs in the area around the Hotel Busch (?) in Surrey? When do they meet? Can a licensed (U.K) foreigner use their club station (if they have one? Any hamfests (sorry rallies) in February? Any information will be appreciated.

BTW, I'll be at British Aerospace. Hopefully I can get on the Internet from there.

Thanks again,

Bill

436. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 00:18:33 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9401191909591.gilbaronw0mn.DLITE@delphi.com>
Source record: 272227

>As a matter of fact, I do. I went through the exact same thing with
>Harley Davidson during the '70s. Harley's were lousey then and now
>they are the most successful motorcycle company in the world. If
>everyone had your attitude, Harley would no longer exist.
>
>73, Cecil, kg7bk@indirect.com
>
>
Hmmm would that be so bad? Just kidding guys. :-)

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

437. Expanded receive mod for Yaesu FT-41R

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 00:27:47 UTC
From: ford@summit.novell.com
Message-ID: <2hkj63INNbge@alpha1.summit.novell.com>
Source record: 272205

I and a friend each just got a Yaesu FT-41R HT.

I called Yaesu and asked for any available mods. They have an expanded Rx/Tx mod which they won't give out without proof of MARS/CAP authorization. They did tell me about a keypad mod for getting just the expanded receive. You just hold down both the up and down arrow keys while powering the unit on.

Now it accepts frequencies from 420-470 MHz instead of its normal limits of 430-450. It still only transmits on 430-450. It also now requires the 100MHz digit to be entered when a frequency is directly entered. I don't know why this is since it doesn't seem to accept any frequencies that don't start with "4". Does anyone have any explanation for this?

Does anyone know of any other mods for the FT-41R? I heard that some Yaesu 70cm HTs can pick up the 800MHz range; can the FT-41R be modified to do this?

Thanks,
"Designed specifically to -=] Ford [=-
dissolve scum on contact" (Mike Ditto)

438. CTCSS encode/decode

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 01:23:11 UTC
From: bhiller@bigwpi.WPI.EDU
Message-ID: <2hkmdv$3vo@bigboote.WPI.EDU>
Source record: 272214
Cross-posted to: rec.radio.amateur.misc,sci.electronics

I'm looking for ICs or suggestions on how to generate and decode subaudible tones (CTCSS) for amateur radio. Any help would be appreciated. It is part of my senior project which involves building a computer controlled 2M transceiver. Thanks.

Brent
bhiller@wpi.wpi.edu

439. ???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 01:32:18 UTC
From: drusteba@plains.NoDak.edu
Message-ID: <CJwMxu.2GFr@ns1.nodak.edu>
Source record: 272140

[No readable article body recovered]

440. Re: What could this mean?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 01:58:02 UTC
From: Kenneth.E.Harker@Dartmouth.Edu
Message-ID: <2hkofa$68u@dartvax.dartmouth.edu>
Source record: 272226

In article <jfhCJw7qA.29r@netcom.com>
jfh@netcom.com (Jack Hamilton) writes:

> Any ideas?

Ignorance in the press. Pure and simple.

==
Kenneth E. Harker N1PVB Dartmouth College Amateur Packet Radio
kenneth.e.harker@dartmouth.edu Hinman Box 1262 n1pvb@w1et.nh.usa.na
(603) 643-6549 Hanover, NH 03755 or n1pvb-5 on 144.99
==

441. Re: What could this mean?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 02:16:57 UTC
From: alanb@sr.hp.com
Message-ID: <CJwp0A.MCB@srgenprp.sr.hp.com>
Source record: 272131

Jack Hamilton (jfh@netcom.com) wrote:
: The following paragraph appeared in an article in today's San Francisco
: Chronicle about what local companies are doing to help prepare for the next
: earthquake:

: Finally, in an attempt to encourage the use of amateur (Ham) radios,
: which are used by many relief agencies during an emergency, Pacific
: Bell has reduced the cost of operating a Ham radio to the basic
: service rate of $8.35 a month. Ham radios are licensed through the
: phone company.

I think it refers to the fact that amateur repeater autopatches and
landline control links have had to pay commercial rates in the past.
Pac Bell now allows us the residential rates, on the theory that
Amateurs are prohibited by law from making a profit by Amateur Radio,
so we are thereby non-commercial.

AL N1AL

442. Old receivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 02:23:56 UTC
From: gdlee@bsu-cs.bsu.edu
Message-ID: <5434@bsu-cs.bsu.edu>
Source record: 272225
Cross-posted to: rec.radio.swap,rec.radio.shortwave,rec.radio.amateur.misc

I am looking for old working communications receivers. I am a shortwave
listener and am thinking about going back into ham radio and getting my
tech. I would like to buy or maybe trade I have a little stuff
for old working general coverage receivers. The wider the coverage the better.
Age is no object as long as it works. If you want to clean out your garage
basement, or atic let me know. Thanks.

Gary Lee

443. Re: Internet Call Sign Servers.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 03:19:48 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.759035988@BIX.com>
Source record: 272128

gosset@pbr322.ceingebi.unam.MX (Guillermo Gosset) writes:

>These are two Internet accessible on line call sign servers:
>telnet callsign.cs.buffalo.edu 3000
>and
>telnet ns.risc.net login: hamradio (BuckMaster and Buffalo Callbooks)

Even better, assuming you have a CD-ROM drive, is the QRZ! CD from
Walnut Creek CD-ROM. At $29.95 + s/h, it's a real bargain. The
callsign database is super fast -- MUCH more responsive than foolin'
with something over the network. Plus, you can do things like output
the results of your queries to mailing labels or to a file or whatever.
Like everything else I've ever bought from Walnut Creek, this is a
great product. You can call them at 800-786-9907 or 510-674-0783
or fax 510-674-0821 or thru email at info@cdrom.com.

444. L.A. Earthquake Information

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 04:21:04 UTC
From: pmarsh@metro.mccneb.EDU
Message-ID: <9401200421.AA05112@metro.mccneb.edu>
Source record: 272136

```
Forwarded message:
> Date: Wed, 19 Jan 1994 00:02:33 -0400 (EDT)
> From: "JEFF GUIDE - SYSTEM MANAGER, MAC & TI SIGS"
<TELEDATA@delphi.com>
> Subject: L.A. Earthquake Information Center
>
> This is to announce the formation of the:
>
> Northridge (L.A.) Earthquake Information and Location
Center Gopher
>
> Set your Gopher pointers to:
>
> Name= L.A. Earthquake Information Center
> Type= 1
> Host= delphi.com
> Port= 70
>
>
> Since this Gopher was set up with some urgency, there is NO
reliable
> telneting into delphi.com 70 at this time. This site MUST be
setup to
> operate on a Gopher Client.
>
>
> 1 A WELCOME TO THE L.A. EARTHQUAKE INFORMATION CENTER Menu
> 2 AMATEUR RADIO INFORMATION Menu
> 3 CALIFORNIA EMERGENCY INFORMATION Menu
> 4 CALIFORNIA ROAD CONDITIONS AND WEATHER Menu
> 5 CONGRESSIONAL OFFICE INFORMATION Menu
> 6 DISASTER INFORMATION AND PUBLICATIONS Menu
> 7 EARTHQUAKE SEISMOGRAPH REPORTS Menu
> 8 FEDERAL DISASTER RELATED AGENCIES Menu
> 9 DELPHI'S MAIN GOPHER (INTERNET SIG) Menu
>
>
> The information in this Gopher is specifically oriented
toward a person
> looking for information on the Northridge (L.A.) Earthquake.
>
> Some sites may be extremely busy at times, but all sites
have been
> verified as "good". New sites and information will be added as
```

it becomes
> available.
>
> Comments and suggestions are welcome! New site information
concerning
> the Northridge Quake is encouraged and appreciated!
>
> Thank you,
> Jeff Guide
> for Delphi Internet Services
> teledata@delphi.com
>

445. FFTMORSE source available

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 05:24:58 UTC
From: troc@inca.gate.net
Message-ID: <2hl4ja$tqf@inca.gate.net>
Source record: 272151

I want to make available the source code for my changes
to FFTMORSE. I have not had the time to fix up the
source for distribution, and don't plan on having it in
the near future, so it will be distributed "as is".

Where is the best ftp site to upload it?

--
-><- Rocco Caputo (troc@inca.gate.net) has left the building.

446. Daily Summary of Solar Geophysical Activity for 19 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 06:11:07 UTC
From: oler@rho.uleth.ca
Message-ID: <9401200611.AA02796@rho.uleth.ca>
Source record: 272245
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

19 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 19 JANUARY, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 019, 01/19/94
10.7 FLUX=103 90-AVG=102 SSN=039 BKI=4553 3233 BAI=023
BGND-XRAY=B2.0 FLU1=4.9E+06 FLU10=9.9E+03 PKI=3553 4233 PAI=022
BOU-DEV=058,077,095,028,027,013,023,022 DEV-AVG=042 NT SWF=00:000
XRAY-MAX= C4.2 @ 1353UT XRAY-MIN= B1.7 @ 1045UT XRAY-AVG= B4.0
NEUTN-MAX= +003% @ 1305UT NEUTN-MIN= -002% @ 0555UT NEUTN-AVG= -0.0%
PCA-MAX= +0.2DB @ 0530UT PCA-MIN= -0.7DB @ 0005UT PCA-AVG= +0.0DB
BOUTF-MAX=55362NT @ 0316UT BOUTF-MIN=55316NT @ 1858UT BOUTF-AVG=55339NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+060,+000,+000
GOES6-MAX=P:+124NT@ 1749UT GOES6-MIN=N:-087NT@ 0613UT G6-AVG=+083,+035,-034
FLUXFCST=STD:105,107,110;SESC:105,107,110 BAI/PAI-FCST=020,020,028/003,004,004
KFCST=3344 4333 3345 4333 27DAY-AP=010,008 27DAY-KP=2313 3223 2123 3322
WARNINGS=*MAJFLR;*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 18 JAN 94 was 47.8.
The Full Kp Indices for 18 JAN 94 are: 3+ 3+ 3o 3- 5o 5- 3o 3-

SYNOPSIS OF ACTIVITY

Solar activity was low. Region 7654 (N11E32) was
responsible for two C4/SF flares with associated weak radio
emissions. The region has shown some penumbral decay in the
north while generally maintaining its overall size and spot
number. Inversion line analysis indicates a beta-delta
magnetic configuration. Region 7652 (N06E18) has been very
stable this period.

Solar activity forecast: solar activity is forecast to be
low with C and possible M-class flaring expected from 7654.

STD: A moderate amount of shear continues to exist near the delta configuration in 7654. Shear may have weakened slightly over the last 24 hours. A Yohkoh xray image for 19 January (01:00 UTC) has been appended to this report showing the large area of x-rays emitted near Region 7654, as well as several coronal hole features.

At middle latitudes, the geomagnetic field has been at quiet to minor storm levels for the past 24 hours. At higher latitudes, levels ranged from unsettled to major storm. The storming is believed to be coronal hole related.

Geophysical activity forecast: the geomagnetic field is expected to be mostly unsettled to active for the first two days. Mostly active to some minor storming is expected for day three due to a new favorably positioned coronal hole.

Event probabilities 20 jan-22 jan

Class M 25/25/25
Class X 05/05/05
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 20 jan-22 jan

A. Middle Latitudes
Active 30/35/50
Minor Storm 20/25/35
Major-Severe Storm 01/05/10

B. High Latitudes
Active 35/40/55
Minor Storm 20/30/40
Major-Severe Storm 05/10/15

HF propagation conditions have changed very little over the last 24 hours. High and polar latitudes continued to see periods of moderate signal degradation due to sporadic bursts of geomagnetic and auroral activity. Some of these degradations were observed migrating into the upper middle latitude night-sectors. Conditions showed minor improvement near the end of the UTC day, although this will likely be short-lived. A well-placed coronal hole is now near the central solar meridian and is expected to sweep another disturbance past the Earth on about 22 January. This should result in poor to very poor propagation for high and polar latitude paths, and good to occasionally poor propagation for the middle latitudes. Low latitudes should continue to see near-normal propagation. The most heavily affected paths will be night-sector transpolar and transauroral circuits.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 19/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N04E18 219 0120 CSO 05 003 BETA
7654 N08E32 204 0570 DKC 09 016 BETA-DELTA
7655 S07W63 300 PLAGE
7656 S22W23 260 PLAGE
REGIONS DUE TO RETURN 20 JANUARY TO 22 JANUARY
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 19 JANUARY, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 19 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 19/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
57 N18W06 S22W11 S10W13 N18W06 254 ISO NEG 004 10830A
58 N37E87 S12E66 N08E47 N37E87 176 ISO POS 029 10830A
59 S61W12 S61W12 S10W52 S00W45 279 EXT NEG 041 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
18 Jan: 0044 0124 0208 C1.7
0417 0424 0431 C2.8
1103 1109 1113 C1.1
1128 1135 1142 C1.2
1603 1617 1625 B8.6 SF 7654 N08E47
1925 1930 1938 B4.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7654: 0 0 0 1 0 0 0 0 001 (16.7)
Uncorrellated: 4 0 0 0 0 0 0 0 005 (83.3)

Total Events: 006 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
18 Jan: 0417 0424 0431 C2.8 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

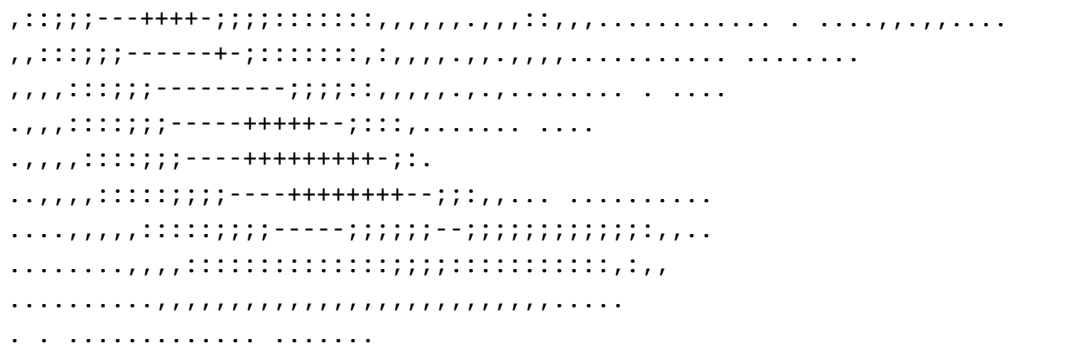
Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

SPECIAL INSERT: CURRENT X-RAY EMISSIONS FROM THE JAPANESE YOHKOH SPACECRAFT
==

19 January 1994, 01:00 UTC

North



South

KEY: East and west limbs are to the left and right respectively. Emission strength, from minimum to maximum are coded in the following way:

[space] . , : ; - + | ! 1 2 3 4 * # @

Units used are arbitrary, for illustrative purposes. Get "showasc.zip" from "pub/solar/Software" at the anonymous FTP site: ftp.uleth.ca (IP # 142.66.3.29) to view these images on VGA screens. Remove all but the image data before typing "showasc filename".

** End of Daily Report **

447. Re: Seeking Opinions of Memory Keyers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 07:06:54 UTC
From: markeh@netcom.com
Message-ID: <markeh-190194230654@markeh.slip.netcom.com>
Source record: 272142

I have a Logikey, an AEA MM3, and a MFJ (newer model with the "menu system"). I vote for the Logikey. Smoothest keying, most integrated operation. Most ability to embedd instructions in the memories (ie: programming the memory, in addition to saving code, that is). My only complaint is that it only has 4 memories. I would really want at least 8. However, I still think its the nicest overall.

Will run off of a 9v battery (although I havn't tested how long.

Mine had a problem - it generated RFI in the 17 meter band - in the CW subband (imagine that - a keyer generating CW RFI!!). I called W9KNI, and he suggested more shielding. Added several wires, slightly bent the audio cable I was using to key the radio (to improve shield contact), and the problem went away. My guess is that they all cause slight RFI, but most outside of the CW subband, or outside of the ham bands entirely. If this was the case, I never would have known of the problem, and it never would have bothered my.

Hope this helps

73 Mark Helfen KM6FM

In article <CJw9D5.J35@cbfsb.cb.att.com>, wstrahl@cbnewsg.cb.att.com (wayne.a.strahl) wrote:

> I am seeking net opinions re: the current crop of contest-style
> memory keyers. I am very pleased with my present 6502-based
> Kansas City Contest Keyer. I am considering getting another
> keyer and was wondering if any of the newer ones are 'better'.
> It must have at least 4 message memories, serial numbering, message
> sending via remote buttons on the paddle, and a speed KNOB.
> What should I be considering, MFJ, Logitek, ???
> Your opinions appreciated.
>
> Wayne Strahl - W9II wstrahl@cbnewsg.att.com

448. TEST

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 11:41:25 UTC
From: "Andy B.Fyodorov" <rw3ah@emercom.msk.su>
Message-ID: <AAbtcFjaT7@emercom.msk.su>
Source record: 272143

```
this is a test. Just TEST.
73'
```

449. Russian ARES info.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 11:42:35 UTC
From: "Andy B.Fyodorov" <rw3ah@emercom.msk.su>
Message-ID: <ABhucFjaT7@emercom.msk.su>
Source record: 272144

Russian Amateur Radio Emergency Service

(This information may be reproduced freely).

Russian Amateur Radio Emergency Services (RARES) was born during the turbulent days of the Chernobyl tragedy. But RARES true abilities emerged in December of 1988, at the time of Armenia's devastating earthquake. No communications were available with the disaster zone, with a notable exception of amateur radio. Our emergency network was fully operational two hours after. Rescue teams, as well as the Disaster Relief HQ in Moscow and Armenia, had their communications provided by RARES and the amateurs of the former Soviet Union. May 1991 - another earthquake in Georgia - and again RARES assisted the search and rescue teams. There are many similar examples, where RARES provided invaluable life-saving links, in situations totally lacking goverment communication support.
On August 19, 1991, the faithful day, when democratic movement in Russia was hanging by a thread, RARES station begun transmitting Boris Yeltsin's decrees to the peoples of Russia. And the following day, R3A became operational from Moscow's "White House", providing communications support for three days to the President of Russia, the members of the Parliament and the "Radio Russia", when the putschists took control of media and telephone facilities.
We, the RARES members, are ready, willing and able. We are ready to react immediately, in Russia or anywhere else (like during Iranian earthquake of 1989), where our help is needed. We are a thousand-strong with members all over Russia. Our sole purpose is to provide disaster relief communications. We do the job, but at present lack outside financial support and modern equipment. High on the list of our needs are mobile and portable equipment, generators, means of transportation and tents. We are in dire need of digital communications equipment. Any and all assistance would be welcome and attention to our needs would be greatly appreciated.

RARES NET - 14292 KHz. Daily at 07:00 GMT SSB

Additional information about our organization may be
obtained by calling these Moscow telephone numbers:

E-MAIL - rw3ah@emercom.msk.su
IP - 44.178.1.7 or rw3ah@gw.ra3apw.ampr.org
AX25 - RW3AH @ R3ARES.#MOS.RUS.EU or R3ARES @ R3ARES.#MOS.RUS.EU

(095)923-5400 - (RARES-HQ) R3ARES.
(095)210-3026 - Andy Fyodorov,RW3AH. (RARES Chief Co-ordinator).

Address: RARES-HQ (R3ARES radio station) P.O.Box-899 Moscow
zip-127018. RUSSIA.

or USA:

ARRL Field managager. ARRL HQ. (RARES US advisor) Mr.Rick Palm K1CE.

or (718)284-4493 - Mr.Ed Kritsky, NT2X. FAX/Voice.(RARES US advisor).

Articles: "QST" magazine, Oct.1991 14-16 pgs."ARES in USSR?",
"QST" magazine, Nov.1991 15-19 pgs."Soviet Hams Rally
Against Coup".

Assisting Russian Amateur Radio Emergency Services is
assisting people whose life depends on it. Your help today
means lives saved tomorrow!
----

450. ������������ ����� ���

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 11:45:16 UTC
From: "Andy B.Fyodorov" <rw3ah@emercom.msk.su>
Message-ID: <ACCxcFjaT7@emercom.msk.su>
Source record: 272145

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451. ������������ ������ ������ ������ (info by RARES).

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 11:50:36 UTC
From: "Andy B.Fyodorov" <rw3ah@emercom.msk.su>
Message-ID: <AAC0dFjaT7@emercom.msk.su>
Source record: 272146

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.������ -18 E-MAIL-rw3ah@emercom.msk.su
127018 /-899 ---(095)923-5400

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452. Re: Ham call CDROMS & SunOS/Solaris

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 13:19:15 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.759071955@BIX.com>
Source record: 272147

ken@boxhill.com (Ken Stamm) writes:

>I am considering purchasing one of the popular ham-related
>CDROMs on the market such as Buckmaster or QRZ!.

>How useful are these to the non-Intel/DOS/Microsoft
>population out there who use Sun SPARC SunOS/Solaris?

[DThe QRZ! CD contains source which should recompile on most UNIX systems + executables created on a Sparcstation running SunOS 4.1.3. You should be in good shape.

>I wish to use them for their callsign databases.
>Can I mount these CDROMs from SunOS/Solaris? (ISO9660?)

Yes.

>Is the callsign database contained therein usable without
> any of the x86 .EXEcutables that may be there?

Yes.

>Is the callsign database in a reasonably massageable format
> that a reasonable C program could grok?

Yes. All the information in the database is also in a simple comma-separated file.
>Which of the CDROMs out there would be most appropriate?

I'm really, really impressed with the QRZ! CD. I haven't seen the other you mention, but having seen the QRZ! CD, I see no reason to look further. Like everything else I've ever bought from Walnut Creek, this thing is super.

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715

453. Re: Best logging program?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 13:34:39 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.759072342@hpuerca>
Source record: 272148
Body handling: HTML body converted to readable text

Talking about looging programs?

In <2hjr3u$2g3@news.tamu.edu> blw7149@cs.tamu.edu (Brandon L White) writes:

>What is the "best" and/or "most functionally complete" logging program
> like to find something for Windows.

Look at the Windows program created by W5XD -- a demo version is
available on the CompuServe Ham Forum, and some other outlets.
You can also contact Wayne directly (he is good in the book, Round
Rock TX). I've run his demo on a notebook 386 quite nicely. Wayne
used his program in his section winning CW scores.

I have no financial interest; Wayne was VP of the Williamson County
(TX) ARC while I was Pres. (before moving to Atlanta). A friend,
a good programmer, and a genuinely nice amateur.

Cheers & 73 Ed Humphries N5RCK
Hewlett Packard NARC Atlanta GA
edh@hpuerca.atl.hp.com

454. Heath SB-1400 problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 13:53:17 UTC
From: bennett@keylime.cis.ufl.edu
Message-ID: <2hm2cd$evg@snoopy.cis.ufl.edu>
Source record: 272149

I would appreciate some help with a small problem that just reared it's ugly
head. I have a Heath SB-1400 HF Transceiver(cousin of the Yaesu FT-747GX).
Over the weekend, receive sensitivity went blah. Ah ha! consult the schematics
and manuals time. While thumbing through the manuals I found reference to a
small light bulb installed on the receive side of the T/R relay that could
cause the problem if it were blown. I checked the bulb, and, sure enough,
it is blown. Well the manual gives the specifications for the bulb as any
8 volt, 100ma pilot lamp(wire pigtails to be precise). Out come the catalogs.
I have not yet been able to find a pilot lamp even coming close to those
specifications. Therefore I approach the net.wisdom in locating the part
number and manufacturer for the appropriate lamp. As this is my only HF
rig that is even remotely capable of meeting my fully legal and licensed
requirements, it is rather important to me to get the unit back up quickly.
If I can find a standard lamp part number, it will be comparatively easy.
(And I will definitely purchase spares this time!)
Any help or information the net can provide me with will be DEEPLY appreciated.
Thanks

Paul R. Bennett N4EGO (General class .. FINALLY)
bennett@mail.cis.ufl.edu

455. ARLB008 League at NJ hearing

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 14:20:22 UTC
From: lhurder@arrl.org
Message-ID: <$arlb008.1994@ampr.org>
Source record: 272247
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB QST @ ARL $ARLB008
ARLB008 League at NJ hearing

ZCZC AG72
QST de W1AW
ARRL Bulletin 8 ARLB008
From ARRL Headquarters
Newington CT January 19, 1994
To all radio amateurs

SB QST ARL ARLB008
ARLB008 League at NJ hearing

League at NJ hearing

At a public hearing on January 11, ARRL officials told the New Jersey Department of Environmental Protection and Energy that a state proposal to register and impose fees on rf sources was contrary to federal law as related to radio amateurs.

The New Jersey proposal, released last month, exempted Amateur Radio stations but left a door open for future regulation of amateurs.

ARRL General Counsel Chris Imlay, N3AKD, and Northern New Jersey Section Manager Rich Moseson, NW2L, both spoke at the hearing on behalf of the more than 5,000 ARRL members in New Jersey.

The League representatives argued that only the FCC had the power to license and regulate radio transmitters, and that applying the proposed regulations to amateurs would effectively preclude Amateur Radio communications in New Jersey.

A number of other ARRL officials and interested amateurs also were present at the hearing, and a specific exemption was requested for radio amateurs.

The NJ DEPE has extended the deadline for comments on the proposal until February 22. More information is in February QST.
NNNN
/EX

456. ARLB009 Tower victory in court

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 14:21:09 UTC
From: lhurder@arrl.org
Message-ID: <$arlb009.1994@ampr.org>
Source record: 272248
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB QST @ ARL $ARLB009
ARLB009 Tower victory in court

ZCZC AG73
QST de W1AW
ARRL Bulletin 9 ARLB009
From ARRL Headquarters
Newington CT January 19, 1994
To all radio amateurs

SB QST ARL ARLB009
ARLB009 Tower victory in court

Tower victory in court

A federal appeals court in Minnesota has found in favor of an amateur and against a local municipality, the latest round in a three-year battle.

Sylvia Pentel, N0MRW, applied in January 1991 for a zoning variance for a 68-foot crank-up tower from the city of Mendota Heights. At the time, she was using a roof-mounted vertical which, she was unaware, violated the city's zoning rules. The city denied her application for a tower but granted a special-use permit to allow her to keep the vertical.

Pentel sued the city in US district court, saying that its ordinance was preempted by federal law PRB-1, which recognizes the needs of both municipalities and amateurs, and which requires a ''reasonable accommodation'' of the needs of amateurs. The district court found in favor of the city, and Pentel appealed.

The US Court of Appeals for the 8th Circuit said that the FCC in PRB-1 ''was attempting to strike a balance'' between the interests of municipalities and amateurs, and exhorted the parties to the suit to work together to ''arrive at a satisfactory solution.''

The court of appeals said that its decision does not mean that the city must necessarily grant Pentel's application for a tower as it stands, but rather that the city must make a reasonable accommodation for her interests. The court said that granting a special-use permit for Pentel's vertical was not an accommodation.

Pentel's lawyer was John B. Bellows Jr, K0QBE, with assistance from ARRL General Counsel Christopher Imlay, N3AKD.
NNNN

/EX

457. Re: DSP Audio Filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 14:26:38 UTC
From: cowart@convex.com
Message-ID: <cowart.759075998@neptune>
Source record: 272152

hamilton@BIX.com (hamilton on BIX) writes:

>Yesterday, I spent a good part of the day at the HRO store in Salem, NH
>and came away rather impressed with the "digital" audio filtering in the
>Yaesu FT-990. Never mind that the 990's filtering isn't really digital --
>it was, nonetheless, impressively effective at cleaning out all the junk
>in a CW signal so that all remained was a nice, clean tone.

>That's got me thinking that perhaps one of the genuine DSP-based filters
>like the Timewave DSP-59 might be even more amazing. The ads claim the
>ability to filter out white (uncorrelated) noise + do tight bandpass
>filtering. I'd love to hear comments from anyone who's got one or
>from others who've actually listened to the effects. (Unfortunately,
>HRO did not have one there on display for me to try yesterday.) Are
>they worth the money? At $169 for the basic DSP-9 or $299 for the DSP-59,
>we're talking the kind of money that could buy one or two xtal filters...
>this is apples and oranges, but just so I get a feel for their relative
>effectiveness, which offers more bang for the buck, do you think?

I have an FT-990. I also have the Timewave DSP-59. If you liked what the
SCAF filters in the 990 did, the DSP-59 will knock your socks off. On CW
it can can go down to 50Hz bandpass, all you hear is the tone with virtually
no ringing!! But it really shines on SSB with its 2 noise reduction and
heterodyne elimination algorithms. Try one some time, you'll be amazed!!
I have had the DSP-59 for about 8 months, and now I can't do without it!

73,
Mike

458. HP's vector modulator

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 14:33:31 UTC
From: jennings@eng115.rochny.USpra.abb.COM
Message-ID: <9401201432.AA17203@nms1.abb.com>
Source record: 272150

Hello,

Hewlett Packard's add in Electronic Engineering Times, Jan 17, 1994,
mentions a "vector modulator" chip. I have no idea what it is and
what it could be used for. Does anybody on the list know?

Thanks and 73.

TJ
--

|
Thomas J. Jennings | Tel: (716) 273 7071
Development Engineer | Fax: (716) 273 7262
|
ABB Process Automation |
Post Office Box 22685 |
Rochester, New York 14692-2685 |
|

Internet: jennings@jennings.rochny.uspra.abb.com
----

459. ThickLAN Ethernet

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 14:42:28 UTC
From: SMITHSON@ACM.ORG
Message-ID: <01H7WE3YNW1E000ER7@PASCAL.ACM.ORG>
Source record: 272153

I think I've seen the answer to this question posted a few moons ago, so please forgive me. I've run across some Thick-LAN Ethernet coax. I think it is 50-ohm, but I wonder if anyone has any other details on impedance, loss, etc. It is the orange jacketed cable and is a little less than 1/2 inch dia.

Thanks in advance!

-Brian Smithson, N8WRL
smithson@acm.org
-or-
brian@wsi.com

460. Re: What could this mean?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 15:01:48 UTC
From: markm@bigfoot.sps.mot.com
Message-ID: <1994Jan20.150148.9044@newsgate.sps.mot.com>
Source record: 272165

In article <jfhCJw7qA.29r@netcom.com> jfh@netcom.com (Jack Hamilton) writes:
> The following paragraph appeared in an article in today's San Francisco
> Chronicle about what local companies are doing to help prepare for the next
> earthquake:
>
> Finally, in an attempt to encourage the use of amateur (Ham) radios,
> which are used by many relief agencies during an emergency, Pacific
> Bell has reduced the cost of operating a Ham radio to the basic
> service rate of $8.35 a month. Ham radios are licensed through the
> phone company.
>
> I called PacBel to ask about this. They didn't have any idea. They
> realize that they don't license amateur radios, and they also don't rent
> any kind of amateur equipment. I thought they might be referring to a
> special rate for phone patches, but they denied knowing anything about that
> either.
>
> Any ideas? Do other phone companies do anything to encourage amateur
> radio?
> ...

It most likely means that whoever wrote it had no idea what he/she was talking about. Typical.

Could it be a special rate for cellular service? Don't some cellular providers offer low 'lifeline' rates for people who only use the cell phone for emergency calls? Cell phones are the only 'radios' I know of that are licensed thru the phone company. But then, maybe *I* don't know what I'm talking about.

73... Mark AA7TA

461. Re: Ham Radio Stores Near NITRO, Virginia

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 15:12:30 UTC
From: lakeith@robins.af.mil
Message-ID: <2hm70u$57c@wrdis02.robins.af.mil>
Source record: 272163

Are you sure about the state.. Think that may be Nitro, West Virginia,
near Charleston..

73,

Larry, KQ4BY

462. Re: HP's vector modulator

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 15:46:47 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2hm917$sc9@hpscit.sc.hp.com>
Source record: 272158

In article <9401201432.AA17203@nms1.abb.com>,
Tom_Jennings <jennings@eng115.rochny.USpra.abb.COM> wrote:
>Hello,
>
>Hewlett Packard's add in Electronic Engineering Times, Jan 17, 1994,
>mentions a "vector modulator" chip. I have no idea what it is and
>what it could be used for. Does anybody on the list know?

The HP HPMX-200_ series of vector modulators (from HPs Communications Components Division) consist basically of two Gilbert cell mixers and a combiner to form an I-Q mixer system. This can be used to make a QPSK modulator or image reject mixer. Some of the chips have on board quadrature networks. The frequency range is over 2 GHz.

You can get data sheets and parts from distributors such as Hamilton Avnet, Penstock, Newark, and Arrow.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

463. Re: CTCSS encode/decode

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 15:58:37 UTC
From: dwg@hpqmola.sqf.hp.com
Message-ID: <CJxr1r.8op@hpqmoea.sqf.hp.com>
Source record: 272168
Cross-posted to: rec.radio.amateur.misc,sci.electronics

Brent Hiller (bhiller@bigwpi.WPI.EDU) wrote:
: I'm looking for ICs or suggestions on how to generate and decode
: subaudible tones (CTCSS) for amateur radio. Any help would be
: appreciated. It is part of my senior project which involves
: building a computer controlled 2M transceiver. Thanks.

: Brent
: bhiller@wpi.wpi.edu

I'm sure that Consumer Microcircuits Limited in the UK (phone +44 376 513833)
have a single chip solution for this.

464. Re: QSL help pse

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 16:19:29 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-200194081653@fp2-st-affairs-11.uoregon.edu>
Source record: 272160

> jcraig@kean.ucs.mun.ca wrote:
> : I worked the following on top band, but can't seem to find
> : managers / CBA's for them...
>
> : YS1X
It took awhile, but I received a card back through the bureau for this one
in the January mailing.

> : HH2PK
> HH2PK - Patrick , POBox 1095 , Port-au-Prince , Haiti.

Patrick had a card back to me in two weeks via this route - and this was
when we were having a flap with our ships off the coast.

465. Re: DSP Audio Filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 16:23:36 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-200194082137@fp2-st-affairs-11.uoregon.edu>
Source record: 272159

In article <cowart.759075998@neptune>, cowart@convex.com (Michael Cowart) wrote:

> hamilton@BIX.com (hamilton on BIX) writes:
>
>
> >Yesterday, I spent a good part of the day at the HRO store in Salem, NH
> >and came away rather impressed with the "digital" audio filtering in the
> >Yaesu FT-990. Never mind that the 990's filtering isn't really digital --
> >it was, nonetheless, impressively effective at cleaning out all the junk
> >in a CW signal so that all remained was a nice, clean tone.
>
> >That's got me thinking that perhaps one of the genuine DSP-based filters
> >like the Timewave DSP-59 might be even more amazing. The ads claim the
> >ability to filter out white (uncorrelated) noise + do tight bandpass
> >filtering. I'd love to hear comments from anyone who's got one or
> >from others who've actually listened to the effects. (Unfortunately,
> >HRO did not have one there on display for me to try yesterday.) Are
> >they worth the money? At $169 for the basic DSP-9 or $299 for the DSP-59,
> >we're talking the kind of money that could buy one or two xtal filters...
> >this is apples and oranges, but just so I get a feel for their relative
> >effectiveness, which offers more bang for the buck, do you think?
>
> I have an FT-990. I also have the Timewave DSP-59. If you liked what the
> SCAF filters in the 990 did, the DSP-59 will knock your socks off. On CW
> it can can go down to 50Hz bandpass, all you hear is the tone with virtually
> no ringing!! But it really shines on SSB with its 2 noise reduction and
> heterodyne elimination algorithms. Try one some time, you'll be amazed!!
> I have had the DSP-59 for about 8 months, and now I can't do without it!
>
> 73,
> Mike

Sounds interesting. I just bought a Ten Tec Omni VI and within a week will have all the optional filters (inluding 1.8khz SSB filter, 500, 250 hz CW filters and the 500 hz narrow filter for the second IF).

Will the DSP help in this situation or would it be overkill?

Steve

466. Re: ThickLAN Ethernet

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 16:54:38 UTC
From: cmoore@mothra.rose.hp.com
Message-ID: <2hmd0e$gga@hpchase.rose.hp.com>
Source record: 272155

SMITHSON@ACM.ORG wrote:
: I think I've seen the answer to this question posted a few moons ago, so
: please forgive me. I've run across some Thick-LAN Ethernet coax. I think
: it is 50-ohm, but I wonder if anyone has any other details on impedance,
: loss, etc. It is the orange jacketed cable and is a little less than 1/2
: inch dia.

Brian,

Are there any numbers on the cable? Without the numbers I can't be sure,
but here is a guess, from the Belden catalog:

89880 Ethernet Cable

Description: Plenum version of 9880 trunk cable; Orange tint FEB Teflon
jacket, cellular FEP insulation, ring-band stripes marked every 2.5 meters
to aid users in tap placement.

Construction: Aluminum Polyester +
95% tinned copper braid +
Duofoil +
95% tinned copper braid

Diameter: .375 inches
Impedance: 50 ohms
Velocity factor: 78%
Capacitance: 26 pF/ft
Loss: .19 db/100ft at 1 MHz
.37 db/100ft at 5 MHz
.52 db/100ft at 10 MHz
1.20 db/100ft at 50 MHz

Chris Moore
N6IYS
cmoore@mothra.rose.hp.com

467. Re: Anyone know of a callsign server?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 17:12:56 UTC
From: vaillan@ireq.hydro.qc.ca
Message-ID: <CJxuHL.4tC@ireq.hydro.qc.ca>
Source record: 272164

In article 1824@newshost.pictel.com, wpns@newshost.pictel.com (Willie Smith) writes:
>apollyon@crash.cts.com (Shannon O. Sullivan) writes:
>> telnet callsign.cs.buffalo.edu port 2000
>
>Someone also mentioned port 3000, and 'callsign' used to be 'marvin',
>but none of the above work any more. Did the internet callbook go
>away, move somewhere else, or is our net connection broken? All I get
>is 'unknown host' errors.
>
>--
>Willie Smith wpns@pictel.com N1JBJ@amsat.org
>Some people you don't have to satirize, you just quote em - Tom Paxton

I did:
telnet callsign.cs.buffalo.edu 2000
yesterday without any problem.

The machine: callsign.cs.buffalo.edu real name is:
electra.cs.buffalo.edu (128.205.32.2)

Clem.
73

Clement Vaillancourt, | Institut de Recherche d'Hydro-Quebec
Analyste, | Varennes, P. Quebec, Canada, J3X 1S1
Informatique scientifique | Tel:+1 514 652 8238 Fax:+1 514 652 8309
vaillan@ireq.hydro.qc.ca | Radio-amateur: VE2HQJ@VE2CRL.PQ.CAN.NA

468. Re: DSP Audio Filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 17:22:52 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2hmelc$mjt@news.acns.nwu.edu>
Source record: 272167

In article <milewski-200194082137@fp2-st-affairs-11.uoregon.edu>,
Steve Milewski <milewski@oregon.uoregon.edu> wrote:
>In article <cowart.759075998@neptune>, cowart@convex.com (Michael Cowart)
>wrote:
>
>>
>> I have an FT-990. I also have the Timewave DSP-59. If you liked what the
>> SCAF filters in the 990 did, the DSP-59 will knock your socks off. On CW
>> it can can go down to 50Hz bandpass, all you hear is the tone with virtually
>> no ringing!! But it really shines on SSB with its 2 noise reduction and
>> heterodyne elimination algorithms. Try one some time, you'll be amazed!!
>> I have had the DSP-59 for about 8 months, and now I can't do without it!
>>
>> 73,
>> Mike
>
>Sounds interesting. I just bought a Ten Tec Omni VI and within a week will
>have all the optional filters (inluding 1.8khz SSB filter, 500, 250 hz CW
>filters and the 500 hz narrow filter for the second IF).
>
>Will the DSP help in this situation or would it be overkill?

For CW only, my guess is that the DSP is not worth it. I have a Kenwood
850 with cascaded 500Hz filters or combination of 500Hz and 270Hz. The
W9GR DSP unit (I expect the DSP-59 to be similar) offers no particular
advantage.

* Disclaimer: I do not operate SSB, so get the salt shaker ready.*
About SSB - the Omni Vi comes with the multi-heterodyne notcher
and so the only value will be from the white noise reducer. All of the
DSP units that I have heard distort the audio when in this mode. Further
they only work well when the SNR is high. In that case, you may as well
use the rf gain pot - cheap and effective. I discovered this in attempting
to get a clear broadcast station reception.

The only mode for which I have found the DSP filter to be of value
is RTTY. This, I suspect, is because the filtering in Kam-All-mode
is a bit too all-mode --- compromised, that is. :)

Sorry for raining on the DSP parade.

I think the next generation of products with
- the kind of processing described in QEX for CW (nice artice Jon)
- may be, harmonic alignment and interface with rig for automatic tuning/lock
on SSB (see the disclaimer above)
- smarter rtty demodulators that exploit the mark/space partial redundancy

better
might really begin to exploit the promise of DSP for ham radio communication.

Rajiv
aa9ch
r-dewan@nwu.edu

469. NEWS ARCHIVE

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 17:41:33 UTC
From: dwarkin@w3eax.umd.edu
Message-ID: <2hmfod$bho@hecate.umd.edu>
Source record: 272166

Hello. Where can I find the archive of postings made to this news group? Thanks.

dwarkin@w3eax.umd.edu

470. Speaker Cone to Frame Gasket Material?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 17:56:12 UTC
From: tjenkins@pnet16.cts.com
Message-ID: <CJxwHp.LKs@nctams1.uucp>
Source record: 272176

Anyone have a line on the rubber/plastic gasket between the speaker cone and metal frame? I've several older Sony type speakers that, over the years, have had their rubber fall apart. I've tried the manufacturer, but for several hundred dollars, they'll sell me the entire woofer assembly. I'd rather do it myself.

--Tom

UUCP: nctams1.navy.mil!pnet16!tjenkins
INET: tjenkins@pnet16.cts.com

471. Jesus Freqs!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 18:01:37 UTC
From: Waltk@PICA.ARMY.MIL
Message-ID: <9401201301.aa11911@COR5.PICA.ARMY.MIL>
Source record: 272161

Could you please refrain from religious commentary on this group. If I want to hear it I'll dial-up alt.religion, thank you! 73 de Walt - K2WK

472. FRG-9600 CAT controller program for grabs

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 18:15:30 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Jan21.021530.1@ntuvax.ntu.ac.sg>
Source record: 272162

Hi all FRG-9600/FRG-965 users,

I have available a CAT controller program for the YAESU FRG-9600 which multitasks in the background and does everything the FRG-9600 can do to the max. Brings to the radio, all the features you would see in a modern scanner. Also includes a very simple and cheap CAT interface which is better but compatible with the FIF-232-C from YAESU. It has enhanced features as well. E-mail me for it.

73 de 9VG Daniel

473. RAMSEY FX TRANSCEIVERS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 19:07:36 UTC
From: steven.rosenberg@support.com
Message-ID: <9401201107.A9679wk@support.com>
Source record: 272230

kg7bk@indirect.com (Cecil Moore) writes:

> I wrote a letter to John Ramsey, owner of Ramsey Electronics, and sent
> him copies of what people have said about Ramsey stuff on Internet. Here's
> a quote from his response:
>
> "Tell those guys that I'll be glad to talk to any of them personally -
> just call and ask for me (and no, I won't rip 'em). I would like to
> show them that we do take our customers and hams seriously and respectfully.
> We are available and ready and willing to help!"

Redesign those FX series radios with TIGHTER front-ends -- forget
wide-coverage -- make 'em tight for the ham bands for improved receiver
performance. Also, LOWER the price -- how about including the case kit
for free?

> Ramsey is an American manufacturer without the resources of an ICOM. The FX
> transceivers perform well once the few bugs are fixed and I, personally, have
> had no bad experiences with Ramsey outside of a few missing parts which they
> promptly supplied without charge. My eyesight is so bad and those parts so
> small that I couldn't even swear they were missing... they might still be
> in my carpet.
>
> How 'bout we stop bashing Ramsey and help them solve whatever problems we
> might have because of them? If you can improve on their products without
> appreciably increasing the cost, send them your improvements. They have
> including some of my previous suggestions.

The kits have been improved over the last few years, but $150 for a
radio with no case, no mic, no speaker, no PL tone board is TOO
EXPENSIVE.

474. Re: RAMSEY FX TRANSCEIVERS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 19:16:10 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Jan20191610@mipgsun.mipg.upenn.edu>
Source record: 272235

> The kits have been improved over the last few years, but $150 for a
> radio with no case, no mic, no speaker, no PL tone board is TOO
> EXPENSIVE.

Are they really that expensive? With automation, labor is no longer as large a fraction in the price of electronics nowadays. Thus, you can't expect to compare built prices with kit prices. In addition, most hams are now appliance operators and there is very little in the way of economy of scale. The volume is low and the costs high. Is it any small wonder that kits are expensive?

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

475. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 19:41:01 UTC
From: btoback@netcom.com
Message-ID: <btobackCJy1CD.M6G@netcom.com>
Source record: 272170

In article <CJw8Bo.9AK@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) writes:
> Steven Jackson (jackson@longlast.cs.nyu.edu) wrote:
>
> : Someone please explain the "one way in" messages that were described here
> : earlier. Maybe I read it wrong, but it seems to mention mail going into the
> : Los Angeles/San Fernando valley area. What kind of messages would go IN?
>
> The messages in question are of the type: "Dear Mom and Dad. Are you
> still alive? Is your house still standing?"
>
> The problem is that it is almost impossible to deliver such messages in
> a disaster area, since phone service is almost invariable down and the
> roads are in disrepair. Incoming H&W (Health and Welfare) messages always
> have lowest priority. Direct disaster-relief communications have highest
> priority, followed by outgoing H&W messages. (Dear ___, your parents are
> OK and living in a shelter at ___)

In the specific case of the LA earthquake, both local telephone companies
(General Telephone and Pacific Telephone) recommended that people calling
to talk to someone in the affected areas instead call someone else
in LA who isn't in one of the areas, and having them place a *local*
call instead. This was issued sometime late Tuesday -- or at least,
the news media reported this. However, in most cases, Al is correct.

-- Bruce Toback

476. Re: safety of HT antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 19:45:30 UTC
From: matthew@sleeper.apana.org.au
Message-ID: <CJy1Jv.GH4@sleeper.apana.org.au>
Source record: 272172
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,aus.radio

craig@orb.apana.org.au (Craig Dewick) writes:

>In <wa2iseCJoqAx.CI3@netcom.com> wa2ise@netcom.com (Robert Casey) writes:

>>One solution (which you may have thought of, or seen used) is to get a
>>magnetic mount 2 meter antenna, if your talkie has a BNC connector for
>>its rubber duckie. When you're in the locomotive, stick the magmount
>>up in the air a few feet from the window (away from immediately nearby
>>objects, a broad somewhat flat area is best, have antenna vertical).

>Yes, I did think of this solution, although for mobile use when I'm on
>a train it would not be so good since the antenna would always be
>collecting bits of tree or tunnel or bridge or......

Or 1.5KDC railway overhead..

>collecting bits of tree or tunnel or bridge or......

>In a car it's ideal though.

>Unlike truckies, who have CB's, radios, TV's, etc, we have nothing other
>than the ridiculous fixed-frequency handheld and my Sony Walkman!

>(Now if only I could work out a way to put an external antenna on that
>Walkman so I can get better reception from narrowcast FM stations!)....

Id go to the ocupational health and safety officer and present a case
that useing these hand-helds in the cab next to ones head is a potential
health risk, and that roof mounted attenna's should be fitted to all
locomotives, and not just the select few that run interstate.
Then you reduce the close emmissions to the times your are outside checking
things.
Not the best, but at least you have removed the situation where you are
in a metal box, holding the annenna next to your head, with the RF bounceing
around untill it finds a window..

Craigs problem is based in the fact that the current NSW railway radio
system is a 10 year old 'tempory measure' that officals keep saying will
be replaced RSN. (Ie they wont spend money putting desk mount units in,
'cause they will 'be replaced soon anyway')

--
Matthew Geier, | Desolation Road Railfan BBS and Dialup Unix
matthew@sleeper.apana.org.au | (+61) 2 718 6996 (Ringback)
matthew@cs.su.oz.au (Quicker) | APANA Sydney secondary hub.

477. Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 20:27:07 UTC
From: benchoff@groupw.cns.vt.edu
Message-ID: <2hmper$ppo@solaris.cc.vt.edu>
Source record: 272171

I know this has been discussed several times on this list. I am looking for a list of famous hams. :-(What I would really like is a pointer to a site that has the list. Maybe this would be a good one for the FAQ.

Phil KC4ZEN
benchoff@vt.edu

478. Re: Best logging program?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 20:49:34 UTC
From: levine@mc.com
Message-ID: <2hmqou$7ef@jericho.mc.com>
Source record: 272169

Check out the new Log Windows in the new AEA catalog that
came out this week.

|| // ||\\ //|| //\\ //\\
|| // || \\ // || // //
||// || \\ || // //
||\\ || || || \\ === \\ ===
|| \\ || // || \\ // \\ //
|| \\ || // || \\// \\//
--FTAC
Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599
----

479. Getting my FT-101 tuned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 21:55:38 UTC
From: Bob.Albert@f943.n102.z1.fidonet.org
Message-ID: <759166865.AA03596@mcws.fidonet.org>
Source record: 272096

I suggest you read the manual. If you can, pick up a service manual for the unit. You will be surprised at how easy it is to do most of these things yourself.. 73 DE K6DDX

480. Re: CW Books

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 21:57:04 UTC
From: johng@white.net.com
Message-ID: <1994Jan20.215704.20062@unet.net.com>
Source record: 272236

Ok, I've gone though the 200 or so unexpired articles, as well as
the FAQ (probably not closely enough) and below is the
closest my question has come to being answered.

In article <2hebl3$2l9@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:
>In article <CJqtFz.61@wri.com>, Bruce Pea <pea@wri.com> wrote:
>>Can anyone recommend some good books on copying code??
>>
>>Next test date is in March here, and I want to be ready
>>to "ace" the 13wpm general class code test. I'm using
>>SuperMorse and listening to code on my radio. I remember
>
>Noting the lack of a call sign in you sig, I assume that you
>are not a ham yet. So I will not recommend getting on the air
>and using it. ... [delete] ...

My question is:

If I pass the 13 wpm test, do I also have to pass the 5 wpm
test? Or in other words; Can I get a General class license
by passing the written tests for Novice, Technician and
General and then pass ONLY the General CW test?

I am interested in a General class license because of the
privileges it provides but I am not that hot about learning
CW at 5 wpm, then having to bump up to 13 wpm. I've listened
to 5 and 13 wpm and they sound like two different languages!

I'm pretty confident that I can be proficient at 13-15 wpm with
plenty of practice. Any thoughts on how 'practical' this ambition is?
Am I setting myself up for 'too much' work by skipping over the
5 wpm rate?
--
John Gratton | johng@net.com
Hans Christian 33 "Nakia" | (415)780-5774
The last time an informal vote on "should we split rec.boats" was taken, the
motion was defeated 67 to 18. Before you start it again, please consider that.

481. TS-50: Do you like yours?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 22:38:46 UTC
From: dbushong@wang.com
Message-ID: <CJy9KM.4rM@wang.com>
Source record: 272173

I am this close ||
----->||<-----
||

to buying an HF rig, and I've been eyeing the TS-50 since it was announced. I could fit it into my car, plus use it at home.

Are there any owners out there who would like to share their opinions with me? Should I get it at HRO for $967 ? It's only a 10-minute drive from my house.

Do I sound like I want someone to talk me out of it?

Email, or post; either is fine.

Thanks a lot,
Dave, kz1o
--
Dave Bushong, Wang Laboratories, Inc.

482. Re: Anyone know of a callsign server?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 22:42:13 UTC
From: dbushong@wang.com
Message-ID: <CJy9qE.4z1@wang.com>
Source record: 272174

wpns@newshost.pictel.com (Willie Smith) writes:

>apollyon@crash.cts.com (Shannon O. Sullivan) writes:
>> telnet callsign.cs.buffalo.edu port 2000

>Someone also mentioned port 3000, and 'callsign' used to be 'marvin',
>but none of the above work any more. Did the internet callbook go
>away, move somewhere else, or is our net connection broken? All I get
>is 'unknown host' errors.

>--
>Willie Smith wpns@pictel.com N1JBJ@amsat.org
>Some people you don't have to satirize, you just quote em - Tom Paxton

It still seems to work for me... (17:40 EST, 20-Jan-94)

```
Trying 128.205.32.2...
Connected to electra.cs.buffalo.edu.
Escape character is '^]'.
Callbook v1.3 Bug reports to bowen@cs.buffalo.edu Type 'help' for help
>> call n1jbj
Call-Sign: N1JBJ Class: TECHNICIAN
Real Name: WILLIAM P N SMITH Birthday: SEP 28, 1959
Mailing Address: POB 438, NORTH READING, MA 01864
Valid From: APR 28, 1992 To: APR 28, 2002
>> quit
```

Sorry, I couldn't just leave it alone. :)

--
Dave Bushong, Wang Laboratories, Inc.

483. Online Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 22:49:54 UTC
From: yee@mipgsun.mipg.upenn.edu
Message-ID: <2hn1qi$m2p@netnews.upenn.edu>
Source record: 272175
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
# This version 0.02 (last updated 19940120) of an online repeater
# directory which currently contains over 1800 entries. All previous
# versions are obsolete.
#
# Thanks go to Errol Casey (KD4IHW) and Bryan Peterson (N0ORR ?) for
# their contributions.
#
# There are entries for AK, CT, DC, DE, HI, ID, KY, ME, MT, NC, ND, NH,
# NJ, NV, NY, PA, RI, SD, UT, VT, WV, WY. Since the last time this data
# base was posted, I have added one state and two volunteers have added
# four more.
#
# Is this project serious? Yes. As a gesture of good faith, I have not
# concentrated solely on regions of the country where I live and work
# for the states I have already completed. As you can readily tell, I
# 22 states have already been completed. Any effort that a volunteer
# might make is not likely to be wasted. Unfortunately, I do not have
# the time or the energy for all 50 states. If you guys are actually
# interested in an online repeater directory, put up or shut up.
#
# Thus far, people have volunteered for
# 1) AZ
# 2) KY, MS, SC, TN, VI, WV, GA (two states already done
# but the current data will be replaced with up to date
# information).
# If everybody follows through with their intentions, we will soon have
# over half the United States accounted for.
#
# I have checked with Project Gutenberg and using the data from the ARRL
# repeater directory or any other published sources is legal. It is
# only the format which is copyrighted. My intention is to post it to
# USENET and to have Project Gutenberg be one place to distribute it.
#
# This file with all the data is be available for anonymous ftp as
# mipg.upenn.edu:/pub/yee/rptr002.Z
#
# Assistance in other states would be appreciated. I would be
# interested in volunteer assistance in completing this database.
# Volunteers should be willing to take up an entire state. Partial
# state listings do me absolutely no good as I will have to go over
# everything by hand to see what is missing. If all those people who
# are interested in getting an online directory together would be
# willing to volunteer for one or two states each, then this directory
```

```
# will be completed in short order.
#
# If there are file format revisions after 0.3, I will worry about the
# file format conversion but I don't expect that there will be any need
# as all or nearly all important fields have already been defined and
# (hopefully) plenty of room has been left for expansion of the field
# definitions.
#
# At first, this directory will contain only 2 meter entries. After all
# 50 states have been completed, updates will then be accepted. If
# someone else is interested in tackling other bands, it would be most
# appreciated. [The current release contains entries for other bands for
# NC.] The proposed file format should be flexible enough for all bands
# and all modes for which a repeater directory would be useful.
#
# I make absolutely no claims as to the accuracy of ANYTHING!! There
# are undoubtedly numerous errors all over the place. Some are
# typographical errors on my part (the data has been typed in by hand).
# Other errors are due to outdated information. Little or no attempt
# has been made thus far to check the data at all as I consider it more
# important to finish the database itself. In general, corrections to
# the database will not be applied until this is done.
#
# Conway Yee, N2JWQ
# yee@mipg.upenn.edu
#
# ============================================================================
#
# The file format (version 0.3) shall be as follows. Consider this file
# format to be in the alpha stage and subject to frequent and arbitrary
# revisions. Each entry will be delineated by being on a different
# line. Each field of a repeater entry shall be delineated by colons.
# The text within a field shall not contain a colon. The field
# definitions are as follows:
#
# 0 latitude (deg,min,sec)
# Each component of the field shall be delineated by commas.
# 1 longitude (deg,min,sec)
# Each component of the field shall be delineated by commas.
# 2 elevation (meters)
# The metric system has been chosen for this field fo the
# eventuality that this database is expanded internationally.
# Unfortunately, in backward countries such as the US, the
# English system is still dominant.
# 3 height above average terrain (meters)
# The metric system has been chosen for this field fo the
# eventuality that this database is expanded internationally.
# Unfortunately, in backward countries such as the US, the
# English system is still dominant.
# 4 spare location designation if grid squares are used for some
```

```
# repeaters while others have the above.
# 5-7 reserved for future use (e.g. ERP)
# 8 continent
# 9 country
# 10 major region designation (e.g. state, province)
# Use standard abbreviations if possible (e.g. NY, CA).
# 11 minor region designation (e.g. county, nearest major city)
# 12 immediate location (e.g. town, city, mountain)
# 13 output frequency of the repeater (MHz)
# 14 input frequency of the repeater (MHz or standard offset: + or -)
# The use of +,- may have to be deleted in the future if this
# repeater directory is extended to other countries that have
# differing standard offsets.
# 15 repeater call sign
# 16 misc. notes (for anything not covered in other fields)
# My intention is to standardize this at some later time.
# SERA Database Key: ARRL Database Key:
# N non-Member SERA o open
# A Open Autopatch c closed
# B Emergency Power t CTSS tone access
# C Under construction tt Touch Tone
# E Emergency Autopatch RB Remote Base
# K Packet Operation a autopatch
# L Linked Repeater e emergency power
# O Off the Air Temporarily x wide coverage
# P Private Autopatch wx weather net
# R Remote Base System y rtty/ascii
# T Tone Accessed z direct access to law enforcement
# V Television (SSTV/ATV) l linked/crossband repeat
# Y RTTY Operation
# 17 sponsor (call sign or club name)
# 18 source of entry (call sign preferred)
# If entry is copied from a published source and not personally
# verified, use the organization publishing the data (e.g. ARRL)
# key : sera - South Eastern Repeater Association repeater index
# arrl - American Radio Relay League repeater directory
# rtari - Research Triangle Amateur Radio Info (v2.18) 1/10/94
# 19 date entry last updated (YYYYMMDD)
# Since published data may only have a year of publication, the date
# shall have a month and date of 0000 (e.g. 19940000).
# 20 PL access (Hertz)
# If multiple for multiple inputs, delineate with commas.
# If none, enter 0.0
# 21 mode (e.g. F3E, A1A)
# 22-27 reserved for future use (e.g. trustee)
#
# Any subsequent fields are free for users to define for their own use.
#
# ============================================================================
#
```

```
::::::::NA:USA:AK:Aleutians:Adak
Island:146.940:-:W0ZK:oae:NavelSec:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Aleutians:Kodiak:146.760:-:KL7AF:o:KL7AF:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Aleutians:Kodiak:146.880:-:KL7HIX:oa:SPARK:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Interior:Delta
Jct:144.880:144.880:KL7KC:olx:+KL7XO:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Interior:Denali Park:146.760:-:KL7KC:ol:Arctic
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Interior:Dot Lake/Tok:146.820:-:KL7KC:olx:Arctic
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Interior:Fairbanks:146.880:-:KL7KC:oaelrx:Arctic
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Interior:Fairbanks:146.940:-:KL7KC:oa:Arctic
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Interior:Fairbanks:147.090:+:KL7IKG:oae:Borealis
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Interior:Knob Ridge:146.820:-:KL7KC:ole:Arctic
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Interior:Manley:147.880:147.880:KL7KC:ole
SUN:KL7KC:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Interior:North Pole:146.790:-:AL7AC:eax:Borealis
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Panhandle:Duncan Mtn:147.360:+:AL7DS:olxe:SARA:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:Panhandle:Haines:146.940:-:KL7CQF:o:KL7CQF:ARRL:19920000::F3E:::::::
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::::::::NA:USA:AK:Panhandle:Juneau:147.300:+:WL7BIL:o(ca)eyr:ARES:ARRL:19920000::F3E::::::
:
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::
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Barron:145.400:-:NL7B:olxe:SARA:ARRL:19920000::F3E:::::::
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::
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ARC:ARRL:19920000::F3E:::::::
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Central:Anchorage:146.940:-:KL7AA:oaelz:AARC:ARRL:19920000::F3E:::::::
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Central:Anchorage:146.970:-:KL7CC:cta:KL7CC:ARRL:19920000::F3E:::::::
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Central:Anchorage:147.300:+:KL7ION:oaerx:PARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:AK:South
Central:Dillingham:146.940:-:KL7KN:oa:KL7KN:ARRL:19920000::F3E:::::::
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River:145.450:-:KL7GG:o(ca)ez:KL7GG:ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
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::::::::NA:USA:AK:South
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Central:Kenai:146.880:-:KL7/VE6NH:oae:MseHrnARC:ARRL:19920000::F3E:::::::
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Creek:147.390:+:KL7IXT:o(ca)exz:KL7GG:ARRL:19920000::F3E:::::::
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:
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::::
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RC:ARRL:19920000::F3E:::::::
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RC:ARRL:19920000::F3E:::::::
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::::::::NA:USA:CT:Hartford:Tolland:145.190:-:WA1HYF:c(ca)t:+KA1BR:ARRL:19920000::F3E::::::
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:
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ARA:ARRL:19920000::F3E:::::::
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::::::::NA:USA:CT:New Haven:Orange:147.285:+:K1ACD:oa:K1ACD:ARRL:19920000::F3E:::::::
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RA:ARRL:19920000::F3E:::::::

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ARA:ARRL:19920000::F3E:::::::
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London:Groton:146.865:-:WA1PTS:o(ca)ezl:Nighthawk:ARRL:19920000::F3E:::::::
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London:146.970:-:K1YJG:o(ca):SCRAMS:ARRL:19920000::F3E:::::::
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Central:Barkhamsted:147.270:+:AA1U:oe:BrkhstdCD:ARRL:19920000::F3E:::::::
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Hartland:145.230:-:K1YON:oe:HartlndCD:ARRL:19920000::F3E:::::::
:::::::::NA:USA:CT:North
Central:Somers:147.000:+:KA1BLV:oae:MTARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:CT:North Central:Winsted:147.330:+:W1EOO:oae:CD:ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
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FMA:ARRL:19920000::F3E:::::::
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::
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ASCII:CTATVSoc:ARRL:19920000::F3E:::::::
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CD:ARRL:19920000::F3E:::::::
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ARA:ARRL:19920000::F3E:::::::
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Coventry:147.375:+:K1JCL:o(ca)el:K1JCL:ARRL:19920000::F3E:::::::

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MD:145.490:-:W3EAX:o(ca)z-*911:UofMdARA:ARRL:19920000::F3E:::::::
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VA:146.970:-:WA4FPM:o(ca)elz-*911:OVHARC:ARRL:19920000::F3E:::::::
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MD:147.180:+:KA3LAO:o(ca)lr:Tri-CoARC:ARRL:19920000::F3E:::::::
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MD:147.225:+:WB3GXW:o(ca)l156.7:+KA3HGB:ARRL:19920000::F3E:::::::
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DC:145.110:-:W3EIL:o(ca)eyz:CCARS:ARRL:19920000::F3E:::::::
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:::::::::NA:USA:HI:Oahu:Kailua:145.210:-:KH6KL:op:EARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Kailua:146.640:-:KH6BI:oe:EARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Kaimuki:145.450:-:NH6YM:o:NH6YM:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Kaneohe:145.130:-:NH6MN:c:NH6MN:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Kaneohe:147.200:+:KH6BFZ:oep(ca):KH6BFZ:ARRL:19920000::F3E:::::::

:::::::::NA:USA:HI:Oahu:Laie:145.290:-:#KH6JDU:oea:byuh:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Manoa:145.470:-:KH6UH:o:KH6UH:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:North Shore:146.760:-:KH6FV:oe:EARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Pearl City:145.190:-:KH6TU:c:KH6TU:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Pearl City:145.490:-:KH6GMP:orem:KH6GMP:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Salt Lake:145.270:-:NH6PW:oa:HH6PW:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Wahiawa:146.900:-:AH6IB:o:AH6IB:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Wahiawa:146.960:-:KH6JUU:cel:RAG:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Waianae Mts:146.800:-:KH6TB:oe:EARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:HI:Oahu:Windward:147.220:+:KH6BS:o:KH6BS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Bonners Ferry:Black
Mtn:146.960:-:KD7IB:oex:KD7ib:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Coeur D'Alene:Mica
Peak:147.080:+:W7MCD:oera:KCDES:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:East:Griggs:146.940:-:K7ENE:o:MCCD:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:East:Howe:146.850:-:WA7FDR:ol::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:East Central:Salmon:146.920:-:WB7SPJ:o:SARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:East Central:Salmon:147.360:+:WB7SPJ:emrg rpt
e-Sun:SARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:East:Howe:146.850:-:WA7FDR/R:ol:ERARRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:East:Rigby:146.880:-:K7ENE:o:MARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Grangeville:High
Camp:146.680:-:WA7TRO:ol:WA7TRO:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Idaho Falls:Idaho
Falls:146.640:-:W7QAN:oa:ERARRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Idaho Falls:Idaho Falls:146.740:-:W7QAN:o:BCCD:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Idaho Falls:Idaho
Falls:147.150:+:WB7CCS:o:WB7CCS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Lewiston/Moscow:Lewiston
Hill:146.860:-:W7VJD:oa:LCARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Lewiston/Moscow:Moscow
Mtn:146.820:-:WA7HWD:olx:NWTriSt:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Mullan:Lookout Pass:147.020:+:WB7AUK:ol:KBARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Orofino:Orofino:145.490:-:N7IIN:o:Barger:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Orofino:Orofino:146.760:-:K7NDX:oe:ClearARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Post Falls:Blossom Mtn:146.980:-:K7ETG:oe:KARS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Rathdrum:Rathdrum Baldy:145.330:-:W7GNU:o:NIRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Rexburg:Rexburg:146.700:-:K7ENE:o:MCCD:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:Sandpoint:Sandpoint
Baldy:146.780:-:K7ENE:o:BonnerARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:South Central:Burley:146.400:+:WA7UHW:oel:ISRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:South Central:Burley:147.000:-:WA7UHW/R:o:ISRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:South Central:Jerome:146.060:+:KA7ENV:oe:ISRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:South Central:Jerome:146.660:-:KA7ENV/R:oe:TF
ARES:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:South
Central:Ketchum:147.180:+:N7EWT/R:o:N7EWT:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:South Central:Twin
Falls:146.160:+:N7GA:oa:ISRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ID:South Central:Twin

Falls:146.760:-:N7GA/R:o:ISRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southeast:Grace:146.800:-:AE7T:o:FCES:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southeast:Pocatello:147.060:+:N7DN:o:PARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southeast:Pocatello:147.360:+:WA0DYU:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Boise:145.250:-:WA7MXN/R:oa:BCARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Boise:145.290:-:KE7RL/R:oe:KE7RL:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Boise:146.840:-:N7HPX/R:oa:VOIARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Boise:146.880:-:W7ID/R:o:W7ZRG:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Boise:146.940:-:W7ZRQ/R:o:ISRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Boise:147.240:+:N7IYM/R:o:VOIARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Boise:147.300:+:NU7L/R:o:NU7L:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Emmett:147.100:+:WB7FDM/R:o:EMETARS:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Kuna:145.490:-:N7NTY/R:o:N7NTY:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Mt Home:147.340:+:N7OKG/R::E.C.R.A.:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Nampa:147.360:+:N7MHE/R:oa:TVARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:Southwest:Payette:147.120:+:W7OJI/R:o:TVARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ID:West:Cascade:146.620:-:WB7URP/R:ol:VOIARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Ashland:146.940:-:KD4SN:o(ca):RIVER CITI:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Ashland:147.240:+:KA4DII:o(ca)::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Ashland:147.330:+:WA8KWH:oa::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Baxter:147.180:+:WM4H:oa:WM4H:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Benton:147.180:+:KC4KAN:o:MCARA:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Berea:146.715:-:KI4B:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Betsy Layne:146.635:-:WA4YCU:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Bowling Green:146.655:-:WD4MNI:o(ca)zrb::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Bowling Green:146.850:-:KA4CLL:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Calvert City:147.105:+:KA4KFD:oae:KA4KFD:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Cambellsville:146.640:-:WA4UXJ:o:CENTRAL KY:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Clarkson:145.490:-:N4PXK:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Corbin:146.610:-:WD4KWV:o(ca):WD4KWV:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Covington:145.410:-:WB8NON:o:CINCINNATT ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Covington:147.390:+:WB8NON:oa:CINCINNATI ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Dawson Sprgs:146.730:-:N4STY:o:DAWSON SPG:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Deane:145.210:-:AK4U:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Dixon:147.180:+:WD4RBI:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Dorton:146.730:-:WA4SWF:oerb::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Elizabethtown:146.980:-:W4BEJ:oael:LINCOLN:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Elkhorn City:147.000:+:WB4WAU:o:EPLING/DAM:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Erlanger:145.210:-:N4BOP:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Fair Dealing:147.240:+:N4AVE:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Fern Creek:146.760:-:WB4NSY:oa::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Frankfort:147.240:+:KC4AI:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Frankfort:147.675:-:K4NGQ:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Glasgow:145.410:-:KF4DC:o:GLASGOW ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Glasgow:146.940:-:W4WZH:oae:MCARC, INC:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Grayson:146.700:-:KF4JP:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Guthrie:146.805:-:KA4NNE:ol:R&W RPTR:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Halls Gap:145.170:-:WD8PRH:oal:FAIRFIELD:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Harlan:147.090:+:WA4ZAC:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Hazard:146.670:-:K4VHF:oe:KY MOUNTAIN:ARRL:19920000::F3E:::::::
::::::::NA:USA:KY::Henderson:145.490:-:W4KVK:o:HARC:ARRL:19920000::F3E:::::::

:::::::::NA:USA:KY::Henderson:146.970:-:K4DPP:o:WEHT-TV:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Highland Heigh:146.790:-:W4YWH:o:W4YWH:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Highland Heigh:147.255:+:K4CO:(ca)123.0:NKARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Hopkinsville:147.030:+:WA4ZVL:oa::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Independence:146.895:-:K4JBV:oa:N KY RPT ARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Irvington:146.900:-:WB4WVH:oaz::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::La Grange:145.350:-:N4RBL:e151.4:OLDHAM CRC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::La Grange:147.390:+:N4RBL:e151.4:OCARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Lawrenceburg:145.290:-:KK4PL:oa:+KK4PL:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Lexington:145.330:-:N4YUU:o(ca):IBM ARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Lexington:145.450:-:KC4TX:o(ca)::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Lexington:146.760:-:K4KJQ:o(ca)z:BLUEGRASS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Lexington:146.940:-:W4AUZ:o:+w4auz:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Lexington:147.015:+:WB4FDK:o:WB4FDK:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Lexington:147.165:+:WA4HBM:o:BLUEGRASS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Litchfield:147.225:+:KB4NFK:o:KB4NFK:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Louisville:145.230:-:WB8PRH:ol:ARTS&FARTS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Louisville:146.700:-:W4BDC:o(ca)zl:BULLITT
ARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Louisville:146.880:-:W4OAU:o(ca):RIVER CITY:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Louisville:147.030:+:W4PJZ:ezrb(ca) 151.4:LVL &
JEF:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Louisville:147.070:+:N4NMC:oez(ca):N4MRM:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Louisville:147.180:+:W4CN:o(ca)zl:A.R.T.S.:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Louisville:147.270:+:N4KWT:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Louisville:147.360:+:KQ9Z:oa:+KQ9Z:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Lynch/Black Mtn:147.345:+:N4IZD:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Marion:147.105:+:KA4FGA:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Marion:147.285:+:KA4FGA:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Mayfield:147.240:+:WA4NAR:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Maysville:145.470:-:WA4WMM:oe(ca):GMCARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Maytown:146.880:-:AK4U:o(ca)lrb::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Middlesboro:146.775:-:W4PPM:o:MOUNTAIN ARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Morehead:146.910:-:K4GFY:o:K4GFY:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Mt Sterling:147.330:+:WD4KNE:o(ca):GATEWAY
ARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Murray:146.940:-:WB4NTB:oa:MSUARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Nicholasville:145.490:-:WB4CWF:o(ca)z:JESSAMINE:ARRL:19920000::F3E:::::
::
:::::::::NA:USA:KY::Owensboro:146.685:-:KN4KQ:oalrb:KN4KQ:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Owensboro:147.030:+:NW4A:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Owingsville:147.075:+:N4TLP:oa:CAVE RUN ARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Oxford/Louisvl:145.230:-:WD8PRH:oal:FAIRFIELD:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Paducah:146.760:-:K4CUW:o:MC DES/PAD:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Paducah:147.060:+:W4WQ:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Paintsville:147.135:+:K4ICN:orbl:+K4ICN:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Phelps:147.090:+:KJ4YK:orb:KJ4YK:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Pikeville:145.150:-:N4IWZ:orb(ca)z::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Pikeville:146.850:-:KM4IV:ozlrb::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Prestonburg:147.165:+:WB4UBY:o:N4MWA:ARRL:19920000::F3E:::::::

:::::::::NA:USA:KY::Princeton:146.670:-:W4KBL:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Providence:147.330:+:N4IUI:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Rabbit Hash:146.955:-:WA4OCP:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Radcliff:146.925:-:W4BEJ:oael:INDIAN TRAIL:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY:Rowan:Southern Cave Run Lake
Morehead:145.130:-:KJ4VF::KJ4FV:KD4OVM:19940117::F3E:::::::
:::::::::NA:USA:KY::Salem:147.315:+:N4IL:o(ca):SALEM ARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Shelbyville:147.000:+:KE4LR:oe(ca):STUBBLEFIE:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Somerset:146.880:-:N4AI:o:LAKE CUMBE:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Springfield:147.300:+:WA4SJH:oa::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Union City:146.700:-:WA4YGM:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Versailles:146.730:-:WA4ZXK:(temp off
air):WA4GHQ:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Walton:147.375:+:K4CO:o:NKARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Whtsbrg/PineMtn:147.390:+:WD4PDJ:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Williamsburg:147.000:+:KG4M:o:KG4M:ARRL:19920000::F3E:::::::
:::::::::NA:USA:KY::Winchester:147.120:+:WB4ASZ:oz(ca):WB4ASZ:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Augusta:Augusta:146.850:-:KQIL:oa::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Augusta:Jay:147.150:+:WA1ASY:ol::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Augusta:Litchfield:146.700:-:N1AZH:oe:N1AZH:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Augusta:Wiscasset:146.895:-:W1NV:o:LclnCoCEP:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Bangor:#Dixmont:146.790:-:K1CZ:o(ca)x::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Bangor:#E Eddington:147.030:+:W1YA:o:UnvofMin:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Bangor:#East Holden:146.940:-:KW1Q:o:PineTree
ARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Bangor:Deadham:147.390:+:K1CZ:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Bangor:East Holden:146.805:-:KW1Q:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Bangor:Orrington:146.640:-:K1CZ:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Biddeford/Saco:#Dayton:147.330:+:WB1EIG:o:WB1EIG:ARRL:19920000::F3E:::::
::
:::::::::NA:USA:ME:Brunswick:Brunswick:147.135:+:WZ1J:oaelzx:GrsTwnRU:ARRL:19920000::F3E:::
::::
:::::::::NA:USA:ME:Brunswick:Brunswick:147.135:449.900:WZ1J:oaelzx:WZ1J:ARRL:19920000::F3E:
::::::
:::::::::NA:USA:ME:Central:#Mars Hill:147.390:+:WA1KAH:o:FAMRTS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Central:Dexter:147.300:+:W1GEE:o:W1GEE:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:East Central:Machias:146.970:-:N1JZV:o:FRG:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Farmington/NE:Farmington:147.015:+:KLIB:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Fort Kent:Charette
Hill:146.640:-:W1TCF:oxaeBl::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Houlton:#Houlton:146.790:-:WA1UDP:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Lewiston:Auburn:146.610:-:W1NPP:o(ca):AARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Lewiston:Auburn:146.790:-:N1BKD:oal::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Lewiston:Auburn:146.940:-:N1BKD:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Lewiston:Buckfield:146.880:-:KQ1L:oe:YankeeARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Lewiston:Topsham:147.210:+:N1MA:oe:MryMtRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Lincoln/NE:Lincoln Center:147.000:+:KW1Q:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:North:#Presque Isle:146.940:-:N1EYO:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:North:Fort Kent:146.700:-:N1CHF:o:N1CHF:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:North:Madawaska:147.330:+:N1FCV:o:N1FCV:ARRL:19920000::F3E:::::::

:::::::::NA:USA:ME:Northeast
Coast:Columbia:146.640:-:WB5NJK:o:WB5NJK:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Penobscot
Bay:Camden:146.820:-:KQ1L:oe:MdcstARRC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Penobscot Bay:Hope:147.060:+:KC1CG:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Penobscot Bay:Rockland:145.330:-:WA1ZDA:oaerl::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Penobscot
Bay:Rockland:147.240:+:WA1ZDA:o:PenBayRC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Portland:Falmouth:147.090:+:WA1MZG:oaerz:BlkstrpRA:ARRL:19920000::F3E:::
::::
:::::::::NA:USA:ME:Portland:Orrs Island:147.270:+:N1FLN:o:Hrp Cep:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Portland:Portland:146.730:-:W1KVI:oe:PAWA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Portland:Portland:147.360:+:K1SA:oerl::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Portland:Saco:146.775:-:WA1GTT:o(ca)lrz:SVRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Portland:Scarborough:146.925:-:K1MON:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Presque Isle:Presque
Isle:146.730:-:K1TFX:oae:ArstkARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Waterville:Skowhegan:146.730:-:KA1C:x:KA1C:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:Waterville:Waterville:146.760:-:K1PMR:o:K1PMR:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:West Central:Kingfield:146.970:-:W1HTG:o:W1HTG:ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:West Central:Spruce Mtn:145.390:-:WB1EUI:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:ME:West Central:Wilton:147.180:+:KY1C:oe:BssHllRG:ARRL:19920000::F3E:::::::
:::::::::NA:USA:MT::EMERG. RPTR. ONLY:145.470:-::::ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:Central:Lewistown:147.150:+:WA7LAD:OE:CMARC:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:East
Central:Glendive:146.760:-:N7HJG:OE:LYARS:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:East Central:Miles
City:146.920:-:W7YUP:O:SEMARC:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:East
Central:Sidney:147.000:-:N7KCH:OA:LYARS:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:North
Central:Chester:146.640:-:WA7JYU:O:MRRA:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:North Central:Great
Falls:146.730:-:KC7OD:OE:GFAARC:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:North
Central:Zortman:146.790:-:N7ARA:O:N7ARA:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:North Central:Havre:146.910:-:KS7S:O:MRRA:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:North
Central:Havre:147.090:+:KC7NV:O(CA):KC7NV:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:North Central:Great
Falls:147.120:+:WB6UOU:OX:GFAARC:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:North Central:Great
Falls:147.300:+:N7SEE:OAEZ:GFAARC:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:Northeast:Fort Peck:146.820:-:N7CTF:O:VRC:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:Northeast:Wolf
Point:146.860:-:WB7QDN:OE(WIND):PRC:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:MT:Northeast:Plentywood:147.340:+:K7PGL:OE:HPARC:ARRL:19930000:0.0:F3E:::::
::
:::::::::NA:USA:MT:Northwest:Cut
Bank:146.610:-:WB7BTS:OL:WB7BTS:ARRL:19930000:0.0:F3E:::::::

```
::::::::NA:USA:MT:Northwest:Kalispell:146.620:-:KA5LXG:OAELXZ(RB):FVRG:ARRL:19930000:0.0:F
3E:::::::
::::::::NA:USA:MT:Northwest:Cut Bank:146.700:-:K7HR:OE:K7HR:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Northwest:Kalispell:146.760:-:K7LYY:O:FVARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Northwest:Cut Bank:146.820:-:W7DPK:O:HARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Northwest:Whitefish:146.820:-:K7LYY:O:FVARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Northwest:Libby:146.920:-:KA7DSH:O:LARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Northwest:Saltese, Lookout
Pass:147.020:+:WJ7F:OL:KBARA:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Northwest:Libby:147.160:+:WB7RLA:O:WA6HSL:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Northwest:Kalispell:147.780:-:W7ZKA:O:W7ZKA:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:South
Central:Bozeman:145.250:-:KB7KB:OALZ:BARBS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:South Central:Big
Sky:146.820:-:W7LR:OE(SUN):ERA:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:South
Central:Bozeman:146.880:-:W7YB:OAEX:ERA:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:South
Central:Livingston:146.910:-:W7RXY:O:TAG:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:South Central:Big
Timber:147.280:+:KF7FW:OELX:BARBS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:South
Central:Bozeman:147.380:+:KF7FW:OELX:BARBS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southeast:Hardin:145.470:-:KB7AN:OEL:KB7AN:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southeast:Colstrip:146.620:-:N7PAR:O:N7PAR:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southeast:Billings:146.760:-:K7EFA:O:YRC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southeast:Broadus:146.880:-:N7DLK:OEL:N7DLK:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southeast:Colstrip:146.900:-:N7PAR:O:N7PAR:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southeast:Red
Lodge:147.000:+:WB7RIS:OE(SUN):BARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southeast:Billings:147.100:+:N7OGN:OEL:N7OGN:ARRL:19930000:0.0:F3E::::::
:
::::::::NA:USA:MT:Southeast:Billings:147.200:+:K7EFA:OEL:YRC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southeast:Colstrip:147.240:+:WA7JDX:OEL:WA7JDX:ARRL:19930000:0.0:F3E::::
:::
::::::::NA:USA:MT:Southeast:Forsyth:147.320:+:K7ISW:O:K7ISW:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southeast:Billings:147.360:+:K7EFA:OAELZ:YRC:ARRL:19930000:0.0:F3E::::::
:
::::::::NA:USA:MT:Southwest:Deer
Lodge:146.680:-:K7KCR:OELR:BARS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southwest:Butte:146.780:-:N7AFS:OE(SUN):N7AFS:ARRL:19930000:0.0:F3E:::::
::
::::::::NA:USA:MT:Southwest:Helena:146.850:-:K7CCZ:OR:K7CCZ:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southwest:Butte:146.940:-:WA7KZF:OER:BARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southwest:Butte:147.020:+:W7VNE:O:AARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southwest:Anaconda:147.080:+:K0PP:O:AARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southwest:Deer
Lodge:147.160:+:KA7NBR:O:AARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southwest:Dillon:147.340:+:K7KCR:OLR:BARS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:Southwest:Boulder:147.360:+:NE7K:O(CA):NE7K:ARRL:19930000:0.0:F3E:::::::
```

::::::::NA:USA:MT:Southwest:Helena:147.820:-:KA7MAH:O:CCARC:ARRL:19930000:0.0:F3E:::::::
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Central:Stevensville:146.660:-:KE7WR:OL:KE7WR:ARRL:19930000:88.5:F3E:::::::
::::::::NA:USA:MT:West
Central:Hamilton:146.720:-:W7KNT:O:RACES:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:West
Central:Hamilton:146.740:-:KB7TG:OA:KB7TG:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:West
Central:Missoula:146.800:-:WB7SFL:OL:HARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:West
Central:Missoula:146.900:-:WB7SFL:OA:HARC:ARRL:19930000:88.5:F3E:::::::
::::::::NA:USA:MT:West
Central:Missoula:146.960:-:WB7SFL:O:HARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:West
Central:Missoula:147.040:+:WB7SFL:OE:HARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:MT:West
Central:Plains:147.140:+:WB7WBJ:OL:WB7WBJ:ARRL:19930000:0.0:F3E:::::::
::::::::NA:US:NC::Ahoskie:145.130:-:WA4YNF:oa::SERA:19931018:::::::::
::::::::NA:US:NC::Ahoskie:146.910:-:WA4ZGQ:ca::SERA:19931018:::::::::
::::::::NA:US:NC::Ahoskie:444.20:+:WB4YNF:NT::SERA:19931018:::::::::
::::::::NA:US:NC::Albemarle:146.985:-:K4OGB:oa::ARRL:19920000:::::::::
::::::::NA:US:NC::Andrews/Robbin:147.045:-:K4AIH:oezl(ca):WD4JEM:ARRL:19920000:::::::::
::::::::NA:US:NC::Andrews/Robbin:224.88:-:K4AIH:TL::SERA:19931018:::::::::
::::::::NA:US:NC::Andrews/Robbinsv:443.65:+:K4AIH:BLT::SERA:19931018:::::::::
::::::::NA:US:NC::Apex/Raleigh:444.95:+:W4DW:o::SERA:19931018:::::::::
::::::::NA:US:NC::Aquadale:147.390:+:WA4CHZ:o::ARRL:19920000:::::::::
::::::::NA:US:NC::Archdale:223.82:-:KC4HTS:R::SERA:19931018:::::::::
::::::::NA:US:NC::Archdale:443.30:+:KC4SVQ:NAR::SERA:19931018:::::::::
::::::::NA:US:NC::Asheboro:147.255:+:KJ4AV:o(ca)l::ARRL:19920000:::::::::
::::::::NA:US:NC::Asheboro:444.975:+:KQ4ML:::SERA:19931018:::::::::
::::::::NA:US:NC::Asheville:146.835:-:WA4QCO:o:STEELMAN:ARRL:19920000:::::::::
::::::::NA:US:NC::Asheville:146.835:-:WA4PLA:::SERA:19931018:::::::::
::::::::NA:US:NC::Asheville:147.225:+:N4UQS:oa:CAP/SUGARL:ARRL:19920000:::::::::
::::::::NA:US:NC::Asheville:224.60:-:NC4N:::SERA:19931018:::::::::
::::::::NA:US:NC::Asheville:224.74:-:N4TFU:BL::SERA:19931018:::::::::
::::::::NA:US:NC::Asheville:444.90:+:N4DWT:::SERA:19931018:::::::::
::::::::NA:US:NC::Ashvl/Mt Pisga:146.760:-:WA4BVW:151.4::ARRL:19920000:::::::::
::::::::NA:US:NC::Ashvl/Mt Pisga:224.26:-:WA4BVW:::SERA:19931018:::::::::
::::::::NA:US:NC::Ashvl/SpiveyMtn:146.910:-:W4MOE:oa:W CAROLINA:ARRL:19920000:::::::::
::::::::NA:US:NC::Asheville/FLATTP:147.18:+:N4OOC:proposed::SERA:19931018:::::::::
::::::::NA:US:NC::Auburn:442.275:+:N4ZCM:::SERA:19931018:::::::::
::::::::NA:US:NC::Bakersville:145.310:-:KC4WPM:oaez:+MCRA:ARRL:19920000:::::::::
::::::::NA:US:NC::Bakersville:442.75:+:KM4GR:C::SERA:19931018:::::::::
::::::::NA:US:NC::Bald Creek:147.045:+:N1BEC:N::SERA:19931018:::::::::
::::::::NA:US:NC::Bald Creek:224.12:-:N1BEC:N::SERA:19931018:::::::::
::::::::NA:US:NC::Bald Creek:444.875:+:N1BEC:N::SERA:19931018:::::::::
::::::::NA:US:NC::Bald Creek:29.66:-:N1BEC:N::SERA:19931018:::::::::
::::::::NA:US:NC::Beulaville:145.230:-:N4VBH:oa:n4vbh:ARRL:19920000:::::::::
::::::::NA:US:NC::Boone/RichMtn:147.360:+:WA4KDB:oa:WATAUGA ARC:ARRL:19920000:::::::::
::::::::NA:US:NC::Boone/Rich Mtn.:443.575:+:WA4PXV:BLR::SERA:19931018:::::::::

:::::::::NA:US:NC::Bostic:444.125:+:KC4YOQ:::SERA:19931018:::::::::
:::::::::NA:US:NC::Brevard:147.135:+:K4GBH:o(ca):TRANSYLVAN:ARRL:19920000:::::::::
:::::::::NA:US:NC::Broadway:17.105:+:KM4OX:l:PCRN:SERA:19931018:::::::::
:::::::::NA:US:NC::Burgaw:146.940:-:W4DLH:o:4-CTY ARC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Burlington:146.670:-:K4FHB:oa::SERA:19931018:::::::::
:::::::::NA:US:NC::Burlington/Cane Mtn:147.075:-:KB4WRP:::KD4IHW:19940117:::::::::
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:::::::::NA:US:NC::Butner:147.315:+:KC4VSO::KC4VSO:KD4IHW:19940117:::::::::
:::::::::NA:US:NC::Buxton:145.15:-:N4AAY:::SERA:19931018:::::::::
:::::::::NA:US:NC::Canton:146.805:+:WA4BVW:::SERA:19931018:::::::::
:::::::::NA:US:NC::Canton:224.82:-:N4DWU:P::SERA:19931018:::::::::
:::::::::NA:US:NC::Castoria:147.195:+:KM4OX:Proposed::SERA:19931018:::::::::
:::::::::NA:US:NC::Carthage:147.240:+:W4NIW:o(ca)pk:MOORE CTY:ARRL:19920000:::::::::
:::::::::NA:US:NC::Chapel Hill:443.475:+:lt:KZ1X::SERA:19931018:::::::::
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:::::::::NA:US:NC::Charlotte:145.290:-:W4BFB:oa:MECKLENBUR:ARRL:19920000:::::::::
:::::::::NA:US:NC::Charlotte:145.350:-:WA4AOS:ol::ARRL:19920000:::::::::
:::::::::NA:US:NC::Charlotte:146.940:-:W4BFB:oa:MECKLENBUR:ARRL:19920000:::::::::
:::::::::NA:US:NC::Charlotte:147.060:-:W4CQ:oa:CHARLOTTE:ARRL:19920000:::::::::
:::::::::NA:US:NC::Charlotte:147.390:+:WD4PLY:o(ca)::ARRL:19920000:::::::::
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:::::::::NA:US:NC::Charlotte:421.25:-:W4PPN:V::SERA:19931018:::::::::
:::::::::NA:US:NC::Charlotte:443.95:+:KD4OWV:N::SERA:19931018:::::::::
:::::::::NA:US:NC::Charlotte:444.45:+:W4CQ:A::SERA:19931018:::::::::
:::::::::NA:US:NC::Charlotte:444.60:+:W4BFB:::SERA:19931018:::::::::
:::::::::NA:US:NC::Charlotte:444.675:+:K4DIL:::SERA:19931018:::::::::
:::::::::NA:US:NC::Charlotte:444.85:+:W4CQ:::SERA:19931018:::::::::
:::::::::NA:US:NC::Cherry Mt:146.670:-:WA4BKU:o:WA4BKU:ARRL:19920000:::::::::
:::::::::NA:US:NC::Cherryville:145.110:-:K4JTX::K4JTX:SERA:19931018:::::::::
:::::::::NA:US:NC::Cherryville:224.96:-:K4JTX::K4JTX:SERA:19931018:::::::::
:::::::::NA:US:NC::Clayton:145.29:-:KO4XC:::SERA:19931018:::::::::???? KM4OX
clinton/fayetteville roseboro PCRN link
:::::::::NA:US:NC::Clayton:147.390:+:WB4IUY:oa(up-*,down-#)ezl:TEARA:KD4IHW:19940114::::::
::
:::::::::NA:US:NC::Clinton:146.790:-:WA4LZD:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::Columbia:145.110:-:KB4TOH:oaezl:COLUMBIA EOC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Concord/Kannap:146.655:-:K4CEB:o(ca)e:Cabarrus
ARC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Crowders Mtn:145.450:-:WD4PLY:o:SOUTH SALE:ARRL:19920000:::::::::
:::::::::NA:US:NC::Crowders Mtn:443.675:+:KD4FRP:::SERA:19931018:::::::::
:::::::::NA:US:NC::Dallas/Chrlotte:444.95:+:WA1WXL:BLT136.5::SERA:19931018:::::::::
:::::::::NA:US:NC::Denver/Clt:444.70:+:KA4YMY:BL::SERA:19931018:::::::::
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:::::::::NA:US:NC::Durham:146.940:-:WB4ADE:oa::ARRL:19920000:::::::::????
:::::::::NA:US:NC::Durham:147.360:+:WD4LDB:OA:MID-STATE:ARRL:19920000:::::::::
:::::::::NA:US:NC::Durham:444.10:+:WA4WTX:ol:DURHAM FM ASSOC:SERA:19931018:::::::::
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:::::::::NA:US:NC::Fayetteville:146.805:-:N4EWG:o:N3EWG:ARRL:19920000:::::::::
:::::::::NA:US:NC::Fayetteville:147.045:-:WA4FLR:oy:FAYV'L ARES:ARRL:19920000:::::::::
:::::::::NA:US:NC::Fayvlle/CFARS:146.910:-:WB4YZF:o(ca):CAPE FEAR:ARRL:19920000:::::::::
:::::::::NA:US:NC::Fayvlle/Ft Bragg:147.330:+:W4LPL:o::ARRL:19920000:::::::::
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:::::::::NA:US:NC::Fayetteville:224.56:-:W4EHF:::SERA:19931018:::::::::
:::::::::NA:US:NC::Fayetteville:444.40:+:WB4YZF::CFARS:SERA:19931018:::::::::
:::::::::NA:US:NC::Forest City:147.240:+:K4PBG:a123.0:RUTHERFORD:ARRL:19920000:::::::::
:::::::::NA:US:NC::Forest City:444.40:+:KC4YOQ:::SERA:19931018:::::::::
:::::::::NA:US:NC::Franklin:145.490:-:W4ZCZ:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::Franklin:147.240:+:W4GHZ:151.4::ARRL:19920000:::::::::
:::::::::NA:US:NC::Gast/Spcr Mtn:147.120:+:W4REW:oa:GASTON CTY:ARRL:19920000:::::::::
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:::::::::NA:US:NC::Gastonia/Crowder:443.75:+:KC4YOT:ABELR::SERA:19931018:::::::::
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:::::::::NA:US:NC::Greensboro:145.290:-:N4GGD:oa::ARRL:19920000:::::::::
:::::::::NA:US:NC::Greensboro:145.310:-:N4QAA:AER::SERA:19931010:::::::::
:::::::::NA:US:NC::Greensboro:146.610:-:K4SNI:oa:GREENSBORO:ARRL:19920000:::::::::
:::::::::NA:US:NC::Greensboro:146.760:-:N4GGD:oazrb:GTR GBO HM:ARRL:19920000:::::::::
:::::::::NA:US:NC::Greensboro:147.030:+:W4GG:o(ca)l:G.A.S.:ARRL:19920000:::::::::
:::::::::NA:US:NC::Greensboro:147.210:+:W4BUZ:oe::ARRL:19920000:::::::::
:::::::::NA:US:NC::Greensboro:224.14:-:WB4WOR:K::SERA:19931018:::::::::
:::::::::NA:US:NC::Greensboro:442.225:+:WB4GUG:::SERA:19931018:::::::::
:::::::::NA:US:NC::Greensboro:443.50:+:WD4PQZ:ALR::SERA:19931018:::::::::
:::::::::NA:US:NC::Greensboro:444.30:+:WB4WOR:BEP::SERA:19931018:::::::::
:::::::::NA:US:NC::Greenville:145.350:-:WD4JPQ:oaezl:PITT CTY RC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Greenville:147.375:+:K4ROK:oa:TAR RIVER:ARRL:19920000:::::::::
:::::::::NA:US:NC::Greenville:444.80:+:AI4J:::SERA:19931018:::::::::
:::::::::NA:US:NC::Greenvl/Estn:147.090:+:W4GDF:o:GREENVILLE:ARRL:19920000:::::::::
:::::::::NA:US:NC::Grifton:146.685:-:W4NBR:o:ENC REPEAT:ARRL:19920000:::::::::
:::::::::NA:US:NC::Grifton:224.84:-:WA4DAN:l::SERA:19931018:::::::::
:::::::::NA:US:NC::Grimesland:224.36:-:WB4PAC:::SERA:19931018:::::::::
:::::::::NA:US:NC::Hamlet:443.20:+:WA4ZI:::SERA:19931018:::::::::
:::::::::NA:US:NC::Haw River:443.775:+:KD4JFN:ABERT107.2::SERA:19931018:::::::::
:::::::::NA:US:NC::Haw River:443.875:+:K2MZ:NT::SERA:19931018:::::::::
:::::::::NA:US:NC::Hendersonville:146.640:-:WB4YAO:ol::ARRL:19920000:::::::::
:::::::::NA:US:NC::Hendersonville:224.96:-:N4UQS:::SERA:19931018:::::::::

:::::::::NA:US:NC::Hendsvl/Berwlw:145.27-:-:WA4KNI:oa::ARRL:19920000:::::::::
:::::::::NA:US:NC::Hendsvl/Berwlw:224.24:-:WA4KNI:::SERA:19931018:::::::::
:::::::::NA:US:NC::Hendsvl/Berwlw M:444.25:+:WA4KNI:::SERA:19931018:::::::::
:::::::::NA:US:NC::Hendsvl/Penic:147.255:+:WA4KNI:oa::ARRL:19920000:::::::::
:::::::::NA:US:NC::Hickory/Brt Mtn:146.850:-:WA4MDW:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::Hickory:444.00:+:K4JEQ:::SERA:19931018:::::::::
:::::::::NA:US:NC::High Peak Mtn:145.21:-:K4OLC:::SERA:19931018:::::::::
:::::::::NA:US:NC::High Point:145.410:-:N4XO:oa::ARRL:19920000:::::::::
:::::::::NA:US:NC::High Point:146.835:+:N4NNR:o(ca)l:N4NNR:ARRL:19920000:::::::::
:::::::::NA:US:NC::High Point:147.165:+:WA4RIS:o(ca):HPARC:ARRL:19920000:::::::::
:::::::::NA:US:NC::High Point:224.60:-:KC4KUL:AL::SERA:19931018:::::::::
:::::::::NA:US:NC::High Point:443.70:+:N4LXW:::SERA:19931018:::::::::
:::::::::NA:US:NC::High Point:443.90:+:KB4JIF:B::SERA:19931018:::::::::
:::::::::NA:US:NC::High Point:444.025:+:AC4DZ:A::SERA:19931018:::::::::
:::::::::NA:US:NC::Hillsborough:147.225:+:WA4WTX:oal:DURHAM FM:ARRL:19920000:::::::::
:::::::::NA:US:NC::Hillsborough:224.26:-:WA4WTX:l:DURHAM FM:SERA:19931018:::::::::
:::::::::NA:US:NC::Jacksonville:145.190:-:WA4WGA:oe:WA4WGA/KA4:ARRL:19920000:::::::::
:::::::::NA:US:NC::Jacksonville:147.000:-:WD4FVO:oaz:ONSLOW ARC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Jacksonville:224.32:-:WA4WGA:C::SERA:19931018:::::::::
:::::::::NA:US:NC::Jacksonville:444.675:+:WA4WGA:C::SERA:19931018:::::::::
:::::::::NA:US:NC::Jefferson:147.300:+:W4YJG:oa:ASHE CTY ARC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Kannapolis:443.25:+:N4JEX:::SERA:19931018:::::::::
:::::::::NA:US:NC::Kellersville:147.105:+:N4WET:::SERA:19931018:::::::::
:::::::::NA:US:NC::King/Sauratown M:444.775:+:WA4YHH:T103.5::SERA:19931018:::::::::
:::::::::NA:US:NC::Kinston:145.470:-:W4OIX:oa:KINSTON ARC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Laurinburg:146.625:-:KI4RR:o(ca)z:SCOTLAND:ARRL:19920000:::::::::
:::::::::NA:US:NC::Lenoir:147.195:+:N4NIN:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::Lenoir/Hibritn:147.330:+:KN4K:o:HIBRITEN RC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Lenoir/Hibritn:224.16:-:KN4K:::SERA:19931018:::::::::
:::::::::NA:US:NC::Lexington:145.310:-:WD4ICX:oaz:HEALING SP:ARRL:19920000:::::::::
:::::::::NA:US:NC::Lexington:146.910:-:K4IZM:oaz:HEALING SP:ARRL:19920000:::::::::
:::::::::NA:US:NC::Lexington:444.50:+:WD4ICZ:N::SERA:19931018:::::::::
:::::::::NA:US:NC::Linwood:223.98:-:KA4HUV:N::SERA:19931018:::::::::
:::::::::NA:US:NC::Lk Nrmn/Clt:147.015:+:WB4KPF:o(ca):ANDERSON:ARRL:19920000:::::::::
:::::::::NA:US:NC::Lk Nrmn/Clt:224.68:-:WB4KPF:::SERA:19931018:::::::::
:::::::::NA:US:NC::Locust:224.48:-:WA4ZIA:PL::SERA:19931018:::::::::
:::::::::NA:US:NC::Locust:443.70:+:WA4LBT:PL::SERA:19931018:::::::::
:::::::::NA:US:NC::Lumberton:147.360:+:KS4S:o(ca):+W4NHV:ARRL:19920000:::::::::
:::::::::NA:US:NC::Lumberton:444.625:+:WB4DVN:B::SERA:19931018:::::::::
:::::::::NA:US:NC::Maco:147.060:+:WA4LED:o(ca):WILMGTN RA:ARRL:19920000:::::::::
:::::::::NA:US:NC::Madison:146.895:-:KA4YFF:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::Maggie Valley:146.805:+:W4HCY:(temp off air)::ARRL:19920000:::::::::
:::::::::NA:US:NC::Manteo/Wanches:146.940:-:W4ACY:oa:+W4ACY:ARRL:19920000:::::::::
:::::::::NA:US:NC::Marion:146.985:-:WD4PVE:oa::ARRL:19920000:::::::::
:::::::::NA:US:NC::Mars Hill:224.66:-:WB4PLA:l::SERA:19931018:::::::::
:::::::::NA:US:NC::Marshall:224.36:-:KA4TYO:::SERA:19931018:::::::::
:::::::::NA:US:NC::Marshall:442.0:+:KC4KPW:::SERA:19931018:::::::::
:::::::::NA:US:NC::Marshall:443.00:+:KC4KPW:::SERA:19931018:::::::::
:::::::::NA:US:NC::Middlesex:444.65:+:NE4J:::SERA:19931018:::::::::
:::::::::NA:US:NC::Midway:145.270:-:KM4AR:o:KM4AR:ARRL:19920000:::::::::

:::::::::NA:US:NC::Millers Creek:146.715:-:N4GGN:oa:BLUE RIDGE:ARRL:19920000:::::::::
:::::::::NA:US:NC::Monroe:147.105:+:K4JCK:(temp off air):NONE:ARRL:19920000:::::::::
:::::::::NA:US:NC::Monroe/UCARS:145.390:-:KF4NJ:o(ca):UNION CITY:ARRL:19920000:::::::::
:::::::::NA:US:NC::Morganton:147.150:+:K4VLY:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::Morganton:224.80:-:WB4PML:::SERA:19931018:::::::::
:::::::::NA:US:NC::Morg. Walker Tooop:147.225:+:N4OOC:ABL::SERA:19931018:::::::::
:::::::::NA:US:NC::Morg. Walker Tooop:442.30:+:N4OOC:ABL::SERA:19931018:::::::::
:::::::::NA:US:NC::Mountain Home:147.105:+:K4GHH:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::Mt Airy:145.330:-:KD4J:oa:KD4J:ARRL:19920000:::::::::
:::::::::NA:US:NC::Mt Airy:146.940:-:N4XRY:o:N4XRY:ARRL:19920000:::::::::
:::::::::NA:US:NC::Mt Airy:146.970:-:N4XRY:o:N4XRY:ARRL:19920000:::::::::
:::::::::NA:US:NC::Mt Airy/Fsh Pk:444.825:+:KF4UY:ABLR::SERA:19931018:::::::::
:::::::::NA:US:NC::Mt Mitchell:145.190:-:WA4BVW:0:WA4BVW:ARRL:19920000:::::::::
:::::::::NA:US:NC::Mt Mitchell:224.54:-:WA4BVW::WA4BVW:SERA:19931018:::::::::
:::::::::NA:US:NC::Mt Mitchell:443.60:+:N4DWU:::SERA:19931018:::::::::
:::::::::NA:US:NC::Murphy:442.60:+:N4USU:T151.4::SERA:19931018:::::::::
:::::::::NA:US:NC::Murphy:147.195:+:KC4WB:(temp off air)::ARRL:19920000:::::::::
:::::::::NA:US:NC::Murphy/Stalcup:146.865:+:K4FOY:o:TRIODE ARC:ARRL:19920000:::::::::
:::::::::NA:US:NC::N Wilkesboro:145.370:-:N4AGN:o(ca):FOOTHILLS:ARRL:19920000:::::::::
:::::::::NA:US:NC::N Wilkesboro:29.62:-:KC4XE:L::SERA:19931018:::::::::
:::::::::NA:US:NC::Nags Head/Bodi:146.835:-:K4UOR:o(ca)z:OUTERBANKS:ARRL:19920000:::::::::
:::::::::NA:US:NC::New Bern:146.610:-:WD4JMS:oal:NEW BERN ARC:ARRL:19920000:::::::::
:::::::::NA:US:NC::New Bern:444.90:+:WD4JMS:B::SERA:19931018:::::::::
:::::::::NA:US:NC::Newport:145.450:-:K4GRW:(temp off air)::ARRL:19920000:::::::::
:::::::::NA:US:NC::Newport:29.66:-:K4GRW:PR::SERA:19931018:::::::::
:::::::::NA:US:NC::Newton:147.075:+:AG4L:oazrb:CATAWBA CT:ARRL:19920000:::::::::
:::::::::NA:US:NC::Newton/AndsnMtn:145.170:-:W4ZQB:o:W4ZQB:ARRL:19920000:::::::::
:::::::::NA:US:NC::Oxford:145.170:-:KA4RVS:o(ca):GRANVILLE:ARRL:19920000:::::::::
:::::::::NA:US:NC::Oxford:145.370:-:WA4MII:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::OXFORD:444.60:+:AC4UO:::SERA:19931018:::::::::
:::::::::NA:US:NC::Pikeville:145.330:-:KK4YP:C::SERA:19931018:::::::::
:::::::::NA:US:NC::Pikeville:443.0:+:KK4YP:C::SERA:19931018:::::::::
:::::::::NA:US:NC::Piney Knob:443.875:+:KC4KPW:::SERA:19931018:::::::::
:::::::::NA:US:NC::Pittsboro:442.55:+:caT::SERA:19931018:::::::::
:::::::::NA:US:NC::Pittsboro:442.55:+:WB4MMY:PT::SERA:19931018:::::::::
:::::::::NA:US:NC::Pittsboro:444.75:+:KD4JFN:::SERA:19931018:::::::::
:::::::::NA:US:NC::Pittsboro:53.23:-:KD4JFN:::KD4IHW:19940114:::::::::
:::::::::NA:US:NC::Polkville:444.975:+:KC4ZTJ:P::SERA:19931018:::::::::
:::::::::NA:US:NC::Raleigh:145.13:-:W4ATC::STARS/RARS:rtari:19940110:::::::::
:::::::::NA:US:NC::Raleigh:145.270:-:N4BQF:o(ca)l::ARRL:19920000:::::::::
:::::::::NA:US:NC::Raleigh:145.490:-:K4BWC:oey:K4BWC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Raleigh:146.640:-:W4DW:o(ca)z:RALEIGH ARS:ARRL:19920000:::::::::
:::::::::NA:US:NC::Raleigh:146.730:-:K4BWC:o(ca)e:K4BWC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Raleigh:146.880:-:WB4TQD:ol:PCRN:ARRL:19920000:::::::::
:::::::::NA:US:NC::Raleigh:147.150:+:WB4TQD:o(ca):PCRN:ARRL:19920000:::::::::
:::::::::NA:US:NC::Raleigh:224.64:-:WA4PEN:LP:Raleigh Amateur Radio
Society:SERA:19931018:::::::::
:::::::::NA:US:NC::Raleigh:224.92:-:W1IFL:::SERA:19931018:::::::::
:::::::::NA:US:NC::Raleigh:444.875:+:KD4RAA:pt162.2::SERA:19931018:::::::::
:::::::::NA:US:NC::Raleigh:444.525:+:WA4PEN:L:Raleigh Amateur Radio

Society:SERA:19931018:::::::::
::::::::NA:US:NC::Raleigh:444.775:+:W4ATC:(being planned):NCSU:SERA:19931018:::::::::
::::::::NA:US:NC::Raleigh:443.225:+:N4ZCM:PT::SERA:19931018:::::::::
::::::::NA:US:NC::Raleigh:442.15:+:N4BEA:L::SERA:19931018:::::::::
::::::::NA:US:NC::Raleigh:442.45:+:N4LMR:P::SERA:19931018:::::::::
::::::::NA:US:NC::Raleigh:443.375:+:W1IFL:::rtari:19940110:::::::::
::::::::NA:US:NC::Raleigh:444.95:+:W4DW:A(down):RARS:SERA:19931018:::::::::
::::::::NA:US:NC::Raleigh/Benson:147.270:+:WB4TQD:o(ca):JOHNSTON
ARC:ARRL:19920000:::::::::
::::::::NA:US:NC::Randleman/Gbo:145.150:-:WD4CVM:ol:GREENSBOROR:ARRL:19920000:::::::::
::::::::NA:US:NC::Red Springs:147.300:+:W4MZP:o(ca):RAD.AM.GRP:ARRL:19920000:::::::::
::::::::NA:US:NC::Reidsville:146.850:-:K4YEC:o:PENNINGTON:ARRL:19920000:::::::::
::::::::NA:US:NC::Reidsville/Eden:444.80:+:K4YEC:::SERA:19931018:::::::::
::::::::NA:US:NC::Roanoke Rapids:147.030:+:WA4DTS:o(ca):ROANOKE VA:ARRL:19920000:::::::::
::::::::NA:US:NC::Roanoke Rapids:444.55:+:KK4VM:AO::SERA:19931018:::::::::
::::::::NA:US:NC::Roaring Gap:146.820:-:WB4PZA:(temp off air):BLUE
RIDGE:ARRL:19920000:::::::::
::::::::NA:US:NC::Roaring Gap:443.55:+:KC4XE:L::SERA:19931018:::::::::
::::::::NA:US:NC::Rockingham:146.955:-:K4PTB:oaez:RCARC:ARRL:19920000:::::::::
::::::::NA:US:NC::Rocky Mount:53.59:-:N4YTU:::SERA:19931018:::::::::
::::::::NA:US:NC::Rocky Mount:147.120:+:WN4Z:o(ca)z:ROCKY MOUN:ARRL:19920000:::::::::
::::::::NA:US:NC::Rocky Mount:224.22:-:NF4C:AR::SERA:19931018:::::::::
::::::::NA:US:NC::Rocky Mount:224.58:-:KC4FKC:AB::SERA:19931018:::::::::
::::::::NA:US:NC::Rocky Mount:444.70:+:N4JEH:BP::SERA:19931018:::::::::
::::::::NA:US:NC::Rocky Mount:444.00:+:WB4WAA:::SERA:19931018:::::::::
::::::::NA:US:NC::Salisbury:146.730:-:W4EXU:ozlrb:BARBER JCT:ARRL:19920000:::::::::
::::::::NA:US:NC::Sanford:147.180:+:WB4EJJ:oa::ARRL:19920000:::::::::
::::::::NA:US:NC::Salisbury:224.76:-:W4EXU:L::SERA:19931018:::::::::
::::::::NA:US:NC::Salisbury:443.15:+:W4HG:ABT::SERA:19931018:::::::::
::::::::NA:US:NC::Salisbury:444.575:+:K0SD:A::SERA:19931018:::::::::
::::::::NA:US:NC::Salisbury:444.65:+:N4MME:AT::SERA:19931018:::::::::
::::::::NA:US:NC::Sauratown Mtn:145.110:-:W4RXG:oy:W4RXG:ARRL:19920000:::::::::
::::::::NA:US:NC::Sauratown Mtn:145.470:-:W4NC:o:FORSYTH ARC:ARRL:19920000:::::::::
::::::::NA:US:NC::Sauratown Mtn:146.790:-:KK4AT:EPT107.2:TRIAD ARA:ARRL:19920000:::::::::
::::::::NA:US:NC::Sauratown Mtn:147.315:+:K4JYH:oe(ca):K4JYH:ARRL:19920000:::::::::
::::::::NA:US:NC::Sauratown Mtn:224.58:-:WA4YHH:::SERA:19931018:::::::::
::::::::NA:US:NC::Sauratown Mtn:224.70:-:W4RXG:OY:W4RXG:SERA:19931018:::::::::
::::::::NA:US:NC::Sauratown Mtn:224.88:-:W4RXG:O:W4RXG:SERA:19931018:::::::::
::::::::NA:US:NC::Sauratown Mtn:224.96:-:WA4WTB:::SERA:19931018:::::::::
::::::::NA:US:NC::Sauratown Mt:421.25:+:K4AZA:OV::SERA:19931018:::::::::
::::::::NA:US:NC::Sauratown Mt:443.10:+:N4GGC:L::SERA:19931018:::::::::
::::::::NA:US:NC::Sauratown Mt:443.40:+:WB4GUG:C::SERA:19931018:::::::::
::::::::NA:US:NC::Selma:147.015:+:KK4YP:oa::SERA:19931018:::::::::
::::::::NA:US:NC::Selma:444.00:+:KK4YP:BP::SERA:19931018:::::::::
::::::::NA:US:NC::Shallotte:145.370:-:K4PPD:o(ca)z:BRUNSWICK:ARRL:19920000:::::::::
::::::::NA:US:NC::Shallotte:147.315:+:K4PPD:oz:BRUNSWICK:ARRL:19920000:::::::::
::::::::NA:US:NC::Shallotte:147.390:+:N4FAU:oz:BRUNSWICK:ARRL:19920000:::::::::
::::::::NA:US:NC::Shelby:146.880:-:W4NYR:o:SHELBY ARC:ARRL:19920000:::::::::
::::::::NA:US:NC::Shelby:147.345:+:W4NYR:o(ca):SHELBY ARC:ARRL:19920000:::::::::
::::::::NA:US:NC::Shelby:224.06:-:W4NYR::SHELBY ARC:SERA:19931018:::::::::
::::::::NA:US:NC::Shelby:224.46:-:KC4ZTJ:::SERA:19931018:::::::::

:::::::::NA:US:NC::Shelby:427.25:+:W4NYR:V::SERA:19931018:::::::::
:::::::::NA:US:NC::Smithfield:146.970:-:KD4JQ:oa:KD4JQ:ARRL:19920000:::::::::
:::::::::NA:US:NC::Smithfield:444.25:+:KD4BFI:::SERA:19931018:::::::::
:::::::::NA:US:NC::Southport:146.775:-:K4JYH:o:+K4JYH:ARRL:19920000:::::::::
:::::::::NA:US:NC::Sparta/GreenMtn:145.430:-:K4QFQ:ol:PCRN:KD4IHW:19940117:::::::::
:::::::::NA:US:NC::Spindale:224.44:-:KC4IEV:CT146.3::SERA:19931018:::::::::
:::::::::NA:US:NC::Spindale:443.30:+:KC4IEV:T123.0::SERA:19931018:::::::::
:::::::::NA:US:NC::Spring Lake:146.715:-:WB4KDC:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::Statesville:146.685:-:WA1EHL:o(ca)z::SERA:19931018:::::::::
:::::::::NA:US:NC::Statesville:224.30:-:WA4PVI:::SERA:19931018:::::::::
:::::::::NA:US:NC::Statsvl/Asbry:147.045:+:KB4QP:oy:ICARS:ARRL:19920000:::::::::
:::::::::NA:US:NC::Statesville:443.45:+:N4VOZ:OA::SERA:19931018:::::::::
:::::::::NA:US:NC::Sunset Beach:224.66:-:AC4AM:A::SERA:19931018:::::::::
:::::::::NA:US:NC::Sunset Beach:442.625:+:AC4AM:C::SERA:19931018:::::::::
:::::::::NA:US:NC::Swansboro:146.760:-:KO4S:oa:KO4S:ARRL:19920000:::::::::
:::::::::NA:US:NC::Tabor City:147.375:+:W4DCD:oalrb:W4DCD:ARRL:19920000:::::::::
:::::::::NA:US:NC::Taylorsvl/Barr M:444.05:+:K4OLC:BC::SERA:19931018:::::::::
:::::::::NA:US:NC::Thomasville:29.68:-:KK4VO:L::SERA:19931018:::::::::
:::::::::NA:US:NC::Thomasville:147.000:-:K4AZA:oal:K4AZA:ARRL:19920000:::::::::
:::::::::NA:US:NC::Thomasville:224.34:-:K4AZA:oal:K4AZA:SERA:19931018:::::::::
:::::::::NA:US:NC::Thomasville:442.90:+:K4AZA:L::SERA:19931018:::::::::
:::::::::NA:US:NC::Trenton:145.210:-:WB4TQD:ol:PCRN:ARRL:19920000:::::::::
:::::::::NA:US:NC::Trenton:224.72:-:WA4DAN:::SERA:19931018:::::::::
:::::::::NA:US:NC::Tuckasegee:147.300:+:W8OMV:o::ARRL:19920000:::::::::
:::::::::NA:US:NC::Wadesboro:146.835:-:W4USH:oa:SELECTRONI:ARRL:19920000:::::::::
:::::::::NA:US:NC::Washington:147.345:+:WA4TEP:o:TAR RIVER:ARRL:19920000:::::::::
:::::::::NA:US:NC::Waxhaw:146.865:+:WA4ZRS:o(ca):WBT ARC WA:ARRL:19920000:::::::::
:::::::::NA:US:NC::Waynesville:147.270:+:N4SM:oa:HAYWOOD CT:ARRL:19920000:::::::::
:::::::::NA:US:NC::Wendell/Lizard Lick:53.07:-:WB4IUY::WB4IUY:SERA:19931018:::::::::
:::::::::NA:US:NC::Wendell/Lizard Lick:224.8:-:KD4WJD:C:DHSVHC:WB4IUY:19940120:::::::::
:::::::::NA:US:NC::Wendell/Lizard Lick:442.400:+:KD4WJD::DHSVHC:WB4IUY:19940120:::::::::
:::::::::NA:US:NC::West Jefferson:442.375:+:WA4PXV:C::SERA:19931018:::::::::
:::::::::NA:US:NC::Whiteville:147.210:+:K4MSD:oal:COLUMBUS:ARRL:19920000:::::::::
:::::::::NA:US:NC::Williamston:145.410:-:KA4KNU:ol:ROANOKE ARC:ARRL:19920000:::::::::
:::::::::NA:US:NC::Wilmington:146.730:-:W4VNK:oae:WILMINGTON:ARRL:19920000:::::::::
:::::::::NA:US:NC::Wilmington:146.820:-:K4GMP:oel:WILMINGTON:ARRL:19920000:::::::::
:::::::::NA:US:NC::Wilmington:147.135:+:KM4GN:::SERA:19931018:::::::::
:::::::::NA:US:NC::Wilmington:147.180:+:N4CTJ:oal::ARRL:19920000:::::::::
:::::::::NA:US:NC::Wilmington:224.20:-:KM4GN:::SERA:19931018:::::::::
:::::::::NA:US:NC::Wilmington:224.50:-:K4YNY:AR::SERA:19931018:::::::::
:::::::::NA:US:NC::Wilmington:442.20:+:KM4GN:P::SERA:19931018:::::::::
:::::::::NA:US:NC::Wilmington:442.500:+:K4YNY:ALR::SERA:19931018:::::::::
:::::::::NA:US:NC::Wilmington:444.20:+:KM4GN:::SERA:19931018:::::::::
:::::::::NA:US:NC::Wilmington:444.85:+:K4GMP:B::SERA:19931018:::::::::
:::::::::NA:US:NC::Wilson:146.760:-:WB4THL:ca:WILSON ARC:KD4IHW:19940114:::::::::
:::::::::NA:US:NC::Wilson:147.300:+:WA4UQC:lzoa(up-*99,down-#5):Triangle East
ARA:KD4IHW:19940114:::::::::
:::::::::NA:US:NC::Wilson:444.90:+:NE4J:L::SERA:19931018:::::::::
:::::::::NA:US:NC::Wilson:29.64:-:WD4IDA:C::SERA:19931018:::::::::
:::::::::NA:US:NC::Wilson:29.68:-:WB4IUY:::SERA:19931018:::::::::

::::::::NA:US:NC::Winston-Salem:146.640:-:W4NC:oal:FORSYTH ARC:ARRL:19920000::::::::
::::::::NA:US:NC::Winston-Salem:224.64:-:WA4YHH:RP::SERA:19931018::::::::
::::::::NA:US:NC::Winston-Salem:444.275:+:W4NC:C::SERA:19931018::::::::
::::::::NA:US:NC::Winston-Salem:444.725:+:N4QDK:ABR::SERA:19931018::::::::
::::::::NA:US:NC::Yadkinville:147.015:-:N4XRY:o::ARRL:19920000::::::::
::::::::NA:US:NC::Yadkinville:442.80:+:N4AAD:A::SERA:19931018::::::::
::::::::NA:US:NC::Yadkinville:444.225:+:N4VWK:A::SERA:19931018::::::::
::::::::NA:US:NC::Yaupon Beach:146.670:-:W4RPC:o::ARRL:19920000::::::::
::::::::NA:US:NC::Yaupon Beach:443.40:+:W4RPC:C::SERA:19931018::::::::
::::::::NA:US:NC::Youngsville:53.37:-:KD4MYE::KD4MYE:KD4IHW:19940114::::::::
::::::::NA:US:NC::Youngsville:145.110:-:KD4MYE::KD4MYE:KD4IHW:19940114::::::::
::::::::NA:US:NC::Youngsville:444.25:+:KD4BFI::KD4BFI:KD4IHW:19940114::::::::
::::::::NA:USA:ND:Statewide:Statewide:145.230:-::snp::ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Statewide:Statewide:145.470:-::snp::ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast
Central:Crary:147.330:52.525:K0PVG:o:K0PVG:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast Central:Devils
Lake:146.880:-:K0PVG:oea:RCARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast
Central:Maddock:147.240:+:KFOHR:oel:BCARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast
Central:Petersburg:146.820:-:KA0FIN:eo:RCARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast Central:Rock
Lake:147.300:+:WC0M:o:WC0M:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast
Central:Rugby:147.060:-:WB0ATB:oea:GCHC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast Central:St
Johns:146.850:-:KE0PW:o:TMARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast:#Grand
Forks:145.490:-:KA7CHZ:oae:KA7CHZ:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast:Cavalier:147.150:+:K0BGV:o:PCARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast:Grand Forks:146.865:-:KA0CLH:oa:UND
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast:Grand Forks:146.940:-:WA0JXT:oe:FORX
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast:Grand Forks:147.030:-:WA0LPV:o(ca):FORX
UG:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast:Grand
Forks:147.390:+:WA0VFY:o:WA0VFY:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast:Langdon:146.790:-:KA0BKO:oa:KA0BKO:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northeast:Mayville:146.910:-:W0KZU:o:GRARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northwest:Stanley:146.610:-:KB0CIR:o:PR HLS
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northwest:Williston:147.210:+:NF0S:o:WB ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northwest
Central:#Minot:146.970:-:KE0WA:oa:SVRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northwest
Central:Crary:52.525:147.330:K0PVG:o:K0PVG:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Northwest
Central:Minot:147.360:+:K0AJW:oe:MARA:ARRL:19920000::F3E:::::::

```
::::::::NA:USA:ND:Northwest Central:Minot
AFB:146.760:-:WD0FGR:oea:NTARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast
Central:Carrington:146.670:-:KR0W:oel:HNARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast
Central:Cooperstown:147.210:+:KA0OFP:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast
Central:Jamestown:147.180:+:W0FX:oael:JARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast:#Fargo:145.350:-:KE0VN:ol:KE0VN:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast:#Horace:147.390:+:WA0ZOK:o:WA0ZOK:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast:Fargo:146.760:-:W0ILO:oael:RRRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast:Fargo:146.970:-:W0RRW:oae:RRRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast:Fargo:147.090:+:W0HSC:o:NDSU ARS:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast:Lisbon:147.000:-:N0BGY:oel:N0BGY:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast:Valley City:146.790:-:W0SRH:oe:Brns
Cty:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southeast:Wahpeton:146.730:-:K0GGL:o:3 Rvr ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southwest:Bowman:145.310:-:N0EHL:oae:SLARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southwest:Dickinson:146.820:-:W0ZCM:oae:TRARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southwest:Hettinger:146.880:-:KA0BAW:o:Hetgr
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southwest:Killdeer:146.640:-:W0BHF:oe:TRARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southwest:Sentinel
Butte:146.730:-:N0KVH:oe:TRARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southwest
Central:Bismarck:146.850:-:KB0UK:oe:CDARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southwest
Central:Bismarck:147.390:+:W0ZRT:oel:CDARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:ND:Southwest
Central:Mandan:146.940:-:N0EPK:oael:CDARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Central:Ossipee:145.310:-:N1DQB:oxl:N1DQB:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Concord:Concord:146.940:-:W1ALE:oe:+W1RMH:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Concord:Concord:147.225:+:W1RMH:o:W1ALE:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Concord:Deerfield:147.000:-:KD1Q:oaez:SddlbckRA:ARRL:19920000::F3E::::::
:
::::::::NA:USA:NH:Concord:Franklin:147.300:+:KA1BUC:ozae:KA1BUC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Concord:Henniker:146.895:-:K1BKE:o:ConValRC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:East:#Exeter:147.805:+:N1BEC:o:N1BEC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:East
Coast:Portsmouth:146.805:-:W1WQM:oe:PrtCtyARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Keene:Keene:146.805:-:K1XR:oaelz:K1XR:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Keene:Walpole:147.030:+:WA1DKL:oae:MarkemARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Laconia:Center
Harbor:147.030:+:W1NBL:o:LksRegRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Laconia:Meredith:147.390:+:KB1NC:oea::ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Littleton:Littleton:145.430:+:KB1HR:o:K1HR:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Manchester/Nashua:#Hollis:147.135:+:KA1SU:oae:KA1SU:ARRL:19920000::F3E::
:::::
::::::::NA:USA:NH:Manchester/Nashua:Amherst:145.150:-:K1KA:oa:AmherstRA:ARRL:19920000::F3E
:::::::
```

::::::::NA:USA:NH:Manchester/Nashua:Derry:146.745:-:NM1D:o:NM1D:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Manchester/Nashua:Derry:146.850:-:K1MNS:ox:InstrStRS:ARRL:19920000::F3E:
::::::
::::::::NA:USA:NH:Manchester/Nashua:Francestown:146.685:-:WA1RWP:oae:GrntSTRA:ARRL:1992000
0::F3E:::::::
::::::::NA:USA:NH:Manchester/Nashua:Goffstown:147.330:+:W1KGZ:o:NH
FMA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Manchester/Nashua:Hudson:147.105:+:WA2ROJ:oa:RRAssn:ARRL:19920000::F3E::
:::::
::::::::NA:USA:NH:Manchester/Nashua:Manchester:147.255:+:N1FIK:o:ARC:ARRL:19920000::F3E:::
::::
::::::::NA:USA:NH:Manchester/Nashua:Manchester:147.375:-:KC1HH:o:GrntStRA:ARRL:19920000::F
3E:::::::
::::::::NA:USA:NH:Manchester/Nashua:Nashua:146.730:-:W1OMZ:oae:W1OMZ:ARRL:19920000::F3E:::
::::
::::::::NA:USA:NH:Manchester/Nashua:Nashua:147.045:+:KA1DT:oel:+W1HZN:ARRL:19920000::F3E::
:::::
::::::::NA:USA:NH:North:Mt Washington:146.655:-:WA1WOK:oerx
100.0:wa1wok:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:North:North Conway:145.450:-:AG1Z:oaz:WhtMtARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:South:Lyndeborough:145.110:-:NX1D:oelx:WB1FRL:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:South:Petersborough:145.210:-:W2NSD:o:W2NSD:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:South
Central:Lyndeborough:145.110:449.200:NX1D:::ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Southeast:Chester:145.190:-:K1OX:o:K1OX:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:Southeast:Salem:147.165:+:W1GPV:o:MtMorhRS:ARRL:19920000::F3E:::::::
::::::::NA:USA:NH:West
Central:Hanover:147.240:+:W1GUA:ol:CtVlyFMA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:::146.415:147.415:::Tri State:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:::146.445:147.445:::Tri State:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:::146.475:147.475:::Tri State:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:::147.505:146.505:::Tri State:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:::146.430:147.430:::Tri State:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:::146.460:147.460:::Tri State:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:::146.490:147.490:::Tri State:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:::146.595:147.595:::Tri State:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ::Millville:223.96:222.36:N2VV:oxelr
wx:Metro-Com:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Atlantic County:Absecon:147.210:+:KB2IOJ:oe
123.0:KB2IOJ:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Atlantic County:Pleasantville:146.820:-:WB2SFH:c(ca)e:Cty
EMA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Atlantic
County:Pleasantville:146.940:-:KA2OOR:o:KA2OOR:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Atlantic
County:Pleasantville:146.985:-:WA2ESD:o(ca)e:SPARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Atlantic
County:Pomona:146.745:-:K2BR:o(ca)e:SCARA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Bergen County:Elmwood
Park:147.390:+:WA2SQQ:oez(ca):WA2SQQ:ARRL:19920000::F3E:::::::

```
::::::::NA:USA:NJ:Bergen County:Fort
Lee:145.470:-:WB2LXS:alt:AE2O:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Bergen County:Fair Lawn:145.310:-:KA2FXA:oer::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Bergen
County:Hackensack:145.210:-:WA2UXC:oa:WA2UXC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Bergen County:Midland
Park:145.150:-:WA2VLD:t:WA2VLD:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Bergen
County:Montvale:146.955:-:K2ETN:o:CsntRdgRC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Bergen
County:Oakland:146.490:147.490:WA2SNA:a:RamapoARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Bergen County:Oakland:146.700:-:W2PQG:otae:10-70
RA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Bergen
County:Paramus:146.790:-:W2AKR:o:BergenFMA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Bergen County:Woodcliff Lake:146.835:-:K2LSA:c(ca)t:Stln
RC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Burlington
County:Chatsworth:145.470:-:W2HOB:c(ca)l:BurCoARES:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Burlington
County:Chatsworth:145.470:147.750:W2HOB:c(ca)l:BurCoARES:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Burlington
County:Medford:145.290:-:K2AA:oa:SJRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Burlington County:Mount
Holly:147.150:+:W2HOB:c(ca)elt:BurCoARES:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Burlington County:Mount
Holly:147.150:144.870:W2HOB:c(ca)elt:BurCoARES:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Burlington County:Tabernacle:145.150:-:K2BU:o(ca)e 91.5:Jersey
TR:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Burlington
County:Willingboro:146.925:-:WB2YGO:o(ca)el:WARG:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Camden
County:Bellmawr:146.895:-:WA2VQG:o:BellmrOEM:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Camden County:Camden:146.820:-:WB2ERI:o:PARA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Camden County:Pine
Hill:146.865:-:K2CJX:o(ca):CCARAI:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Camden County:Waterford
Wks:145.210:-:W2FLY:celt:W2FLY:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Camden County:Waterford Wks:147.345:+:W2HOB:oey 127.3:SJ TT
UG:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Cape May County:Cape May CH:146.610:-:AE2Y:oa:CM cty
RC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Cape May County:N
Wildwood:146.775:-:WB3KAG:131.8:CARES:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Cumberland County:Millville:147.135:+:N2VV:oxelr(ca) wx ctss
156.7:Metro-Com N2VV:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Cumberland
County:Vineland:146.655:-:WB2RUH:oa:Vineland:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:East Central:#Deal:147.135:+:K2KMT:ct(ca)el
tt:DMARC:ARRL:19920000::F3E:::::::
```

```
::::::::NA:USA:NJ:East Central:#Deal:449.000:147.825:K2KMT:ct(ca)el
tt:DMARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:East
Central:Farmingdale:145.110:-:KC2Q:a:OMARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex County:Cedar
Grove:146.445:147.445:K2KJI:oaelz::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex County:Cedar
Grove:147.180:+:W2JT:olx:SBARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex
County:Livingston:146.595:147.595:N22S:oae:SBARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex
County:Montclair:145.190:-:K2AQG:oa:K2AQG:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex County:Newark:145.330:-:WA2CBM:o:WA2CBM:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex County:Newark:147.225:+:K2MFF:oe:NJIT
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex County:Newark:147.285:+:WB2MFC:o:WARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex County:West
Orange:146.415:147.415:W2QR:al:W2QR:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex County:West Orange:146.745:-:WA2BAU:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Essex County:West
Orange:147.345:+:WA2HYO:oaer::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Glouchester
County:Grenlock:145.390:-:KB2BF:oe:KB2BF:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Glouchester
County:Pitman:147.180:+:W2MMD:o(ca):GlouCoARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Glouchester
County:Pitman:147.315:+:W2JAV:o:W2JAV:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Hudson County:Bayonne:145.430:-:W2ODV:oaerl:BEM
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Hudson County:Jersey
City:145.125:-:WB2TSH:o:WB2TSH:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Long Branch:Ashbury Park:147.045:+:W2EXQ:o(ca)e:Monmouth
CoRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Long Branch:Belmar:146.775:-:N2CTD:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Long
Branch:Middletown:145.485:-:K2RAP:oaez:MTCD:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Mercer County:Hopewell:146.670:-:W2ZQ:oel:DVRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Mercer
County:Lawrenceville:146.460:147.460:K2RCG:o(ca)l:SarnoffRC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Mercer
County:Lawrenceville:147.105:+:K2UQ:c(ca):Allentown:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Mercer
County:Robbinsville:147.075:+:K2ASF:o(ca)el:K2ASF:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Middlesex
County:Fords:146.820:-:K2IEZ:otlrz:NJFMRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Middlesex County:Old
Bridge:147.120:+:KB2TX:o(ca)er:OldBrdgRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Middlesex
County:Sayreville:146.760:-:K2GE:etlr:RBRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Monmouth County:#Cream
```

Ridge:147.240:+:WB2JCW:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Morris
County:Morristown:145.370:-:KC2CY:ote:KC2CY:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Morris County:Mt.
Freedom:146.895:-:K2GDD:oerxz:MorrisOEM:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Morris
County:Rockaway:146.985:-:K2RF:o(ca)ez:SpltrckRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Morris
County:Whippany:147.030:+:W2TW:o:WpnyARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Ocean
County:Jackson:146.955:-:KA2GEI:ote:KA2GEI:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Ocean County:Lakehurst:145.170:-:WB2JCW:o
131.8:CrmRdgRG:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Ocean
County:Manahawkin:146.835:-:N2OO:o:.835/OCEM:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Ocean County:Toms
River:146.910:-:W2DOR:oae:JSARS:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Ocean County:West
Creek:146.700:-:W2HDS:o:W2HDS:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Passaic County:West
Milford:146.925:-:W3YAX:o:SkylndsRC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Passaic County:West
Paterson:146.610:-:W2FCL:clt:WA2JXE:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Salem
County:Pennsville:146.625:-:W2AMN:oe:SalemCoRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Somerset County:Green Brook:146.940:-:W2NR:oa:ETS of
NJ:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Somerset
County:Martinsville:145.330:-:K2RB:o:TelEmplRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Somerset
County:Martinsville:146.625:-:W2QW:oa:RVRC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.415:::FM
Smplx::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.430:::FM
Smplx::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.445:::FM
Smplx::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.460:::FM
Smplx::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.475:::FM
Smplx::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.490:::FM
Smplx::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.505:::FM
Smplx::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.520:::FM
Smplx::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.535:::FM
Smplx::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.550:::FM
Smplx::ARRL:19920000::F3E:::::::

:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.565:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.580:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:146.595:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.420:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.435:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.450:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.465:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.480:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.495:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.510:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.525:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.540:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.555:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.570:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Southern New Jersey:SNJ Section:147.585:::FM
Smplx::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Sussex County:High
Point:146.715:440.025:K2KQZ:oelt:HPLinkSys:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Sussex County:Newton:147.210:+:WB2WJX:oe:Fredon
RA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Sussex
County:Newton:147.300:+:N3WM:o(ca)elr:SussexARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Sussex
County:Newton:147.330:+:N3WM:oepry:SussexARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Sussex County:Pahaquarry:145.390:-:KA2EIA:otely
tt:CIS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Union
County:Hillside:145.290:-:WB2CWZ:oa:WB2CWZ:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Union
County:Linden:146.655:-:K2ACU:o(ca)er:EARS-NJ:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Union County:Linden:146.685:-:WA2ZDN:o:WA2ZDN:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Union County:Murray
Hill:147.255:+:W2LI:o:Tri-CoRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Union
County:Springfield:147.505:146.505:WA2BAT:oaerz:SpgfldOEM:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NJ:Warren County:#Grt

Meadows:146.805:-:K2OWR:oe:K2OWR:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:Warren County:Washington:146.820:-:WA2AFB:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:West
Central:Cherryville:147.135:+:K2NJ:ot:WJsyDxGrp:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:West Central:Cherryville:147.375:+:WB2NQV:oaelrz:Chryvl
RA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:West
Central:Frenchtown:146.850:-:WA2GWA:atez:K2PM:ARRL:19920000::F3E:::::::
::::::::NA:USA:NJ:West Central:Glen Gardener:147.015:+:WB2NQV:aterz:Chryvl
RA:ARRL:19920000::F3E:::::::
38,35:114,44:2787::::::NA:USA:NV:Central:Goldfield, Mount
Montezuma:146.640:-:WB7WTS:OLX:WB7WTS:ARRL:19930000:0.0:F3E:::::::
39,39:114,48:1815::::::NA:USA:NV:Central:Ely, Warm
Springs:146.850:-:WB7WTS:OL:WB7WTS:ARRL:19930000:0.0:F3E:::::::
39,10:114,37:3274::::::NA:USA:NV:East Central:Ely, Cave
Mtn:146.610:-:WB7WTS:OL:WB7WTS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:East Central:Ely:146.880:-:WB7WTS:O:WB7WTS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:East
Central:Eureka:147.060:+:WB7WTS:O:WB7WTS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:East Central:Ely:147.180:+:WB7WTS:OR:WB7WTS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Boulder
City:145.110:-:WA7LAT:OEL:LVRA:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Las
Vegas:145.190:-:KA7BCP:O:KA7BCP:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Las
Vegas:145.300:-:KW6HF:OEP:KW6HF:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Henderson:146.610:-:W7JLN:O:W7JLN:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:North Las
Vegas:146.670:-:WA7CYC:O:WA7CYC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Las
Vegas:146.700:-:W7IVK:OY:W7IVK:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Las Vegas, Apex
Mtn:146.790:-:W7JLN:O::ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Hi
Potosi:146.880:-:WA7HXO:OX:LsVgasRA:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Las
Vegas:146.940:-:K7UGE:A:LsVgasRAC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Las Vegas:147.090:+:KJ6CF:O:N7AXY:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Las Vegas, Angel
Peak:147.180:+:AA7JZ:OR:NVSTRACES:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Las Vegas:Lo Potosi:147.210:+:K7WS:O:K7WS:ARRL:19930000:0.0:F3E:::::::
36,40:114,34:465::::::NA:USA:NV:Las
Vegas:Glendale:147.390:+:N7CJX:O::ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:North
Central:Winnemucca:146.730:-:WO7I:OR:WO7I:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:North Central:Battle
Mountain:146.910:-:NF7K:O:EARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Northeast:Carlin:146.880:-:WA7BWF:O:EARC:ARRL:19930000:0.0:F3E:::::::
41,7:114,34:2522::::::NA:USA:NV:Northeast:Wells, Rocky
Point:146.960:-:WA7BWF:O:EARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Northwest:Lovelock:146.700:-:K7VJZ:O:SCARS:ARRL:19930000:0.0:F3E:::::::

```
::::::::NA:USA:NV:Northwest:Denio:147.200:+:WO7I:O:WO7I:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Northwest:Lovelock:147.270:+:WO7I:O:WO7I:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Sierra/Tahoe:Truckee
(CA):145.310:-:WA6FWU:O:WA6FWU:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Sierra/Tahoe:Truckee
(CA):146.640:-:WB6ALS:OL:PCSCR:ARRL:19930000:131.8:F3E:::::::
::::::::NA:USA:NV:Sierra/Tahoe:S. Lake
Tahoe:146.850:-:WA6EWV:OEL(CA):TARA:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Sierra/Tahoe:King's
Beach:146.940:-:WA6FJS:OL:WA6FJS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:Sierra/Tahoe:S. Lake
Tahoe:147.030:+:N7RH:OALZ:WADG:ARRL:19930000:123.0:F3E:::::::
::::::::NA:USA:NV:Sierra/Tahoe:Reno:147.150:+:WA7RPS:OXEL(CA):TMARA:ARRL:19930000:123.0:F3
E:::::::
::::::::NA:USA:NV:Sierra/Tahoe:S. Lake
Tahoe:147.240:+:NR7A:OE(CA):TARA:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West Central:Carson
City:145.110:-:WA6JQV:OL:WA6JQV:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West
Central:Reno:145.330:-:WA6MNM:O:WA6MNM:ARRL:19930000:151.4:F3E:::::::
::::::::NA:USA:NV:West Central:Fallon:145.350:-:W6POC:O:W6POC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West Central:Reno:145.370:-:W7UIZ:O:W7UIZ:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West Central:Reno:145.390:-:W7UIZ:O:W7UIZ:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West Central:Reno:145.450:-:W7MOM:OE:CARA:ARRL:19930000:123.0:F3E:::::::
::::::::NA:USA:NV:West Central:Carson
City:145.490:-:W7AAA:OE:CARA:ARRL:19930000:123.0:F3E:::::::
::::::::NA:USA:NV:West Central:Reno:146.610:-:W7TA:OE:SNARS:ARRL:19930000:123.0:F3E:::::::
::::::::NA:USA:NV:West
Central:Reno:146.670:-:W7TA:A*UP#DWN:SNARS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West Central:Reno:146.760:-:K6ALT:O:CARA:ARRL:19930000:123.0:F3E:::::::
::::::::NA:USA:NV:West
Central:Hawthorne:146.790:-:WA6TLW:OLX:WA6TLW:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West Central:Carson
City:146.820:-:N7KTV:O:N7KTV:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West
Central:Bridgeport:146.970:-:K6PXF:O:W6TD:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West Central:Reno:147.090:+:KD6ZM:O:KD6ZM:ARRL:19930000:127.3:F3E:::::::
::::::::NA:USA:NV:West Central:Reno:147.120:+:N7NV:OE:USVAH:ARRL:19930000:123.0:F3E:::::::
::::::::NA:USA:NV:West
Central:Reno:147.180:+:WA7WOP:OER:WA7NHJ:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West Central:Reno:147.300:+:N7RH:OAELZ:WADG:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:NV:West
Central:Minden:147.330:+:KE7FV:OL:SIERA:ARRL:19930000:123.0:F3E:::::::
::::::::NA:USA:NV:West Central:Reno:147.390:+:NZ7E:O:NZ7E:ARRL:19930000:88.5:F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Albany:146.790:-:WA2BFI:o(ca)e:SEEN:ARRL:19920000::F3
E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Albany:147.120:+:WB2ZCM:ore:ALB
RACES:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Cohoes:147.150:+:WB2TDG:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Delmar:146.640:-:WB2VJB:or:BETH.RACES:ARRL:19920000::
```

F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Duanesburg:146.865:-:WA2AAU:o:NOAHS
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Grafton:145.310:-:K2CBA:o:GURU:ARRL:19920000::F3E::::
:::
::::::::NA:USA:NY:Albany/Schenectady:Grafton:147.180:+:KB2YX:orel:RENSS
RACES:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Grafton:147.375:+:WA2WNI:oe:GURU:ARRL:19920000::F3E::
:::::
::::::::NA:USA:NY:Albany/Schenectady:Knox:147.315:+:WA2WNI:oe:GURU:ARRL:19920000::F3E:::::
::
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RACES:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Martindale:147.210:+:WB2UEB:oer:RIPVW
ARS:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Poestenkill:145.370:-:KB2GPK:or:RENNSRACES:ARRL:19920
000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Rensselaer:147.330:+:WB2HZT:o::ARRL:19920000::F3E::::
:::
::::::::NA:USA:NY:Albany/Schenectady:Schenectady:147.060:+:K2AE:oaer:SARA:ARRL:19920000::F
3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Schenectady:147.300:+:WA2AFD:oa::ARRL:19920000::F3E::
:::::
::::::::NA:USA:NY:Albany/Schenectady:Troy:145.330:-:KA2NMP:olr:NiMo
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Troy:146.820:-:W2SZ:oe(ca):RPI
RC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Troy:146.940:-:W2LWX:oael:TEL
PIONRS:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Troy:147.270:+:WA2SPJ:o:WAST
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Albany/Schenectady:Albany:145.190:-:KM2H:oe:ALB
ARA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Amsterdam:Broad Albin:145.430:-:WB2BGI:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Amsterdam:Gloversville:146.700:-:WA2ZJF:oar:TRYON
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Auburn:Auburn:147.270:+:WA2LVW:oaer:CAYUGA EMO:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Auburn:Clyde:145.470:-:KA2NDW:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Auburn:Skaneateles F:147.195:+:WB2FOF:oe:RAGE:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Binghamton:Binghamton:146.640:-:W2AJ:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Binghamton:Binghamton:146.730:-:K2TD:oe::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Binghamton:Binghamton:146.820:-:WA2QEL:oae:SVARA:ARRL:19920000::F3E:::::
::
::::::::NA:USA:NY:Binghamton:Binghamton:147.390:+:W2OW:oae:BINGO
ARA:ARRL:19920000::F3E:::::::
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::::::::NA:USA:NY:Binghamton:Owego:146.760:-:W2VDX:o:TIOGA ARA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Binghamton:Port Crane:145.290:-:WA2QEL:O::ARRL:19920000::F3E:::::::
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::::::::NA:USA:NY:Bronx:Bronx:147.240:+:WA2DUO:lt:WA2DUO:ARRL:19920000::F3E:::::::

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::::::::NA:USA:NY:Brooklyn:Brooklyn:146.730:-:W2IVS:o:WA2RBG:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Canandaigua:Bristol Mtn:146.730:-:N2IBE:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Central:Cazenovia:147.105:+:N2IQU:ole(ca)z::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Central:Auburn:145.350:-:WA2QYT:oa::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Central:Auburn:147.000:-:WA2QYT:oae::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Central:Canastota:146.670:-:N2JEU:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Central Mohawk Valley:German
Flats:145.110:-:WB2KMH:oaer:HerkARES:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Central/Yates County:Penn
Yan:145.370:-:WA2UKX:oer::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Cortland:Cortland:145.490:-:N2BEA:oaez::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Cortland:Cortland:147.030:+:WA2VAM:or:FLRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Cortland:Cortland:147.180:+:KB2FAF:o:SkylineARC:ARRL:19920000::F3E::::::
:
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::::::::NA:USA:NY:Delaware County:Walton:147.000:-:K2NK:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:East Central:Burlingon Fl:146.715:-:K9JR:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:East Central:Canajoharie:146.970:-:WA2GXP:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:East
Central:Cobleskill:146.610:-:WA2ZWM:ora:SARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:East
Central:Cooperstown:145.350:-:KA2JMC:oe:OCARA:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:East
Central:Cooperstown:146.640:-:WA2SAF:oer:OCARA:ARRL:19920000::F3E:::::::
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::::::::NA:USA:NY:East Central:Lake Nancy:147.360:+:KC2IV:o::ARRL:19920000::F3E:::::::
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RC:ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
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RC:ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Eastern Adirondack:Schroon
Lake:145.270:-:KE2LS:o(ca)ez::ARRL:19920000::F3E:::::::
::::::::NA:USA:NY:Eastern Catskills:Hunter:145.150:-:WB2UYR:oer:MTNTOP
ARA:ARRL:19920000::F3E:::::::
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CRA:ARRL:19920000::F3E:::::::
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::
::::::::NA:USA:NY:Elmira/Ithaca:Ithaca:146.610:-:W2CXM:oaez:CORNELL
RC:ARRL:19920000::F3E:::::::
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::::::::NA:USA:NY:Elmira/Ithaca:Ithaca:146.970:-:AF2A:oaerz:TOM CO
ARC:ARRL:19920000::F3E:::::::
```

:::::::::NA:USA:NY:Elmira/Ithaca:Tuscarora:147.090:+:W2ZXZ:o:OLD
TIMERS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Elmira/Ithaca:Watkins
Glenn:147.165:+:KA2IFE:orl:WARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Glens Falls:Corinth:147.000:-:WA2UMX:orl:Stga
RACES:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Glens Falls:Hartford:147.285:+:N2IIK:o:S.ADIR
RGI:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Glens Falls:Hudson Falls:145.410:-:WB2CEP:o::ARRL:19920000::F3E:::::::
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Falls:146.775:-:K2ACA:(ca)erx:SoAdRG:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Glens Falls:Lake George:146.730:-:KT2M:or:WC
RACES:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Hoosick Falls/Troy:Hoosick
Falls:147.345:+:KB2KYZ:olr:RENNSRACES:ARRL:19920000::F3E:::::::
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CRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Kingston/Poughkeepsie:Clinton
Cors:147.345:+:W2CS:c:STARC:ARRL:19920000::F3E:::::::
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RG:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Kingston/Poughkeepsie:Poughkeepsie:147.045:+:K2UZS:oaez:MtBcn
ARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Kingston/Poughkeepsie:Poughkeepsie:147.135:+:WC2AGD:or:RACES:ARRL:199200
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tt:TSRC:ARRL:19920000::F3E:::::::
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136.5:Hntgn EOC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Long Island/Nassau County
East:Bethpage:146.745:-:WA2LQO:oe:GrummanRC:ARRL:19920000::F3E:::::::
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ARTS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Long Island/Nassau County East:Levittown:147.030:+:WB2ROL:etl(ca)p
tt:WB2ROL:ARRL:19920000::F3E:::::::
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tt:+WB2WAK:ARRL:19920000::F3E:::::::
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tt:+WB2WHH:ARRL:19920000::F3E:::::::
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ARTS:ARRL:19920000::F3E:::::::
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East:Plainview:146.805:-:WB2WHH:ot:+WB2WAK:ARRL:19920000::F3E:::::::
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ARTS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Long Island/Nassau County

East:Plainview:147.375:+:WB2NHO:ot:LIMARC:ARRL:19920000::F3E:::::::
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West:Albertson:145.410:-:K2CJP:or:k2cjp:ARRL:19920000::F3E:::::::
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Oaks:146.850:-:W2VL:oe:LIMARC:ARRL:19920000::F3E:::::::
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Central:Hauppauge:147.075:+:WA2IAW:o:WA2IAW:ARRL:19920000::F3E:::::::
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Central:Islip:145.210:-:W2DQ:o:SuffolkRC:ARRL:19920000::F3E:::::::
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Central:Manorville:146.820:-:W2OQI:elt:RckHillRA:ARRL:19920000::F3E:::::::
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Central:Manorville:448.325:146.220:W2OQI:elt:RckHillRA:ARRL:19920000::F3E:::::::
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tt:K2YBW:ARRL:19920000::F3E:::::::
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Brook:146.760:-:WA2VNV:ctael:StnyBrkRA:ARRL:19920000::F3E:::::::
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Brook:146.760:443.825:WA2VNV:otael:StnyBrkRA:ARRL:19920000::F3E:::::::
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East:Amagansett:147.030:+:W2HLI:o(ca):W2HLI:ARRL:19920000::F3E:::::::
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Park:145.290:-:WA2BPO:o:AIL:ARRL:19920000::F3E:::::::
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Hampton:145.270:-:KA2NYA:ct:HERA:ARRL:19920000::F3E:::::::
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East:Southampton:146.955:-:WA2SWL:olxy:WA2SWL:ARRL:19920000::F3E:::::::

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East:Southampton:147.195:+:WA2UEG:o(ca)e:WA2UEG:ARRL:19920000::F3E:::::::
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West:Babylon:146.685:-:WB2FKZ:oer:GrtSBayRC:ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
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ARTS:ARRL:19920000::F3E:::::::
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West:Huntington:147.210:+:WA2PNU:cer:LrkfldARC:ARRL:19920000::F3E:::::::
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West:Huntington:147.300:+:W2WMG:cter:LIDXA:ARRL:19920000::F3E:::::::
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West:Huntington:147.330:+:WA2UZE:oal:HVHFFMA:ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Manhattan:Manhattan:145.450:-:K2KLN:oaelz:Metroplex:ARRL:19920000::F3E::
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RA:ARRL:19920000::F3E:::::::
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RS:ARRL:19920000::F3E:::::::
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:::
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:F3E:::::::
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:F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
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N:ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
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RS:ARRL:19920000::F3E:::::::
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:::::::::NA:USA:NY:Norwich:Bainbridge:146.685:-:WA2EYH:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Northwest Adirondacks:Tupper
Lake:147.330:+:NS2Y:oe:GARA:ARRL:19920000::F3E:::::::
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Lake:147.330:+:WB2ZIY:oex::ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
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RRA:ARRL:19920000::F3E:::::::
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RN:ARRL:19920000::F3E:::::::
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RACES:ARRL:19920000::F3E:::::::
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RA:ARRL:19920000::F3E:::::::
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:
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Island:146.880:-:NS2U:oe:NYCRA:ARRL:19920000::F3E:::::::
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Island:147.315:+:WA2RXQ::WA2RXQ:ARRL:19920000::F3E:::::::

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ARC:ARRL:19920000::F3E::::::
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CD:ARRL:19920000::F3E::::::
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LARC:ARRL:19920000::F3E::::::
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LARA:ARRL:19920000::F3E::::::
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Central:Naples:146.925:-:NO2W:ol:TELCOURIER:ARRL:19920000::F3E::::::
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HLRC:ARRL:19920000::F3E::::::
```

:::::::::NA:USA:NY:West Central:Prattsburg:147.120:+:K2MLT:ol:BULLY
HLRC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West Central:Springwater:146.760:-:WA2DHB:ole(ca)z:LVGSTN
ARS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West Finger Lakes:Penn Yan:146.835:-:KE2BV:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West Finger Lakes:South
Bristol:146.925:-:N2HJD:olr::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West Finger Lakes:Bristol
Spgs:145.110:-:WA2EWU:o:WA2EWU:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Western Southern:Hornell:146.955:-:KE2BVD:oe:ALFRED
COL:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Western Southern:Groveland:147.030:-:N2BAD:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester
County:Bedford:147.105:+:WB2AAQ:or::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester
County:Chappaqua:145.110:-:WA2DCH:ot:NWARptAsn:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester County:Rye:146.940:-:AJ1J:oer:Rye
CD:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester
County:Valhalla:147.060:146.565:WB2ZII:elyz:WECA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester
County:Valhalla:147.060:+:WB2ZII:oaelryz:WECA:ARRL:19920000::F3E:::::::
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County:Valhalla:224.780:147.660:WB2ZII:oaelryz:WECA:ARRL:19920000::F3E:::::::
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County:Valhalla:447.475:147.660:WB2ZII:oaelryz:WECA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester County:White
Plains:145.330:-:WA2ELE:oe::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester County:White
Plains:146.775:-:WA2CWP:oe:LLTelPnrs:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester
County:Yonkers:145.495:-:W2KSV:ot:W2KSV:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester
County:Yonkers:146.865:-:W2MZV:ae:YARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester
County:Yonkers:146.910:-:K2JQB:oaz:WFMA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester County:Yorktown
Hgts:146.940:-:WA2TOW:oar:YCDARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Westchester County:Yorktown
Hgts:147.015:+:WB2IXR:oa:YCDARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Monroe County:Monroe
County:145.250:-:SNPF:snp::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Monroe County:Monroe
County:147.390:+:SNPF:snp::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Monroe County:Churchville:145.210:-:N2EPO:o::ARRL:19920000::F3E:::::::
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:::::::::NA:USA:NY:Niagara:Niagara:147.390:+:SNPF:snp::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Niagara:Boston:146.910:-:W2EUP:o Link2::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Niagara:Grand Island:146.730:-:K2GUG:o::ARRL:19920000::F3E:::::::

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:::::::::NA:USA:NY:Niagara:Hamburg:147.090:+:WB2ELW:oez::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Niagara:Lockport:146.820:-:W2RUI:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Niagara:Niagara Falls:146.685:-:WA2UJG:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Niagara:Niagara
Falls:146.775:-:WC2AFM:oea:RACES:ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Niagara:Tonawanda:146.955:-:W2PVL:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Niagara:Tonawanda:147.045:+:KA2WFT:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Southern Tier:Southern
Tier:145.250:-:SNPF:snp::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Southern Tier:Southern
Tier:147.390:+:SNPF:snp::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Southern Tier:Cherry Creek:147.000:+:W2OXB:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:Southern Tier:Dayton:146.655:-:WA2DSI:oe(ca)::ARRL:19920000::F3E:::::::
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:::::::::NA:USA:NY:Southern Tier:Fillmore:145.330:-:N2EHY:o::ARRL:19920000::F3E:::::::
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:::::::::NA:USA:NY:West:#Caledonia:147.030:+:N2BAD:o::ARRL:19920000::F3E:::::::
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:::::::::NA:USA:NY:West:Alma Hill:145.490:-:N2ISM:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West:Arcade:145.170:-:KC2JY:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West:Attica:145.310:-:WB2IID:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West:Attica:147.360:+:W2RR:oe DX info::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West:Batavia:147.150:+:W2DIG:oea::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West:Batavia:147.285:+:W2RCX:o::ARRL:19920000::F3E:::::::
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:::::::::NA:USA:NY:West:Lyndon:146.895:-:K2UOB:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West:Wethersfield:146.640:-:W2ZIA:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:NY:West:Wethersfield:147.315:+:WA2CAM:o::ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA::Chester:146.43:147.43:WB3JVX:oxelr(ca) wx ctcss
156.7:Metro-Com:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA::Westchester:146.43:147.43:WB3JVX:oxelr(ca) wx ctcss
71.9:Metro-Com:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA::Chester:29.62:29.52:WB3JVX:oxelr wx
141.3:Metro-Com:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA::Chester:53.95:52.95:WB3JVX:oxl wx:Metro-Com:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA::Chester:224.96:223.96:WB3JVX:oxelr(ca) wx
z:Metro-Com:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA::Chester:443.05:448.05:WB3JVX:oxelr(ca) wx z
156.7:Metro-Com:ARRL:19920000::F3E:::::::

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023inv.:Metro-Com:ARRL:19920000::F3E:::::::
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wx:Metro-Com:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA::Chichester:443.00:448.00:WB3JVX:oe(ca)
156.7:Metro-Com:ARRL:19920000::F3E:::::::
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County:Gettysburg:145.350:-:WB3CVM:o(ca)e:ACARS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Altoona:Altoona:146.610:-:K3IML:oaerz:HshuRC:ARRL:19920000::F3E:::::::
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:::::::::NA:USA:PA:Berks
County:Earlville:147.210:+:W3BWD:o(ca)e:PART:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Berks County:Reading:145.150:-:N3CHL:oy:Daub DX
Asn:ARRL:19920000::F3E:::::::
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Asn:ARRL:19920000::F3E:::::::
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County:Reading:146.910:-:W3BN:oel:ReadingRC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bradford County:New
Albany:147.285:+:NE3O:o:NoTierRG:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks County:Doylestown:145.350:-:WA3EPA:o:WRC:ARRL:19920000::F3E:::::::
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County:Doylestown:147.390:+:K3ESJ:o(ca)e:CentBucks:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks
County:Feasterville:146.970:-:K3ZFD:oel:PARA:ARRL:19920000::F3E:::::::
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County:Feasterville:146.970:223.380:K3ZFD:el:PARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks County:Hatfield:146.880:-:WB3BJE:oa:PARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks County:Hilltown:145.330:-:K3ESJ:oa
131.8:HiPntRC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks
County:Quakertown:145.310:-:W3AI:oe:RfHillARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks
County:Richboro:146.250:-:W3SK:o(ca):PennWirAs:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks County:Richboro:146.790:-:N3TS:o(ca)e:Lwr
Bucks:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks
County:Sellersville:145.190:-:NK3U:oae:TARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks
County:Warrington:147.100:+:WA3ZID:os:WA3ZID:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Bucks County:Yardley:147.300:+:WA3HLC:o(ca)e
l31.8:BEARS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Carbon County:Jim
Thorpe:147.255:+:WB3ESS:oelw:EPaVHFScy:ARRL:19920000::F3E:::::::
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:::::::::NA:USA:PA:Central:Lewistown:146.910:-:WA3TRG:o:JVARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Central:State
College:145.450:-:K3EZS:oael:K3EZS:ARRL:19920000::F3E:::::::

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College:146.760:-:K3HKK:oael:NtnyRC:ARRL:19920000::F3E:::::::
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County:Parkersburg:146.985:+:WA3GMS:oe:WA3GMS:ARRL:19920000::F3E:::::::
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Forge:146.760:-:W3PHL:o(ca)elw:PARA:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Columbia
County:Berwick:146.790:-:AD3L:oe:JonesMtRC:ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Cumberland
County:Carlisle:145.190:-:KD3HJ:oael:N3GCG:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Cumberland
County:Dillsburg:147.210:+:W3MXD:o:W3MXD:ARRL:19920000::F3E:::::::
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County:Mechanicsburg:145.270:-:K3WKK:oe:CCARS:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Cumberland County:Mt. Holly
Spgs:145.430:-:WA3ZXG:o(ca)el:SMRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Cumberland County:Mt. Holly
Sprg:146.880:-:N3EPY:o:SMRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Dauphin
County:Cumberland:147.000:+:W3ABF:o:W3ABF:ARRL:19920000::F3E:::::::
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County:Dauphin:147.075:+:WB3JFA:oe:Keystone:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:Dauphin
County:Harrisburg:145.110:-:WB3JFA:oe:Keystone:ARRL:19920000::F3E:::::::
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County:Harrisburg:145.290:-:WA3KXG:oael:CPRA:ARRL:19920000::F3E:::::::
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County:Harrisburg:146.760:-:W3UU:o(ca):HRAC:ARRL:19920000::F3E:::::::
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County:Harrisburg:146.940:-:WA3KXG:oae:CPRA:ARRL:19920000::F3E:::::::
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County:Harrisburg:147.375:+:KC3BN:oey:CPRA:ARRL:19920000::F3E:::::::
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County:Hummlstown:145.330:-:AK3P:o:AK3P:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Delaware
County:Darby:147.360:+:W3UER:o(ca)el:DelCoARA:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Delaware
County:Darby:147.360:222.900:W3UER:o(ca)el:DelCoARA:ARRL:19920000::F3E:::::::
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County:Media:145.230:-:W3FBF:o:Mbl6rsRC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Delaware County:Newtown
Sq:147.195:+:AK3M:o(ca)e:AK3M:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Delaware
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County:Radnor:147.060:+:WB3JOE:oe:MidAtlARC:ARRL:19920000::F3E::::::
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::::::::NA:USA:PA:Eastern Penna:EPA Section:146.505:::FM Smplx::ARRL:19920000::F3E::::::
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::::::::NA:USA:PA:Erie:Cherry Hill:146.760:-:WA3USH:oaelx:+WYZ:ARRL:19920000::F3E::::::
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::::::::NA:USA:PA:Erie:Erie:147.000:-:WB3DWL:oael RB:GANNON:ARRL:19920000::F3E::::::
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::::::::NA:USA:PA:Erie:Union City:146.730:-:WA3PGL:ca:WA3PGL:ARRL:19920000::F3E::::::
::::::::NA:USA:PA:Johnstown:Johnstown:145.390:-:WA3WGN:oery:+CVARC:ARRL:19920000::F3E:::::
::
::::::::NA:USA:PA:Johnstown:Johnstown:146.940:-:WA3WGN:o(ca)erz:+CVARC:ARRL:19920000::F3E:
::::::
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::::::::NA:USA:PA:Juniata
County:Mifflintown:147.045:-:KI3D:oe:Tuscarora:ARRL:19920000::F3E::::::
::::::::NA:USA:PA:Lackawana
County:Scranton:146.940:-:K3CSG:o(ca)e:SPARK:ARRL:19920000::F3E::::::

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County:Columbia:146.715:-:K3FHC:o(ca):CoulAreaARC:ARRL:19920000::F3E:::::::
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County:Columbia:147.255:+:WB3KAW:o:W3GES:ARRL:19920000::F3E:::::::
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County:Ephrata:145.450:-:K3RZF:o:EARS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lancaster
County:Lancaster:146.610:-:WA3NOF:c(ca)t:SeaComm:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lancaster
County:Lancaster:147.015:+:N3CC:o(ca)e:RedRoseRA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lebanon
County:Cambelltown:147.165:+:WA3ZFM:oa:ZFM-ESN:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lebanon
County:Cornwall:145.390:-:KA3NKB:oael:LRTS:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lebanon
County:Lebanon:147.315:+:W3EIA:oae:LebVyScty:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lehigh County:Allentown:146.745:-:KA3HJW:cae
151.4:KA3HJW:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lehigh County:Allentown:147.135:+:W3OI:o:LVARC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lehigh County:Coopersburg:147.285:+:W3IDZ:oel
151.4:w3idz:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Luzerne
County:Freeland:146.670:-:K3JSZ:oae:Anthracit:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Luzerne
County:Freeland:147.030:+:K3BS:o:AnthrRC:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Luzerne County:Hanover
Twp:147.330:+:K3FUT:oae:K3FUT:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Luzerne
County:Pringle:146.880:-:W3KUA:o(ca):W3KUA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Luzerne
County:Wilkes-Barre:145.410:-:N3DAX:o(ca)e:N3DAX:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lycoming
County:Huntersville:145.450:-:K3QFW:oaelw:LCDptES:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lycoming County:Trout
Run:145.150:-:K3QFW:oaelw:LCDptES:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lycoming
County:Waterville:145.350:-:K3QFW:oael:LCDptES:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lycoming
County:Williamsport:145.490:-:N3AFX:o:BERA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lycoming
County:Williamsport:146.730:-:W3AVK:oael:WBrARA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Lycoming
County:Williamsport:147.090:+:N3AFX:o:BERA:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Monroe County:Long
Pond:145.230:-:N3DZM:o(ca)lt:Complex:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Monroe County:Tannersville:146.865:-:N3BFL:oal:Monroe
CO:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Montgomery
County:Abington:147.270:+:W3FRY:o:Frankford:ARRL:19920000::F3E:::::::
:::::::::NA:USA:PA:Montgomery County:Bryn

Mawr:145.130:-:WB3JOE:o:MAAC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Montgomery
County:Eagleville:146.805:-:WA3SSG:o:WA3SSG:ARRL:19920000::F3E:::::::
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County:Hatfield:147.330:+:WA3RYQ:o(ca)el:WA3RYQ:ARRL:19920000::F3E:::::::
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County:Meadowbrook:147.165:+:K3SSC:o(ca)e:DelMontRC:ARRL:19920000::F3E:::::::
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County:Wynnwood:145.410:-:K3TR:oa:OARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Mountour County:Liberty
Twp:145.290:-:WA2JOC::MCEMA:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:North Central:DuBois:147.390:+:K3PS:or:QCFMA:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:North
Central:Emporium:146.805:-:N3FYD:o(ca):CCARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:North
Central:Emporium:147.180:+:WA3WPS:o(ca)e:CCARC:ARRL:19920000::F3E:::::::
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Haven:147.360:+:K3KR:oelr:K3KR:ARRL:19920000::F3E:::::::
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Central:Rockton:146.775:-:N3GJZ:oel(ca):RMRA:ARRL:19920000::F3E:::::::
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County:Bangor:147.045:+:WA3GYE:o:SPARK:ARRL:19920000::F3E:::::::
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County:Nazareth:145.110:-:W3PYF:o:NoCtyEMA:ARRL:19920000::F3E:::::::
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County:Nazareth:146.700:-:W3OK:oel:DelLehRC:ARRL:19920000::F3E:::::::
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County:Milton:146.970:-:WA3AMI:o(ca):WA3AMI:ARRL:19920000::F3E:::::::
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County:Shamokin:147.300:+:WB3KCW:o(ca)e:CentPaARC:ARRL:19920000::F3E:::::::
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County:Sunbury:147.270:+:K3ARR:oae:SusVyARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Northwest:Franklin:145.230:-:W3ZIC:oaelz:FVM&KC:ARRL:19920000::F3E:::::
:
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City:146.730:-:WB3IGM:oel:WB3IGM:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:Northwest:Meadville:147.030:-:W3NRU:oaer:W3NRU:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Northwest:Meadville:147.210:+:K3YAK:oaerz:K3YAK:ARRL:19920000::F3E:::::
:
::::::::NA:USA:PA:Northwest:Pleasantville:147.120:+:W3ZIC:oalrz:FVM&KC:ARRL:19920000::F3E:
::::::
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88.5:CCAFMA:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Northwest:Warren:147.360:+:AK3R:o:WrnHMS:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Northwest:Youngsville:146.970:-:N3DB:oe:n3db:ARRL:19920000::F3E:::::::

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Bell:ARRL:19920000::F3E:::::::
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County:Phila/Roxboro:147.030:+:W3QV:oal:Phil-Mont:ARRL:19920000::F3E:::::::
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ARC:ARRL:19920000::F3E:::::::
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County:Phila/West:146.685:-:WA3AOP:ol:HolmesARC:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:Pike County:Shohola
Falls:146.715:-:K2KQZ:o:K2KQZ:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Pike County:Twin
Lakes:147.090:+:K2KQZ:oe:7StatesRG:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:Pittsburgh:Apollo:146.970:-:KR3P:oaelrzx:BPRA:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:Pittsburgh:Clinton:147.210:+:K3KEM:oaelz
100.0:K3KEM:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:Pittsburgh:McMurray:147.345:+:WB3AZL:at::ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Pittsburgh:Monroeville:145.250:-:K3SYJ:oel(ca):K3CFY:ARRL:19920000::F3E:
::::::
::::::::NA:USA:PA:Pittsburgh:Mt
Lebanon:146.955:-:N3CGD:o:MtLHSARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Pittsburgh:N
Huntingdon:147.120:+:WA3NTR:(ca)t:WA3GXO:ARRL:19920000::F3E:::::::
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Hts:147.000:-:WB3AHI:p:WB3AHI:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Pittsburgh:New
Kensingtn:146.640:-:K3MJW:oae:Skyvu:ARRL:19920000::F3E:::::::
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FMA:ARRL:19920000::F3E:::::::
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info:WPaDXA:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:Pittsburgh:Phg/N Hills:147.090:+:W3BIS:o:NHARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Schuykill
County:Delano:145.370:-:W3EEK:o(ca):SchuylARA:ARRL:19920000::F3E:::::::
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Grove:145.170:-:K3SLG:el:AARG:ARRL:19920000::F3E:::::::
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Grove:146.640:-:K3SLG:o(ca)ew:AARG:ARRL:19920000::F3E:::::::
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County:Pottsville:146.955:-:WB3CRX:o:WB3CRX:ARRL:19920000::F3E:::::::
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ARA:ARRL:19920000::F3E:::::::
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County:Tamaqua:147.105:+:W3TI:oe:TamTrsScy:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Snyder
County:Middleburg:146.820:-:WA3DTV:oty:SnyCtyEMA:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Snyder
County:Selinsgrove:147.180:+:NR3U:oe:SVARC:ARRL:19920000::F3E:::::::
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County:Friedens:146.625:-:N3GQP:olr(ca):N3GQP:ARRL:19920000::F3E:::::::
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County:Friedens:146.625:-:WA3MYA:o(ca)elrzx110.9RBDS:N3GQP:ARRL:19920000::F3E:::::::
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DS:+N3GQP:ARRL:19920000::F3E:::::::
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County:Myersdale:145.270:-:KQ3M:o(ca)elrz-107.2:AHRA:ARRL:19920000::F3E:::::::
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RB:+N3GQP:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:South Central:Blue
Knob:147.150:+:K3OIH:oaelrzx:BKRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:South
Central:Chambersburg:147.120:+:W3ACH:o:CVARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:South
Central:Derry:145.150:-:N3FLR:oeary:LHVHFS:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:South Central:Fort
Loudon:147.225:+:K3PQX:o:K3PQX:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Southwest:Bentleyville:147.270:+:WA3KIQ:oy:WA3DIQ:ARRL:19920000::F3E::::
:::
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::::::
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::
::::::::NA:USA:PA:Southwest:Greensburg:147.180:+:W3LWW:o(ca)e:FARC:ARRL:19920000::F3E:::::
::
::::::::NA:USA:PA:Southwest:Hopwood:145.170:-:WB3LUC:o:WB3LUC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Southwest:Indian
Head:147.225:+:KA3BFI:oa:KA3BFI:ARRL:19920000::F3E:::::::
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Pleasant:147.015:+:KA3JSD:o:KA3JSD:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Southwest:Somerset:147.195:+:NJ3T:aerz:SARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Southwest:Uniontown:147.045:+:W3PIE:oax:UARC:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:Southwest:Washington:145.490:-:W3CYO:oa:+AD3T:ARRL:19920000::F3E:::::::
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::::::::NA:USA:PA:Susquehanna
```

County:Montrose:147.375:+:N3HPY:o(ca)e:MARA:ARRL:19920000::F3E:::::::
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RG:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Tioga
County:Wellsboro:146.790:-:WA3CSP:o:WA3DPV:ARRL:19920000::F3E:::::::
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County:Wellsboro:146.910:-:W3VEG:oe:W3VEG:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Union County:New
Berlin:146.625:-:WA3SXQ:o:MiltonARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Wayne County:Honesdale:145.210:-:K3MMC:o:Wayne
ARS:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:Wayne
County:Waymart/Salem:146.655:-:WB3KGE:oae:KA3BXT:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:West Central:#Petrolia:146.715:-:N3HLG:t:N3HLG:ARRL:19920000::F3E:::::::
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Central:Aliquippa:145.530:222.960:N3IRI:oz:N3IPW:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:West
Central:Beaver:146.850:-:W3VRZ:o(ca)erz:TAARA:ARRL:19920000::F3E:::::::
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100.0:N3CYR:ARRL:19920000::F3E:::::::
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Falls:145.310:-:W3SGJ:oaelrz:BVARA:ARRL:19920000::F3E:::::::
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Central:Bessemer:145.170:-:N3FYK:oez(ca):N3FYK:ARRL:19920000::F3E:::::::
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Central:Brookville:147.285:147.285:WA3FFC:o(ca):WB3HUE:ARRL:19920000::F3E:::::::
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Central:Industry:146.415:146.415:N3CYR:oe(ca):RESCU40:ARRL:19920000::F3E:::::::
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Central:Leechburg:147.330:+:WA3JVG:oer:WA3JVG:ARRL:19920000::F3E:::::::
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Castle:146.625:-:WA3VRD:o:BDeSanzo:ARRL:19920000::F3E:::::::
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Castle:147.195:+:N3CVB:otaz:NCRA:ARRL:19920000::F3E:::::::
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Central:Parker:145.190:-:W3ZIC:oalr:FVM&KC:ARRL:19920000::F3E:::::::
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Central:Sharon:145.350:-:AF3P:oaelrzx:SPRING:ARRL:19920000::F3E:::::::
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Central:Sharon:147.150:+:W3LIF:oaerz:MCARC:ARRL:19920000::F3E:::::::
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Central:Zelienople:147.240:+:W3WKD:oe:BCFMA:ARRL:19920000::F3E:::::::
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County:Mehoopany:147.210:+:WB3IWZ:o:EMARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:PA:York
County:Hanover:147.330:+:W3JNT:o(ca)e:Penn-Mar:ARRL:19920000::F3E:::::::
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Top:ARRL:19920000::F3E:::::::
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County:Shrewsbury:146.700:-:K3NXU:oe:SPaComGrp:ARRL:19920000::F3E:::::::
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::::::::NA:USA:RI::Newport:146.985:-:K1DA:a:K1DA:ARRL:19920000::F3E:::::::
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::::::::NA:USA:RI::Scituate:146.760:-:W1HQV:olx:RI FM RS:ARRL:19920000::F3E:::::::
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::::::::NA:USA:SD:Central:Huron:146.820:-:WB0ULX:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Central:Huron:147.090:+:WB0PLP:oa::ARRL:19920000::F3E:::::::
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::::::::NA:USA:SD:North Central:Mobridge:147.210:+:W0YMB:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Northeast:Bowdle:147.120:+:WB0JZZ:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Northeast:Clear Lake:145.430:-:K0CVF:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Northeast:Clear Lake:147.180:+:WAOYIN:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Northeast:Crandall:146.970:-:W0JOZ:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Northeast:Groton:147.330:+:WBOJZZ:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Northeast:Sisseton:146.880:-:WA0BZD:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Northeast:Watertown:146.850:-:KF0HL:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Southeast:Beresford:147.240:+:W0OJY:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Southeast:Canton:147.150:+:K0TVJ:oa::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Southeast:Humbolt:147.285:+:N0LCL:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Southeast:Menno:147.000:-:W0OJY:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Southeast:Sioux Falls:145.310:-:KBOA:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Southeast:Sioux Falls:146.895:-:W0ZWY:oae::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Southeast:Vermillion:147.375:+:AC0M:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:Southeast:Yankton:146.850:-:W0OJY:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:West:Custer:146.850:-:W0BLK:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:West:Midland:147.270:+:W0RTD:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:West:Rapid City:146.940:-:WB0BLK:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:West:Rapid City:147.840:-:K0VKH:oa::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:West:Terry Peak:146.760:-:W0BLK:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:SD:West:Custer:147.090:+:K0DPD:o::ARRL:19920000::F3E:::::::

:::::::::NA:USA:UT::SHARED NON-PROTECTED:145.410:-::O::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT:::146.420:::::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT:::146.440:::::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT:::146.460:::::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT:::146.480::WA7PKL:::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT::Orem:146.500::KA7QEF:::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT:::146.520:::::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT:::146.540:::::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT:::146.560:::::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT:::146.580:::::UVHFS:19920201:0.0:F3E:::::::
:::::::::NA:USA:UT:::147.420:::::::0.0:F3E:::::::
:::::::::NA:USA:UT:::147.480:::::::0.0:F3E:::::::
:::::::::NA:USA:UT:::147.540:::::::0.0:F3E:::::::
:::::::::NA:USA:UT:::147.600:::::::0.0:F3E:::::::
38,38:112,1:3421::::::NA:USA:UT:Central:Richfield, Signal
Peak:146.640:-:WA7HSW:OX:WA7HSW:ARRL:19930000:0.0:F3E:::::::
39,20:111,27:3168::::::NA:USA:UT:Central:Ephraim, Skyline
Drive:146.660:-:W7JGS:OX:W7JGS:ARRL:19930000:0.0:F3E:::::::
38,52:112,14:3114::::::NA:USA:UT:Central:Richfield, White Pine
Peak:146.860:-:N7VQW:OX::ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:UT:Central:Salina, Beesting
Peak:147.100:+:N7GGN:OEX:N7GGN:ARRL:19930000:0.0:F3E:::::::
38,36:111,58:3264::::::NA:USA:UT:Central:Monroe, Cove
Mtn:147.300:+:WA7HSW:OA::ARRL:19930000:0.0:F3E:::::::
41,50:112,2:1753::::::NA:USA:UT:North:Logan, Wheelon
Peak:145.310:-:WA7KMF:OA:BARC:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:UT:North:Brigham City,
Thiokol:145.430:-:KE7FO:OAL:MTARC:ARRL:19930000:0.0:F3E:::::::
41,44:111,49:1457::::::NA:USA:UT:North:Logan, USU
Campus:146.640:-:AC7O:OL:AC7O:ARRL:19930000:0.0:F3E:::::::
41,43:111,43:2960::::::NA:USA:UT:North:Logan, Logan
Peak:146.720:-:AC7O:OAX:+WA7MXZ:ARRL:19930000:0.0:F3E:::::::
41,53:111,16:2310::::::NA:USA:UT:North:Bear Lake, N of Lake
Town:147.120:+:KB7OGM:OLX:+K7JL:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:UT:North:Logan:147.200:+:KD7FM:O::ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:UT:Northeast:Roosevelt,
Altamont:145.490:-:WB7CBS:O(CA):K7HEN:ARRL:19930000:0.0:F3E:::::::
40,21:110,48:3048::::::NA:USA:UT:Northeast:Altamont, Tabby
Mtn:146.700:-:WB7CBS:C::ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:UT:Northeast:Roosevelt:146.920:-:KA7BPB:O::ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:UT:Northeast:Vernal:147.040:+:KF7AG:O:BARC:ARRL:19930000:0.0:F3E:::::::
40,23:109,6:2469::::::NA:USA:UT:Northeast:Vernal, Blue
Mtn:147.100:+:KA7LWF:O::ARRL:19930000:0.0:F3E:::::::
40,21:110,48:3048::::::NA:USA:UT:Northeast:Roosevelt, Tabby
Mtn:147.240:+:K7HEN:OALX:K7HEN:ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:UT:Northeast:Duchesne:147.260:+:N7PQD:O::ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:UT:Southeast:Carbon
County:145.410:-:KA7LEG:OE::ARRL:19930000:0.0:F3E:::::::
:::::::::NA:USA:UT:Southeast:Price:145.430:-:KA7LEG:O::ARRL:19930000:0.0:F3E:::::::
37,30:109,28:3463::::::NA:USA:UT:Southeast:Monticello, Abajo

Peak:146.610:-:K7QEQ:OLX:K7QEQ:ARRL:19930000:0.0:F3E:::::::
38,32:109,19:2609::::::NA:USA:UT:Southeast:Moab, Bald
Mesa:146.760:-:K7QEQ:OLX:K7QEQ:ARRL:19930000:0.0:F3E:::::::
39,12:111,19:2731::::::NA:USA:UT:Southeast:Castledale, Horn
Mtn:147.060:+:WX7Y:OX::ARRL:19930000:0.0:F3E:::::::
39,46:110,59:2907::::::NA:USA:UT:Southeast:Price, Ford
Ridge:147.080:+:WX7Y:OALX:WX7Y:ARRL:19930000:0.0:F3E:::::::
39,10:110,37:2336::::::NA:USA:UT:Southeast:Castledale, Cedar
Mtn:147.140:+:NC7F:OLA:NC7F:ARRL:19930000:0.0:F3E:::::::
39,39:110,21:3104::::::NA:USA:UT:Southeast:Price, Bruin
Peak:147.320:146.920:WX7Y:OALX:WX7Y:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Southwest:St. George:145.450:-:W7NFT:O::ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Southwest:Cedar
City:145.470:-:N7IQD:O:N7IQD:ARRL:19930000:0.0:F3E:::::::
37,7:113,34:982::::::NA:USA:UT:Southwest:St. George, Red
Hill:146.640:-:W7NFT:OA::ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Southwest:St.
George:146.700:-:KA7STK:O(CA)::ARRL:19930000:0.0:F3E:::::::
37,39:113,22:2387::::::NA:USA:UT:Southwest:Cedar City, Iron
Mtn:146.760:-:K7JH:OAX:K7GH:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Southwest:Cedar City:146.800:-:N7IQD:O::ARRL:19930000:0.0:F3E:::::::
37,6:113,50:1439::::::NA:USA:UT:Southwest:St. George, Utah
Hill:146.820:-:NR7K:OLX:DARC:ARRL:19930000:0.0:F3E:::::::
37,4:112,31:1771::::::NA:USA:UT:Southwest:Kanab, TV
Site:146.880:-:WA7VKV:O::ARRL:19930000:0.0:F3E:::::::
36,49:113,31:1842::::::NA:USA:UT:Southwest:St. George, Seegmiller Mtn
(AZ):146.910:-:NR7K:OLX:NR7K:ARRL:19930000:0.0:F3E:::::::
38,31:113,17:2944::::::NA:USA:UT:Southwest:Milford, Frisco
Peak:146.940:-:WA7GTU:OLX:UVHFS:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Southwest:Cedar City, Leigh
Hill:146.980:-:N7KM:O:N7KM:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Southwest:Cedar
City:147.060:+:N7DZP:O(CA):N7DZP:ARRL:19930000:0.0:F3E:::::::
37,41:113,4:0::::::NA:USA:UT:Southwest:Cedar City, SUSC
Campus:147.360:+:N7KM:O:SUSC:ARRL:19930000:0.0:F3E:::::::
40,46:111,52:1366::::::NA:USA:UT:Wasatch Front:Salt Lake City, Holy
Cross:145.210:-:WB7NNM:O::UVHFS:19920201:0.0:F3E:::::::
40,19:111,39:1634::::::NA:USA:UT:Wasatch Front:Provo, mouth Provo
Canyon:145.230:-:WA7FFM:O:ARES:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:American
Fork:145.250:-:KF7CK:O(CA):KF7CK:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch
Front:Kearns:145.270:-:WB7BCJ::+WO7W:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Brigham
City:145.290:-:KE7FO:OL:MTARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Spanish
Fork:145.370:-:N7CGH:O:N7CGH:ARRL:19930000:0.0:F3E:::::::
40,34:112,8:2276::::::NA:USA:UT:Wasatch Front:Salt Lake City, Curry
Peak:145.450:-:K7FY:O:MARA:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch
Front:Provo:145.470:-:WA7PKL:OA:UVSC:ARRL:19930000:0.0:F3E:::::::

41,13:112,25:1471::::::NA:USA:UT:Wasatch Front:Ogden, Promontory
Point:145.490:-:W7WQC:OAL:ARI:ARRL:19930000:0.0:F3E:::::::
40,40:112,12:2694::::::NA:USA:UT:Wasatch Front:Salt Lake City, Farnsworth
Peak:146.620:-:W7SP:OX:UARC:ARRL:19930000:0.0:F3E:::::::
41,22:111,45:2694::::::NA:USA:UT:Wasatch Front:Ogden, Powder
Mtn:146.680:-:W7WQC:OALX:ARI:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Salt Lake
City:146.700:-:W7EU:OLA:W7EU:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Murray:146.740:-:WB7V:OA:WB7V:ARRL:19930000:0.0:F3E:::::::
40,17:111,57:2316::::::NA:USA:UT:Wasatch Front:Provo, Lake
Mtn:146.760:-:W7SP:OAX:UARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Orem:146.780:-:N7NRX:OA::ARRL:19930000:0.0:F3E:::::::
41,15:111,50:2910::::::NA:USA:UT:Wasatch Front:Ogden, Kaysville
Peak:146.820:-:NC7UB:OLE(SUN):OARC:ARRL:19930000:0.0:F3E:::::::
40,5:111,49:2104::::::NA:USA:UT:Wasatch Front:Payson, West
Mtn:146.860:-:KB6VWN:P::UVHFS:19920201:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch
Front:Bacchus:146.880:-:KA7GZH:O:UVHFS:ARRL:19930000:0.0:F3E:::::::
41,15:112,14:1424::::::NA:USA:UT:Wasatch Front:Ogden, Little
Mtn:146.900:-:KC7UB:OLA:OARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Hooper:146.920:-:N7TOP:OL::ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Salt Lake City, Kennecott
Mine:146.940:-:K7JL:OX:UVHFS:ARRL:19930000:0.0:F3E:::::::
40,5:111,49:2104::::::NA:USA:UT:Wasatch Front:Payson, West
Mtn:147.020:+:WB7RPF:(CA):WB7RPF:ARRL:19930000:107.2:F3E:::::::
40,57:112,12:0::::::NA:USA:UT:Wasatch Front:Odgen, Antelope
Island:147.040:+:NU7X:OX:DCARC:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch
Front:Sandy:147.120:+:K7JL:OALE:K7JL:ARRL:19930000:0.0:F3E:::::::
40,41:111,52:1471::::::NA:USA:UT:Wasatch Front:Salt Lake City, LDS
Hospital:147.140:+:WB7RYE:O::ARRL:19930000:0.0:F3E:::::::
40,48:111,53:1650::::::NA:USA:UT:Wasatch Front:Salt Lake City, Ensign
Peak:147.160:+:WA7SNS:OA::ARRL:19930000:0.0:F3E:::::::
40,34:111,39:3350::::::NA:USA:UT:Wasatch Front:Salt Lake City,
Snowbird:147.180:+:K7JL:OLX:K7JL:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Lehi, Point of the
Mtn:147.220:+:WA7YZR:OA::ARRL:19930000:0.0:F3E:::::::
40,14,45:111,39,01:1445::::::NA:USA:UT:Wasatch Front:Provo, BYU Campus
(ELWC):147.260:+:W7OHR:O:BYUARC:KI7TD:19940115:0.0:F3E:::::::
40,17:111,57:2316::::::NA:USA:UT:Wasatch Front:Provo, Lake
Mtn:147.280:+:WB7TSY:OX:ARES:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Kearns:147.300:+:WA7SYU:OA::ARRL:19930000:0.0:F3E:::::::
40,17:111,57:2316::::::NA:USA:UT:Wasatch Front:Provo, Lake
Mtn:147.340:+:WB7TSY:OX:ARES:ARRL:19930000:0.0:F3E:::::::
40,51:111,29:2836::::::NA:USA:UT:Wasatch Front:Park City, Lewis
Peak:147.360:+:WA7GIE:OALX:WA7GIE:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:Wasatch Front:Parleys
Canyon:147.380:+:W7EU:O::ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:UT:West:Dugway:145.350:-:W7DTO:OA:W7DTO:ARRL:19930000:0.0:F3E:::::::
40,51:112,48:1969::::::NA:USA:UT:West:Tooele, Black Mtn

(Delle):145.390:-:K7LKH:OAL:TCARES:ARRL:19930000:0.0:F3E:::::::
40,7:112,34:1887:::::NA:USA:UT:West:Tooele, Lookout
Pass:146.980:-:KR7H:OLA:TCARES:ARRL:19930000:0.0:F3E:::::::
::::::::NA:USA:VT:Burlington:Burlington:146.610:-:W1KOO:oa:BrlngtnAR:ARRL:19920000::F3E:::
::::
::::::::NA:USA:VT:Burlington:Essex:146.670:-:WB1GQR:oelpExp:Pisamone:ARRL:19920000::F3E:::
::::
::::::::NA:USA:VT:Burlington:Essex Jct:146.850:-:WA1WLM:o(ca)l 10FM:SilJct
RC:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:Burlington:Essex Jct:146.850:+:WA1WLM:o(ca)l +600lP:SilJct
RC:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:Burlington:Mt Mansfield:145.470:-:N1ELL:oex:MT
Assoc:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:Burlington:Mt
Mansfield:146.940:-:W1KOO:o:BrlngtnAR:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:Central:Killington:146.660:-:W1ABI:ox:NE FM RA:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:East Central:Cabot:146.820:-:W1BD:o:CentVtARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:East Central:Norwich:145.130:-:N1CIV:oae:N1CIV:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:East Central:Tunbridge:146.970:-:K1MOQ:ol 6/10
FM:K1MOQ:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:East
Central:Williamstown:146.625:-:W1BD:oae:CentVtARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:North:Jay Peak:146.745:-:WA1HSG:ox:BorderARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:Northwest:Berkshire:146.895:-:K1VKN:o:K1VKN:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:Plattsburgh:Plattsburgh
NY:147.150:+:W2UXC:oa:ChmpVlyRC:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:Southeast:Marlboro:147.015:+:N1HWI:te:N1HWI:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:Southeast:Mt
Ascutney:146.760:-:W1GUA:o:CtVlyFMA:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:Southwest:Mt
Equinox:145.390:-:WA1ZMS:tex:WA1ZMS:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:West Central:Mendon:145.370:-:WA1ZMS:t:WA1ZMS:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:West
Central:Middlebury:147.360:+:WA1NRA:o:WA1NRA:ARRL:19920000::F3E:::::::
::::::::NA:USA:VT:West
Central:Rutland:147.045:-:WA1ONT:oae:GreenMtWS:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:All Areas:145.170:-::TST PR::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc
Area:Barboursville:441.000:146.460:KB8EHJ:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Beckley/Bolt:145.170:-:N8FRV:oal:ARA
NORTH:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Beckley/EOC:145.370:-:KD8VS:oa:BLACK
DIAM:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Beckley/Flat Top:146.850:-:K8BO:o:BLACK
DIAM:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Beckley/Laylan:145.310:-:WF1G:ol:ARA
NORTH:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Bluefield:145.490:-:W8MOP:o(ca):EAST
RIVER:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Bridgeport:147.120:+:WB8DKM:(ca)t::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Buckhannon:145.130:-:N8FHE:oal:MOUNTAIN

ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Buckhannon:145.410:-:N8FHE:oa:MOUNTAIN
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Buckhannon:146.850:-:WD8L:o:UPSHUR
REP:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc
Area:Charleston:145.430:-:WS8L:o(ca):GR.KANAWHA:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Charleston:146.820:-:WB8IFS:oaz::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc
Area:Clarksburg:146.685:-:N8FMD:ol:N8FMD:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Clarksburg:147.315:+:KE8MR:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Craigsville:145.270:-:KD8OG:ol::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Elkins:146.775:-:KB8BWZ:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Evans:147.210:+:KD8TC:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Fairmont:146.900:-:W8SP:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Flat Top/Wintr:146.625:-:WF1G:oa:ARA
NORTH:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Franklin:147.345:+:W3RUA:oe:W3RUA:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Gassaway:146.610:-:WB8MZI:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Glenville:145.290:-:KA8ZXP:oazlrb::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Grafton:147.375:+:WD8LNB:o:WD8LNB:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Grantsville:145.450:-:N8LGY:o(ca)z:CALHOUN
ARC:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Harrisvl/Pensb:147.300:+:WD8NSL:o::ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc
Area:Hinton:147.255:+:KB8EQC:oae:BLUESTONE:ARRL:19920000::F3E:::::::
::::::::NA:USA:WV:T-Marc Area:Horsepen
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ARC:ARRL:19920000::F3E:::::::

:::::::::NA:USA:WV:T-Marc
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Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

484. rsgb gb2rs news 23rd jan 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 23:17:50 UTC
From: ted@tedb.demon.co.uk
Message-ID: <759107870snz@tedb.demon.co.uk>
Source record: 272100
Cross-posted to: rec.radio.amateur.misc,uk.radio.amateur

Good morning. It's Sunday the 23rd of January and here is the GB2RS news broadcast, prepared by the Radio Society of Great Britain.

We start this week with the news that Ian Suart, GM4AUP was formally installed as the President of the Radio Society of Great Britain for 1994 during the evening of Saturday the 15th in Glasgow. We are sure that all those listening will join us in wishing Ian a successful year as President during 1994. In attendance were representatives of the French, Belgian, Dutch and German national societies. In his address, Ian spoke of plans to hold more regional meetings where members can meet and question officials of the RSGB. The text of his speech appears in February's edition of Radio Communication which is due to be posted to all members later this week.

Now, attention all Novice instructors who intend to enter candidates for the March Novice Radio Amateur Examination. The November 1993 edition of the Novice Instructors' Newsletter gave an incorrect date for the examination. The correct day is Monday the 14th of March. Instructors are reminded that the closing date for entries to be received by the City & Guilds Head Office is Tuesday the 1st of February.

There are vacancies for Morse Test Examiners in the county of Buckinghamshire. Radiocommunications Agency requirements stipulate that prospective examiners must demonstrate their ability to receive at 20 wpm and send a typical test passage on a manual key at 12 wpm. In addition, the Society are looking for people with ability to deal with candidates in a professional and helpful manner. Applicants should write to the RSGB Chief Morse Examiner, Roy Clayton, G4SSH, at 9 Green Island, Irton, Scarborough, North Yorkshire YO12 4RN or telephone him on 0723 862924. Interviews will be conducted at the RSGB London Amateur Radio Show.

The Guides Thinking Day on the Air will take place during Saturday the 19th and Sunday the 20th of February. A list of participating British GB Stations and of Countries permitting Third Party Greetings Messages is available from RSGB Headquarters on receipt of a Self Addressed Stamped Envelope, size A5 or larger, please mark the envelope TDOTA 1994 List.

The 70cm Repeater GB3BA has now been rebuilt and the Grampian Repeater Group intends to put the system back into service next Sunday the 30th of January at 1500 UTC. The repeater transmits on 433.025MHz (channel RB1) and is located 16km WNW of Stonehaven, near Aberdeen. Further details and/or reports should go to the Repeater Keeper GM3VEY, QTHR.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO. From Canada, VO1XA will sign VO1XA/VE8 from now until June during his tour of duty in NW Territories. From British

Virgin Islands, W2GUP will sign VP2V/W2GUP from today, Sunday the 23rd, until Thursday the 17th of March. From Cayman Islands, W8BLA and K2UFT will sign ZF1CQ from Tuesday the 25th until Monday the 31st of January. Operation will be CW only, taking in the CQWW 160m CW Contest, but before the contest look for them on the WARC bands. And from Ogasawara, JA1LSY will be active as JA1LSY/JD1 on SSTV only on 14MHz band, from Saturday the 29th until Tuesday the 8th of February. This is the first SSTV operation from Ogasawara.

Rally news now and we have one event this week:

The Oldham Amateur Radio Club Radio Rally which is being held at the Queen Elizabeth Hall, Civic Centre, West Street, Oldham, Lancs. Doors open at 11.00am, or 10.30 for disabled visitors. The event features many trade stands and a bring and buy stall. Refreshments will be available and talk-in is on channel S22 via GB4ORC, starting at 7.30am.

We know of only one rally for next Sunday the 30th of January:

The fourth Lancastrian Rally which is to be held at the University of Lancaster. Doors open at 11.00am, or 10.30 for disabled visitors. The rally features many trade stands and a bring and buy stall. Further details can be obtained from G1OHH on 0524 64239.

Next a date for your diary.

The 1994 RSGB VHF Convention is to be held at its usual venue at Sandown Race Course, Esher, Surrey on Sunday the 20th of February. See January's RadCom, page 24, for full details of the comprehensive lecture programme.

HF contest news now:

The RSGB LF Cumulative 3.5MHz Contest takes place today Sunday the 23rd and again next Saturday the 29th. Both run from 1600 to 1800 UTC. The RSGB LF Cumulative 1.8MHz Contest is next Thursday the 27th of January from 2000 - 2200UTC. The next RSGB LF Cumulative 7.0MHz Contest takes place on Sunday the 30th from 1000 - 1200 UTC. December's RadCom, page 84, gives detailed information on all of these LF Cumulative Contests. The ARRL CQ Worldwide 160m Contest takes place next weekend, starting at 2200 UTC on Friday the 28th and finishing at 1600 UTC on Sunday the 30th of January.

Next some VHF contest news:

The first of five events in the RSGB 70MHz Cumulatives Contest is today, Sunday the 23rd, with the second on Sunday the 30th from 1000 to 1200 UTC. There are three sections:- Fixed station single operator, Open and Listeners. The RSGB 432MHz Fixed, AFS and Listeners Contest takes place on Sunday the 6th of February from 0900 to 1500 UTC. There are three sections:- Single operator fixed, Multiple operator fixed and Listeners. See December's RadCom page 83 for details for both of these VHF events.

Special event stations this week include:

GB4FFL (Fight For Life) operated by members of the Salop Amateur Radio Society in support of the Air Ambulance appeal from a site near the old Control Tower

at Condor Airfield, Shropshire. The station will be on the air during Saturday the 29th and Sunday the 30th from 9am to 6pm. All are welcome to visit the station. Contact Sheila, G0SST on 0743 361935 if you require further details. During next weekend many other Special Event Stations will be taking part in the Midlands Air Ambulance appeal. See January RadCom for a list of callsigns.

And now the solar factual data:

The period from the 10th to the 16th of January has seen a coronal mass ejection, some M flares and a lot of magnetic disturbance, particularly at high latitudes. The sunspot index has declined from the recent high levels and meaned about the 84s. An M6.1/1N flare was reported on the 16th. Solar flux levels did not vary much over the period and averaged 98 units. The geomagnetic activity was influenced by a coronal mass ejection on the 12th. Though only lasting 30 minutes, it pushed up the geomagnetic activity from a quiet Ap of only 1 on the 10th to sub storm levels of 32 on the 12th. The levels remained very unsettled for the rest of the period with the Ap indices averaging 23 units. The state has been magnetically active at high latitudes for most of the period. The daily averages of the aa indices, as supplied by the British Geological Survey, for the 4th to the 10th of January have been quiet. The average was only 11.5 nanoTeslas, with the 9th being down to only 5.8 nanoTeslas. There were periods of only 2 nanoTeslas. The X-Ray flux has generally declined over the past three weeks from the very high levels of B8.1 units, and is now down to what is more like the levels we would expect. The average for the period was B2.6 units, though levels seemed to be climbing again with the 16th being up to B3.8 units. Bartells rotation 2192 starts on January 26. The mean 90 day solar flux is 102 units.

Now the ionospheric data for Central France:

The F2 daytime critical frequencies at Poitiers as reported by Meudon averaged 8.1MHz. The darkness hour lows averaged 2.3MHz. These have been severely affected by spread-F lasting up to 8 hours on some days, together with blanketing E, but that only lasted for an hour or so.

Now the ionospheric data for the north:

The F2 daytime critical frequencies at Ekaterinberg have been affected by the high latitude magnetic storms and averaged 6.4MHz. The darkness hour lows averaged 2.1MHz. As the closure of Darmstadt means the radio quality indices are no longer available and no UK ionospheric data is available either, it will be increasingly difficult to know what state the ionosphere is in. As a result of this, the forecasts over the next few weeks will be varied to try different ways of expressing what we think is likely to happen.

And lastly the solar forecast:

This week, the active side of the sun will be coming into view. Solar flux levels are expected to be about the 110s, and the magnetic activity is expected to be mainly quiet. Ionospheric MUFs at equal latitudes during daylight in the south are expected to be about 24MHz and for the darkness hours about 9MHz.

And that's the end of the solar information.

Finally in the main news, SSL has informed the Society that as of last Wednesday morning, the latest callsigns issued were in the G0 U J and G7 R O series, and Novice calls in the 2 0 A H and 2 1 C M series.

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

Next, the local news.

NEWS FOR THE SOUTH EAST

Meetings for Tuesday the 25th of January:

Dorking and District Radio Society meets for its Annual General Meeting at the Friends' Meeting House, starting at 7.30pm sharp. Further details from John, tel: 0306 631236.

GB3HZ Repeater Group meets for its Annual General Meeting at Chiltern Communications, Lincoln Road, High Wycombe at 7.30pm. For further details contact Alan, G4LWA on 0494 531755 or G4DDM on 0494 815355.

Home Counties ATV Group meets for its Annual General Meeting, to be followed by the 'grand' Junk Sale. Further enquiries to tel: 081 979 4432.

Stevenage and District Amateur Radio Society has a Video evening, showing "Big Beams, Big Station to Win Contests, Texas Style". Contact Neil, 2E1ASZ on 0438 350882 for details.

Thames Valley Packet Radio Group has a presentation 'G6BIF packet Soft Ware and BBS bulletin statistics' by Alan, G1AOL. Contact Graham, G8DMR on 0256 59773 eve.

Waterside Amateur Radio Society has its Annual Junk and Bring & Buy Sale at 7.30pm. Contact George, G0IDN on 0703 843491 for details.

Meetings for Wednesday the 26th of January:

Chesham and District Amateur Radio Society meets for "Hancock's Half-Hour" Further details from Ian, G0RTF on 0494 676391.

Cheshunt and District Amateur Radio Club has a Quiz Night with Alvin, G1VXD. Details from Roger, G4OAA on 0992 464795.

Dover Radio Club has a talk entitled 'Tales from the Repair Department' by G1HHU. For further details telephone 0304 825030.

Newbury and District Amateur Radio Society has a talk on 'VHF and UHF DX-ing' by Ian, G3SEK. Visitors are most welcome to attend. For further details from Norman, G0HFU tel: 0635 863310.

Meetings for Thursday the 27th of January:

Crowborough and District Amateur Radio Society meets for its Annual General Meeting at the Plough & Horses, Crowborough at 8pm. Details Mick, G6UUO on 0892 661807.

Reading and District Amateur Radio Club has a talk on 'The 1992 Mellish Reef DXpedition' by John, G3WGV. Further information from Vin, G4JTR on 0734 476873.

Shefford and District Amateur Radio Society has a talk entitled 'Charter Lea Motorcycles' Contact Paul, G1GSN on 0462 700618 for further details.

Southgate Amateur Radio Club has a Planning Session concerning the London Amateur Radio & Computer Show. For further information contact Brian, G0MEE on 081 360 2453.

Meetings for Friday the 28th of January:

Clifton Amateur Radio Society has a talk on 'How to Tune up Linears'. For further details contact Keith, G4TJE on 081 859 7630.

Hilderstone Amateur Radio Society has a talk entitled 'Extras for a Two Metre Station' by Paul, G3DNR. For further details telephone 0843 869812.

Itchen Valley Amateur Radio Club has a talk on 'What Packet can do for you and the DX Cluster System' by Chris, G4HCL. Further details from Les, G3ABA 0703 732997.

Maidstone YMCA Amateur Radio Society is showing a Video entitled 'American Holiday' by Nick, G4ZXI and a Morse training evening. Contact G0RHO, QTHR for further details.

Wimbledon and District Amateur Radio Society has a talk on 'Backyard Antennas'. For information contact George, G3DWW, tel: 081 540 2180.

NEWS FOR SOUTH WEST

Meeting for Monday the 24th of January:

Wincanton Amateur Radio Club has an Open Evening. Further details from Dave, G3ZXX on 0963 34360 or Andy, G1FPW on 0747 51381.

Meeting for Wednesday the 26th of January:

South Bristol Amateur Radio Club has a Computer Shareware evening. For more information tel: 0275 834282.

Meeting for Friday the 28th of January:

Shirehampton Amateur Radio Club has a talk entitled 'Acorn Packet Radio Card' by G0CJG. For further information contact Ron, G4GTD on 0272 770504.

NEWS FOR EAST ANGLIA

Meeting for Wednesday the 26th of January:

Ipswich Radio Club is hosting a Morse tuition evening at the Rose & Crown. Contact Sheila, G8HYE, tel: 0473 742072 for further details.

Meeting for Thursday the 27th of January:

Yarmouth Radio Club has a talk entitled 'Mechanical TV, part 2' by G3OEP. Contact Tony, G3NHU, on 0493 721173 for further details.

Meeting for Friday the 28th of January:

Cambridge and District Amateur Radio Club has a talk on 'Introduction to PC Net-working' by Tony, G0OEG. Non members always welcome. Contact John, G0TIL on 0763 243570 for details.

NEWS FOR THE MIDLANDS

Meeting for Monday the 24th of January:

Stratford upon Avon and District Radio Society has a talk entitled "European Space Agency" by Tony, G3ESK. For further details contact Alan, G0CXJ, tel: 0608 682495.

Meetings for Tuesday the 25th of January:

Buxton Radio Amateurs has a Video night. For details contact Derek, G4IHO, tel: 0298 25506.

Loughborough and District Amateur Radio Club has a 'Domestic Scene' Video session. For further details contact Ian, G8SNF by telephoning 0509 218259.

Meetings for Wednesday 26th of January:

Bromsgrove Amateur Radio Society has a talk on 'CQTV and Use of Oscilloscopes' by Mike, G6IQM. Details from Barry, G0TPG on 0527 542266.

Derby and District Amateur Radio Society has a Video show. Contact Hayley, G7PXA on 0773 856904 for further information.

Telford and District Amateur Radio Society meets for GB0AA preparations by 2E1BEW. For further details contact Dave, G4EIX, on 0952 588878.

Meetings for Thursday the 27th of January:

Amateur Radio Club of Nottingham has a Construction night. Contact Simon, G0IEG on 0602 501733 for further details.

Salop Amateur Radio Society has a talk on 'The Airfields of Shropshire' by Flight Lieutenant Ian Pride at 8pm. Details from G0SST on 0743 361935.

Meeting for Friday the 28th of January:

South Notts Amateur Radio Club has a Construction evening. For further details contact Julie, G0SOU on 0602 216342.

NEWS FOR THE NORTH OF ENGLAND

Meetings for Monday the 24th of January:

RATEC has a video show entitled 'Pitcairn Island'. The club meets at the United Reformed Church, Swann Lane, Cheadle Hulme at 8.15pm. Visitors are welcome. For details contact Don, G4SFU on 061-485 3912.

Thornton Cleveleys Amateur Radio Society has a talk on 'Recent Changes in Prefixes and QSL Bureaux'. Further details from G4BFH who is QTHR.

Meetings for Tuesday the 25th of January:

Bury Radio Society has a RSGB Video evening. For further details contact Mike, G4GSY on 061 761 5083.

Liverpool and District Amateur Radio Society has a Surplus Sale. Further details from Ian, G4WWX who is QTHR.

North Wakefield Radio Club has a Visit to the Police Air Support Unit. Contact John, G4RCG on 0924 362144 for further details.

Wakefield and District Radio Society meets for a Construction Evening. Further details from Roy, G0TBY on 0924 893321.

Meetings for Wednesday the 26th of January:

Mid-Cheshire Amateur Radio Society has a Rally Planning night. Details from Mike, G7LQD on 0606 331210.

Stockport Radio Society has a talk on 'De-commissioning' by John Hill-Wilson of Nuclear Electric. For further details telephone 061 439 4952.

Wirral and District Amateur Radio Club has a Surplus Equipment and Junk Sale. Contact Paul, G0JZP, on 051 648 5892 for further details.

Meetings for Thursday the 27th of January:

Eden Valley Radio Society has a Demonstration of Packet Radio, a Construction evening also a Bring & Buy sale. Further details from John, G0NYQ on 07683 52106. Keighley Amateur Radio Society meets for its Annual General Meeting. For further details contact Kathy, G0RLO on 0274 496222.

Hambleton Amateur Radio Society meets for its AGM at Allertonshire School, Northallerton at 7.30pm. Details from Nigel, G0NHM on 0609 776608.

Meetings for Friday the 28th of January:

North Ferriby United Amateur Radio Society has an 'Aerial Forum' by Frank, G3YCC. Further details from Frank, G3YCC, tel: 0482 650410.

South Manchester Radio Club has its Winter Direction Finding evening. For further details contact Edward, G7FQY, tel: 061 969 1964.

Stockport Radio Society Computer Group has a talk entitled 'Atari and Macintosh Computers' by G0HAL. For details telephone 061 439 4952.

NEWS FOR SCOTLAND

Meeting for Tuesday the 25th of January:

Dundee Amateur Radio Club has a Construction night. Details from GM4FSB who is QTHR.

Meeting for Thursday the 27th of January:

Dunfermline Radio Society has a talk on 'DK0WCY Propagation Beacon - an Ordeal by Listening' by Wallace, GM0GNT.

Meetings for Friday the 28th of January:

Ayr Amateur Radio Group has a talk entitled 'Broadcast Audio' by Tom, GM4YMA. Details from Ian, GM3VMG 0292 260870.

West of Scotland Amateur Radio Society has a talk on 'Standby Power for Comms Systems' by GM7AOW. Details from GM4COX on 0698 350926.

And that's the end of this week's GB2RS news broadcast, which was prepared by the Radio Society of Great Britain.

485. Re: Sony 2001 mods?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 23:26:40 UTC
From: Ed Ellers <EDELLERS@delphi.com>
Message-ID: <940120.66400.EDELLERS@delphi.com>
Source record: 272177

Tom Jenkins <tjenkins@pnet16.cts.com> writes:

>Over the past few weeks, I've listened to my newly aquired 2010. Super radio.
> Are there any mods/installations that I should be aware of?

Actually, the ICF-2010 is fully unlocked and has all modes and coverage that the series is capable of. Some versions sold in other countries have certain features (285-531 kHz coverage, 26100-29999 kHz coverage, CW and SSB, air band , 76-87.5 MHz FM and/or external antenna inputs) disabled to comply with the regulations of those countries, but all such sets carry the model number ICF-2001D; the ICF-2010 is the US/Canada version.

-- Ed Ellers, KD4AWQ (happy ICF-2010 owner)

486. ANNOUNCEMENT: DSPMORSE.ZIP source is available via ftp

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 23:37:47 UTC
From: troc@inca.gate.net
Message-ID: <2hn4kb$13ah@inca.gate.net>
Source record: 272228

```
There is now a file at ftp.funet.fi called /pub/ham/morse/dspmorse.zip
It contains the source for the modified FFTMORSE executable I posted
several days ago. It is provided as it is, without documentation or
warranty.

--
->><- Rocco Caputo (troc@inca.gate.net) has left the building.
```

487. Kantronics and VIC-20

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-20 23:43:11 UTC
From: k1zat@bah.COM
Message-ID: <Pine.3.05.9401201811.B3252-9100000@booz.bah.com>
Source record: 272229

I have both the VIC-20 Hamtext Operator's Manual (30 pages long)
and the Kantronics Interface Instruction Manual (20 pages). You
want me to make and send you copies or just extract some information?

I assume your looking for things like control-E (Return to Receive),
control-I (CW-ID), control 0-9 (message ports) sort of information?

jd....k1zat

488. Freebies from ARRL HQ

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 00:07:22 UTC
From: arrl@BIX.com
Message-ID: <arrl.759110842@BIX.com>
Source record: 272231

A reminder to all that the American Radio Relay League
continues to make available to Amateur Radio Operators and
non-amateurs alike a wide variety of free materials and
services. Of particular interest to the not-yet-licensed
individual would be the ARRL Prospective Ham Package. In
the PHP, one would find:
.-
1. Printouts of Volunteer Examination session
opportunities in his/her area.
.-
2. Listings of Amateur Radio clubs in his location.
.-
3. Helpful promotional material about the Amateur Radio
Service.
.-
Please remember that the above package is ONLY available
to not-yet-licensed individuals.

The already-licensed person might well be interested
in another free ARRL publication, the ARRL Public Service
Communications Manual. The PSCM represents the "bible" of
public service communications, and clearly/concisely
points out how the ARRL National Traffic System and the
ARRL Amateur Radio Emergency Service function as a
cohesive unit to provide the maximum support to the public
both in times of disaster as well as "normal" times.
.-
To obtain either of these free ARRL services, please
provide us with:
B. Your mailing address
C. A Specific request for either of the two services
above.
.-
73!
.-
ARRL HQ

489. RECIPOP packages

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 00:10:25 UTC
From: arrl@BIX.com
Message-ID: <arrl.759111025@BIX.com>
Source record: 272232

Yet another of the many free services that ARRL HQ offers
is the ability to obtain Reciprocol Operating permit
information.

Matter of fact, ARRL HQ is the ONLY place on the planet
where this information resides!

"Awrite, already" sez you, "why would I ever want one, and
how much are ya gonna burn me to GET one?" "Glad you
asked!" sez I

Radio amateurs are a constantly-travelling, very mobile,
bunch of folks, it appears, and their travels clearly take
them to countries near and far. Myself, I prefer "far"
rather than 'near', but if you're inclined to travel to
Canada, you can ignore this whole tome, as the Canadian
government and our own here in the States have worked out
an automatic-reciprocity agreement.

But if Belize is on your itinerary perhaps, or any of the
other many countries with whom we share a reciprocol
operating agreement, you're in luck! Many foreign
administrations DO allow U.S. Amateur Radio licensees to
apply for a reciprocol operating permit, and you need
but ask us for the complimentary package that we make
available.

To make your trip more enjoyable in that regard, we need:

1. Your name
2. Your mailing address
3. A specific request for the RECIPOP package for the
specific country you'll be off to.

And, yes, an e-mail request is fine!

| | | Deputy Manager, Field Services, ARRL.
| |___| The ARRL A R E S, the ARRL
| uck | |urder N T S, The Amateur Auxiliary to
------ | | the FCC's FOB, the ARRL
KY1T FO and the ARRL Monitoring System.
---
lhurder@arrl.org Prodigy - MGTS39A, BIX - ARRL,
MCI Mail - RPALM, MCI Mail - "ARRL", America On Line -
"ARRL HQ" Compuserve - 70007,3373 (ARRL HQ) -- Genie
ARRL.HQ The 5-line ARRL BBS - 203-666-0578

490. Re: Bencher Straight key

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 00:12:57 UTC
From: arrl@BIX.com
Message-ID: <arrl.759111177@BIX.com>
Source record: 272234

JMG@tntech.edu (JEFF M. GOLD) writes:

>anyone see one of the new Bencher Straight Keys in person.. look
>interesting.

>73

>Jeff, AC4HF

Yes, I happen to have one in my office at this moment.
It's not mine, but rather a fellow's who's been studying
for his license for -- I kid you not -- almost 30 years
now. He got it, finally, and somebody shipped him one of
those Bencher straight keys (they sure feel nice...) anonymously...

LH

491. Kenwood radio software

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 00:14:36 UTC
From: SHMC0874@BCIT.BC.CA
Message-ID: <199401210019.QAA22870@ucsd.edu>
Source record: 272233

I am trying to locate Kenwood radio control software such as COMPTROL
or KTWIN either on Internet or BBS.

The particular radio I use is the TS-140S.

Any replies would be appreciated.

SHMC0874@BCIT.BC.CA

492. Re: CALL SIGN SERVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 02:39:19 UTC
From: cchris@charlie.usd.edu
Message-ID: <CJyKpJ.GAI@sunfish.usd.edu>
Source record: 272082

The one I use is in buffalo. telnet to callsign.cs.buffalo.edu 2000. Good luck.In article <199401191856.NAA24159@dialup.oar.net>, berwyn@dialup.oar.NET (George Sweigert) writes:

>
>Does anyone know where the call sign dtabase server exists ?
>
>I believe it is on DEWIE.DEL.EDU . . . does anyone know ?
>
>Thanks
>
>berwyn@oar.net
>

493. How to find the answers to frequently-asked questions about Ham Radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 02:44:05 UTC
From: ikluft@kluft.com
Message-ID: <ham-faq-ptr-1-759120242@kluft.com>
Source record: 272120
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
Posted-By: auto-faq 3.1.1.4
Archive-name: ham-faq-ptr

How to find the Rec.radio.amateur.misc Frequently Asked Questions list
------------------------------------------------------------------------

This article will tell you how to find the answers to frequently-asked
Questions (FAQ) from rec.radio.amateur.misc. The FAQ articles are posted on
the 7th of each month. This article is posted on the 14th, 21st, and 28th of
every month as a reminder of where to find the FAQ.

The FAQ articles are intended to summarize some common questions on the
rec.radio.amateur.misc newsgroup and Info-Hams mail list as well as to help
beginners get started.

Besides the monthly posting, the FAQ is always available via anonymous FTP
and from e-mail servers. This article contains instructions for obtaining a
copy of the FAQ. It also contains the table of contents from the FAQ so
that you know which questions are covered by it.

Please provide a copy of the FAQ to any new or soon-to-be Hams you know.

Regular FAQ postings can help save network bandwidth and maintain a good
signal-to-noise ratio in the newsgroup. However, they can't do it alone - you,
the reader, have to use them. If you are a new user, please print and review
the FAQ articles and look at the instructions in the news.newusers newsgroup
before posting any articles. If you are an experienced user, please help by
refraining from answering frequently-asked questions on the newsgroup if they
are already answered by the FAQ articles. Instead, send e-mail to the user who
asked the question. (It will be helpful if you include the part of the FAQ
that answers their question, but not the whole thing.)

--How to obtain a current copy of the FAQ-----------------------------------

There are 7 ways to obtain a copy of the FAQ.
1) NetNews
2) Anonymous FTP
3) An Electronic Mail Server
4) Mail List Subscription
5) Gopher
6) Wide Area Information Server (WAIS)
7) World-Wide Web (WWW)

Option #1: NetNews
------------------
If you are familiar enough with NetNews to look through previous articles on
```

your system, Option #1 above may be the easiest for you. The FAQ is posted so that it should not expire from your site's news spool until the next one is posted. Unfortunately, some news administrators do not honor the expiration dates meant to preserve the FAQ.

Look in rec.radio.amateur.misc, rec.radio.info, rec.answers, or news.answers. If the FAQ has expired at your site, try Option #2 (and ask your news administrator to honor expiration dates for articles cross-posted to news.answers if he/she can.)

Option #2: Anonymous FTP

Anonymous FTP uses the File Transfer Protocol. It is only available to sites which are directly connected to the Internet. If you don't know how to use FTP and can't find a friend to help you, continue to Option #3. If your site is not connected to the Internet, you should also continue to Option #3.

The following sites have copies of the FAQ:
site name & address path to FAQ articles
------------------- --------------------
ftp.amdahl.com pub/radio/amateur/faq.[1-3].Z
located in western USA, FAQ updated daily
ftp.cs.buffalo.edu pub/ham-radio/faq_ham_[1-3]
located in eastern USA, FAQ updated monthly
rtfm.mit.edu pub/usenet/news.answers/radio/ham-radio/faq/part*
located in eastern USA, FAQ updated monthly
contains news.answers archive - most UseNet FAQs are here
grivel.une.edu.au pub/ham-radio/buffalo/ham-radio/faq_ham_[1-3]
located in Australia, FAQ updated monthly
(Ham files mirrored from buffalo/funet/ucsd daily)
nic.funet.fi pub/ham/info/faq_ham_[1-3]
located in Finland, FAQ updated monthly

Remember, when connecting to the remote system, use the login name of "anonymous" and, as a courtesy to the site administrators, your e-mail address for the password.

Option #3: Electronic Mail Server

If you can't use Options 1 or 2, your only remaining option is electronic mail. You can retreive a copy of the FAQ by sending a message to mail-server@rtfm.mit.edu

The body of your mail will contain a command for the mail server software. To get all of the FAQ (consisting of 70K of e-mail in 3 parts), place the following in the first line of your message:
send usenet/news.answers/radio/ham-radio/faq/*

Leave out the subject of your message because the mail server will ignore it.

--- begin sample mail message ---
To: mail-server@rtfm.mit.edu
From: me@here.org

Date: Mon Aug 14 22:27:33 PDT 1995

send usenet/news.answers/radio/ham-radio/faq/*
--- end sample mail message ---

Option #4: Mail List Subscription

If you prefer, you may get the FAQ and other periodic Ham Radio information as it gets posted. All the information posted to rec.radio.info can be obtained through the UCSD list server via the "radio-info" mail list. To subscribe, send an e-mail to
listserv@ucsd.edu
Similar to the e-mail server listed above, just send a single-line message
subscribe radio-info
If you need more information, the listserv program also accepts a "help" command. Just keep it on a separate line in the message.

Option #5: Gopher

You can access gopher servers on TCP port 70 (gopher protocol) at the following locations which carry the Ham Radio FAQ:
cc1.kuleuven.ac.be
jupiter.sun.csd.unb.ca
gopher.univ-lyon1.fr
ftp.win.tue.nl
gopher.win.tue.nl
For more information on gopher, see the comp.infosystems.gopher newsgroup.

Option #6: Wide Area Information Server (WAIS)

In addition to the other services mentioned above, rtfm.mit.edu offers a WAIS server on TCP port 210. Use the "usenet" database to access the FAQ.

For more information on WAIS, see the comp.infosystems.wais newsgroup.

Option #7: World-Wide Web (WWW)

The World-Wide Web (WWW) has experienced explosive growth in usage since early 1993. WWW clients like Lynx (in ASCII text) or NCSA Mosaic (X/Motif) can display the FAQ from many different sources. Each source is named by a URL (uniform resource locator.) The following URLs can be used to find the FAQ:
http://www.cis.ohio-state.edu:80/hypertext/faq/usenet

Other services listed earlier are also accessible with WWW at the following URLs:
news:rec.radio.info
file://ftp.amdahl.com/pub/radio/amateur
file://ftp.cs.buffalo.edu/pub/ham-radio
file://rtfm.mit.edu/pub/usenet/news.answers/radio/ham-radio/faq
file://grivel.une.edu.au/pub/ham-radio/buffalo/ham-radio
file://nic.funet.fi/pub/ham/info
gopher://cc1.kuleuven.ac.be/

gopher://jupiter.sun.csd.unb.ca/
gopher://gopher.univ-lyon1.fr/
gopher://ftp.win.tue.nl/
gopher://gopher.win.tue.nl/
wais://rtfm.mit.edu/usenet

For more information on WWW, see the comp.infosystems.www newsgroup. Also,
the help options on your WWW client should be able to point you to lots of
information all over the world.

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--Submitting changes for the FAQ--

If you have comments or updates for the FAQ, send e-mail to
hamradio-faq@amdahl.com
This will send mail to all the people on the FAQ editorial review group.

494. Ftp for macintosh/radio????

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 03:06:12 UTC
From: fsrla@aurora.alaska.edu
Message-ID: <1994Jan20.180612.1@aurora.alaska.edu>
Source record: 272237

```
HELP!!!!!!
I am desperatly seeking a list of
ftp sites that have things related
to macintosh computers and amateur radio!!!!!!
Any help would be greatly appriciated!!!!!!
Thanks!
--------------------------------------------------
FSRLA@AURORA.ALASKA.EDU WL7NT
```

495. G8BPQ 7.04a

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 04:13:10 UTC
From: Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US
Message-ID: <Angelo_Glorioso_Iii.2lsz@agwbbs.new-orleans.LA.US>
Source record: 272241

Hi All,

I dont have access to archie, so I must ask for help.. I heard that G8BPQ
407A has been released.. Anyone know what ftp site has it???

Thanks in advance..

Angelo

-- Via DLG Pro v1.0

Internet:angelo_glorioso_III@agwbbs.new-orleans.LA.US
Usenet:rex!agwbbs!angelo_glorioso_III
Packet:N5UXT @ N5UXT.#NOLA.LA.USA.NA
Tcp/ip:N5UXT.AMPR.ORG [44.108.2.13]

496. Daily Summary of Solar Geophysical Activity for 20 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 04:34:58 UTC
From: oler@rho.uleth.ca
Message-ID: <9401210435.AA07801@rho.uleth.ca>
Source record: 272249
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

20 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 20 JANUARY, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 020, 01/20/94
10.7 FLUX=105 90-AVG=103 SSN=054 BKI=3333 2221 BAI=010
BGND-XRAY=B1.8 FLU1=3.4E+06 FLU10=9.8E+03 PKI=3333 3232 PAI=012
BOU-DEV=025,032,037,020,013,019,017,008 DEV-AVG=021 NT SWF=00:000
XRAY-MAX= C1.0 @ 0018UT XRAY-MIN= B1.7 @ 1734UT XRAY-AVG= B3.2
NEUTN-MAX= +002% @ 1530UT NEUTN-MIN= -001% @ 1955UT NEUTN-AVG= -0.0%
PCA-MAX= +0.1DB @ 1935UT PCA-MIN= -0.1DB @ 1530UT PCA-AVG= -0.0DB
BOUTF-MAX=55353NT @ 0601UT BOUTF-MIN=55325NT @ 1909UT BOUTF-AVG=55341NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+072,+000,+000
GOES6-MAX=P:+127NT@ 1715UT GOES6-MIN=N:-072NT@ 0529UT G6-AVG=+095,+030,-030
FLUXFCST=STD:105,105,100;SESC:105,105,100 BAI/PAI-FCST=020,020,015/015,015,018
KFCST=3333 3333 3333 3333 27DAY-AP=008,007 27DAY-KP=2123 3322 1313 2122
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 19 JAN 94 was 48.3.
The Full Kp Indices for 19 JAN 94 are: 3+ 5- 5o 3o 4- 2o 3o 3-

SYNOPSIS OF ACTIVITY

Solar activity was at very low levels. Region 7654
(N08E18) continues to be the largest and most active Region
on the disk.

Solar activity forecast: solar activity is expected to be
at low levels with a slight potential for an M class flare
from Region 7654 (N08E18).

STD: Magnetic shear near the northern end of the delta
within Region 7654 has remained relatively unchanged over the
last 24 hours. Although there is an outside chance for another
major flare from this region, nothing significant is likely to

be observed unless new flux emerges to perturb the current relatively stable configuration. This is further supported by the gradually declining background x-ray levels together with the relatively low frequency of small-scale flare activity and lack of spot growth.

The geomagnetic field has been at quiet to unsettled levels for the past 24 hours.

Geophysical activity forecast: the geomagnetic field is expected to be at unsettled to active levels.

STD: The field may become slightly disturbed on 22 January due to a negative polarity transequatorial coronal hole which is approximately one day beyond the central meridan. Periods of minor to major storming will be possible over the high and polar latitudes.

Event probabilities 21 jan-23 jan

Class M 10/05/05
Class X 05/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 21 jan-23 jan

A. Middle Latitudes
Active 40/45/15
Minor Storm 15/10/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 40/40/10
Minor Storm 15/15/05
Major-Severe Storm 01/01/01

HF propagation conditions were near-normal over all regions. Subsiding levels of geomagnetic activity prompted improved conditions over the high and polar latitude paths. Conditions should continue near-normal with only intermittent minor signal degradation for transauroral night-sector circuits. Signals are expected to become increasingly disturbed on 22 January if the anticipated disturbance from the well placed coronal hole noted above arrives. Poor to occasionally very poor propagation could occassionally exist over the higher latitude paths during that period. Otherwise, conditions should continue near-normal.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 20/2400Z JANUARY

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N04E04 219 0140 CSO 03 002 BETA
7654 N09E19 204 0530 EKI 11 032 BETA-DELTA
7656 S22W36 259 PLAGE
REGIONS DUE TO RETURN 21 JANUARY TO 23 JANUARY
NMBR LAT LO
7647 S15 096

LISTING OF SOLAR ENERGETIC EVENTS FOR 20 JANUARY, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 20 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 20/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
57 N20W14 S14W21 S00W25 N24W14 253 ISO NEG 005 10830A
58 N20E55 S10E41 N08E34 N34E48 189 ISO POS 014 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
19 Jan: 0306 0316 0322 C4.0 SF 7654 N05E40 47 25
0449 0452 0454 C1.0
0615 0619 0623 B7.5
0629 0636 0641 B6.6
0826 0830 0833 B4.7 39 62
1141 1146 1150 C2.8
1143 1144 1152 SF 7654 N09E33 16 43 28
1335 1354 1410 C4.2 SF 7654 N05E40
2012 2016 2020 B4.5

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7654: 2 0 0 3 0 0 0 0 003 (33.3)
Uncorrellated: 2 0 0 0 0 0 0 0 006 (66.7)

Total Events: 009 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

```
Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
19 Jan: 0615 0619 0623 B7.5 III
```

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

497. Re: TS-50: Do you like yours?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 05:08:53 UTC
From: NDFRIEDMAN@delphi.com
Message-ID: <940121.00533.NDFRIEDMAN@delphi.com>
Source record: 272238

The TS-50 is a great mobile rig. I have had one in my VW Passat for five months now and use it with a Hustler antenna system. Have a great time driving around and working 17 and 20 meters.

498. Re: What could this mean?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 05:19:06 UTC
From: robocop@clark.net
Message-ID: <2hnoka$jck@explorer.clark.net>
Source record: 272240

In article <jfhCJw7qA.29r@netcom.com>, Jack Hamilton <jfh@netcom.com> wrote:
>The following paragraph appeared in an article in today's San Francisco
>Chronicle about what local companies are doing to help prepare for the next
>earthquake:
>
> Finally, in an attempt to encourage the use of amateur (Ham) radios,
> which are used by many relief agencies during an emergency, Pacific
> Bell has reduced the cost of operating a Ham radio to the basic
> service rate of $8.35 a month. Ham radios are licensed through the
> phone company.
>
>I called PacBel to ask about this. They didn't have any idea. They
>realize that they don't license amateur radios, and they also don't rent
>any kind of amateur equipment. I thought they might be referring to a
>special rate for phone patches, but they denied knowing anything about that
>either.
>
>Any ideas? Do other phone companies do anything to encourage amateur
>radio?

I smell fish here. The telephone companies have nothing to do with
Amateur Radio.
In my area, amateur radio clubs are required to pay business rates for
phone lines for repeaters. The only acceptions are if the repeater is at
your house or if the phone line is provided by the county or state. I
would be interested to know what this means also.

Matt Roberts N3GZM

499. NEED VE in NYC area for 1/23 exam

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 05:49:23 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.94Jan21004923@prince.cs.columbia.edu>
Source record: 272242

[Apologies if this goes outside the NYC area, but please note that I did include a "Distribution:" line.]

A VE who was to have worked our exam session this Sunday at Columbia University cannot make it to the session. As a result, we find ourselves one Extra class VE short. We currently have two Extra class and one or two Advanced class VEs available. If we cannot find another Extra class VE in the next few days, we will be forced to restrict our exam session to Novice and Tech exams only. If you are a VE in this area and would be available to help out at an exam session this Sunday, please let me know ASAP! Our session is coordinated with the ARRL/VEC, but due to the ARRL/VEC's "instant accreditation" policy, we should be able to use the services of any accredited VE -- you'd just have to fill out a short form, and give us a copy of your license and your VE credentials, to apply for instant ARRL/VEC accreditation. Surely there's one more VE in this huge city who would be willing to help us out. Your assistance at this session would be greatly appreciated! 73,
-Steve, WB3I
Columbia University ARC VE Team

500. Stolen TH-78A - Need your help!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 07:26:19 UTC
From: mgriffith@pimacc.pima.edu
Message-ID: <1994Jan21.002620.9071@pimacc.pima.edu>
Source record: 272246

Ham Radio Ops. in New York and Arizona please take note!

Returning from my trip from New York (LGA) to Phoenix via Philadelphia -
My baggage was lost by US AIR. When I picked up the luggage from
Tucson International where they had flown it via America West, my KENWOOD
TH-78A and a camera had been stolen. The Kenwood has my callsign on powerup -
N7QVL.

If you live in one of these three areas, !PLEASE! be on the look out for the
radio at swap meets and/or my callsign on the air.

I realize that this is a long-shot but I thought I would put the power of the
InterNet to the test.

Information concerning the radio or other recommendations can be E-Mailed
to me at....

MGRIFFITH@PIMACC.PIMA.EDU

Thanks - Mike

ps. Yes, a claim IS being filed with the airline. But I would like the thief
put UNDER the jail. :)

501. IOTA frequencies wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 07:33:10 UTC
From: tom@systemtechnik.tu-ilmenau.de
Message-ID: <2ho0fm$1tl@prakinf2.PrakInf.TU-Ilmenau.DE>
Source record: 272243

I'm looking for the so called IOTA frquencies. Could one who
knows them point me to those qrg's?

Thomas, DL5ATP
--
Thomas Planke Planke@Systemtechnik.TU-Ilmenau.DE
Technical University of Ilmenau Phone: +49 3677/69-1465

502. AMIGA software for BAYCOM modems

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 07:48:00 UTC
From: philip@stack.urc.tue.nl
Message-ID: <2ho1bg$ak6@tuegate.tue.nl>
Source record: 272244

Hi,

For a friens of mine I am searching for a programm to control a baycom modem
with an Amgiga 2000. Does anybody know where (on which ftp-site) such a
programm will be?
Hope to hear some positive reactions, please mail them directly to:

Philip@stack.urc.tue.nl

Thanx, 73

Publ: Philip@blade.stack.urc.tue.nl My .sig is not on request only!
PE1PCP and operator on PI5EHV & PI4TUE .--. . .---- .--. -.-. .--.
---

503. Re: Are there any RS232C cards for PCMCIA?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 10:00:22 UTC
From: kitagawa@ee.ES.Osaka-U.AC.JP
Message-ID: <KITAGAWA.94Jan21190022@qed.laser.ee.es.osaka-u.ac.jp>
Source record: 272274
Cross-posted to: comp.sys.laptops,rec.radio.amateur.misc

Thank you everyone who responded by mail or news.

I> Are there any RS232C cards for PCMCIA slot?

> you may want to consider "dockable" laptops.

Unfortunately I've never heard of the docking station for my favorite
T1950. I am told that there are some serial interface cards for PCMCIA
(by IBM and others) but still don't have specific model numbers.

I> I'm also looking for PCMCIA Ethernet cards for 10base-2 (Coax)

I've got the info that there is one for T1950;
NWETH02 Noteworthy 10base2 PCMCIA type II Ethernet card.

> You could go with the old, yet trusty Xircom 10-Base2 external LAN
> adapter....

Oh, it might be even better if I can save a PCMCIA slot. Thanks!

I> FYI (to Hams only, probably contesters only): Why do I need so many
I> serial ports? Yes, I want to run CT (by K1EA) in multi-multi station.

I am informed that CT ver 8.47 has implemented a single-directional
loop which requires only one serial port per computer. If it works
fine, I don't need a serial port card nor an Ethernet card, i.e. the
best solution for me.

Masahiro Kitagawa <kitagawa@ee.es.osaka-u.ac.jp>
Electrical Engineering, Engineering Science, Osaka University

504. Re: CTCSS encode/decode

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 10:27:50 UTC
From: dave@llondel.demon.co.uk
Message-ID: <759173270snx@llondel.demon.co.uk>
Source record: 272099
Cross-posted to: rec.radio.amateur.misc,sci.electronics

In article <CJxr1r.8op@hpqmoea.sqf.hp.com> dwg@hpqmola.sqf.hp.com (David Grieve) writes:
>Brent Hiller (bhiller@bigwpi.WPI.EDU) wrote:
>: I'm looking for ICs or suggestions on how to generate and decode
>: subaudible tones (CTCSS) for amateur radio. Any help would be
>: appreciated. It is part of my senior project which involves
>: building a computer controlled 2M transceiver. Thanks.
>
>
>: Brent
>: bhiller@wpi.wpi.edu
>
>I'm sure that Consumer Microcircuits Limited in the UK (phone +44 376 513833)
>have a single chip solution for this.

FX365 is the chip you want.

Dave
--

* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *

505. HOW TO FILE COMMENTS TO FCC NOTICES OF PROPOSED RULEMAKING

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 11:25:17 UTC
From: marcbg@netcom.com
Message-ID: <$arlhowto.1994@ampr.org>
Source record: 272030
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

HOW TO FILE COMMENTS TO FCC NOTICES OF PROPOSED RULEMAKING

If you plan to file comments to an FCC Notice of Proposed Rulemaking, use the caption format shown below making sure that you put the appropriate Docket number at the top.

When you file comments or reply comments with the FCC, list your credentials, be fact-specific and to the point. When you file comments to an active NPRM, the FCC wants you to send an original and four copies. If you want each FCC Commissioner to have a copy, send an original plus nine copies. Send all comments and reply comments to:

Secretary
FCC
Washington, DC 20554

Caption to be used in filing formal comments:

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the matter of)
)
(Insert a brief) PR Docket 93-###
description of)
what you are)
commenting on))

Details can be found in Chapter 15 of The FCC Rule Book. ARRL HQ and your ARRL Director would appreciate a courtesy copy of your comments and reply comments. See page 8 of any QST for his or her address.

John Hennessee, KJ4KB
Regulatory Information Specialist
American Radio Relay League
225 Main St
Newington CT 06111
203-666-1541
Internet jhenness@arrl.org

--
Marc B. Grant 214-231-3998

marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

506. DX Bulletin 5 ARLD005

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 11:26:25 UTC
From: marcbg@netcom.com
Message-ID: <$arld005.1994@ampr.org>
Source record: 272029
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

SB DX @ ARL $ARLD005 ARLD005 DX news ZCZC AE03
QST de W1AW
DX Bulletin 5 ARLD005
From ARRL Headquarters
Newington CT January 20, 1994
To all radio amateurs

SB DX ARL ARLD005
ARLD005 DX news

The items in this week's bulletin are courtesy of Chod, VP2ML; The DX Bulletin; Bob, W5KNE; QRZ DX; Pat, WA8YVR; and the Ohio/Penn and Yankee Clipper Contest Club PacketCluster networks. Thanks to all.

ANGOLA. Kim, OZ1EYE, is active as D2EYE on 30, 40, 80 and 160 meters, both CW and SSB. QSL via OZ1ACB. Antonio, D2EGH, has been on daily around 14201 kHz between 2000 and 2300z. He chats with C91AI from time to time on this frequency. D2EGH checks into the 21335 DX Net around 1800z and 14205 kHz between 2100 and 2245z. QSL via CT1EGH.

BURKINA FASO. Peter, XT2BW, continues to warm the WARC bands, but will be leaving at the end of January bound for Ghana. Check 12 and 17 meters between 1600 and 1930z. He also works 3530 kHz around 2200z. QSL via WB2YQH.

ANTARCTICA. Aage, LA9YBA, has been operating 3Y9YBA from the Bluefield camp in the Tierro Mountains and making Zone 13 available to many. Check 10102 kHz at 0100z or 14250 kHz at 0245z. QSL via LA9YBA. Dinesh, VU3DEN/MM is believed to be a member of India's Antarctic Expedition team. Upon arrival he will be signing AT3D. QSL via VU2DVC.

RWANDA. F6EXV is signing 9X5DX, and F6FNL is on as 9X5CW. This operation should continue until March 1.

SAUDI ARABIA. HZ1AB gets on the top band from 1830 to 1835 kHz on Fridays starting around 0200z. QSL via K8PYD.

SPACED OUT? MIR has a new crew comprised of Commander U9MIR, Engineer R3MIR and Doctor U3MIR. The call sign R0MIR is used on packet and the Packet Mail System R0MIR-1. Listen to 145.55 MHz for passes of ''MIR''. QSL via

RV3DR, Serge Samburov, PO Box 73, Kaliningrad-10 City, Moscow Area, 141070, Russia.

SUDAN. G4OJW is the main operator of ST0K in Khartoum, believed to be the only legally licensed club station in the Sudan. The Sudan Amateur Radio Association, SARA, is being established and soon hopes to be able to deliver QSLs to Sudanese amateurs. The address for SARA is c/o Khartoum Airport, Box 73, Khartoum, Sudan.

CENTRAL AFRICAN REPUBLIC. TL8NG has been heard on the 3789 kHz Net at 2135z, 24935 kHz at 1700z, 18114 kHz at 1709z and 10107 kHz at 1945z. Another spot to try is 21335 kHz at 1445z or as late as 1745z.

OGASAWARA. JD1BIE has left Minami Torishima and will become active on Ogasawara. His length of stay is unknown at this time. He has been a regular on the 14226 DX Net and also checks into the 7062 DX Net run by VK stations between 1030 and 1200z.

SAINT LUCIA. Scott, N0JCL, will be on from January 28 to February 2. Check 3510 or 3795 kHz at 0900z; 7003 kHz at 1000z; and 14195 kHz at 1200z. QSL w/SASE via 1138 McAllister Avenue, Marinette WI 54143. DL5XAT and DL9XAT plan to be active on 160 through 6 meters with CW and SSB from March 5 to 17. If J6 calls do not come through they will operate as J6/DL5XAT and J6/DL9XAT. QSL via CBA or PO Box 1411, D-21454 Reinbek, Germany.

PREFIX HUNTERS NOTE. Nickolas, UX0FF, is on 3650 kHz every evening between 0300 and 0600z looking for stateside QSL via DF8BK.

CAYMAN ISLANDS. Bruce, K0BJ, will sign ZF2NJ from January 23 through 29, mainly on 15 and 20 meter CW. He also plans to be active on RS-12. QSL via Box DX, Colby, KS 67701.

PACIFIC DXPEDITION. Nob, JF2MBF, starts a one month journey on February 12. He and Yasu, JI1NJC, will operate from Tonga as A35JJ February 12 through 20; T23JJ from Tuvalu February 23 to March 1; T30JJ from Western Kiribati March 2 to 8; and C21/WK3D from Nauru March 9 to 14. Plans include 160 through 10 meter CW, SSB and RTTY, plus some Mode B satellite work. QSL direct or to JR2KDN via the bureau.

NEW ZEALAND. Jacky, F2CW, has visited Ron, ZL1AMO, and guest operated ZL1AMO on 7005 kHz at 0518z.

CONTEST DATE CORRECTION. To set the story straight, the CQ 160 Meter Contest will be on the weekend of January 28

through 30. The following are some tips for this event.

Mike, K4PI, will be signing P49I. Remi, FK8CP, will call for W and VE stations on 1842 kHz, listening between 1846 and 1848 kHz at 0320 and 1300z. P40W will be a multi-single effort by W2GD and K2TW. QSL via N2MM. AH6IO will activate Oahu on both CW and SSB.

THIS WEEKEND ON THE RADIO. The ARRL January VHF Sweekstakes runs from 1900z Saturday the 22nd until 0400z Monday the 24th. Work as many stations possible and exchange grid squares. For full contest rules, check page 128 of December QST. W1AW will be active on 50, 144, 222 and 432 MHz on Saturday afternoon.
NNNN
/EX

--
Marc B. Grant 214-231-3998
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

507. Re: CW Books

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 12:40:51 UTC
From: connie2@freenet2.scri.fsu.edu
Message-ID: <2hoigj$1j0@mailer.fsu.edu>
Source record: 272085

No, you do not have to pass the 5 WPM test if you've passed the 13 WPM test.

Yes, you can go straight to General Class in one session, i.e., by passing the two written elements and the 13 WPM code test at one sitting.

Yes, it is a practical objective to aim your initial speed into the 13-15 WPM range. [I agree, 5 WPM and 13 WPM speeds do sound like two different languages. I find it very difficult to copy at speeds below 10 WPM..the characters just don't sound "right".]

Do become very familiar with the typical CW QSO format. It is what is used in administering the code test. Be able to identify call signs, signal reports, locations, equipment and names..all of these will be part of the code test.

Good luck,
Michael Christie, K7RLS
Crawfordville, Florida

508. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 12:54:45 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <VayFjGG8yPwG053yn@dorsai.dorsai.org>
Source record: 272086
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc

In article <1994Jan18.201820.13828@ringer.cs.utsa.edu>, M Blake Schreckenba wrote:
> I remember reading somewhere that the Lost Ark of the Covenant was really an
> extraterrestrial sub-space transceiver, left behind by the same beings that
> gave some of their construction and architecture expertise to the Egyptians,
> Mayans, etc.

I remember seeing somewhere, (Nova?), that if you tried to build the Ark of the Covenant from it's description in the Bible, you would wind up with a storage battery. Could you immagine some one who couldn't understand the concept of energy getting an electric shock. To him it would have been the power of God.

According to legend, there was a light on top of the great pyramid that burned for 600 years. Egyptologist found a small room with copper troughs in it that were lined with lead, and two wires that lead up to, where? When you think about it, a wet cell is a simple idea. It is conceiveable that some high priest of a once acient religion discoverd electricity and the knowledge was kept as a secret.

< ^^^

509. Re: DSP Audio Filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 12:59:09 UTC
From: n4hy@tang.ccr-p.ida.org
Message-ID: <N4HY.94Jan21125909@tang.ccr-p.ida.org>
Source record: 272254

> - smarter rtty demodulators that exploit the mark/space partial redundancy
> better
>might really begin to exploit the promise of DSP for ham radio communication.

>Rajiv
>aa9ch

My demod for the DSP1232/2232 contains a sliding slicer, etc. for exploiting
this redundancy. This has been out for almost two years.

Bob

--
Robert W. McGwier | n4hy@ccr-p.ida.org Interests: ham radio,
Center for Communications Research | scouts, astronomy, golf (o yea, & math!)
Princeton, N.J. 08520 | ASM Troop 5700, ACM Pack 53 Hightstown
(609)-279-6240(v) (609)-924-3061(f)| I used to be a Buffalo . . . NE III-120

510. Communications Quarterly

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 13:25:18 UTC
From: claude@bauv.unibw-muenchen.de
Message-ID: <claude.759158718@bauv106>
Source record: 272084

How can I contact the members of the Editorial Board via E-Mail ?

Thanks for helping me.
--
Claude F.

This message may contain opinions which are not shared by my employer.
The facts can speak for themselves.

511. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 13:29:51 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Jan21.212951.1@ntuvax.ntu.ac.sg>
Source record: 272087

>No... read the description more carefully. You will find that the Ark of
>the Covenant is basically a *large* capacitor (wooden box with metal inside
>and metal outside). Penalty for unauthorised contact was a lightning bolt,
>although presumably you got let off if it was raining :-)

Why does one get let off if it was raining? Capacitance leakage? :)

>Dave

73 de 9VG Daniel

512. <WANTED> SM-220, transverter, scanner

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 13:54:58 UTC
From: white@csusys.ctstateu.edu
Message-ID: <1994Jan21.085458.1@csusys.ctstateu.edu>
Source record: 272088
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc

```
WANTED:
Kenwood SM-220 station monitor
10m->2m transverter
Older scanner with 137-138 MHz
APT demodulator/software

Replies and offers to white@csusys.ctstateu.edu
```

513. ORBS$021.OSCAR.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 13:56:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.5953.99.0C389D96@drig.com>
Source record: 272268

```
SB KEPS @ AMSAT $ORBS-021.O
Orbital Elements 021.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH,TX January 21, 1994
BID: $ORBS-021.O
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94012.88782746
Element set: 252
Inclination: 27.1999 deg
RA of node: 346.8463 deg
Eccentricity: 0.6020165
Arg of perigee: 145.8302 deg
Mean anomaly: 274.3239 deg
Mean motion: 2.05879874 rev/day
Decay rate: -3.37e-06 rev/day^2
Epoch rev: 7958
Checksum: 340

Satellite: UO-11
Catalog number: 14781
Epoch time: 94018.53148342
Element set: 658
Inclination: 97.7944 deg
RA of node: 40.2143 deg
Eccentricity: 0.0012903
Arg of perigee: 32.0480 deg
Mean anomaly: 328.1509 deg
Mean motion: 14.69124335 rev/day
Decay rate: 2.35e-06 rev/day^2
Epoch rev: 52833
Checksum: 287

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94016.19941791
Element set: 854
Inclination: 82.9244 deg
RA of node: 81.1944 deg
Eccentricity: 0.0013211
Arg of perigee: 85.2443 deg
Mean anomaly: 275.0217 deg
```

Mean motion: 13.72329684 rev/day
Decay rate: 4.6e-07 rev/day^2
Epoch rev: 32906
Checksum: 302

Satellite: AO-13
Catalog number: 19216
Epoch time: 94013.76090682
Element set: 865
Inclination: 57.8727 deg
RA of node: 273.6690 deg
Eccentricity: 0.7205576
Arg of perigee: 332.7751 deg
Mean anomaly: 3.3757 deg
Mean motion: 2.09726934 rev/day
Decay rate: -5.86e-06 rev/day^2
Epoch rev: 4277
Checksum: 343

Satellite: FO-20
Catalog number: 20480
Epoch time: 94018.51659842
Element set: 652
Inclination: 99.0147 deg
RA of node: 198.7340 deg
Eccentricity: 0.0540754
Arg of perigee: 318.6667 deg
Mean anomaly: 37.4685 deg
Mean motion: 12.83223815 rev/day
Decay rate: 1.00e-06 rev/day^2
Epoch rev: 18493
Checksum: 319

Satellite: AO-21
Catalog number: 21087
Epoch time: 94019.17209926
Element set: 417
Inclination: 82.9424 deg
RA of node: 252.9794 deg
Eccentricity: 0.0035743
Arg of perigee: 137.1749 deg
Mean anomaly: 223.2201 deg
Mean motion: 13.74532086 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 14911
Checksum: 304

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94018.81286753
Element set: 656

```
Inclination: 82.9239 deg
RA of node: 122.2331 deg
Eccentricity: 0.0029532
Arg of perigee: 161.6651 deg
Mean anomaly: 198.5573 deg
Mean motion: 13.74033348 rev/day
Decay rate: 3.7e-07 rev/day^2
Epoch rev: 14813
Checksum: 312

/EX
```

514. ORBS$021.MICRO.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 13:59:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.5954.99.0C389D97@drig.com>
Source record: 272271

```
SB KEPS @ AMSAT $ORBS-021.D
Orbital Elements 021.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH,TX January 21, 1994
BID: $ORBS-021.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94019.24162783
Element set: 957
Inclination: 98.6014 deg
RA of node: 105.9995 deg
Eccentricity: 0.0010476
Arg of perigee: 271.0915 deg
Mean anomaly: 88.9061 deg
Mean motion: 14.29817627 rev/day
Decay rate: 4.8e-07 rev/day^2
Epoch rev: 20830
Checksum: 322

Satellite: AO-16
Catalog number: 20439
Epoch time: 94019.23294962
Element set: 758
Inclination: 98.6092 deg
RA of node: 107.0729 deg
Eccentricity: 0.0010727
Arg of perigee: 271.4260 deg
Mean anomaly: 88.5694 deg
Mean motion: 14.29873575 rev/day
Decay rate: 4.3e-07 rev/day^2
Epoch rev: 20831
Checksum: 327

Satellite: DO-17
Catalog number: 20440
Epoch time: 94018.78193383
Element set: 757
Inclination: 98.6093 deg
RA of node: 106.8996 deg
Eccentricity: 0.0010796
Arg of perigee: 272.2002 deg
Mean anomaly: 87.7944 deg
```

Mean motion: 14.30011640 rev/day
Decay rate: 5.5e-07 rev/day^2
Epoch rev: 20826
Checksum: 311

Satellite: WO-18
Catalog number: 20441
Epoch time: 94019.24446275
Element set: 758
Inclination: 98.6091 deg
RA of node: 107.3686 deg
Eccentricity: 0.0011348
Arg of perigee: 270.7621 deg
Mean anomaly: 89.2257 deg
Mean motion: 14.29988067 rev/day
Decay rate: 3.2e-07 rev/day^2
Epoch rev: 20833
Checksum: 322

Satellite: LO-19
Catalog number: 20442
Epoch time: 94019.23252273
Element set: 757
Inclination: 98.6097 deg
RA of node: 107.5781 deg
Eccentricity: 0.0011714
Arg of perigee: 270.9464 deg
Mean anomaly: 89.0376 deg
Mean motion: 14.30081798 rev/day
Decay rate: 4.8e-07 rev/day^2
Epoch rev: 20834
Checksum: 318

Satellite: UO-22
Catalog number: 21575
Epoch time: 94018.70071175
Element set: 458
Inclination: 98.4490 deg
RA of node: 96.1200 deg
Eccentricity: 0.0008373
Arg of perigee: 21.0530 deg
Mean anomaly: 339.1000 deg
Mean motion: 14.36883323 rev/day
Decay rate: 1.04e-06 rev/day^2
Epoch rev: 13161
Checksum: 259

Satellite: KO-23
Catalog number: 22077
Epoch time: 94015.07021241
Element set: 352

Inclination: 66.0872 deg
RA of node: 240.5682 deg
Eccentricity: 0.0008534
Arg of perigee: 325.9559 deg
Mean anomaly: 34.0911 deg
Mean motion: 12.86283203 rev/day
Decay rate: -3.7e-07 rev/day^2
Epoch rev: 6709
Checksum: 280

Satellite: AO-27
Catalog number: 22825
Epoch time: 94015.23688085
Element set: 254
Inclination: 98.6695 deg
RA of node: 92.4839 deg
Eccentricity: 0.0008356
Arg of perigee: 301.9653 deg
Mean anomaly: 58.0715 deg
Mean motion: 14.27601623 rev/day
Decay rate: 3.6e-07 rev/day^2
Epoch rev: 1586
Checksum: 323

Satellite: IO-26
Catalog number: 22826
Epoch time: 94015.22892069
Element set: 255
Inclination: 98.6706 deg
RA of node: 92.4916 deg
Eccentricity: 0.0008734
Arg of perigee: 301.5136 deg
Mean anomaly: 58.5191 deg
Mean motion: 14.27703814 rev/day
Decay rate: 3.8e-07 rev/day^2
Epoch rev: 1586
Checksum: 313

Satellite: KO-25
Catalog number: 22830
Epoch time: 94014.64339549
Element set: 256
Inclination: 98.5722 deg
RA of node: 90.7900 deg
Eccentricity: 0.0010843
Arg of perigee: 268.6528 deg
Mean anomaly: 91.3411 deg
Mean motion: 14.28027124 rev/day
Decay rate: 1.0e-08 rev/day^2
Epoch rev: 1578
Checksum: 291

/EX

515. ORBS$021.WEATH.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 14:02:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.5955.99.0C389D98@drig.com>
Source record: 272273

```
SB KEPS @ AMSAT $ORBS-021.W
Orbital Elements 021.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX January 21, 1994
BID: $ORBS-021.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94014.01154683
Element set: 677
Inclination: 99.0744 deg
RA of node: 62.5335 deg
Eccentricity: 0.0014570
Arg of perigee: 297.2963 deg
Mean anomaly: 62.6724 deg
Mean motion: 14.13579715 rev/day
Decay rate: 1.35e-06 rev/day^2
Epoch rev: 46856
Checksum: 324

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94013.95089539
Element set: 576
Inclination: 98.5115 deg
RA of node: 27.6470 deg
Eccentricity: 0.0014289
Arg of perigee: 60.6937 deg
Mean anomaly: 299.5669 deg
Mean motion: 14.24857313 rev/day
Decay rate: 8.5e-07 rev/day^2
Epoch rev: 38064
Checksum: 354

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94019.09840418
Element set: 255
Inclination: 82.5397 deg
RA of node: 27.1822 deg
Eccentricity: 0.0015166
Arg of perigee: 239.2617 deg
Mean anomaly: 120.7049 deg
```

Mean motion: 13.84704972 rev/day
Decay rate: 4.1e-07 rev/day^2
Epoch rev: 30172
Checksum: 300

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94018.57372231
Element set: 257
Inclination: 82.5389 deg
RA of node: 69.5600 deg
Eccentricity: 0.0015877
Arg of perigee: 278.6887 deg
Mean anomaly: 81.2437 deg
Mean motion: 13.16963263 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 26356
Checksum: 332

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94013.91338651
Element set: 478
Inclination: 99.1575 deg
RA of node: 359.1629 deg
Eccentricity: 0.0011211
Arg of perigee: 204.5750 deg
Mean anomaly: 155.4889 deg
Mean motion: 14.12949930 rev/day
Decay rate: 1.26e-06 rev/day^2
Epoch rev: 27343
Checksum: 313

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94019.18866258
Element set: 256
Inclination: 82.5226 deg
RA of node: 262.7081 deg
Eccentricity: 0.0013229
Arg of perigee: 289.3306 deg
Mean anomaly: 70.6423 deg
Mean motion: 13.84355686 rev/day
Decay rate: 6.9e-07 rev/day^2
Epoch rev: 24707
Checksum: 331

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94017.89422067
Element set: 971

Inclination: 82.5495 deg
RA of node: 13.8911 deg
Eccentricity: 0.0005906
Arg of perigee: 311.7262 deg
Mean anomaly: 48.3353 deg
Mean motion: 13.04401542 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 20330
Checksum: 267

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94019.25203231
Element set: 757
Inclination: 82.5477 deg
RA of node: 326.7663 deg
Eccentricity: 0.0014849
Arg of perigee: 201.4548 deg
Mean anomaly: 158.5995 deg
Mean motion: 13.84186662 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 18001
Checksum: 317

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94016.17645587
Element set: 873
Inclination: 98.8459 deg
RA of node: 41.1276 deg
Eccentricity: 0.0015374
Arg of perigee: 75.7420 deg
Mean anomaly: 284.3802 deg
Mean motion: 14.01335636 rev/day
Decay rate: -2.7e-07 rev/day^2
Epoch rev: 17241
Checksum: 313

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94019.19169044
Element set: 756
Inclination: 82.5267 deg
RA of node: 264.5225 deg
Eccentricity: 0.0014575
Arg of perigee: 102.3761 deg
Mean anomaly: 257.9031 deg
Mean motion: 13.83571054 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 16715
Checksum: 303

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94016.77549633
Element set: 664
Inclination: 82.5405 deg
RA of node: 276.6395 deg
Eccentricity: 0.0012441
Arg of perigee: 202.6707 deg
Mean anomaly: 157.3867 deg
Mean motion: 13.16458614 rev/day
Decay rate: 5.0e-07 rev/day^2
Epoch rev: 13143
Checksum: 299

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94015.96922581
Element set: 886
Inclination: 98.6363 deg
RA of node: 46.9897 deg
Eccentricity: 0.0012686
Arg of perigee: 321.9099 deg
Mean anomaly: 38.1181 deg
Mean motion: 14.22357548 rev/day
Decay rate: 1.57e-06 rev/day^2
Epoch rev: 13889
Checksum: 349

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94018.52836753
Element set: 660
Inclination: 82.5520 deg
RA of node: 222.4234 deg
Eccentricity: 0.0012361
Arg of perigee: 209.0115 deg
Mean anomaly: 151.0325 deg
Mean motion: 13.16826870 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 11676
Checksum: 269

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94018.89845223
Element set: 256
Inclination: 82.5520 deg
RA of node: 324.7383 deg
Eccentricity: 0.0021299
Arg of perigee: 286.9901 deg
Mean anomaly: 72.8924 deg
Mean motion: 13.82996980 rev/day

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Decay rate: 3.9e-07 rev/day^2
Epoch rev: 1945
Checksum: 341

/EX
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516. ORBS$021.MISC.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 14:04:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.5956.99.0C389D99@drig.com>
Source record: 272265

```
SB KEPS @ AMSAT $ORBS-021.M
Orbital Elements 021.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX January 21, 1994
BID: $ORBS-021.M
TO ALL RADIO AMATEURS BT

Satellite: MIR
Catalog number: 16609
Epoch time: 94017.58944630
Element set: 99
Inclination: 51.6174 deg
RA of node: 222.2409 deg
Eccentricity: 0.0004684
Arg of perigee: 210.2206 deg
Mean anomaly: 149.8392 deg
Mean motion: 15.59692386 rev/day
Decay rate: 9.870e-05 rev/day^2
Epoch rev: 45255
Checksum: 323

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94019.23512510
Element set: 429
Inclination: 28.4680 deg
RA of node: 112.6612 deg
Eccentricity: 0.0005975
Arg of perigee: 331.6281 deg
Mean anomaly: 28.3980 deg
Mean motion: 14.90430063 rev/day
Decay rate: 8.38e-06 rev/day^2
Epoch rev: 714
Checksum: 269

Satellite: GRO
Catalog number: 21225
Epoch time: 94017.58973420
Element set: 56
Inclination: 28.4617 deg
RA of node: 196.8700 deg
Eccentricity: 0.0003735
Arg of perigee: 311.7439 deg
Mean anomaly: 48.2817 deg
```

Mean motion: 15.39842307 rev/day
Decay rate: 3.648e-05 rev/day^2
Epoch rev: 3369
Checksum: 309

Satellite: UARS
Catalog number: 21701
Epoch time: 94018.13837617
Element set: 464
Inclination: 56.9833 deg
RA of node: 40.3077 deg
Eccentricity: 0.0005136
Arg of perigee: 99.2913 deg
Mean anomaly: 260.8424 deg
Mean motion: 14.96334028 rev/day
Decay rate: -1.27e-06 rev/day^2
Epoch rev: 12847
Checksum: 294

Satellite: POSAT
Catalog number: 22829
Epoch time: 94015.20627603
Element set: 247
Inclination: 98.6671 deg
RA of node: 92.4771 deg
Eccentricity: 0.0009664
Arg of perigee: 287.5870 deg
Mean anomaly: 72.4206 deg
Mean motion: 14.27996968 rev/day
Decay rate: 4.5e-07 rev/day^2
Epoch rev: 1586
Checksum: 331

/EX

517. ORBS$021.2L.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 14:07:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.5957.99.0C389D9A@drig.com>
Source record: 272275

```
SB KEPS @ AMSAT $ORBS-021.N
2Line Orbital Elements 021.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX January 21, 1994
BID: $ORBS-021.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10
1 14129U 83058B 94012.88782746 -.00000337 00000-0 10000-3 0 2527
2 14129 27.1999 346.8463 6020165 145.8302 274.3239 2.05879874 79582
UO-11
1 14781U 84021B 94018.53148342 .00000235 00000-0 47829-4 0 6584
2 14781 97.7944 40.2143 0012903 32.0480 328.1509 14.69124335528336
RS-10/11
1 18129U 87054A 94016.19941791 .00000046 00000-0 34288-4 0 8545
2 18129 82.9244 81.1944 0013211 85.2443 275.0217 13.72329684329062
AO-13
1 19216U 88051B 94013.76090682 -.00000586 00000-0 10000-4 0 8653
2 19216 57.8727 273.6690 7205576 332.7751 3.3757 2.09726934 42777
FO-20
1 20480U 90013C 94018.51659842 .00000100 00000-0 30329-3 0 6526
2 20480 99.0147 198.7340 0540754 318.6667 37.4685 12.83223815184933
AO-21
1 21087U 91006A 94019.17209926 .00000094 00000-0 82657-4 0 4173
2 21087 82.9424 252.9794 0035743 137.1749 223.2201 13.74532086149118
RS-12/13
1 21089U 91007A 94018.81286753 .00000037 00000-0 23432-4 0 6567
2 21089 82.9239 122.2331 0029532 161.6651 198.5573 13.74033348148137
UO-14
1 20437U 90005B 94019.24162783 .00000048 00000-0 35626-4 0 9578
2 20437 98.6014 105.9995 0010476 271.0915 88.9061 14.29817627208309
AO-16
1 20439U 90005D 94019.23294962 .00000043 00000-0 33605-4 0 7583
2 20439 98.6092 107.0729 0010727 271.4260 88.5694 14.29873575208314
DO-17
1 20440U 90005E 94018.78193383 .00000055 00000-0 38411-4 0 7571
2 20440 98.6093 106.8996 0010796 272.2002 87.7944 14.30011640208261
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WO-18
1 20441U 90005F 94019.24446275 .00000032 00000-0 29435-4 0 7587
2 20441 98.6091 107.3686 0011348 270.7621 89.2257 14.29988067208332
LO-19
1 20442U 90005G 94019.23252273 .00000048 00000-0 35616-4 0 7574
2 20442 98.6097 107.5781 0011714 270.9464 89.0376 14.30081798208349
UO-22
1 21575U 91050B 94018.70071175 .00000104 00000-0 49885-4 0 4588
2 21575 98.4490 96.1200 0008373 21.0530 339.1000 14.36883323131615
KO-23
1 22077U 92052B 94015.07021241 -.00000037 00000-0 10000-3 0 3520
2 22077 66.0872 240.5682 0008534 325.9559 34.0911 12.86283203 67099
AO-27
1 22825U 93061C 94015.23688085 .00000036 00000-0 32631-4 0 2549
2 22825 98.6695 92.4839 0008356 301.9653 58.0715 14.27601623 15866
IO-26
1 22826U 93061D 94015.22892069 .00000038 00000-0 33169-4 0 2558
2 22826 98.6706 92.4916 0008734 301.5136 58.5191 14.27703814 15866
KO-25
1 22830U 93061H 94014.64339549 .00000001 00000-0 18008-4 0 2563
2 22830 98.5722 90.7900 0010843 268.6528 91.3411 14.28027124 15789
NOAA-9
1 15427U 84123A 94014.01154683 .00000135 00000-0 95826-4 0 6779
2 15427 99.0744 62.5335 0014570 297.2963 62.6724 14.13579715468562
NOAA-10
1 16969U 86073A 94013.95089539 .00000085 00000-0 54705-4 0 5769
2 16969 98.5115 27.6470 0014289 60.6937 299.5669 14.24857313380648
MET-2/17
1 18820U 88005A 94019.09840418 .00000041 00000-0 23323-4 0 2554
2 18820 82.5397 27.1822 0015166 239.2617 120.7049 13.84704972301727
MET-3/2
1 19336U 88064A 94018.57372231 .00000051 00000-0 10000-3 0 2577
2 19336 82.5389 69.5600 0015877 278.6887 81.2437 13.16963263263566
NOAA-11
1 19531U 88089A 94013.91338651 .00000126 00000-0 92509-4 0 4785
2 19531 99.1575 359.1629 0011211 204.5750 155.4889 14.12949930273432
MET-2/18
1 19851U 89018A 94019.18866258 .00000069 00000-0 48247-4 0 2567
2 19851 82.5226 262.7081 0013229 289.3306 70.6423 13.84355686247076
MET-3/3
1 20305U 89086A 94017.89422067 .00000044 00000-0 10000-3 0 9712
2 20305 82.5495 13.8911 0005906 311.7262 48.3353 13.04401542203308
MET-2/19
1 20670U 90057A 94019.25203231 .00000024 00000-0 79036-5 0 7575
2 20670 82.5477 326.7663 0014849 201.4548 158.5995 13.84186662180010
FY-1/2
1 20788U 90081A 94016.17645587 -.00000027 00000-0 10000-4 0 8732
2 20788 98.8459 41.1276 0015374 75.7420 284.3802 14.01335636172410
MET-2/20
1 20826U 90086A 94019.19169044 .00000094 00000-0 71590-4 0 7568
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2 20826 82.5267 264.5225 0014575 102.3761 257.9031 13.83571054167152
MET-3/4
1 21232U 91030A 94016.77549633 .00000050 00000-0 10000-3 0 6645
2 21232 82.5405 276.6395 0012441 202.6707 157.3867 13.16458614131438
NOAA-12
1 21263U 91032A 94015.96922581 .00000157 00000-0 90208-4 0 8861
2 21263 98.6363 46.9897 0012686 321.9099 38.1181 14.22357548138892
MET-3/5
1 21655U 91056A 94018.52836753 .00000051 00000-0 10000-3 0 6606
2 21655 82.5520 222.4234 0012361 209.0115 151.0325 13.16826870116763
MET-2/21
1 22782U 93055A 94018.89845223 .00000039 00000-0 21950-4 0 2565
2 22782 82.5520 324.7383 0021299 286.9901 72.8924 13.82996980 19459
MIR
1 16609U 86017A 94017.58944630 .00009870 00000-0 12730-3 0 995
2 16609 51.6174 222.2409 0004684 210.2206 149.8392 15.59692386452555
HUBBLE
1 20580U 90037B 94019.23512510 .00000838 00000-0 68854-4 0 4298
2 20580 28.4680 112.6612 0005975 331.6281 28.3980 14.90430063 7146
GRO
1 21225U 91027B 94017.58973420 .00003648 00000-0 82854-4 0 566
2 21225 28.4617 196.8700 0003735 311.7439 48.2817 15.39842307 33692
UARS
1 21701U 91063B 94018.13837617 -.00000127 00000-0 10000-4 0 4641
2 21701 56.9833 40.3077 0005136 99.2913 260.8424 14.96334028128474
POSAT
1 22829U 93061G 94015.20627603 .00000045 00000-0 36004-4 0 2479
2 22829 98.6671 92.4771 0009664 287.5870 72.4206 14.27996968 15866
/EX
```

518. Re: CW Books

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 14:16:06 UTC
From: jackson@longlast.cs.nyu.edu
Message-ID: <2hoo36$lmq@slinky.cs.nyu.edu>
Source record: 272090

|> Am I setting myself up for 'too much' work by skipping over the
|> 5 wpm rate?

I was just going to ask the same type question myself. I got sm404 working last night and am very happy with it. I'm especially happy with the SoundBlaster compatibility.. it does wonders for the quality of the tone. I heard a tip a while ago from someone to skip right over 5 wpm and start at 13. Most people have the innate capability to copy faster than five, so you won't be fighting yourself to stay too slow.

My question/suggestion: I don't know what code tapes sound like, but it seems to me that software could be written to, using the SoundBlaster card, roll your own code tapes. Obviously, I understand that there is human voice on the tapes, but a sentence library could be saved to disk and played at the appropriate times while creating the tape. Instead of buying six or seven tapes, you can create a new tape as you advance. Just make a few selections in the software, such as start speed and end speed, tone in Hz, and word spacing. If a person is sampled saying each character or procedural code once, the human voice could appear on the left track while the code is playing on the right track. (or vice versa since we drivers sit on the left in America) Or, some combination of volume of the code and voice can be made until it's "just right".

For non-instructional speech, the sampling rate can be done at 8MHz.. that's not the important part of the tape for sound quality, its the code that matters. And since the code is generated on the fly, it doesn't need to be stored anywhere.

This would also come in handy for groups as they teach a large number of people code. They can make custom tapes for everyone. And with a QSO library like SM's, a different QSO could be heard on every tape. The group could still fulfill their shareware obligations for the software without royalty for each tape produced, so long as they're not sold.

I had to turn off the DIT DAH display in SM because, as someone warned me not to do, I found myself counting them on screen and trying to remember. The key is what it sounds like. I even closed my eyes for a while.. that's when I came up with the idea for the custom tapes..

Does this sound like a good idea?

"Now here's a sample QSO at thirteen words per minute..."
--
Steven Jackson New York University
Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012
"Commercial sign in 5, 4, 3, 2... commercial sign now"

519. Weekly Solar Terrestrial Forecast & Review for 22 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 14:37:11 UTC
From: oler@rho.uleth.ca
Message-ID: <9401211437.AA10084@rho.uleth.ca>
Source record: 272095
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

```
--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
January 21 to January 30, 1994

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

---------

SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE
----------------------------------------------------

|10.7 cm|HF Propagation +/- CON|SID AU.BKSR DX| Mag| Aurora |
|SolrFlx|LO MI HI PO SWF %MUF %|ENH LO MI HI LO MI HI %|K Ap|LO MI HI|
--|-------|----------------------|------------------------|----|--------|
21| 105 |VG G F F 30 00 70| 30 NA NA NA 01 15 20 35|2 12|NV NV LO|
22| 105 | G G P P 30 -15 65| 30 NA NA NA 02 20 35 30|4 22|NV LO MO|
23| 110 |VG G P F 30 -10 65| 30 NA NA NA 02 15 25 30|3 18|NV LO MO|
24| 110 |VG G F F 30 00 65| 30 NA NA NA 01 10 20 35|3 14|NV NV LO|
25| 110 |VG G F F 30 00 65| 30 NA NA NA 01 10 20 40|3 12|NV NV LO|
26| 105 |VG G F F 30 00 65| 30 NA NA NA 01 10 20 40|2 10|NV NV LO|
27| 105 |VG G F F 30 00 65| 30 NA NA NA 02 15 25 40|3 12|NV NV MO|
28| 100 | G G P P 30 -15 65| 30 NA NA NA 03 30 40 30|4 22|NV LO MO|
29| 97 |VG G P P 30 -10 65| 30 NA NA NA 03 25 35 35|3 15|NV LO MO|
30| 95 |VG G F F 30 00 65| 30 NA NA NA 02 20 30 35|2 12|NV NV LO|

PEAK PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (21 JAN - 30 JAN)

_____________________________________________________________________________
| EXTREMELY SEVERE | | | | | | | | | | HIGH |
| VERY SEVERE STORM | | | | | | | | | | HIGH |
| SEVERE STORM | | | | | | | | | | MODERATE |
| MAJOR STORM | | | | | | | | | | LOW - MOD. |
| MINOR STORM | | | | | | | | | | LOW |
| VERY ACTIVE | | * | * | | | | | * | | | NONE |
| ACTIVE | |***|***|** | * | | * |***|** | | NONE |
| UNSETTLED |***|***|***|***|***|***|***|***|***|***| NONE |
| QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
| VERY QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
|-------------------|---|---|---|---|---|---|---|---|---|---|------------|
| Geomagnetic Field |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| Anomaly |
| Conditions | Given in 8-hour UT intervals | Intensity |
|_____________________________________________________________________________|

CONFIDENCE LEVEL: 65%
```

NOTES:
Predicted geomagnetic activity is based heavily on recurrent
phenomena. Transient energetic solar events cannot be predicted reliably over
periods in excess of several days. Hence, there may be some deviations from
the predictions due to the unpredictable transient solar component.

60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACTIVITY

```
------------------------------------------------------------
51 | J |
48 | J |
46 | J |
43 | J |
41 | J |
38 | M J |
36 | MM J |
33 | MM J |
31 | MM J |
28 | MM J |
26 | MM J |
23 | MM J A |
20 | AMM J A A AA |
18 | AMM J A AAA AAA AAA |
15 | AMM AJ AA AAAA AAAAA AAA |
13 | AMM AJ AAU U AAAA AAAAAUAAA |
10 | AMM AJ AAU U AAAAU U AAAAAUAAAU|
8 | U U AMMUU AJ U UAAUUUUUUU AAAAU U U AAAAAUAAAU|
5 |Q QU U AMMUUQAJQUUU UAAUUUUUUUUU AAAAUQ UQU AAAAAUAAAU|
3 |QQQUQQUQAMMUUQAJQUUUQQUAAUUUUUUUUUUQQQQAAAAUQQUQUQQAAAAAUAAAU|
0 |QQQUQQUQAMMUUQAJQUUUQQUAAUUUUUUUUUUQQQQAAAAUQQUQUQQAAAAAUAAAU|
------------------------------------------------------------
```

Chart Start Date: Day #327

NOTES:
This graph is determined by plotting the greater of either the planetary
A-index or the Boulder A-index. Graph lines are labelled according
to the severity of the activity which occurred on each day. The left-
hand column represents the associated A-Index for that day.
Q = Quiet, U = Unsettled, A = Active, M = Minor Storm,
J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

```
------------------------------------------------------------
151 | |
148 | * |
145 | ** |
142 | * ** |
139 | * ***** |
136 | * ***** * |
133 | ** ****** * |
130 | ** ****** ** |
```

```
127 | ********** |
124 | ********** |
121 | ********** |
118 | ********** |
115 | ********** |
112 | ********** |
109 | * ********** |
106 | * * * ********** |
103 | ***** *** ********** * **|
100 |** ********* ********** *****|
097 |*** ********** ********** *****|
094 |*** ********** ********** ******|
091 |**** ********** ********** ******|
088 |********** ********** ********** ******|
085 |********** ********** **********|
082 |**********|
----------
Chart Start: Day #327

GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX
----------

----------
104 | |
103 | *|
102 | **********|
101 | **********|
100 | **********|
099 | **********|
098 | **********|
097 | **********|
096 | **********|
095 | **********|
094 |**********|
093 |**********|
----------
Chart Start: Day #327

NOTES:
The 10.7 cm solar radio flux is plotted from data reported
by the Penticton Radio Observatory (formerly the ARO from
Ottawa). High solar flux levels denote higher levels of
activity and a greater number of sunspot groups on the Sun.
The 90-day mean solar flux graph is charted from the 90-day
mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS
----------

----------
161 | |
154 | * |
```

```
147 | *  |
140 | ** |
133 | ** * *** |
126 | *** ***** |
119 | * *** ****** |
112 | ** * *** ****** |
105 | ** ******* ****** |
098 | ** * * ** ******* ******* |
091 | *** ** ** ****************** |
084 | ********** ****************** |
077 | * *********** ****************** |
070 | * ************ ******************** |
063 |** ************ ********************** * |
056 |*** ************** ************************ |
049 |******************** * * ************************ * *|
042 |******************** ** ***************************** * *|
035 |******************** * ** ****************************** ***|
028 |******************** * *** *********************************|
021 |************************************************************|
------------------------------------------------------------
Chart Start: Day #327

NOTES:
The graphical chart of sunspot numbers is created from the
daily sunspot number counts as reported by the SESC.

HF RADIO SIGNAL PROPAGATION PREDICTIONS (21 JAN - 30 JAN)

High Latitude Paths

_____________________________________________________
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD | | | | | | | | | |
LEVEL | FAIR |***| * | * | **| **|***|** | * | * | **|
------- | POOR | |* *|* *|* |* | | *|* *|* *|* |
65% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------

Middle Latitude Paths

_____________________________________________________
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD |***| **| **|***|***|***|***| **| **|***|
LEVEL | FAIR | |* |* | | | | |* |* | |
------- | POOR | | | | | | | | | |
65% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
```

```
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------

Low Latitude Paths

_____________________________________________________
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | * | | | * | * | | | | |
CONFIDENCE | GOOD |* *|***|***|***|* *|* *|***|***|***|***|
LEVEL | FAIR | | | | | | | | | |
------- | POOR | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------
NOTES:
NORTHERN HEMISPHERE SOUTHERN HEMISPHERE
High latitudes >= 55 deg. N. | High latitudes >= 55 deg. S.
Middle latitudes >= 40 < 55 deg. N. | Middle latitudes >= 30 < 55 deg. S.
Low latitudes < 40 deg. N. | Low latitudes < 30 deg. S.

POTENTIAL VHF DX PROPAGATION PREDICTIONS (21 JAN - 30 JAN)
INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

HIGH LATITUDES

_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% | * | * | * | * | * | * | * | * | * | * | 60%| | | | | | | | | |
| 80% | | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |-------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | | | | | | | 60%| | | | | | | | | |
| 40% | **| * | * | * | **| **| * | * | * | * | 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| |*|*| | | | |*|*| |
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

MIDDLE LATITUDES

FORECAST	Given in 8 hour local time intervals		SWF/SID ENHANCEMENT
CONFIDENCE	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*
20%	***	***	***	***	***	***	***	***	***	***	20%	*	*	*	*	*	*	*	*	*
40%	***	***	***	***	***	***	***	***	***	***	40%	*	*	*	*	*	*	*	*	*
60%	***	***	**	***	***	***	***	***	**	***	60%									
80%											80%									
100%											100%									
100%											100%									
80%											80%									
60%											60%									
40%	***	**	**	***	***	***	**	*	**	***	40%									
20%	***	***	***	***	***	***	***	***	***	***	20%		*	*				*	*	
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*

CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S
VHF DX	Given in 8 hour local time intervals										AURORAL BACKSCATTER									

LOW LATITUDES

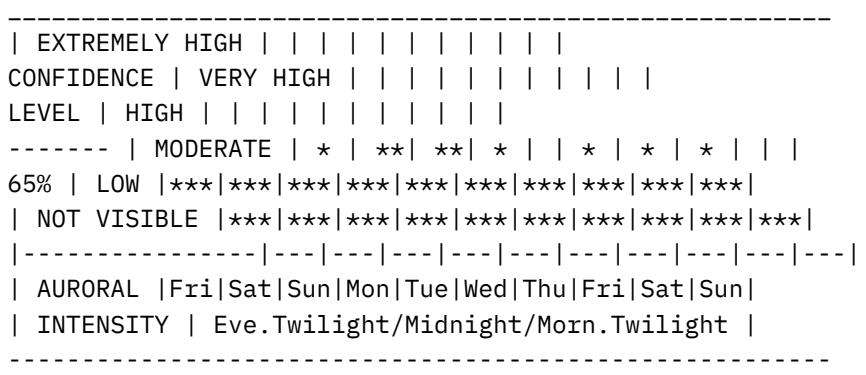
FORECAST	Given in 8 hour local time intervals		SWF/SID ENHANCEMENT
CONFIDENCE	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*
20%	***	***	***	***	***	***	***	***	***	***	20%	*	*	*	*	*	*	*	*	*
40%	***	***	***	***	***	***	***	***	***	***	40%	*	*	*	*	*	*	*	*	*
60%	***	***	***	***	***	***	***	***	***	***	60%									
80%											80%									
100%											100%									
100%											100%									
80%											80%									
60%	*	*	*	*	*	*	*	*	*	*	60%									
40%	***	***	***	***	***	***	***	***	***	***	40%									
20%	***	***	***	***	***	***	***	***	***	***	20%									
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*

CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S
VHF DX	Given in 8 hour local time intervals										AURORAL BACKSCATTER									

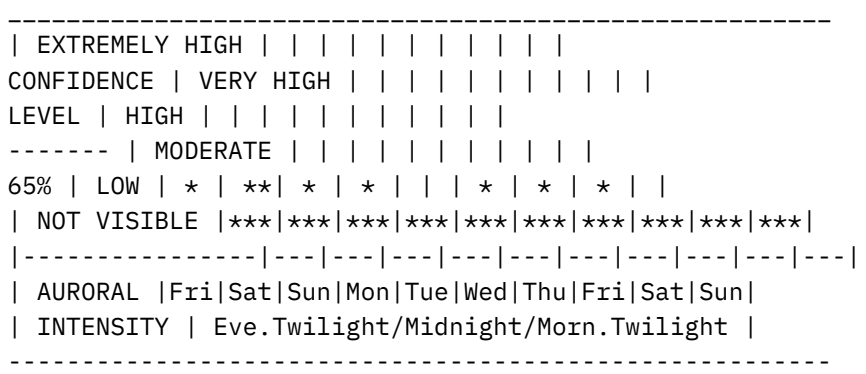
NOTES:
These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACTIVITY PREDICTIONS (21 JAN - 30 JAN)

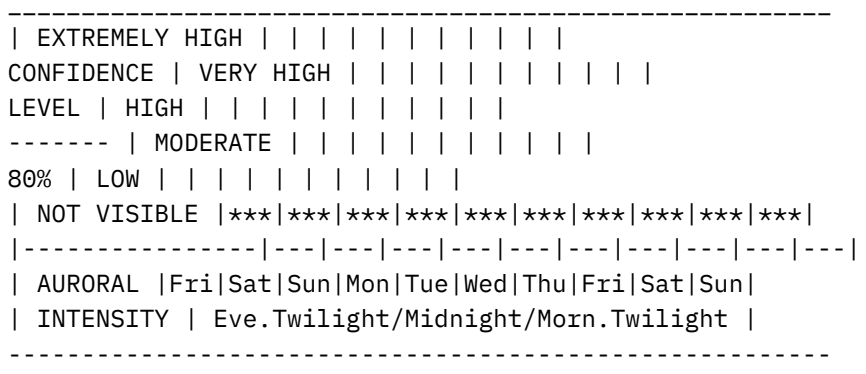
High Latitude Locations



Middle Latitude Locations



Low Latitude Locations



NOTE:
Version 2.00b of our Professional Dynamic Auroral Oval Simulation Software Package is now available. This professional software is particularly valuable to radio communicators, aurora photographers, educators, and astronomers. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "COler@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

** End of Report **

520. Re: Portable 2m Antenna for Mountaineering???

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 14:47:21 UTC
From: zlau@arrl.org
Message-ID: <1994Jan21.144721.5694@arrl.org>
Source record: 272104
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

A simple dipole can be a surprisingly good portable antenna
if used intelligently. By adjusting the location and polarization,
you can often come close to the gain of a small beam. Since
a 2 meter dipole is small and balanced, it usually isn't too
difficult to hold it in the optimum position.

However, a beam makes more sense for setting up long distance
(200 to 500 mile) microwave contacts, where two or more antennas
have to be kept in alignment.

I've found that Cushcraft antennas can be folded into slender poles
if you loosen the elements, rotate them 90 degrees, and retighten
them. Unfortunately, you can lose hardware getting up the mountain.
Of course, many of these antennas can sacrifice an interior director
without losing any gain, so perhaps this isn't much of a worry.

My latest mountaintop antennas are built like the K1FO antennas with
retaining rings. The antennas will not fold up, but littering
the mountain with stainless steel hardware is less of a problem.

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

521. What's the best Iambic paddle?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 14:51:06 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.759163866@BIX.com>
Source record: 272250

It looks like the Bencher BY-x and Vibroplex Iambic models may be the largest sellers, but I happened to see a really intriguing iambic key by Schurr. It's made in Germany out of solid brass with a plexiglass cover. The detailing is superb to look at: everything looks hand-machined and fit together with precision. Then again, maybe it _should_ look pretty good at $150, compared to $90 or $100 for the Bencher and Vibroplex keys.

What makes for a good key? I presume this is a matter of personal taste, but okay, how _do_ personal tastes run? Any advice (short of buying them all and trying them myself :-) on deciding which I'd like best?

522. Re: ThickLAN Ethernet

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 15:23:03 UTC
From: gdo@aloft.att.com
Message-ID: <CJzK2s.MC3@cbnewsm.cb.att.com>
Source record: 272094

In article <01H7WE3YNW1E000ER7@PASCAL.ACM.ORG>, SMITHSON@ACM.ORG writes:
|> I think I've seen the answer to this question posted a few moons ago, so
|> please forgive me. I've run across some Thick-LAN Ethernet coax. I think
|> it is 50-ohm, but I wonder if anyone has any other details on impedance,
|> loss, etc. It is the orange jacketed cable and is a little less than 1/2
|> inch dia.

Hi Brian,
I posted the original query back in the summer. Everyone was VERY helpful.
I got a bunch of the same stuff. If the jacket is translucent or thansparent,
it's probably teflon. Either way, it's good cable.
Here is a brief summary of what folks told me:

Impedance: 50 ohms (this I already knew from my networking background)
Loss at 50 MHz: 1.2 dB per 100 feet (better than most (including RG-213),
slightly worse than 9913) ... assuming Teflon
Velocity factor: 78 ... also assuming Teflon
Some questioned its ability to withstand UV from the Sun. Several people
replied that they've been using it for years with no signs of breakdown.

As you've probably noticed, the shielding is absolutely superb. Also, if you
have the Teflon stuff, you may actually *ENJOY* (!?!) soldering PL-259's on it.
You can heat it up with NO fear of ruining the cable. Try THAT with 9913!

If you picked up the cable for free, consider yourself lucky. This cable is
VERY expensive when purchased new. I remember forking out lots of our
company's money for this cable back in the Coax Age of networking. :-)
It's a shame, we have miles of this cable still in the ceiling ... unused.
Hmmm!

73 de Glenn, N3BDA

P.S. Before anybody flames me about using company cable for my ham shack,
This cable came from one of my wife's customers. She redesigned their
network and they gave her the old coax. It's nice to know that SOMEBODY
cleans out their ceilings!
--

Glenn D. O'Donnell, N3BDA Internet: gdo@aloft.att.com
AT&T Bell Laboratories Amateur Radio: n3bda@n3dpu.#epa.pa.usa.na
Allentown, PA Home QTH: Palmerton, PA (Grid FN20eu)

523. LARC VP2E DXpedition '94

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 16:08:02 UTC
From: jimkelly@astro.ocis.temple.edu
Message-ID: <1994Jan21.160802.23716@cronkite.ocis.temple.edu>
Source record: 272093

FOR RELEASE 1 JANUARY 1994

For more information contact: Jim Kelly, KK3K (215) 978-5272

LARC Announces DXpedition to VP2E

The Lambda Amateur Radio Club (LARC), an international club for gay, lesbian, bisexual, transgendered hams, shortwave listeners and computer enthusiasts and their friends and supporters, will sponsor it's third DXpedition in March 1994 with LARC members planning to operate on HF and OSCAR-13 Mode B and Mode S from the Caribbean island of Anguilla, British West Indies. The team of operators and equipment are planning to be on the air March 5-10, 1994.

Planned operations will include multi-band and multi-mode HF and OSCAR-13 Mode B and Mode S. This may be the first OSCAR-13 Mode S DXpedition for the record books.

The operators making the trip will be Jim Kelly (KK3K), Don Bledsoe (WB6LYI), Mark Wilcox (KC3XC), Tom Hendrix (KI4ZN), Howard Wyman (W9BVD), Norm Gray (KF7IK), James Keeth (AF9A), and Wayne Schuler (AI9Q). QSL for all operators is direct to current Callbook addresses only.

In March 1992, LARC sponsored OSCAR-13 Mode B DXpeditions to Anguilla, British West Indies (VP2E) and Tortola, British Virgin Islands (VP2V) and logged over 900 contacts.

In March 1993, a second team of five LARC operators put the island nation of Montserrat (VP2M) on OSCAR-13 Mode B and logged over 1150 contacts.

To make contacting the LARC VP2E DXpedition even more exciting, the club will automatically mail an engraved certificate to every station who successfully works either any HF operator and any OSCAR-13 operator OR any OSCAR-13 Mode B operator and any OSCAR-13 Mode S operator during the DXpedition.

The club has members in nine countries and local chapters around the United States. For membership information, write the Lambda Amateur Radio Club International Headquarters, P.O. Box 24810, Philadelphia, PA, USA, or call (215) 978-5272.

--
Jim Kelly, Amateur Radio Licensee KK3K (jimkelly@astro.ocis.temple.edu)
M.A. Candidate - Political Science - Temple University \

```
President - Lambda Amateur Radio Club for Sexual Minorities \
Standard Disclaimers Apply - LARC info: (215) 978 - LARC / \
************************************************** / \
```

524. Propagation Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 16:47:32 UTC
From: tavernin@sun1.interlan.com
Message-ID: <CJznz9.EGy@rd1.InterLan.COM>
Source record: 272251

Does anybody have any recommendations for any propagation prediction programs that are available!?

I'd appreciate any info on any freeware, shareware, or commercial propagation software that is available ...

Thanks,

Victor Tavernini
Racal-Datacom, Inc.

tavernin@sun1.interlan.com

525. Re: ThickLAN Ethernet

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 17:13:22 UTC
From: Unknown
Message-ID: <1994Jan21.171322.8989@pan.mc.ti.com>
Source record: 272259

In article <01H7WE3YNW1E000ER7@PASCAL.ACM.ORG>, SMITHSON@ACM.ORG says:
>
>I think I've seen the answer to this question posted a few moons ago, so
>please forgive me. I've run across some Thick-LAN Ethernet coax. I think
>it is 50-ohm, but I wonder if anyone has any other details on impedance,
>loss, etc. It is the orange jacketed cable and is a little less than 1/2
>inch dia.
>
>Thanks in advance!
>
>-Brian Smithson, N8WRL
>smithson@acm.org
> -or-
>brian@wsi.com
>
Brian... Thick Ethernet Coax is 50 ohms of impedence...
Belden's ethernet coax is #9880... I think the orange colored one
that you have is of the plenum type which is used for direct burial
or outside use...
The usual color for indoor use is yellow... although you can get it
in any color if you special order...

Regards...

526. The differences in CW filter performance

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 17:16:54 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Jan21171654@mipgsun.mipg.upenn.edu>
Source record: 272269
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

When I look at CW filters, I see advertised bandwidths of between circa
250Hz to 600Hz. What are the difference?

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

527. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 17:21:00 UTC
From: m14494@mwvm.mitre.org
Message-ID: <2hp2ts$38m@linus.mitre.org>
Source record: 272272

Dana Myers writes:
> The difference is that the IC24AT was factory built and then adjusted
> by the factory to specified tolerances.

I don't know about Icom specifically, but this is generally
not true of consumer electronics. The published specs for
most electronics represent an average based on samples
taken from the production run. The statement at the end of
the specs that says "Specifications subject to change without
notice" really means "Your radio may not do this well". Only
a very few manufacturers offer "guarenteed specs", in which
each and every unit is guarenteed to meet the spec. When I
bought a stereo receiver a while back, I went with Tandberg
because unlike almost every other manfacturer, they
guarentee their specs. Check the spec sheet for the radio in
question; if it doesn't say they're guarenteed, they aren't.

****
* These are my opinions only*
****

528. callsign servers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 18:20:00 UTC
From: ez006683@othello.ucdavis.edu
Message-ID: <CJzs9D.7Fy@ucdavis.edu>
Source record: 272258

```
Hi all,
I was trying to access the buffalo callsign server but I keep getting an
error. Is this a network problem a local problem or an operator problem.

othello% telnet electra.cs.buffalo.edu 2000
telnet: service to this port is not available
othello% telnet callsign.cs.buffalo.edu 2000
telnet: service to this port is not available
othello% telnet 128.205.32.2 2000
telnet: service to this port is not available
othello%

Thanks for the help,
Dan

--
*------------------------------------------------------------------------*
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
*------------------------------------------------------------------------*
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
*------------------------------------------------------------------------*
```

529. Re: Low Power VCO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 18:20:13 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2hp6ct$3h6@hpscit.sc.hp.com>
Source record: 272257

In article <2hk0r2$kht@dartvax.dartmouth.edu>,
Johan D. H. Goedkoop <daan220@draco.dartmouth.edu> wrote:
>
>
> Frequency Range: 138-153 MHz
> Power Supply: 3 Vdc @ 3 mAmp or
> 5 Vdc @ 1-2 mAmp
> Output (Power): +8 - +10 dBM (50 Ohm Load Resistance)
> Control Voltage: 1 - 3 Volts
> Op. Temp. Range: -45 to +70 degrees Celcius
>
>
>Has anyone been able to find a VCO that meets these specifications? Or just
>one that is reasonable in meeting them closely? Trade-offs are control voltage,
>output, and power supply. Total power consumption w/o output should range b/w 10
>and 15 mWatts.

I can just about guarantee you that no off the shelf VCO would even come
close to these specs.

You'll have to build your own using an MRF931 transistor and an MV1404 tuning
diode. I'd pick the 5 volt supply over the 3 volt supply. Allow a day or two
of design time.

Of course, you do realize that +8 dBm is 90 milliwatts and you are asking
for a maximum power consumption of 90 milliwatts at 3V or 100 milliwatts at
5V. Those specs are incompatible. You'll either need to allow more DC in or
less RF out. I would say you could probably get +4 to +6 dBm. with your DC
constraints if you worked at it.

I love these kinds of problems because they refute the notion that some managers
have that you can build systems by buying all the blocks and putting
them together like tinkertoys. No, I'm sorry, but some engineer is actually
going to have to *design* something this time.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

530. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 18:29:49 UTC
From: greg@netcom.com
Message-ID: <gregCJzspp.8nD@netcom.com>
Source record: 272260

In article <CJw15H.MKy@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>
>Instead of ragging on Internet which Ramsey may not see, how about

I think if I owned one of the major ham radio businesses, I'd make
it my business to see internet discussions about ham radio. It's
as important as, say, reading QST.

>convincing John that he needs to upgrade the designs? If more hams
>buy his designs after the upgrade you can bet he will do it.

True, but there is a certain expectation of initial quality. Unfortunately,
John Ramsey has not come across as well as he might to some of the
readership here. Worse yet, he managed to send something to QST for
review which was, put simply, illegal. And he tended, at least as
reported here, to downplay the issue. I suspect someone receiving a
Notice of Apparent Liability from the FCC would not consider it
to be trivial.

> But, like
>the Corvair, bad publicity can destroy a product even though it was
>upgraded to a very good product.

Dangerous analogy, this. After all, the evidence suggests that GM
knew there were problems, and let people go ahead and die. Yes,
they eventually fixed the car, and apparently put their best people
on it, considering what a nifty product the last ones were; but did
their having done so only after their customers were killed and maimed,
and following a huge cover-up speak of a product that deserved success?

I don't think so. Consumers were right in avoiding a product where
the manufacturer conspired to hide defects, historically. Trust,
once lost, must be re-earned.

I love to see responsive, responsible, and honest businesses succeed.
Particularly since they seem to be somewhat of an endangered species.
From what I've seen, I haven't been able to determine if Ramsey is
one or the other.

Greg

531. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 18:34:27 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Jan21183427@mipgsun.mipg.upenn.edu>
Source record: 272080

I ask a poorly phrased question:
>When I look at CW filters, I see advertised bandwidths of between circa
>250Hz to 600Hz. What are the difference?

A poster replies:
>The 250 Hz ones have a bandwidth of 250 Hz and the 600 Hz ones have a
>bandwidth of 600 Hz. That are[sic] the difference. What do you mean?

I am asking about the difference in CW performance. Is a narrower
filter easier to copy or a wider one?

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

532. Re: RAMSEY FX TRANSCEIVERS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 18:54:36 UTC
From: greg@netcom.com
Message-ID: <gregCJztv0.MMy@netcom.com>
Source record: 272263

In article <9401201107.A9679wk@support.com> steven.rosenberg@support.com writes:
>
>
>Redesign those FX series radios with TIGHTER front-ends -- forget
>wide-coverage -- make 'em tight for the ham bands for improved receiver
>performance. Also, LOWER the price -- how about including the case kit
>for free?

...and f'god's sake give people an option outside of the diode matrix.

Even if it's an add-on kit. A friend of mine and I drew up an arrangement
that used a couple of EPROMs and a thumbwheel switch to twiddle the PLL
lines. Would have cost fifty or so bucks and a lot of time to make one,
probably twenty bucks each in 500 quantity.

Greg

533. Hamfest Jan 30, Villa Park, Illinois / IL Hamfest Calendar

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 19:02:01 UTC
From: parnass@cbnewse.cb.att.com
Message-ID: <CJzu7n.L4D@cbnewse.cb.att.com>
Source record: 272091
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,alt.radio.scanner,rec.radio.swap,rec.radio.shortwave,sci.electronics

HAMFEST CALENDAR 1993/4 - NORTHERN ILLINOIS
last updated December 9, 1993

o Please report additions or changes to Bob Parnass, AJ9S, office phone: (708)979-5414, electronic mail: parnass@ih4gp.att.com.

JANUARY 1994

Jan 30, Sunday: Odeum, Villa Park, IL - Wheaton Community Radio Amateurs hamfest. Odeum Expo Center. 8 AM - 3 PM. Tickets $6 advance, $8 at the door. VEC testing. All flea market tables reserved. To reserve a table, call (708)231-2428.

(Note for Bell Labs folks: John Broughton has tickets. Call him at 713-4319 for info.)

FEBRUARY

Feb 20, Sunday: Rock Island, IL - Davenport Hamfest, QCCA Expo Center, 2621 4th Avenue, Rock Island. Admission $5. Info, SASE to Kent Williams, 4245 10th St., East Moline, IL 64244.

Feb 26, Saturday: LaPorte, IN - Cabin Fever, LaPorte Civic Auditorium. LaPorte Amateur Radio Club. 8 AM. Setup 6 AM. Admission $4. Talk-in 146.61 MHz. Info: LPARC, POB 30, LaPorte IN 46350.

April 29, 30, and May 1: Dayton, OH - Dayton HamVention. Hara Arena, Information, General: (513) 276-6930, Flea Market: (513) 276-6932 (Reservations not accepted by phone). Write: Hamvention, Box 964, Dayton, OH 45401-0964.

Advance Registration: Checks in $US, payable to Dayton Hamvention. Send name, address, call, and day and evening phone numbers. Enclose separate checks for admission and Flea Market.

Be sure to indicate either: Send admission tickets ONLY if flea market space assigned. Send admission tickets REGARDLESS of space assignment. Admission: $11.00 per person ($14.00 at door, good all 3 days). Banquet: $22.00 per person ($24.00 at door, if available). Send

to: Dayton Hamvention, Box 1446, Dayton, OH 45401-
1446.

JUNE

June 12, Sunday: Willow Springs, IL 6 Meter Club Ham-
fest, Six Meter Club of Chicago. Santa Fe Speedway,
91st Street and Wolf Road. Admission $5. Gates open
6AM. Talk-in on 146.52 simplex or 146.97 repeater.
Info, call Joe Gutwein, WA9RIJ, at (708)963-4922.

JULY

July 24, Sunday: Stickney, IL - DuPage ARC hamfest,
Hawthorne Race Course, 3500 South Cicero Ave. Handicap
accessible. Starts at 6 AM. Talk in on 142.25 MHz
with 107.2 PL. (-600). VE Testing 9 - 12. Advance
tickets are $4.00, $5.00 at the door.

This hamfest used to be held at the American Legion in
Downers Grove and was a good small to medium-sized ham-
fest. This year, there will be a 30,000 square foot
indoor exhibit area in an air conditioned building,
plus outdoor tailgating.

For advance tickets, send check payable to DARC,
enclose SASE, and send to Hamfest 94, 7511 Walnuut Ave,
Woodridge, IL 60517. For commercial or fleamarket
tables info, call 708-985-9256.

--
==========
Copyright 1994, Bob Parnass, AJ9S
AT&T Bell Laboratories - parnass@ih4gp.att.com - (708)979-5414

534. Re: RAMSEY FX TRANSCEIVERS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 19:03:20 UTC
From: greg@netcom.com
Message-ID: <gregCJzu9L.G4@netcom.com>
Source record: 272264

In article <YEE.94Jan20191610@mipgsun.mipg.upenn.edu> yee@mipg.upenn.edu (Conway Yee) writes:

>
>> The kits have been improved over the last few years, but $150 for a
>> radio with no case, no mic, no speaker, no PL tone board is TOO
>> EXPENSIVE.
>
>Are they really that expensive? With automation, labor is no longer
>as large a fraction in the price of electronics nowadays.

...Which leads to another suggestion. Perhaps Ramsey could offer a 'semi-kit' with the board stuffed, tested, and aligned. Work out your own case and add-on arrangements. Stuffing and wave-soldering a PC is a miniscule amount of the labor, compared to attaching the outside wires and getting a persnickety case together.

Greg

535. Re: ARLX003 Girl Scout Thinking Day

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 19:10:24 UTC
From: mikewood@rock.concert.net
Message-ID: <2hp9b1$spl@inxs.concert.net>
Source record: 272253

In article <$arlx003.1994@ampr.org>, Luck Hurder KY1T <lhurder@arrl.org> wrote:
>SB SPCL @ ARL $ARLX003
>ARLX003 Girl Scout Thinking Day
>
>ZCZC AX35
>QST de W1AW
>Special Bulletin 3 ARLX003
>From ARRL Headquarters
>Newington CT January 17, 1994
>To all radio amateurs
>
>SB SPCL ARL ARLX003
>ARLX003 Girl Scout Thinking Day
>
>THE GIRL SCOUT'S THINKING DAY IS FEBRUARY 22. GIRL SCOUTS AND GIRL
>GUIDES THE WORLD OVER USE THINKING DAY TO REFLECT ON INTERNATIONAL
>FRIENDSHIP AND WORLD PEACE. WHY NOT CONTACT YOUR LOCAL GIRL SCOUT

And PLEASE whatever you do, DO NOT THINK on any other day of the year.
February 22 has been exclusively reserved for thinking. ;-)

536. Re: CW Books

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 19:29:20 UTC
From: wjturner@iastate.edu
Message-ID: <2hpaeg$6cs@news.iastate.edu>
Source record: 272255

In article <1994Jan20.215704.20062@unet.net.com> johng@white.net.com (John Gratton) writes:
>If I pass the 13 wpm test, do I also have to pass the 5 wpm
>test? Or in other words; Can I get a General class license
>by passing the written tests for Novice, Technician and
>General and then pass ONLY the General CW test?

As I've just take the Amateur Extra test (and PASSED!!!), I think I can answer this. (Along with many other people I suspect...)

NO!! You do not have to take the 5wpm code test [Element 1(a)]. The only elements you must have credit for to get a general license are:

1(b), 2, 3(a), and 3(b).

This is all spelled out, and covered by the Amateur Extra test (for those who are interested).

73, Will. N0RDV/AE (Since 16 Jan 94...just a few more weeks--I mean months!)
--
Will Turner, N0RDV ----------
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov ----------

537. Re: callsign servers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 19:29:27 UTC
From: koszelak@galaxy.ucr.edu
Message-ID: <2hpaen$avv@galaxy.ucr.edu>
Source record: 272256

In article <CJzs9D.7Fy@ucdavis.edu>,
Daniel D. Todd <ez006683@othello.ucdavis.edu> wrote:
>Hi all,
>I was trying to access the buffalo callsign server but I keep getting an
>error. Is this a network problem a local problem or an operator problem.
>
>othello% telnet electra.cs.buffalo.edu 2000
>telnet: service to this port is not available
>
>Thanks for the help,
>Dan
>

Dan,

On my stupid machine, I have to be more specific:

telnet electra.cs.buffalo.edu /PORT=2000
******

Hope this helps. -Stan (N6YYV)

538. Re: CW Books

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 19:31:56 UTC
From: wjturner@iastate.edu
Message-ID: <2hpajc$6g4@news.iastate.edu>
Source record: 272261

In article <2hoigj$1j0@mailer.fsu.edu> connie2@freenet2.scri.fsu.edu (Connie Christie) writes:
>No, you do not have to pass the 5 WPM test if you've passed the
>13 WPM test.
>
>Yes, you can go straight to General Class in one session, i.e.,
>by passing the two written elements and the 13 WPM code test at
>one sitting.

Point of information: It is now *three* (3) elements: 2, 3(a), and 3(b).

73, Will N0RDV/AE
--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

539. Re: What could this mean?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 19:35:59 UTC
From: wjturner@iastate.edu
Message-ID: <2hpaqv$6gp@news.iastate.edu>
Source record: 272105

In article <2hnoka$jck@explorer.clark.net> robocop@clark.net (matt roberts) writes:
>In article <jfhCJw7qA.29r@netcom.com>, Jack Hamilton <jfh@netcom.com> wrote:
>>The following paragraph appeared in an article in today's San Francisco
>>Chronicle about what local companies are doing to help prepare for the next
>>earthquake:
>>
>> Finally, in an attempt to encourage the use of amateur (Ham) radios,
>> which are used by many relief agencies during an emergency, Pacific
>> Bell has reduced the cost of operating a Ham radio to the basic
>> service rate of $8.35 a month. Ham radios are licensed through the
>> phone company.

My guess is the author of the article screwed up! It could have been, as
someone mentioned, the rate for a phone patch for a repeater. I think the
reporter doesn't know what he or she is talking about, and you may call the
paper to talk to the reporter and see for sure...

just my $0.02...

73, Will N0RDV/AE
--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

540. CONTEST HELP!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 19:44:14 UTC
From: Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US
Message-ID: <Angelo_Glorioso_Iii.2lxw@agwbbs.new-orleans.LA.US>
Source record: 272108

Hi All,

Our club is about to enter the Jan. VHF Sweepskates Contest tomorrow and
found out that CT does not handle the contest.. Is there a contest software
that does and what is the FTP site???

Thanks for the help!!!!!!

-- Via DLG Pro v1.0

Internet:angelo_glorioso_III@agwbbs.new-orleans.LA.US
Usenet:rex!agwbbs!angelo_glorioso_III
Packet:N5UXT @ N5UXT.#NOLA.LA.USA.NA
Tcp/ip:N5UXT.AMPR.ORG [44.108.2.13]

541. ARC @ Univ. of Washington

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 20:49:30 UTC
From: jhulten@u.washington.edu
Message-ID: <2hpf4q$55g@news.u.washington.edu>
Source record: 272037

ATTENTION ALL UW HAMS!!!!!!

The ARC@UW is having its first meeting of the year on January 24 1994 in
the 2nd floor lounge of the HUB at 12:30 p.m. If you are interested,
please contact jhulten@u.washington.edu for more
information.

If this message is found outside the seattle area, please contact me and
I will try to figure out the distribution better next time. Thanks.


```
=====================================================================
= Jeffrey E. Hulten N 7 Y H L (Tech +) =
= jhulten@u.washington.edu Media Services =
= Bothell, WA 98012 University of Washington - Bothell =
= PGP Public Key availible via Finger or Keyservers. =
= Fingerprint : 89 95 AA BD BD 4F CE AE FD FC B7 AD F8 C5 AF 40 =
=====================================================================
```

542. * SpaceNews 24-Jan-94 *

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 20:59:50 UTC
From: kd2bd@ka2qhd.DE.COM
Message-ID: <9401212059.AA02494@ka2qhd.de.com>
Source record: 272277

SB NEWS @ AMSAT $SPC0124
* SpaceNews 24-Jan-94 *

BID: $SPC0124

=========
SpaceNews
=========

MONDAY JANUARY 24, 1994

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited distribution.

* STS-60 ASTRONAUTS ISSUED HAM CALL SIGNS *
==========

Astronauts Charles F. Bolden, Jr. of Columbia, South Carolina and Ronald M. Sega of Seabrook, Texas, have been issued amateur radio call signs in preparation for their joint U.S.-Russia science mission. The Spacehab science objectives are primarily micro-gravity oriented with emphasis on materials and life science.

Bolden, KE4IQB is commander of the space shuttle Discovery (OV-103) due for lift off on February 3, 1994, at 12:10 UTC from Cape Kennedy. Sega (now KC5ETH) is the second of four Mission Specialists. They plan to contact several schools as part of the SAREX program - including one in Russia.

The flight of STS-60 represents an historic first, the first of several joint U.S.-Russian Space Shuttle flights planned in preparation for the development of the international Space Station. Veteran cosmonaut Sergei Krikalev, U5MIR, was chosen to be the first Russian to fly on the U.S. Space Shuttle. During the 8 day flight, Cosmonaut Krikalev will support the science operations on the Space Shuttle as Mission Specialist 4.

Last year, Sergei attended the Dallas Ham-Com convention and told us he would try to qualify for a U.S. license - but his training duties have prevented him from doing so. Since no reciprocal operating privileges exist between Russia and the United States, Sergei will operate amateur radio under Bolden's control operator authority. The possibility also exists for the first U.S. Space Shuttle to Mir Space Station (Russian astronaut-to-Russian cosmonaut) amateur radio contact!

Three new Russian amateurs were launched on January 8, 1994 aboard a Soyuz rocket and docked at the MIR space station on January 10th. The new crew includes Viktor Afanasiev (commander) U9MIR, Yuri Usachev (flight engineer) R3MIR and Valerij Polyakov (doctor) U3MIR. They are using the call sign R0MIR on packet.

[Info via Fred, W5YI]

* FUJI-FAX *
============
With the Fuji-OSCAR-20 satellite schedule providing extended periods of analog (Mode JA) transponder operation, Ted (G6HMS) and Ian (G0NKA) in England have been exchanging FAX images through this satellite.

At first, the technique was a bit "iffy", but Ted and Ian gradually got the hang of following the doppler on the downlink to hold the picture. Unlike voice transmissions where the ear is relatively tolerant of frequency change, the same cannot be said for computers decoding FAX signals.

Ted and Ian initially started out exchanging black and white images with no grey scale. After correcting some transmission problems, images containing 256 grey levels were exchanged, and finally FULL COLOR FAX images were exchanged!

Ted and Ian used JV-FAX 6.0 software for making FAX transmissions, and a Shareware version of Microfax on receive. Both stations used an uplink on 145.980 MHz (LSB) which produced an FO-20 downlink on 435.820 MHz (USB).

If you have FAX capability, you are asked to join Ted and Ian as they exchange FAX images through the FO-20 satellite.

[Info via Ian, G0NKA @ GB7DTX.GBR.EU]

* SUPERBALL 1-94 UPDATE *
=========================
The attempt to recover the SuperBall 1-94 balloon and payload on Saturday 15-Jan-94 failed. Numerous troubles plagued the effort and they basically just ran out of day-light and had to turn back. Another attempt was made on the 16th) which was successful! All of the critical elements of the craft were recovered.

Preliminary reports indicate that another launch will take place in about a month's time.

[Info via Kris Nosack, N7SHV]

* STS-60 SAREX INFO *
====================
Mission: STS-60 Space Shuttle Discovery
Vehicle: OV-103/Discovery
Wake Shield Facility & Spacehab-2 Mission
Launch: February 3, 1994, 12:10 UTC from KSC Pad A
Landing site: KSC
Orbit: 57 degree inclination
Orbital altitude: 218 sm
Mission Length: 8 days (Nominal)
Crew size: 6

Amateur Radio Operators: Charlie Bolden (License Pending), Ron Sega (License Pending), Sergei Krikalev, U5MIR

Modes: FM Voice
Prime callsign: To be provided once Commander Bolden's callsign is known

Packet Radio: Callsign W5RRR-1

Frequencies: All operations in split mode. Do not transmit on
the downlink frequency.

Voice Freqs: Downlink: 145.55 MHz (Worldwide)
Uplinks: 144.91, 144.93, 144.95, 144.97,
144.99 MHz (Except Europe)
144.70, 144.75, 144.80 MHz (Europe only)

Note: The crew will not favor any specific uplink frequency, so your ability
to work the crew will be the "luck of the draw."

Packet Freqs: Downlink: 145.55 MHz
Uplink: 144.49 MHz

[Info via KA3HDO]

* FO-20 OPERATION SCHEDULE *
============================
The FO-20 operation schedule is follows. Analog transponder and digital
transponder will be ON for a week respectively as they were since last
December.

Analog mode:
26-Jan-94 08:20 UTC -to- 02-Feb-94 06:50 UTC
09-Feb-94 07:15 UTC -to- 16-Feb-94 07:40 UTC
23-Feb-94 08:05 UTC -to- 02-Mar-94 06:40 UTC
09-Mar-94 07:05 UTC -to- 16-Mar-94 07:30 UTC
23-Mar-94 07:52 UTC -to- 30-Mar-94 08:15 UTC

Digital mode:
Unless otherwise noted above.

[Info via Kazu Sakamoto, JJ1WTK]

* CORRECTION *
==============
The next STS mission is STS-60, not STS-58 as indicated in last week's issue
of SpaceNews.

* THANKS! *
===========
Thanks to all those who sent messages of appreciation regarding SpaceNews,
especially:

G1LKJ 9V1XA WN3C KC6ROL KI7OM KD9BE Lee Pratt Will Marchant

* FEEDBACK/INPUT WELCOMED *
===========================
Mail to SpaceNews should be directed to the editor (John, KD2BD) via any
of the following paths:

FAX : 1-908-747-7107
PACKET : KD2BD @ N2KZH.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College
Lincroft, New Jersey 07738
U.S.A.

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
John A. Magliacane, KD2BD * /\/\ * Voice : 1-908-224-2948
Advanced Technology Center |/\/\/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
Brookdale Community College |\/\/\/| Internet: kd2bd@ka2qhd.ocpt.ccur.com
Lincroft, NJ 07738 * \/\/ * Morse : -.- -.. ..--- -... -..

543. Help wanted: Assembler TSR

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 21:13:01 UTC
From: MOWE%SLUMUS.BITNET@CUNYVM.CUNY.EDU
Message-ID: <21JAN94.17514616.0009.MUSIC@SLUMUS>
Source record: 272266

I would like to hire someone to write a very small TSR in Assembler. If you have experience with these and would like to earn $100 for a couple of hour's work, please contact me.
MRO

****
Michael R. Owen, Ph.D. a.k.a.: W9IP
Department of Geology Northern Lights Software
St. Lawrence University Star Route, Box 60
Canton, NY 13617 Canton, NY 13617
(315) 379-5975 - voice - (315) 379-0161 (6-9pm)
e-mail: MOWE@SLUMUS FAX - (315) 379-5804
****

544. Re: Heath SB-1400 problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 21:28:30 UTC
From: donh@hpcuhe.cup.hp.com
Message-ID: <47540031@hpcuhe.cup.hp.com>
Source record: 272109

How about the use of ohms law? Replace the lamp with a resistor! This
will get you back on the air until you find a replacement.

Just a thought.....

```
*****************************************************************************
* The opinions expressed are mine, and mine alone *
* *
* - You can lead a horse to water, but a pencil must be lead - *
* *
* Cessna 172A Driver, N7770T @ PAO - - WB6LPJ OM *
* KD6QQW XYL *
*****************************************************************************
```

545. Re: callsign servers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 21:34:58 UTC
From: vaillan@ireq.hydro.qc.ca
Message-ID: <CK01AB.HIE@ireq.hydro.qc.ca>
Source record: 272267

```
In article 7Fy@ucdavis.edu, ez006683@othello.ucdavis.edu (Daniel D. Todd) writes:
>Hi all,
>I was trying to access the buffalo callsign server but I keep getting an
>error. Is this a network problem a local problem or an operator problem.
>
>othello% telnet electra.cs.buffalo.edu 2000
>telnet: service to this port is not available
>othello% telnet callsign.cs.buffalo.edu 2000
>telnet: service to this port is not available
>othello% telnet 128.205.32.2 2000
>telnet: service to this port is not available
>othello%
>
>Thanks for the help,
>Dan
>
>--
>*------------------------------------------------------------------------*
>* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
>* Internet: ddtodd@ucdavis.edu *
>* Snail Mail: 1750 Hanover #102 *
>* Davis CA 95616 *
>*------------------------------------------------------------------------*
>* I do not speak for the University of California.... *
>* and it sure as hell doesn't speak for me!! *
>*------------------------------------------------------------------------*
>

You must have network problems...

Here is what I get:

telnet 128.205.32.2 2000
Trying 128.205.32.2 ...
Connected to 128.205.32.2.
Escape character is '^]'.
Callbook v1.3 Bug reports to bowen@cs.buffalo.edu Type 'help' for help
>> call kc6uud
Call-Sign: KC6UUD Class: TECHNICIAN
Real Name: DANIEL D TODD Birthday: DEC 19, 1966
Mailing Address: 1411 WAKE FOREST 6, DAVIS, CA 95616
Valid From: MAY 7, 1991 To: MAY 7, 2001
>>
```

73
Clem.

Clement Vaillancourt, | Institut de Recherche d'Hydro-Quebec
Analyste, | Varennes, P. Quebec, Canada, J3X 1S1
Informatique scientifique | Tel:+1 514 652 8238 Fax:+1 514 652 8309
vaillan@ireq.hydro.qc.ca | Radio-amateur: VE2HQJ@VE2CRL.PQ.CAN.NA

546. DSP Audio Filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 21:38:09 UTC
From: mikemr@microsoft.COM
Message-ID: <9401212140.AA04274@netmail2.microsoft.com>
Source record: 272262

I have an IC-765 with the 250Hz optional CW filters. I use a Timewave DSP-59 with it, although I modified the radio so that the DSP is ONLY in the detector audio branch (not in the monitor audio---I didn't like what it did to my sidetone!).
I find that it's extremely effective filtering the background noise on the higher
bands, less so on 160/80/40 (the noise characteristics are very different on the
low bands). I find that 99.9% of the time I just keep the DSP in line, in the noise
reduction position (I'm 99.9% CW). It's really nice to use it on SSB to eliminate
carriers, assuming the carrier isn't louder than the DX I'm trying to hear. The white noise reduction mode works very well, reduces fatigue, and actually helps pull some weak signals through the background noise.

I don't use the super-narrowband CW filters very often. They don't give any significant improvement over the 250Hz crystal filters in the rig's IF (and the IF filters ring less). The notch filter in the rig is also preferable for heterodynes
because the IF won't pump as it does with the DSP.

All in all, I think the DSP-59 is worth the investment, especially if you modify
your radio so that it only DSPs the detected audio.

73 Mike N6MZ mikemr@microsoft.com

547. Art & Millie of K6MYK

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 21:38:28 UTC
From: arog@BIX.com
Message-ID: <arog.759188308@BIX.com>
Source record: 272066

I just talked with Art and Millie Gentry. Art is w6mep and I've forgotten Millie's call. These are the folks that put the first Los Angeles two-meter repater on the air in the mid.fifties and are very special folks to a lot of us that hung out there...

Both are fine and only had modest damage to things... other than the kind of mess that happens when racks and such get slammed about by an earthquake.

.....
Alan Ogden, w6spk, moderator of ham.radio on BIX
arog@BIX.com

548. CT (was: Contest Logger)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 22:24:47 UTC
From: sas@opus.xyplex.COM
Message-ID: <9401212224.AA06275@opus.xyplex.com>
Source record: 272270

Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US (Angelo Glorioso Iii) recently asked:
> I am looking for a Contest logger that will support ARRL format for
>electronic filing for ARRL RTTY ROUND-UP contest. If you know of one,
>please let me know where I can ftp it??

To which someone (unsigned posting) replied:

>I'm told the standard by which all others are judged is CT by Ken
>Wolff, K1EA, at 221 Old Littleton Road, Harvard, MA 01451. I don't
>know if it's available for download anywhere, but I'm sure you could
>contact Mr. Wolff directly.

There is an ancient version of CT out there for free, but CT is now a commercial product. You've got the author correct, but the latest information for ordering or inquiries is

K1EA Software
5 Mt. Royal Ave
Marlborough, MA 01752
508 779-5054

There is also a CT bbs which will give you the latest updates, ordering information, etc. The bbs number is 508 460-8877. The bbs won't do you much good other than finding out how to order, price, etc. unless you are a registered user of CT.

Of course, I have no affiliation with K1EA Software, Harvard Radio, Inc., K1EA, etc. I just thought that people would like to know where to find out more about CT...

73,
Scott WO1G
==========
Scott Sminkey email: sasminkey@eng.xyplex.com
Software Sustaining Engineering voice: 508 952-4792
Xyplex, Inc. fax: 508 952-4887
295 Foster St. (Opinions, comments, etc. are mine,
Littleton, MA 01460 not Xyplex's...)

549. CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 22:36:55 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2hple7$ti@geraldo.cc.utexas.edu>
Source record: 272276

yee@mipg.upenn.edu (Conway Yee) asks:

>>When I look at CW filters, I see advertised bandwidths of between circa
>>250Hz to 600Hz. What are the difference?

The 250 Hz ones have a bandwidth of 250 Hz and the 600 Hz ones have a
bandwidth of 600 Hz. That are[sic] the difference. What do you mean?

Ref the DSP-9 postings, I have used mine a few times and am still not
sure that it is doing anything for me on CW. It's cute having a 100 Hz
width filter but, as someone mentioned, when it cuts out your sidetone
you think twice about using it. So far, I've found that the fiddling
around adjusting the receiver output for signals of different level as
well as playing with the gain on the DSP-9 is distracting when tuning
the bands. There is a narrow range of signal strengths where the DSP
really helps. If the signal/noise is already 10 I don't need it to be
100, and when it's 1, the DSP doesn't really help. I need to play
with it some more, I'm sure.

It should be useful on phone, when I get around to that. Taking out
the jammers and tuners-up on top of DX stations is useful, but it's
not saying much for the state of amateur radio if the DSP boxes are
primarily of use for removing deliberate human (or quasi-human) QRM.

As far better ops than I have said, sometimes the best filter is the
one between your ears.

Derek "up lid" Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

550. Re: WANTED: CALL SIGN SERVER IN INTERNET

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 23:07:04 UTC
From: jtriolo@delphi.com
Message-ID: <9401211802591.jtriolo.DLITE@delphi.com>
Source record: 272065

>I am looking for a call sign server a-la buckmaster
>accessible on line through the internet...
>i thought that there was one in buffalo???

There are two:
mudgate.imsa.edu 2000
plan9.njit.edu 2000

The first one tends to be a little more current, but they are both set up the same way. If you're calling from Delphi, there should be a way to get right into one of the servers. Before the rebuilt some of the menus, there was an auto-telnet for it.

Jason D. Triolo -- Colonial Heights, VA | ----------
Amateur Radio: KD4ACG | This space for rent.
Internet : JTRIOLO@delphi.com | Call today!
Fidonet : 1:264/219.1 | ----------
---

551. Re: Low Power VCO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 23:47:21 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2hppi9$c17@hpscit.sc.hp.com>
Source record: 272078

In article <2hp6ct$3h6@hpscit.sc.hp.com>,
Richard Karlquist <rkarlqu@scd.hp.com> wrote:

>Of course, you do realize that +8 dBm is 90 milliwatts and you are asking

I goofed! +8 dBm. is 5.6 milliwatts

>for a maximum power consumption of 90 milliwatts at 3V or 100 milliwatts at
>5V. Those specs are incompatible. You'll either need to allow more DC in or
>less RF out. I would say you could probably get +4 to +6 dBm. with your DC
>constraints if you worked at it.

Even with the correct numbers here, you would need 60 to 70% efficiency.
Maybe just barely doable.

>
>Rick Karlquist N6RK
>rkarlqu@scd.hp.com

552. Re: The differences in CW filter performance

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-21 23:53:01 UTC
From: kg7bk@indirect.com
Message-ID: <CK07oD.EEv@news.direct.net>
Source record: 272079
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Conway Yee (yee@mipg.upenn.edu) wrote:
: When I look at CW filters, I see advertised bandwidths of between circa
: 250Hz to 600Hz. What are the difference?
: Conway Yee, N2JWQ

Hi Conway, I have both 250Hz and 500Hz CW filters and I prefer the 500Hz.
The center frequency 750Hz component in the background noise bothers me with
the 250Hz and it does ring worse than the 500Hz filter.
The big boys tell me that 250Hz filters are for "really serious CW".
I'm hardly ever serious.

73, Cecil, kg7bk@indirect.com

553. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 00:01:22 UTC
From: turner@safety.ics.uci.edu
Message-ID: <2hpqci$m30@safety.ics.uci.edu>
Source record: 272081

In <YEE.94Jan21183427@mipgsun.mipg.upenn.edu> yee@mipg.upenn.edu (Conway Yee) writes:

>I am asking about the difference in CW performance. Is a narrower
>filter easier to copy or a wider one?

This is a matter of personal taste for many of us. I really prefer the narrower, my favorite filter is the Kenwood 270 Hz filter in the TS 430. The 500 Hz filter is fine, though, especially with IF shift or PBT (though there is a difference in PBT and IF shift that seems to make PBT much preferable :-). The filter can do two things for you :

1. Eliminate QRM nearby
2. Quiet down the background noise.

Reference number 2, some filters don't do so well at this, and some narrow filters have a "ring", or hollow sound to them. Many don't like this at all. Most IF filters don't have much ring, though some, many audio filters (except DSP I understand) can ring pretty badly.

My two cents.

Clark
.....

Clark Savage Turner, Graduate Student Researcher
Safety Critical Software Group home:
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717 Irvine, CA. 92715
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526, active on HF, VHF and UHF.
Admitted to practice law in California, Massachusetts, and New York.
ARRL Volunteer Counsel

554. Re: Anyone know of a callsign server?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 01:06:44 UTC
From: gorski@vms.huji.ac.il
Message-ID: <1994Jan22.010644.2867@vms.huji.ac.il>
Source record: 272111

>
> I did:
> telnet callsign.cs.buffalo.edu 2000
> yesterday without any problem.
>
> The machine: callsign.cs.buffalo.edu real name is:
> electra.cs.buffalo.edu (128.205.32.2)
>
> Clem.
> 73
>
I just tried it from here and got to it okay, but then had problems because I couldn't get any of the usual log ins to work. What is the log in Proceedure? Or do you have to be a registered user?

555. Re: What could this mean? (Pac Bell residential rates)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 01:07:46 UTC
From: horak@src.dec.com
Message-ID: <2hpu92$sna@src-news.pa.dec.com>
Source record: 272083

The SF Chronicle article is a bit misleading.

Pacific Bell will offer a residence-tariffed line to anyone operating an Amateur Radio repeater with a phone line used for autopatch, even if the phone line is located in an obviously non-residential location.

This saves you ~$1.17/mo on the "Interstate Access Charge", and gives you unlimited zone 1 & 2 dialing if you order a flat-rate line. Business service does not have a flat-rate tariff, so you pay for all local calls.

Most business offices don't know about this. I just converted two phone lines that I'm responsible for, and went through a fun maze of employees to get it done. One of the major players is currently swamped with LA quake stuff, but email me directly if you have a repeater and want more info about how to go about getting this type of service.

GTE also offers this service anywhere in the US, but I don't have any experience with them in this regard.

--Brad Horak N6BDE

556. dspmorse.zip US ftp site

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 02:22:12 UTC
From: troc@inca.gate.net
Message-ID: <2hq2kk$l4b@inca.gate.net>
Source record: 272089

You can now find this at world.std.com as
/pub/hamradio/pc/digital/dspmorse.zip

--
-><- Rocco Caputo (troc@inca.gate.net) has left the building.

557. AMSAT News Letter

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 03:27:19 UTC
From: 73611.1622@CompuServe.COM
Message-ID: <940122032718_73611.1622_FHD101-1@CompuServe.COM>
Source record: 272092

AMSAT News Service,
I am a student at Weber State University, Ogden, Utah. USA. I am requesting that my Internet address be added to the list of recipients for the AMSAT News letter. I am involved in the production of the Center Hex assembly and would like to be more involved in the entier project.

Thankyou
Devin Foster
01-21-94

558. Daily Summary of Solar Geophysical Activity for 21 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 05:12:34 UTC
From: oler@rho.uleth.ca
Message-ID: <9401220512.AA13774@rho.uleth.ca>
Source record: 272102
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

21 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 021, 01/21/94
10.7 FLUX=110.8 90-AVG=103 SSN=078 BKI=0301 2222 BAI=005
BGND-XRAY=B2.1 FLU1=2.3E+06 FLU10=9.9E+03 PKI=2311 1232 PAI=007
BOU-DEV=004,021,004,005,012,014,014,011 DEV-AVG=010 NT SWF=00:000
XRAY-MAX= B8.0 @ 2328UT XRAY-MIN= B1.7 @ 0248UT XRAY-AVG= B2.5
NEUTN-MAX= +002% @ 2300UT NEUTN-MIN= -001% @ 2330UT NEUTN-AVG= +0.2%
PCA-MAX= +0.1DB @ 0815UT PCA-MIN= -0.4DB @ 1105UT PCA-AVG= +0.0DB
BOUTF-MAX=55350NT @ 1454UT BOUTF-MIN=55323NT @ 2056UT BOUTF-AVG=55340NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+072,+000,+000
GOES6-MAX=P:+134NT@ 1758UT GOES6-MIN=N:-056NT@ 0548UT G6-AVG=+093,+030,-030
FLUXFCST=STD:110,110,105;SESC:110,110,105 BAI/PAI-FCST=010,005,005/012,010,010
KFCST=2222 2212 1121 2211 27DAY-AP=007,007 27DAY-KP=1313 2122 2012 3223
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 20 JAN 94 is not available.
The Full Kp Indices for 20 JAN 94 are not available.

SYNOPSIS OF ACT

Solar activity was very low. Region 7654 (N08E09)
produced several subflares and appears to be rotating
counterclockwise, but has remained mostly stable in white
light and H-alpha. New Region 7657 (N12W20) emerged
rapidly on the disk. It is magnetically simple but with an
east-west inversion line. A dark filament near S23W03
disappeared between 1747 and 2015 UT.

Solar activity forecast: solar activity is expected to be
low. Eruptive events are expected from Region 7654 and possibly
from 7657, if rapid growth continues in that region.

STD: Region 7654 has shown only minor changes over the last 24
hours. Magnetic gradients and shear remains strongest near the
delta along the predominantly east-west oriented neutral line.
An M-class flare remains a possibility from this region.

The geomagnetic field has been at mostly quiet levels
for the past 24 hours. Activity that was expected from an
isolated, equatorial coronal hole has not occurred.

Geophysical activity forecast: the geomagnetic field is
expected to persist at quiet to occasionally unsettled levels
throughout the forecast period. Today's filament disappearance
will be evaluated for possible effects on 25-26 January.

Event probabilities 22 jan-24 jan

Class M 10/10/10
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 22 jan-24 jan

A. Middle Latitudes
Active 25/10/10
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 25/10/10
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

HF propagation conditions were near-normal over all
regions, although persistent occasional minor signal
degradation over the high and polar latitude night-sector
paths has continued. Effects from the anticipated coronal hole
disturbance have not yet arrived, and there is a possibility
it may not arrive. If it does arrive, only a minor impact is
expected over the high and polar latitudes. Otherwise,
near-normal conditions should continue over all regions.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N04W09 219 0120 HSX 02 001 ALPHA
7654 N08E08 202 0540 DKC 10 036 BET
7657 N12W21 231 0050 DRO 05 011 BET
7656 S22W49 259 PLAGE
REGIONS DUE TO RET
NMBR LAT

7647 S15 096
7646 S09 087
7645 N13 085

LISTING OF SOLAR ENERGETIC EVENTS FOR 21 JANUARY, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 21 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
21/A1747 B2015 S23W03 DSF

INFERRED CORONAL HOLES. LOCATIONS VALID AT 21/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
57 N19W31 N02W35 N10W39 N20W33 253 ISO NEG 001 10830A
58 N14E41 N00E32 N07E27 N23E30 186 ISO POS 005 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
NO DAT

** End of Daily Report **

559. Re: Low Power VCO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 05:25:53 UTC
From: ep588deb@pts.mot.com
Message-ID: <ep588deb-220194003025@davebmac.pts.mot.com>
Source record: 272098

In article <2hp6ct$3h6@hpscit.sc.hp.com>, rkarlqu@scd.hp.com (Richard
Karlquist) wrote:
>
> In article <2hk0r2$kht@dartvax.dartmouth.edu>,
> Johan D. H. Goedkoop <daan220@draco.dartmouth.edu> wrote:
> >
> >
> > Frequency Range: 138-153 MHz
> > Power Supply: 3 Vdc @ 3 mAmp or
> > 5 Vdc @ 1-2 mAmp
> > Output (Power): +8 - +10 dBM (50 Ohm Load Resistance)
> > Control Voltage: 1 - 3 Volts
> > Op. Temp. Range: -45 to +70 degrees Celcius
> >
> >
>
> You'll have to build your own using an MRF931 transistor and an MV1404 tuning
> diode. I'd pick the 5 volt supply over the 3 volt supply. Allow a day or two
> of design time.
>
>
> Rick Karlquist N6RK
> rkarlqu@scd.hp.com

Any Particular reason you picked the MRF-931? We've been using MRF941's in
even lower power applications, and getting what we consider good results.
Sorry, no spec's off the top of my head.

David Bengtson All Standard Disclaimers apply
Motorola Paging and Wireless Data Group Sorry, no witty quote.
MS 98
1500 NW 22nd Ave
Boynton Beach, FL 33467

560. PROJECT 14: THE WORLD'S SMALLEST TRANSMITTER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 05:57:06 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CK0oJ6.5Do@news.Hawaii.Edu>
Source record: 272077

Gang,
If there was a contest to come up with a xmtr containing as few
parts as possible, this would be the winner: 10 parts if you include
the key, battery, and antenna!
In the CODE/NO-CODE debate on r.r.a.policy some pro-coders will
mention the simplicity of CW xmtrs as opposed to those of other modes;
this circuit really drives that point home (that's why I'm posting this
on .policy)
On r.r.a.misc we've heard talk about how costly ham gear is today - all
this rig will cost you is the effort to find an old color TV chassis -
that's the parts source for all my QRP transmitters (and this is why I'm
also posting this on .misc).
Normally I post these xmtrs only on r.r.a.homebrew and on the QRP
mailgroup; so if you've missed the first dozen xmtr circuits email me
and I'll send them off to you.
I built this for 80M only because I've got so many 3579 kHz crystals
from old TV sets, but this can be used on any HF band - just choose
L and C to resonant at the crystal frequency.
For peace of mind you might want to add a bandpass filter to the
output.

|
GND

Again, choose L&C to resonant at the desired frequency; one of the two should be adjustable. I got both from the chromatic board of a TV - both were sitting next to the 3579 kc xtal; easy, huh? I didn't use a 2N2188 transistor; rather, I used a x-sistor right off the video board (of the TV).
So, don't you dare buy one component for this - just dig through your junk box (or your neighbor's trash for an old TV). With a good antenna (those are the magic words in QRP work) this little peanut-whistle will provide hours of pleasurable QSO's.
Oh, 3579 kc has become a national QRP frequency due to the easy availability of these crystals.

.... .- ...- . ..-. ..- -.

72,
Jeff NH6IL

561. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 07:12:57 UTC
From: budinger@titan.ds.gen.nj.US
Message-ID: <2d40d1fe.titan@titan.ds.gen.nj.us>
Source record: 272097

help
--

Eric T. Budinger Dan's Domain 201-586-1223
budinger@ds.gen.nj.us Ham Central SysOp
ericbud@ritz.mordor.com 1-201-398-4619 (voice)
n2koj@w2xo.pa.usa.na 1-201-205-2134 (digital)

562. VK2SG RTTY DX Notes, 21 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 08:20:56 UTC
From: bulletin@n8emr.cmhnet.org
Message-ID: <1994Jan22.082056.6131@n8emr.cmhnet.org>
Source record: 272106
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
============================================================
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
============================================================

SB DX @ WW $RTDX0121
VK2SG RTTY DX Notes, 21 January
VK2SG RTTY DX Notes for week ending 21 January 1994 (BID RTDX0121)

Our information this week came from ZS5S, 9X5LJ, WB2CJL, I5FLN, DJ3IW
and the Central EU DX-Cluster DB0SPC, IK5AAX and the IK5PWJ Packet
Cluster, and the NJ0M node of the Twin Cities DX Packetcluster
Network. Thank you all for your help.

Bandpass:

Friday 14
0932-14087 OD5PL
1231-14086 LY2BBF
1254-21088 4X6UO
1425-14085 YL2GD
1457-21081 4Z85TA
1610-21086 CU1AC
2325-14084 JA1AYC

Saturday 15
0629-14086 UA1OJ/UA9Q
0629-14086 US0HZ
0906-21085 UQ9TV
0911-14089 TZ6FIC
0940-14083 ZA1AD
1205-18095 ZA/K5KWG
1520-21087 PJ0/N9FTC
1547-21066 7Q7LA PACTOR
1548-28-21085 V50CM
1555-21086 ZS9A QSL ZS1IS
1557-21089 CE0ZIS
1558-21085 V50CM
1638-21081 TZ6FIC
1826-21087 VP2EL
2026-1RPIO S92ZM
2052-14092 TZ6FIC
2105-14084 V50CM
```

Sunday 16
0015-14090 HK0DPA
0156-14083 VP8BFH
0800-14088 XT2BW
0805-14087 US0LA
1037-21089 UR5LBX
1041-14083 RC2CR
1115-14085 S57U
1132-14088 EA8VI
1231-21082 7Q7RM
1258-21089 5R8DS
1324-21082 J28BM
1326-21091 4L8A
1333-21091 S56A
1341-21089 TZ6FIC
1352-14085 S51ZG
1355-21090 KG4HG
1359-14085 UK9ADW
1423-21086 TA5C
1429-21077 SV9ACAG (?) Pactor
1436-14079 1B1AD Pactor (WFWL) QSL DK7ZZ
1529-21084 EA6VS
1541-14090 A41KC
1552-14084 UX0LT
1605-21085 VP2EL
1611-14086 EA9NP
1627-21084 CP1FF
1628-21091 PY7AKI
1649-21087 VE9ZI
1650-14091 4S7RM
1704-14088 HP1XVI
1708-14086 9H1ET
1719-14087 IW0LDO
1725-14087 EA8/ON8RI
1731-14087 PJ0/N9FTC
1817-14087 TZ6FIC
1858-14084 EA8AKL
2020-14079 ZD8M PACTOR
2119-14087 VP2EL

Monday 17
1139-14088 EA8/ON8RI
1839-21086 FG5FI

Tuesday 18
1507-14086 EA8/ON8RI
1838-14091 TZ6FIC

Wednesday 19
NO REPORTS

Thursday 20
2332-14085 PJ2MI

Notes of Interest:

All the team members of the Peter I DXpedition have assembled at the Falkland Islands and are preparing for a 23 January sailing, with an anticipated landing on the island of 1 February, +/- ice and weather. Departure will be 12-14 February. RTTY frequencies for 3Y0PI will be 1825, 3680, 7070, 14080, 21080, and 28180 KHz. They will be listening up. Other mode frequencies are: CW-1826, 3522 (US), 3507 (EU), 7022 (US), 10104, 14024, 18074, 21024, 24894, 28024. SSB-1845, 3785 (US), 3800 (EU QSX down), 7065, 14195, 18145, 21295, 24945, 28475. Satellite-(QSX down) 145.890 (AO-10 and AO-13). Look for them as VP8BZL/MM while they are enroute to the island. QSL both VP8BZL and 3Y0PI to AA6BB.

St. Peter and St. Paul Rocks - This all band/all mode expedition was scheduled to have started on 20 January for a two week stay, but has now been again delayed to start 1 February. QSL RTTY contacts to PS7KM.

Send your Bandpass and Notes of Interest for next week's bulletin to Luciano, I5FLN @ ZS5S.ZAF.AF or I5FLN @ 9X5LJ.#KGL.RWA.AF.

73 es Good Hunting DE JULES W2JGR @ W2TKU.#SRQFL.FL.USA.NA
/EX
SP KT7H @ N7DUO.WA.USA.NA

563. Where is ss25.zip?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 08:51:03 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <759265824.F00001@ocitor.fidonet>
Source record: 272119

> In article <wy1zCJsLx7.KzC@netcom.com> wy1z@netcom.com
> (Scott Ehrlich) writes:
>>A friend of mine pointed me to this program, though I'm not sure whether
>>or not it is a ham radio related program.
>>

> It's shareware and I got mine from Stan Staten's BBS
> (the W3INK board)
> at 301-590-9629. Stan is a Stalwart down here
> maintaining a packet-BBS
> pair setup .

> Joe NA3T
> mack@ncifcrf.gov

try ftp.halcycon.com

lee - wa5eha@delphi.com

* Origin: Com Port 1 DFW Amateur Radio BBS (214) 226-1181 (1:124/7009)

564. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 09:04:48 UTC
From: jeffl@comix.UUCP
Message-ID: <741@comix.UUCP>
Source record: 272112

In article <kmBagc1w165w@beagle.UUCP> chandler@beagle.UUCP (Jim Chandler) writes:
>You're absolutely right howie.
>One is well thought out and designed, and the kits are meticulously assembled
>to ensure the components are correct (NorCal). The other is quickly thrown
>together to make a profit (Ramsey). My hats off to N6KR (designer) and
>WA6GER (assembler). I can't wait for the new 5 band QRP rig that the
>Northern California QRP club it putting together.
>------------
>Jim Chandler, N0VAH
>infopro.com!beagle!chandler
>citrus.sac.ca.us!beagle!chandler

First a credibility check. I've spent about 25 years fixing, designing,
maintaining, and swearing at radio and computers. I've designed
approximately 20 different RF products. I've also worked for a
kit manufacturer and know the economics of kits.

1. Any company that does NOT make a profit will not last too long.

2. You cannot buy the PARTS for a typical Japanese transceiver
for what they sell for in the quantities that Ramsey sells. The
bulk of the economy of scale is in the large quantities manufactured.
Were I to take a typical radio and just bag the parts in kit form,
the cost would be MORE than the assembled version because the
cost of packaging, handling, labeling, inspection, component testing,
and documentation would be MORE than the finished, robot assembled
unit. Heathkit discovered this near the end when they "kitted"
commercial products and discovered it would cost MORE than the
assembled product.

3. You cannot compare a 40meter (7Mhz) design QRP design with a 146Mhz
25watt design. The higher frequency and power make construction,
component tolerances, and mechanical considerations far more critical.
I've played with some assembled Ramsey kits and found the construction
technique to vary radically from builder to builder. One board must
have held a pound of solder. Another had some parts fall out.
The "quality" of the end product is highly dependent upon the builder.

4. Consistancy is difficult to achieve. This is because of
accumulated component tolerances. Volume manufacturers compensate
for this with incoming inspection, grading, post-assembly
component value selection, and statistical performance analysis.
A small kit manufacturer cannot do any of these economically.
What it usually done is to use low gain, low impedance, inefficient,
and broad band design with a large number of adjustments to compensate
for component and construction variables. The result is increased

cost.

5. A kit manufacturer is actually a book publisher that happens
to include some parts and pieces with the instruction manual. The
cost of producing a Heathkit style assembly manual would bankrupt
any small manufacturer. I do not consider the Ramsey instructions
to be even adequate, but expect improvements with time.

6. The Ramsey kits are not state of the art, high quality,
or a fabulous bargain. They are adequate for the purpose intended:
a kit for those that still believe that radio construction is a
part of ham radio and that believe they may profit from the
experience. If the lack of accessories is offensive, please
consider that anyone who builds their own equipment, is quite
likely to have a supply of suitable microphones, speakers, and
boxes.

--
Jeff Liebermann Box 272 1540 Jackson Ave Ben Lomond CA 95005
408.336.2558 voice wb6ssy@ki6eh.#nocal.ca.usa wb6ssy.ampr.org [44.4.18.10]
408.699.0483 digital_pager 73557,2074 cis [don't]
jeffl@comix.santa-cruz.ca.us scruz.ucsc.edu!comix!jeffl

565. Re: Amateur predicts LA quake (ELF)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 09:34:43 UTC
From: tcj@netcom.com
Message-ID: <tcjCK0yLv.L1L@netcom.com>
Source record: 272101

Bradley T Banko (btbg1194@uxa.cso.uiuc.edu) writes:

> I ran across a guy in an Internet newsgroup who was an amateur
> studying natural low frequency electromagnetic field patterns in
> relation to earthquake prediction....Here is another of his ilk, who
> might just become famous:
>
> > SAN FRANCISCO (AP) -- An amateur who studies radio signals
> > had warned over the weekend that an earthquake capable of
> > "devastating" damage would hit California within three days.

He's already famous on "ca.earthquakes" -- as a publicity-seeking crazoid with very little credibility. Check out that newsgroup for the full text of his "prediction" if you want a good laugh. He applies some concepts in radio theory that were somehow omitted from the ARRL Handbook.

BTW, he's predicting a 6.0 for the San Francisco Bay area for next Sunday, Janauary 23, give or take 19 hours. We'll see....

Todd, KB6JXT

566. Availability of Study Materials-General operator

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 11:19:57 UTC
From: apaj-eh-el@zama-emh1.ARmy.MIL
Message-ID: <9401221127.AA04847@nsco.network.com>
Source record: 272103

Hello,

I would like to get some study material and manuals for a general HAM operators license. If you have a pamphlet or price list could you send it either in care of my e-mail address or to :

Ron Masters
USAPACEHEA
Box 39, Unit 45008
APO AP 96343-0079

Thank you

Ronnie |G. Masters

567. Re: CALL SIGN SERVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 14:26:56 UTC
From: ghitz@world.std.com
Message-ID: <CK1C4y.IyH@world.std.com>
Source record: 272107

George Sweigert (berwyn@dialup.oar.NET) wrote:

: Does anyone know where the call sign dtabase server exists ?

: I believe it is on DEWIE.DEL.EDU . . . does anyone know ?

: Thanks

: berwyn@oar.net

telnet to:

callsign.cs.buffalo.edu 2000

George, W1DA

--
%%%

568. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 16:25:41 UTC
From: k23690@lehtori.cc.tut.fi
Message-ID: <2hrk25$4l6@cc.tut.fi>
Source record: 272114

Clark Savage Turner (turner@safety.ics.uci.edu) wrote:

> In <YEE.94Jan21183427@mipgsun.mipg.upenn.edu> yee@mipg.upenn.edu
> (Conway Yee) writes:

> >I am asking about the difference in CW performance. Is a narrower
> >filter easier to copy or a wider one?

> This is a matter of personal taste for many of us.

[deleted]

> The filter can do two things for you :
>
> 1. Eliminate QRM nearby
> 2. Quiet down the background noise.
>
> Reference number 2, some filters don't do so well at this,

The filter bandwidth (which is usually defined as the bandwidth between the points where the frequency is -6 dB down from the maximum in the pass band) is not the only figure-of-merrit to look for. Equally important is the shape of the frequency response above and below the quoted bandwidth. This is usually specified with the -60 dB bandwidth and it indicates how much background noise will get through.

There are 250 Hz (at -6 dB) filters with a 1.2 kHz -60 dB bandwidth and there are 500 Hz filters with a 800 Hz -60 dB bandwidth, so look carefully at the specifications. Despite broader passband, the latter filter is more effective to quiet down background noise and interfering signals a few hundred Hertz or more above or below the passband.

Some manufacturers specify the passband bandwidth and the frequency offset from the center of the passband where the frequency response is -60 dB down, in the previous example +/- 600 Hz resp. +/- 400 Hz. Some even omit the +/- signs so that the figures look better. You can easily get the impresion that (+/-) 600 Hz is better than 800 Hz (total) bandwidth, so be carefull.

Instead of the -60 dB bandwidth, sometimes the shape factor is given, which is simply the ratio of the -60 dB bandwidth to the -6 dB bandwith. The shape factor for the first example is 4.8 and 1.6 for the latter.

In some cases the shape factor is given at a smaller attenuation e.g. 50 dB/6 dB to get smaller (and better) figures.

Thus, it is very hard to select filters solely on the basis of passband bandwidth.

As Clark pointed out in the begginning it is also a matter of personal
taste.

Paul OH3LWR

Phone : +358-31-213 3657
X.400 : G=Paul S=Keinanen O=Elisa-Tampere A=ELISA C=FI
Internet: Paul.Keinanen@Telebox.tele.fi
Telex : 58-100 1825 (ATTN: Keinanen Paul)
Mail : Hameenpuisto 42 A 26
FIN-33200 TAMPERE
FINLAND

569. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 16:26:34 UTC
From: k23690@lehtori.cc.tut.fi
Message-ID: <2hrk3q$4m9@cc.tut.fi>
Source record: 272115

Clark Savage Turner (turner@safety.ics.uci.edu) wrote:

> Most IF filters don't have much ring, though some, many audio filters
> (except DSP I understand) can ring pretty badly.

What should the audio filter frequency (and phase response) look like
to avoid ringing. A high-Q single stage bandpass sounds horrible, but
how does a filter with flat passband (eg. Butterworth or elliptic)
sound like or is it really required to use Bessel-response in order
to get rid of the hollow sound produced by noise peaks.

Paul OH3LWR

Phone : +358-31-213 3657
X.400 : G=Paul S=Keinanen O=Elisa-Tampere A=ELISA C=FI
Internet: Paul.Keinanen@Telebox.tele.fi
Telex : 58-100 1825 (ATTN: Keinanen Paul)
Mail : Hameenpuisto 42 A 26
FIN-33200 TAMPERE
FINLAND

570. Re: QSL help pse

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 16:27:31 UTC
From: cchris@charlie.usd.edu
Message-ID: <CK1Hpw.9D2@sunfish.usd.edu>
Source record: 272110

In article <CJvrrA.1LJ@news.ci.ua.pt>, etjfonte@ci.ua.pt (Jose Miguel Fonte) writes:
>jcraig@kean.ucs.mun.ca wrote:
>: I worked the following on top band, but can't seem to find
>: managers / CBA's for them...
>
>: YS1X
> for this I have DL9ZB in 1986 but now I don't now...
>: HH2PK
> HH2PK - Patrick , POBox 1095 , Port-au-Prince , Haiti.
>: XF4JC
>: V47WZ
> For this two I don't know nothing...
>
>
> 73's de CT1ENQ
>
>
>--
>|--|
>| Jose' Miguel M.B.Fonte | Universidade de Aveiro - PORTUGAL |
>| | Departamento de Electronica e Telecom. |
>| E-mail : etjfonte@ci.ua.pt |---------------------------------------|
>| | Ham callsign : CT1ENQ "always QRV" |
>|--|
>
The manager for YS1X is W3HNK and the turn around time is very short. I also
worked him on 160. Good Luck.

Chris, AC0M
Vermillion, SD

571. subscribe

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 19:43:09 UTC
From: dy794@cleveland.FReenet.EDU
Message-ID: <9401221943.AA00480@eeyore.INS.CWRU.Edu>
Source record: 272113

```
Please send E mail to dy794@cleveland.freenet.edu
I am an AMSAT Life Member. Tnx

--
de Bob, W2THU
```

572. Re: Low Power VCO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 21:04:21 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2hs4cl$7vd@hpscit.sc.hp.com>
Source record: 272116

In article <ep588deb-220194003025@davebmac.pts.mot.com>,
David Bengtson <ep588deb@pts.mot.com> wrote:

>Any Particular reason you picked the MRF-931? We've been using MRF941's in
>even lower power applications, and getting what we consider good results.

The MRF-931 is optimized for low currents. It still has good
gain and f-sub-t down to .1 mA. This should allow a larger
current swing than the 941, which has little gain at .1 mA.
You want to approach a swing of 4 mA. peak to peak when using
2 mA. DC collector current for maximum efficiency. To do this,
you need to get as close to 0 mA. as possible.

For "normal" uses, we love the MRF941. We use it (actually the
SMT version MRF9411L) practically "everywhere" in RF circuits.
Just watch what you hang on the base so it doesn't take off at 3
GHz! The MRF931 is more "idiot proof" in this respect.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

573. 10meters, anyone want to try it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 22:16:48 UTC
From: jrl2@crux1.cit.cornell.edu
Message-ID: <jrl2.759277008@crux1.cit.cornell.edu>
Source record: 272117

Hello,
I just got my HF privs, and was wondering if there
are any nets or clubs operating on 10m now? I heard
Costa Rica and Phenoex,Az this afternoon from Ithaca,NY
. I was wondering if there are any freqs that people
normally listen to for contacts?
Thanks,
-Jeff Luszcz N2TIQ

574. Kenwood radio software

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 22:59:58 UTC
From: darren.leno@radiohobby.chigate.com
Message-ID: <532_9401231727@chigate.fidonet.org>
Source record: 272049

The following Kenwood files are available on RADIO HOBBY ONLINE bbs at
708-238-1901, 14,400 v32bis-300 baud. Full dl access to 1st time callers.

3RD.ZIP Kenwood TS-440 control pgm. Will opr w/TNC
440_4.ZIP Kenwood TS-440 Control Program
44SPL101.ZIP TS-400 Control Program, with search ability
4MS200.ZIP Tandy 100 controls Kenwood TS-440S
680MODS.TXT
680MODS.ZIP Kenwood TS-680 Mod
732INFO.ZIP Mods for the Kenwood TM-732a
940SET.ARJ Changes forwarding frequency under computer control in HF
RLI-BBS network. Choose any frequency for forwarding. For TS-
940 or TS-790. Sup
94SPOIL.ZIP Control program for Kenwood TS-940S
ALLBULL.ZIP All Kenwood service bulletins
KEN450.ZIP Complete computer control of TS-450
KEN790.ZIP Complete computer control of TS-790
KEN850.ZIP Complete computer control of TS-850
KEN950.ZIP Complete computer control of TS-950
KENCON.ZIP Kenwood 440 comp cntrl. Great for handicap
KENWOOD.ZIP Kenwood radio control program
KENWOODC.ZIP
KEN_MODS.ZIP Various modifications for Kenwood
KMIJ3_11.ZIP
KNWDMOD.ZIP Official list of Kenwood mods
KNWDSTUF.ZIP
MODS.ZIP Mods for Kenwood, Yaesu & Icom radios
R-5000.ZIP Kenwood mods for R-5000
RADMOD.ZIP Mods for Kenwood and Icom radios.
RIG-EQF1.ZIP Computer control for most Kenwood radios
RIGEQF.ZIP Control Kenwood rigs via computer
RIG_EQF.ZIP Front end program for the Kenwwood computer interface
TH28-48.ZIP TH-228 and TH-48 Secret Functions Manual by PE1ACG
TH77AMOD.TXT Modifications for Kenwood TH77a dual band handheld.
TH78E.LZH Secret kenwood functions by FC1JSO
TM732A.MOD Modifications for the Kenwood TM-732a
TM741A.ZIP Modifications for Kenwood TM741A
TS-440S.ZIP Controller program for TS-440S
TS-50QRP.LZH Reduce Kenwood TS-50 power to QRP standards by WA6ERB
TS140S-1.TXT
TS140S-2.TXT
TS140S-3.TXT
TS2400.TXT
TS430-1.TXT

TS430S-2.TXT
TS430S-3.TXT
TS430S-4.TXT
TS430S-5.TXT
TS430S-6.TXT
TS440.TXT
TS440S-1.TXT
TS440S-2.TXT
TS440S-3.TXT
TS440S-4.TXT
TS440S-5.TXT
TS440S-6.TXT
TS440S-7.TXT
TS440S-8.TXT
TS440S-9.TXT
TS440S-A.TXT
TS440S-B.TXT
TS440S-C.TXT
TS440S-D.TXT
TS440S-E.TXT
TS440S-F.TXT
TS440S-G.TXT
TS50XMT.MOD All band transmit modification for TS-50 mobile HF transceiver.
TS530.TXT
TS680-1.TXT
TS680-2.TXT
TS680.TXT
TS690PAK.LZH
TS711.TXT
TS790-1.TXT
TS790-2.TXT
TS790.TXT
TS820.TXT
TS830-1.TXT
TS830-2.TXT
TS830.TXT
TS830S.TXT
TS850.ZIP Several Modifications, including all band TX MOD. for KENWOOD TS
850 HF Radio.
TS850KAM.LZH
TS930-1.TXT
TS930-2.TXT
TS930.TXT
TS940-1.TXT
TS940-2.TXT
TS940-3.TXT
TS940-4.TXT
TS940-5.TXT
TS940-6.TXT
TS940-7.TXT

TS940-8.TXT
TS940-9.TXT
TS940.TXT
TS_850S.ZIP Computer control of the Kenwood TS-850S
VFOTRAK.ZIP Amateur Radio: Lock VFO B T VFO A on Kenwood radios

575. Converter?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-22 23:39:00 UTC
From: matti.nieminen@mpoli.fi
Message-ID: <f7.10514.1807.0NFAB097@mpoli.fi>
Source record: 272118

Would it be possible to build a _simple_ converter, located between antenna and receiver, which would convert incoming FM (with 18-20kHz deviation) to WFM (75kHz deviation)? It should cover frequencies from 137 to 138MHz. It's just that the signals from the NOAA satellites are so weak that I can't get any useful pictures with signals received in WFM mode. (to me the sound isn't that noisy, go and figure)

576. No-Code Tec. license

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 02:51:07 UTC
From: Graylan_Vincent@walnut.prs.k12.nj.us
Message-ID: <1994Jan22.225107.520432@walnut.prs.k12.nj.us>
Source record: 272031

I want to go for my No-Code Tech. license (First, I'm 13, second, I don't know code well) and someone showed me a book. I think it was called "Now Your Talking", but I'm not sure. I really want to find out how to get started with some cheap, but good equipment. What is the name of the booklet at Radio Shack that I can get?

Graylan Vincent@corbin.prs.k12.nj.us

-----Princeton Regional Schools takes no responsibility for the accuracy or content of the above message.

577. Re: Jesus Freqs!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 03:18:06 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.94Jan22221806@gdstech.GRUMMAN.COM>
Source record: 271952

Walt, I agree with you 100%. This stuff shouldnt appear in every
newsgroup on the net. But, let's not fall into the trap of thinking
that the mutant who made the post is actually going to come back
here and read your replies. He's already gotten yelled at by
his sysadmin, and hundreds (perhaps thousands) of direct emails
from his furious fans. Let's move on to more important issues.
Can a nocoder take his HT on an airplane if the battery was
left on a concrete floor?
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

578. Re: IOTA frequencies wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 03:26:59 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.94Jan22222659@gdstech.GRUMMAN.COM>
Source record: 271953

```
The IOTA (Islands On The Air) stations try to congregate on
these frequencies: 14.260, 21.260, 28.460. But, when there is already
traffic there, they would move up or down. So, tune around that area.
I don't know the 40 and 80 IOTA frequencies. -pat
--
*------------------------------------------------------------*
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *
```

579. Daily Summary of Solar Geophysical Activity for 22 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 04:40:50 UTC
From: oler@rho.uleth.ca
Message-ID: <9401230440.AA17701@rho.uleth.ca>
Source record: 272127
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

22 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 022, 01/22/94
10.7 FLUX=113.0 90-AVG=103 SSN=102 BKI=3212 0022 BAI=005
BGND-XRAY=B2.1 FLU1=7.1E+05 FLU10=1.0E+04 PKI=3212 2122 PAI=007
BOU-DEV=029,017,008,010,002,002,010,011 DEV-AVG=011 NT SWF=00:000
XRAY-MAX= C1.6 @ 0110UT XRAY-MIN= B1.9 @ 1808UT XRAY-AVG= B2.7
NEUTN-MAX= +002% @ 1205UT NEUTN-MIN= -002% @ 2005UT NEUTN-AVG= +0.0%
PCA-MAX= +0.1DB @ 0745UT PCA-MIN= -0.4DB @ 1500UT PCA-AVG= -0.0DB
BOUTF-MAX=55348NT @ 0446UT BOUTF-MIN=55328NT @ 1925UT BOUTF-AVG=55341NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+060,+000,+000
GOES6-MAX=P:+127NT@ 1950UT GOES6-MIN=N:-061NT@ 0601UT G6-AVG=+081,+032,-031
FLUXFCST=STD:110,110,110;SESC:110,110,110 BAI/PAI-FCST=005,005,005/010,010,010
KFCST=1111 2111 0101 2111 27DAY-AP=007,005 27DAY-KP=2012 3223 1121 2211
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 21 JAN 94 is not available.
The Full Kp Indices for 21 JAN 94 are: 2o 3- 1+ 1- 1+ 2- 3- 2o

SYNOPSIS OF ACT

Solar activity was low during the past 24 hours. Region
7654 (N09W06) produced the only C-class x-ray event observed
but has lost its delta magnetic configuration. Two new regions
were numbered. Region 7658 (N12E16) is a simple bipolar group.
Region 7659 (S13E47) was spotted briefly but is presently only
plage and an arch filament system. Several unassociated Type
III radio sweeps, and discrete radio bursts were reported. A
large, inactive prominence is rotating over the east limb.

Solar activity forecast: solar activity is expected to be
low. Region 7654 retains the potential for occasional eruptive

flares.

The geomagnetic field has been at mostly quiet levels at
middle geomagnetic latitudes for the past 24 hours. Some
periods at active levels were observed at auroral latitudes.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet for the next three days. Active conditions
are possible on 26 Jan in response to disturbed solar wind
associated with a filament disappearance on 21 Jan and an
equatorial coronal hole which will be near central meridian
on 23 Jan.

Event probabilities 23 jan-25 jan

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 23 jan-25 jan

A. Middle Latitudes
Active 05/10/10
Minor Storm 01/05/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 05/10/10
Minor Storm 01/05/05
Major-Severe Storm 01/01/01

HF propagation conditions were normal over all regions.
Near-normal conditions should persist over the next 72 hours.
High latitudes may begin seeing effects of the above-mentioned
disturbance on 25 January. Otherwise, near-normal conditions
are expected to continue.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N04W23 220 0090 HSX 02 001 ALPHA
7654 N09W08 205 0610 CKI 09 032 BET
7657 N12W37 234 0080 DAO 06 012 BET
7658 N12E14 183 0010 BXO 05 005 BET
7659 S13E47 150 0010 BXO 02 002 BET
7656 S22W62 259 PLAGE
REGIONS DUE TO RET
NMBR LAT
7647 S15 096

7646 S09 087
7645 N13 085
7649 S19 079

LISTING OF SOLAR ENERGETIC EVENTS FOR 22 JANUARY, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0102 0109 0114 7654 N10W00 C1.6 SF 280
0246 0246 0246 110
0633 0633 0634 310
1911 1919 1926 7654 N08W10 B6.2 SF 290
1928 1928 1928 110

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 22 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 22/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
57 N18W17 S10W57 S10W57 N18W17 250 ISO NEG 008 10830A
58 N20E29 S15E22 N02E07 N30E17 190 ISO POS 016 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
21 Jan: 0324 0328 0332 B4.5
0758 0802 0809 B3.5
0816 0821 0838 SF 7654 N07E17
1019 1023 1025 B6.6
1140 1146 1155 B4.5
1610 1613 1616 B4.0 SF 7654 N08E12
2059 2103 2106 B4.6 SF 7654 N07E08
2308 2330 2340 B7.8 SF 7654 N06E07

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7654: 0 0 0 4 0 0 0 0 004 (50.0)
Uncorrellated: 0 0 0 0 0 0 0 0 004 (50.0)

Total Events: 008 optical and x-ray.

EVENTS WIT

```
Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
21 Jan: 0758 0802 0809 B3.5 III
2308 2330 2340 B7.8 SF 7654 N06E07 Continuum

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **
```

580. Re: Boatanchors "forum"

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 04:49:33 UTC
From: lakeith@robins.af.mil
Message-ID: <2hsvkt$lmv@wrdis02.robins.af.mil>
Source record: 272121

J. D. Delancy (k1zat@bah.COM) wrote:
: Interested in what other people have for "boatanchors"? Been
: looking for a type 80 tube to go in your 1927 Oceananic
: receiver? This and lots more. Check out the boatanchors
: "forum" on internet e-mail.

: Subscribe to: boatanchors@gnu.ai.mit.edu
^^^^^^^^^^^^^^^^^^^^^^^^^^^^

CORRECTION..

Subscribe to boatanchors-request@gnu.ai.mit.edu

That will keep our listowner much happier!!

73,

Larry Keith, KQ4BY

581. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 05:05:14 UTC
From: lyndon@unbc.edu
Message-ID: <2ht0ia$9r8@unbc.edu>
Source record: 272122

jeffl@comix.UUCP (Jeff Liebermann) writes:

[Lots of good common sense arguments deleted for brevity]

>6. The Ramsey kits are not state of the art, high quality,
>or a fabulous bargain. They are adequate for the purpose intended:
>a kit for those that still believe that radio construction is a
>part of ham radio and that believe they may profit from the
>experience.

Exactly. I picked up a pair of Ramsey's (2m, 440) to run on packet. Why? For one, it seemed silly to buy an all-singing all-dancing 400 memory PL rig just to wire down onto one frequency for packet. The Ramsey kit is easily interfaced to a packet modem.

As for price, the Ramsey kit is marginally less expensive than a comparable single band radio WITH THE SAME FEATURES. I defy you to find a commercially manufactured 2m (or 440) rig, with as few features as the Ramsey, to compare the price to. When you do, *then* we'll argue about the relative expense of the Ramsey kit.

I agree that the front end on the Ramsey kit is wider than it should be. I was aware of this from the outset. Prior to buying it, I asked around about it's good and bad points. If you did not do this, that's your problem. It should be noted that the 2m kit comes with an addendum that states quite plainly that the 2m kit is prone to intermod, and provides alternate component values for the front-end filter that will tighten things up. I'm not sympathetic at all to the whining about wide front-ends' since this whining almost always comes from the same people that want DC-to-daylight coverage.

One thing about the Ramsey kit that does interest me is the PLL design. It appears to be able to lock up quickly after large frequency shifts. I'm curious to see if this can be exploited to run frequency-hopping spread spectrum. Not being an RF guru I might well be on drugs, but that's another reason why I bought a kit - there is enough room (and design documentation) in the kit that I can get my fat fingers in there and try out my ideas.

> If the lack of accessories is offensive, please
>consider that anyone who builds their own equipment, is quite
>likely to have a supply of suitable microphones, speakers, and
>boxes.

Jeff has obviously seen my basement :-)

It's a shame that the Amateur Experimental Service has turned into the Amateur Appliance Service.

--lyndon VE7TCP/VE6BBM (who adds a whole new meaning to "beware of programmers bearing screwdrivers ...)

582. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 05:27:01 UTC
From: lyndon@unbc.edu
Message-ID: <2ht1r5$9vi@unbc.edu>
Source record: 272123

myers@sunspot.West.Sun.COM (Dana Myers) writes:

>The difference is that the IC24AT was factory built and then adjusted
>by the factory to specified tolerances. Selling a kit which is highly
>sensitive to component tolerances without providing an adjustment
>method is considerably different. I've been insisting that people
>who attempt to build and operate VHF and UHF amateur gear really need
>to verify the performance of the home-built (including kits) gear,

Has anyone considered that perhaps the requirements for obtaining an
Amateur Radio license should be upgraded to the point where people cannot
obtain a license until such time as they are aware of these problems?

The current practice (in Canada, anyway) of granting a license to anyone
who can spell "Ohm's Law" correctly two times out of three might be a lot
more at fault than John Ramsey's circuit designs.

--lyndon VE7TCP/VE6BBM

583. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 05:30:46 UTC
From: lyndon@unbc.edu
Message-ID: <2ht226$a0s@unbc.edu>
Source record: 272124

greg@netcom.com (Greg Bullough) writes:
>I suspect someone receiving a
>Notice of Apparent Liability from the FCC would not consider it
>to be trivial.

Aren't US hams required to learn the reg's prior to obtaining their ticket?

--lyndon

584. Re:Bird Problems with Yagi Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 06:28:08 UTC
From: janc@icebox.iceonline.com
Message-ID: <CK2KIE.5HD@iceonline.com>
Source record: 272126

>This produces a messy roof and a serious hazard to parked cars, cats and
>small children on the ground :-)
>
>Also, however, the elements have been getting torqued seriously out of
>plane by the weight of the lil' chirpers. They seem not to have an eye
>for symmetry and apparently don't understand about balanced loads,
>balanced feed lines, or the like.
>

Some of the local hams in this area have mounted plastic Owls atop the antenna
and tuned to compensate (if and when necessary). It seems to keep the real
feathered fiends at bay.

: If you eat a live toad first thing in the
janc@icebox.iceonline.com : morning, nothing worse will happen to you all
: day.
: To you or the toad.
---

585. Re: BRAIN CANCER, LEUKEMIA FROM HAM RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 06:28:40 UTC
From: jukka@clinet.fi
Message-ID: <9ASGjOn80hHP053yn@clinet.fi>
Source record: 272125

Man has a high risk to get at least brain cancer if listening too
much 2m repeater OH2RAA in Helsinki.
--
Jukka Salomaa jukka@clinet.fi OH2BUA
phone +358 400 315 444 puhelin 9400 315 444

586. RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 09:24:09 UTC
From: steven.rosenberg@support.com
Message-ID: <9401230124.A9637wk@support.com>
Source record: 272028

jeffl@comix.UUCP (Jeff Liebermann) writes:

> 6. The Ramsey kits are not state of the art, high quality,
> or a fabulous bargain. They are adequate for the purpose intended:
> a kit for those that still believe that radio construction is a
> part of ham radio and that believe they may profit from the
> experience. If the lack of accessories is offensive, please
> consider that anyone who builds their own equipment, is quite
> likely to have a supply of suitable microphones, speakers, and
> boxes.

I didn't say that Ramsay should include microphones, speakers or boxes,
just that pegging the kits as existing ONLY for the thrill of
construction and not to produce a useable radio.

If this is the case, shouldn't Ramsay's ads lead off with the following
words in big letters:

DO NOT USE THIS AS YOUR PRIMARY RADIO. ONLY PURCHASE THIS KIT IF YOU
PRIZE THE THRILL OF CONSTRUCTION FAR ABOVE ANY PRACTICAL USE OF SAID
EQUIPMENT.

On the contrary, I think Ramsay is trying to push these kits to people
who "can't afford" a pre-made Japanese radio. And that is a travesty.

Steven Rosenberg, KC6FYL

587. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 10:02:36 UTC
From: cheese@active.asstdc.com.au
Message-ID: <s4xQtAULBh107h@active.asstdc.com.au>
Source record: 271990
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc

In <VayFjGG8yPwG053yn@dorsai.dorsai.org> bigsteve@dorsai.dorsai.org (Steve Coletti) writes:

>According to legend, there was a light on top of the great pyramid that
>burned for 600 years. Egyptologist found a small room with copper troughs
>in it that were lined with lead, and two wires that lead up to, where?
>When you think about it, a wet cell is a simple idea. It is conceiveable
>that some high priest of a once acient religion discoverd electricity and
>the knowledge was kept as a secret.

And created a battery with a shelf-life of >600 years? I sure could use one of those!

--
******* Please note new address ---- ********
Mark Cheeseman cheese@active.asstdc.com.au Fido: 3:712/412.0 [+61 2 399 9268]
PO Box 199 Alexandria NSW 2015 Ph +61 2 353 0143 Fax +61 2 353 0720

588. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 11:06:10 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <759360005.F00002@ocitor.fidonet>
Source record: 272059

```
The following files were processed Sunday 1-23-94:

HAMPACK [ HAM: Packet Communications programs ]
------------------------------------------------------------------------
APRS310.ZIP ( 652564 bytes) Automatic Packet Reporting System

------------------------------------------------------------------------
652564 bytes in 1 file(s)

Total of 652564 bytes in 1 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcycon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - wa5eha
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)
```

589. ZA1QA QSLs rcvd

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 13:37:00 UTC
From: CSMSCST@MVS.OAC.UCLA.EDU
Message-ID: <19940123133700CSMSCST@MVS.OAC.UCLA.EDU>
Source record: 272039

After wasting time, effort, and several green stamps on the Quick Aid route, I recieved my ZA1QA QSLs within 2-3 weeks via HA0MM (CBA) and 2 gs.
-- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)

590. Re: G8BPQ 7.04a

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 15:08:43 UTC
From: ghitz@world.std.com
Message-ID: <CK38qK.AwD@world.std.com>
Source record: 272032

Angelo Glorioso Iii (Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US) wrote:
: Hi All,

: I dont have access to archie, so I must ask for help.. I heard that G8BPQ
: 407A has been released.. Anyone know what ftp site has it???

: Thanks in advance..

: Angelo

: -- Via DLG Pro v1.0

: Internet:angelo_glorioso_III@agwbbs.new-orleans.LA.US
: Usenet:rex!agwbbs!angelo_glorioso_III
: Packet:N5UXT @ N5UXT.#NOLA.LA.USA.NA
: Tcp/ip:N5UXT.AMPR.ORG [44.108.2.13]

Archie drew a blank on BPQ407A but I did find the following
on my BBS this morning:

****

Date: 22 Jan 94 07:25
Message-ID: <9090@N7MRP> (60981@WB1DSW)
From: N7MRP@N7MRP
To: BPQ@USBBS
Subject: BPQ Version 4.07A Now Avail!
Path: WB1DSW!KC1PK!NS1N!KQ1K!KA1RCI!WG1I!WG1I!KA0WIN ...

From: N7MRP@N7MRP.AZ.USA.NA
To : BPQ@USA

Hello All,
The latest G8BPQ THENODE software package is now available from the
F6FBB
Western U.S. Support BBS...

The file is: BPQ407..RJ in the G8BPQ Directory

Western U.S. F6FBB Support PBBS

+02-912-0225

300-14400 V32/v41.Bis Multi-mode

For those regulars, please note the change in telephone number...
Also, it is no longer necessary to have the ,,1 in your dial string...

73 de Dan N7MRP

<<<--------------------------------------->>>
Daniel J. Meredith
Arizona Packet Coordinator
Voice/Fax: (602) 956-2566
Data : (602) 912-0225
Ax.25 : n7mrp@n7mrp.az.usa.na
Internet : dan@aznet.stat.com

****

Hope this helps...73 de George, W1DA
--
%%%

591. DOES CALLSIGN.CS LOCK OUT NONE NA'S

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 15:56:35 UTC
From: gorski@vms.huji.ac.il
Message-ID: <1994Jan23.155636.2877@vms.huji.ac.il>
Source record: 272033

>>
>> I did:
>> telnet callsign.cs.buffalo.edu 2000
>> yesterday without any problem.
>>
>> The machine: callsign.cs.buffalo.edu real name is:
>> electra.cs.buffalo.edu (128.205.32.2)
>>
>> Clem.
>> 73
>>
>I just tried it from here and got to it okay, but then had problems because I
>couldn't get any of the usual log ins to work. What is the log in Proceedure?
>Or do you have to be a registered user?

+Did you remember to type the port number (the "2000" part) after the
+telnet address? The first time I tried using that callsign server, I
+got caught by the login prompts because I forgot the port number. (I
+hadn't ever used anything that needed a port number before.)
+
+Regards,
+Doug Hamilton hamilton@bix.com Ph 508-358-5715

Yes, I included 2000 and got a "no route" prompt. With 3000 I got a
"connect refused" prompt. I tried to send /PORT=2000 and 3000, and every way
I could think of. My system operators can't explain the refuse to me. Do you
think it locks out connects from outside North America? Or maybe it just
does not like me.

Shalom from Jerusalem,

592. Re: G8BPQ 7.04a

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 16:32:13 UTC
From: dave@llondel.demon.co.uk
Message-ID: <759367933snx@llondel.demon.co.uk>
Source record: 272057
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

In article <Angelo_Glorioso_Iii.2lsz@agwbbs.new-orleans.LA.US>
Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US (Angelo Glorioso Iii) writes:
>Hi All,
>
> I dont have access to archie, so I must ask for help.. I heard that G8BPQ
>407A has been released.. Anyone know what ftp site has it???
>
>Thanks in advance..
>
>Angelo
>
By the time you read this, BPQ 4.07a (not what the subject said!) should
be available on ftp.demon.co.uk:/pub/ham

If it isn't there, try a bit later (depends on when the sys admin moves it
from the upload directory).

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

593. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 17:27:00 UTC
From: CSMSCST@MVS.OAC.UCLA.EDU
Message-ID: <19940123172749CSMSCST@MVS.OAC.UCLA.EDU>
Source record: 272045

In article <1994Jan19.154907.17558@rsg1.er.usgs.gov>,
bodoh@dgg.cr.usgs.gov (Tom Bodoh) writes:

>cellular system must tie into (and depend on) the land-line phone system
>as well as power and is no more reliable than the land-line phone system...

While I understand your (theoretical) point, as a matter of fact
several of our employees had *much better* luck with their cell
phones than with their home phones in reaching us in the first 24
hrs following the quake. One of our managers was able to stay in
touch *only* via her cell phone - she had no trouble getting a dial
tone on the cell system, while her home phone had a several minute
wait for a dial tone, and then usually got an "all circuits busy"
msg after dialing.

-- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)

594. Tubes, ~4800 of them for sale!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 18:34:28 UTC
From: kayd@xanth.CS.ORST.EDU
Message-ID: <2hufvkINNe76@flop.ENGR.ORST.EDU>
Source record: 272034
Cross-posted to: rec.radio.amateur.misc,rec.radio.swap,misc.forsale

The Oregon State University Amateur Radio Club has over 4800 tubes for sale. They are of varying types and quantities. I have a full inventory list available through my mailbox. Simply send E-mail to my E-mail address listed below with the subject "osutubes" and you'll get the list. If you want to talk about the tubes, DON'T use that subject, as I won't get the mail.

Our current offer for the tubes is $4250 + Shipping. We are not going to sell ANY of the tubes separate from the lot.

Darrek Kay
kayd@xanth.cs.orst.edu
(503)737-9410

595. Re: Availability of Study Materials-General operator

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 18:48:57 UTC
From: slay@netcom.com
Message-ID: <slayCK3IxM.22x@netcom.com>
Source record: 272035

APAJ-EH-EL (apaj-eh-el@zama-emh1.ARmy.MIL) wrote:
: I would like to get some study material and manuals for a general HAM
: operators license. If you have a pamphlet or price list could you send it
: either in care of my e-mail address or to :
: Ronnie |G. Masters

Ronnie - since you appear to be at Camp Zama, see if you can contact Roland Cowan there. He is an accredited VE and is one of the most helpful hams I've met. His callsigns are: WF4P and 7J1AKI. He's very active on both Internet (I'll find his address and advise by separate e-mail) and packet radio [7J1AKI@7J1AKI.10.JNET1.JPN.AS]. Ask him for information on TIARA - the Tokyo Int'l Amateur Radio Association as well. They are a good group of people.

73 de Sandy WA6BXH/7J1ABV Internet: slay@netcom.com

596. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 19:08:00 UTC
From: CSMSCST@MVS.OAC.UCLA.EDU
Message-ID: <19940123190831CSMSCST@MVS.OAC.UCLA.EDU>
Source record: 272048

In article <2hjn8lINNua@abyss.West.Sun.COM>,
myers@sunspot.West.Sun.COM (Dana Myers) writes:

>The couple of cell sites I've been to had backup generators that start
>when power is disabled, or a big battery.

So do virtually all CO's (landline phone exchanges). My landline
phone service was 100% available during the several hours before
area power was restored.

-- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)

597. Re: Expanded receive mod for Yaesu FT-41R

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 19:30:15 UTC
From: ijordan@freenet2.scri.fsu.edu
Message-ID: <2huj87$m41@mailer.fsu.edu>
Source record: 272036

```
--
* * Ian Jordan * *
```

598. FCC Daily Digest - 1994-01-21

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 20:05:08 UTC
From: bruce@pixar.com
Message-ID: <1994Jan23.200508.10991@pixar.com>
Source record: 271944

[downloaded from the FCC's bulletin board]

Vol. 13, No. 13 January 21, 1994

The following items were adopted at the Commission meeting on January 19 and released later that day:

NEWS RELEASES

CERTAIN FEATURES ON LEC PRICE CAPS MODIFIED TO COMPLIMENT RESTRUCTURING OF TRANSPORT RATES - CC DOCKET 91-213 (Report DC-2558, Action in Docket Case)
Modified certain features of the price cap regulatory system applicable to LECs to complement the recent restructuring of the LECs' transport rates.
Action by the Commission January 19 by Second R&O (FCC 94-9).
News Media contact: Rosemary Kimball at (202) 632-5050; Common Carrier Bureau contact: David L. Sieradzki at (202) 632-1304.

COMMISSION BEGINS COMPREHENSIVE FOURTH YEAR REVIEW OF THE PRICE CAP PLAN FOR LECS; NOTICE SEEKS COMMENTS ON REVISIONS TO PRICE CAP RULES THAT WOULD BETTER ACHIEVE COMMISSION GOALS IN THE YEARS AHEAD - CC DOCKET 94-1 (Report DC-2559, Action in Docket Case)
Action by the Commission January 19 by NPRM (FCC 94-10).
News Media contact: Rosemary Kimball at (202) 632-5050; Common Carrier Bureau contacts: Dan Grosh at (202) 632-6387, Joanne Wall at (202) 632-6917 and Greg Vogt at (202) 632-6387.

COMMISSION PROPOSES RULES AND POLICIES FOR MOBILE SATELLITE SERVICES IN THE 1610-1626.5/2483.5-2500 MHZ FREQUENCY - CC DOCKET 92-165 (Report DC-2556, Action in Docket Case)
Proposed regulations for licensing and operation of mobile satellite systems to provide a variety of voice and data mobile satellite services in these bands.
Action by the Commission January 19 by NPRM (FCC 94-11).
News Media contact: Patricia A. Chew at (202) 632-5050; Common Carrier Bureau contact: Fern Jarmulnek or

Harry Ng at (202) 634-1682.

COMMISSION SEEKS COMMENT REGARDING PROPOSAL TO REDESIGNATE THE 28 GHZ BAND TO POINT-TO-MULTIPOINT SERVICES -- CC DOCKET 92-297 (Report DC-2557, Action in Docket Case)
Pursuant to the Negotiated Rulemaking Act, began process to determine whether FCC should implement a Negotiated Rulemaking Proceeding to allow industry participants to reach a consensus on methods of sharing the 27.5-29.5 GHz band.
Action by the Commission January 19 by Second NPRM (FCC 94-12).
News Media contact: Patricia A. Chew at (202) 632-5050; Common Carrier Bureau contact: Susan Magnotti at (202) 634-1773.

****

ADDENDUM: The following items, released January 19, were not listed on Digest 12:

NEWS RELEASES

MICHAEL L. KATZ TO BE APPOINTED CHIEF ECONOMIST

MARY ELLEN BURNS NAMED CHIEF, CABLE BUREAU'S CONSUMER PROTECTION DIVISION

ROBERT CORN-REVERE TO LEAVE FCC

FCC CLOSES ITS OFFICES EARLY

--

--
Bruce Perens AB6YM Bruce@Pixar.com 510-215-3502

599. RAC Logo

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 21:16:18 UTC
From: Jim_Sollows@mindlink.bc.ca
Message-ID: <37116@mindlink.bc.ca>
Source record: 272038

I am in need of the RAC (Radio Amateurs of Canada) logo in PCX, BMP, TIF, CDR or whatever format, for desktop publishing purposes. I would appreciate hearing from anyone who has this or knows where I can ftp it. Thanks.

Jim VE7JLS

--
****
Jim Sollows Internet: JIM_SOLLOWS@MINDLINK.BC.CA
Agape Data Solutions Packet: VE7JLS@VE7KIT.#VANC.BC.CAN
****

600. Help wanted with KA9Q comms package.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 21:47:25 UTC
From: dubu@cs.sun.ac.za
Message-ID: <2hur9d$lcb@itu1.sun.ac.za>
Source record: 272040

I am using the KA9Q package to impliment ax.25, KISS (maybe some more)
for the communication software for a satellite being buildt here.
The sat. (SUNSAT) is an small experimental satellite. Amateur (+packet)
radio support is one of the major tasks.

What I actually need:

-> Programmers documentation of KA9Q (if it exists - I have scanned quite
a few sites.)
-> Possibly Phil Karn's e-mail address (if he has one)

Thanx
Johan

J du Buson	e-mail: dubu@seagoon.ee.sun.ac.za
SUNSAT Lab	dubu@itu1.sun.ac.za
E&E Engineering	jdubuson@firga.sun.ac.za
University of Stellenbosch	work-tel: +27 21 808 4472
7600, ZA	home-tel: +27 21 886 4050

DISCLAIMER: Me not say nothing for no-one!

601. Ohio/Penn DX Bulletin #144

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 21:50:20 UTC
From: kb8nw@barf80.nshore.org
Message-ID: <$opdx.144.1994@ampr.org>
Source record: 272061
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ALLBBS $OPDX.144
Ohio/Penn DX Bulletin No. 144

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 144
BID: $OPDX.144
January 24, 1994
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio
Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, DL7VEE & DXNL, DF4RD, CT1XX, IW2IYN, AD1C, KC1AG, NA2M, WA2ABN, N2PNG, K4CEF & Southeastern Cluster Group, ON6TT, N4VZ, N8BQJ, K8YSE and NE8Z for the following DX information.

3Y0PI, PETER I ISLAND DXPEDITION. As the countdown continues for the start of this DXpedition, here is some important information: KA6V and AA6BB, are the QSL Managers and they ask that you put "ALL" your cards into the same envelope or put all your QSO labels into one card. "DO NOT" (repeat DO NOT) mix VP8BZL and VP8BZL/MM cards with the 3Y0PI cards (send them separately). Mixing operations in the same envelope will cause a delay in processing your QSL cards. Include a SASE or SAE and enough to cover at least the return postage. The 3Y QSLs will be printed in Belgium and have the same layout as the AH1A and VP8SS I cards (folding type with colored pictures). There is room for 5 QSO's per 3Y-card. If you have more than 5 QSOs, more cards will be needed, and the cost of postage will increase (So, remember send enough to cover this!). Next week we will have more on operating frequencies and practices.

EU/EV/EW, BELARUS (NOT YET!). Bob, N4VZ, had a chat with Yuri, RC2AR, and Yuri states that Belarus will not be using its EU, EV, or EW assigned prefixes until June 1, 1994. This is surprising since most other countries have made the changeover to their new prefixes and this will add more confusion since Russia uses the "R" prefix.

FO, FRENCH POLYNESIA. Walter, DJ0FX, will be active on CW/SSB through February 19 as FO0PT. He will be using 100 watts into a vertical antenna. Activity should be on all bands including the WARC bands.

GD, ISLE OF MAN. Several stations have been active on the WARC bands and the lower bands. GD4WBY has been heard on 12 and 17 meters between 1400 and 1630z. GD4PTV has been heard on 80 meters at 0800z and GD4BEG on 160 meters between 0630 and 0730z. Steve, G4UOL, will be active until the

6th of February as GD4UOL. His activity will be mainly on CW (11 kHz up or on 3507, 10102, 18070 and 24900). QSL via the bureau or CBA.

HK0/I2RAO INFORMATION. Marco, IW2IYN, reports that the "Italian DX Bulletin" states, "operations by I2RAO from Gorgola Island is considered as Colombia for DXCC, and the previous from Malpelo should really count as Malpelo".

PJ2, NETHERLANDS ANTILLES. Seppo, OH1VR, will be active from Curacao as PJ2/OH1VR from January 26 through February 2nd. Seppo is a contester and it is likely that he will be active in the CQ WW 160 Meter CW Contest next weekend.

S2, BANGLADESH. Eric, S21ZG, has been active almost daily on 80 meters (3651-3653 kHz) at 1145-1215z and again around 0000z.

V2, ANTIGUA. John, AA2LW, will be traveling to V2-land the last week of Jaunary. He will be there through the first part of February (around 10 days). John is actually there on business, but in his spare time he plans to be active on 40-10 meters SSB (his favorite band is 17 meters). QSL to CBA.

V4, ST. CHRISTOPHER/NEVIS. Mike, W9NSZ, will be active as V47NS from January 28th thru February 2nd. QSL to CBA.

VP2, ANGUILLA. Jim/KK3K, Don/WB6LYI, Mark/KC6XC, Tom/KI4ZN, Howard/W9BVD, Norm/KF7IK, James/AF9A and Wayne/AI9Q (members of the Lambda Amateur Radio Club, LARC) will be active from March 5-10. They plan to be active on multi-band and multi-mode HF, and OSCAR-13 Mode B and Mode S. They claim this may be the first OSCAR-13 Mode S DXpedition. QSL for all operators is direct to their CBA.

VP5, TURKS & CAICOS ISLANDS. Tom/K2TD, John/N2VW and Mike/WB2YOF will be active now through part of February. The group will be using /VP5 and their own callsigns. No details of their activities were reported, but listen for instructions on where to QSL.

VP8, ANTARCTICA. Brian, VP8CFM, has been assigned as Base Commander at the British Antarctic Survey Base. He will be there for 14 months and will be active as either VP8HAL or his own call VP8CFM. QSL via GM4KLO.

VR6BB/VR6JJ DXPEDITION SUMMARY. Here is information about this operation's QSO totals. They made 35025 QSOs (VR6BB - 23311 / VR6JJ - 11714). Here is just a few of their totals by bands: 683 QSOs on 160 meters, 1291 QSOs on 80 meters, 23 QSOs on 75 meters, 2698 QSOs on 40 meters and 538 QSOs on 6 meters.

XE/XF1, MEXICO. Rick, NE8Z, will be operating from Puerto Vallarta, Mexico, as XE1/NI8Z from February 13-20. Activities will be on 160-10 meters (including the WARC bands) and the ARRL CW DX Contest. Frequencies: CW - 5 and 25 kHz up from band edge / SSB - Various. SPECIAL IOTA NOTE: Rick is planning to be active from Islas Marietas (NA-189) and Islas Los Arcos Mismaloya (IOTA unknown). Specific dates are unknown at this time,

but activity will be on CW (21005 and 14005 kHz) and SSB (21260 and 14260 kHz). Rick also mentions that he is required to take along a local Mexican amateur to these islands. His goal is to spend time on the WARC bands and 80/40 meters. QSL via K8LJG.

ZS0, PENGUIN ISLANDS. This may possibly be the last ZS0 operation. Ian, ZS9A, reports that Baldur, DJ6SI, is attempting to mount a trip to the Penguin Islands sometime around Feb 24th. The RSA will turn over both Walvis Bay and the Penguin Islands to Namibia at the end of February. No other further details are available at this time.

DAYTON DX DINNER ANNOUNCEMENT. The Southwest Ohio DX Association is pleased to announce the Ninth Annual DX Dinner which will be held on Friday, April 29th, 1994, at the Stouffer Center Plaza Hotel. There will be a cash bar at 6:30 with dinner at 7:15. Tickets must be purchased in advance, and are available from Scott Lehman, N9AG, PO Box 803, Greenville OH 45331. Tickets will be $27.00. Please make your check payable to SWODXA, and send an SASE for ticket return. Seating will be limited, so please order early. If you wish to sit as a group, it would be appreciated if you order as a group. All seats will be reserved. For further information, contact Scott Lehman, N9AG, at (513) 548-6230 or Steve Bolia, N8BJQ, at (513) 429-9954 voice/fax.

KEEP THOSE BALLOTS COMING! (Only a 1 weeks to go!) Ballots for the Third Annual OPDX/NODXA DX Survey can be found in OPDX.137. Ballots can be sent to the following packet and online addresses listed below.

FAX YOUR DX INFORMATION NOW! Faxing is available Monday/Wednesday/Friday from 0430 to 2330z only. The number is 216-237-8208 and the FAX card is sharing the same phone line as BARF-80 BBS using a data/fax/phone switch.

Excerpts and distribution of The OPDX Bulletin are granted as long as OPDX/BARF80 receive credit. To contribute DX info, call BARF-80 BBS online at 216-237-8208 14400/9600/2400/1200/300 and leave a message with the Sysop or send InterNet Mail to: aq474@cleveland.freenet.edu or send BitNet Mail to: aq474%cleveland.freenet@cunyvm or send PRODIGY Mail to: DFJH48A or send a message via packet to KB8NW @ WA8BXN.OH.USA.NA
/EX

602. OPDX/NODXA 1993 DX Survey

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 22:21:52 UTC
From: kb8nw@barf80.nshore.org
Message-ID: <$opdxnodxa.5.1994@ampr.org>
Source record: 272060
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB ALL @ ALLBBS $OPDXNODXA.5
OPDX/NODXA 1993 DX Survey

THE THIRD ANNUAL OPDX/NODXA DX SURVEY.
Here is your chance to be counted. Deadline will be January 31, 1994,
with results in February. The questions of the survey will deal with:

1) The DXer of the year. This is a DXer who you thought was outstanding
in operating and handling the pile-ups from their DXpedition.
2) DXpedition of the Year (Group and Indivdual). Choose the best and most
well organized DXpedition that met the needs of the DX community.
3) The 30 Most Wanted Countries. Choose your 30 most wanted countries.
4) OPTION: Your personal comments about DXing in 1993.

Please use the ballot below. Votes will only be accepted in the
following format below.

```
---------------------------------------------------------------------
Your | DXer of the Year| DXpedition of the| DXpedition of the
Callsign | (Person) | Year by a person | Year by a group
and QTH | | |
---------------------------------------------------------------------
CHOOSE YOUR MOST WANTED COUNTRIES. (Please list only 30 of your most
wanted countries. List CW and SSB modes separately.
CW - AB,CD,EF
SSB - GH,IJ
---------------------------------------------------------------------
Comments on DXing in 1993: (Text Any Length)
---------------------------------------------------------------------
```

* Just Fill-in The Blanks And Send It To One Of The Three Address:
"Packet Radio" - KB8NW @ WA8BXN.OH.USA.NA
"InterNet" - aq474@cleveland.freenet.edu
"PRODIGY" - DFJH48A

OPDX/NODXA DX Survey

Example Ballot:

```
---------------------------------------------------------------------
| | |
| | |
---------------------------------------------------------------------
CHOOSE YOUR MOST WANTED COUNTRIES. (Please list only 30 of your most
wanted countries. List CW and SSB modes separately.
CW -
```

SSB -

Comments: (Text Any Length)
I think DXing in 1993 was.....

/EX

603. RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 22:38:15 UTC
From: steven.rosenberg@support.com
Message-ID: <9401231438.A0004wk@support.com>
Source record: 272043

lyndon@unbc.edu (Lyndon Nerenberg) writes:

> Exactly. I picked up a pair of Ramsey's (2m, 440) to run on packet. Why?
> For one, it seemed silly to buy an all-singing all-dancing 400 memory PL
> rig just to wire down onto one frequency for packet. The Ramsey kit is
> easily interfaced to a packet modem.
>
> As for price, the Ramsey kit is marginally less expensive than a comparable
> single band radio WITH THE SAME FEATURES. I defy you to find a commercially
> manufactured 2m (or 440) rig, with as few features as the Ramsey, to compare
> the price to. When you do, *then* we'll argue about the relative expense of
> the Ramsey kit.

I'm curious, Lyndon, what kind of test equipment did you use to check
out the radios after you assembled them? How did the assembly go?

steven.rosenberg@support.com

KC6FYL

604. ANS-022 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 22:55:06 UTC
From: cowdin@pogo.DEn.mmc.COM
Message-ID: <199401232257.OAA06991@AMSAT.Org>
Source record: 272041

SB SAT @ AMSAT $ANS-022.01
STS-60 ASTRONAUTS GET CALL SIGNS

HR AMSAT NEWS SERVICE BULLETIN 022.01 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 22, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-022.01

STS-60 ASTRONAUTS ISSUED HAM CALL SIGNS

Astronauts Charles F. Bolden, Jr. of Columbia, South Carolina and Ronald M. Sega of Seabrook, Texas, have been issued amateur radio call signs in preparation for their joint U.S.-Russia science mission. The Spacehab science objectives are primarily micro-gravity oriented with emphasis on materials and life science. Bolden (KE4IQB) is commander of the space shuttle Discovery (OV-103) due for lift off on February 3, 1994, at 12:10 UTC from Cape Kennedy. Sega (now KC5ETH) is the second of four Mission Specialists. They plan to contact several schools as part of the SAREX program - including one in Russia. The flight of STS-60 represents an historic first, the first of several joint U.S.-Russian Space Shuttle flights planned in preparation for the development of the international Space Station. Veteran cosmonaut Sergei Krikalev (U5MIR) was chosen to be the first Russian to fly on the U.S. Space Shuttle. During the 8 day flight, Cosmonaut Krikalev will support the science operations on the Space Shuttle as Mission Specialist 4. Last year, Sergei attended the Dallas Ham-Com convention and said he would try to qualify for a U.S. license - but his training duties have prevented him from doing so. Since no reciprocal operating privileges exist between Russia and the United States, Sergei will operate amateur radio under Bolden's control operator authority. The possibility also exists for the first U.S. Space Shuttle to Mir Space Station (Russian astronaut-to-Russian cosmonaut) amateur radio contact! Three new Russian amateurs were launched on January 8, 1994 aboard a Soyuz rocket and docked at the MIR space station on January 10th. The new crew includes Viktor Afanasiev (commander) U9MIR, Yuri Usachev (flight engineer) R3MIR and Valerij Polyakov (doctor) U3MIR. They are using the call sign R0MIR on packet.

[The AMSAT News Service would like to thank W5YI for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-022.02
MICROSATS TURN 4 YEARS OLD!

HR AMSAT NEWS SERVICE BULLETIN 022.02 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 22, 1994
TO ALL RADIO AMATEURS BT

BID: $ANS-022.02

HAPPY 4TH BIRTHDAY To DOVE, PACSAT, WEBERSAT, And LUSAT!

Four years ago, four small cube-shaped satellites were launched from the Kourou, French Guyana spaceport aboard an Ariane rocket at 01:35 UTC, 21-JAN-90. They started a new era in radio amateur satellite comunications.

/EX
SB SAT @ AMSAT $ANS-022.03
STS-60 SAREX TWO WEEKS AWAY!

HR AMSAT NEWS SERVICE BULLETIN 022.03 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 22, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-022.03

STS-60 SAREX Mission Less Than Two Weeks Away

STS-60 is currently scheduled for launch on February 3, 1994 at 12:10 UTC. The flight of STS-60 represents an historic first -- the first joint U.S.-Russian Space Shuttle flight. This will be the first of several joint missions planned in preparation for the development of the international Space Station. Cosmonaut Sergei Krikalev, U5MIR, was chosen to be the first Russian to fly on the U.S. Space Shuttle. SAREX information for STS-60 including frequencies, callsigns and Keplerian elements, follows:

STS-60 Shuttle Amateur Radio Experiment (SAREX) Information Sheet

Mission: STS-60 Space Shuttle Discovery Wake Shield Facility & Spacehab-2 Mission

Launch: February 3, 1994, 12:10 UTC

Orbit: 57 degree inclination

Mission Length: 8 days (Nominal)

Amateur Radio
Operators: Charlie Bolden, KE4IQB, Ron Sega, KC5ETH,
Sergei Krikalev, U5MIR

Modes: FM Voice
Prime callsign: KE4IQB

Packet Radio
Callsign: W5RRR-1

Frequencies: All operations in split mode. Do not transmit on the downlink frequency.

Voice Freqs: Downlink: 145.55 MHz (Worldwide)
Uplinks: 144.91, 144.93, 144.95, 144.97, 144.99 MHz
(Except Europe)

144.70, 144.75, 144.80 MHz (Europe only)

Note: The crew will not favor any specific uplink frequency, so your
ability to work the crew will be the "luck of the draw."

Packet Freqs: Downlink: 145.55 MHz
Uplink:144.49 MHz

Info: Goddard Amateur Radio Club, WA3NAN, Greenbelt Maryland,
SAREX Bulletins and Shuttle Retransmissions
3860 KHz, 7185 KHz, 14,295 KHz, 21,395 KHz, 28,650 KHz and
147.45 MHz (FM)

Johnson Space Center ARC, W5RRR, Houston, Texas SAREX Bulletins
7225 KHz, 14,280 KHz, 21,395 KHz, 28,650 KHz, (SSB) and
146.64 MHz (FM)

ARRL Amateur Radio Station, W1AW, Newington, CT SAREX News
Bulletins 3990, 7290, 14,290, 18,160, 21,390, and 28,590 KHz and
147.555 MHz (FM)

Also, bulletins available on internet, via AMSAT ANS, Compuserve,
and your local PBSS.

School Group Participation: 5 school groups will participate in
SAREX with pre-scheduled direct and telebridge contacts. These
include 4 in the U.S. and one in Russia.

Prelaunch Keplerian Elements:

The following Keplerian Elements are provided by Gil Carman, WA5NOM
at the Johnson Space Center ARC:

Satellite: STS-60
Catalog number: 00060
Epoch time: 94034.56756353 (03 FEB 94 13:37:17.49 UTC)
Element set: 004
Inclination: 57.0033 deg
RA of node: 215.8607 deg Space Shuttle Flight STS-60
Eccentricity: .0010675 Prelaunch Element set JSC-004
Arg of perigee: 264.1500 deg Launch: 03 FEB 94 12:10 UTC
Mean anomaly: 95.8328 deg
Mean motion: 15.72291901 rev/day Gil Carman, WA5NOM
Decay rate: 3.3600e-04 rev/day*2 NASA Johnson Space Center
Epoch rev: 2
Checksum: 254

/EX
SB SAT @ AMSAT $ANS-022.05
AO-13 OPERATIONS NET SCHEDS

HR AMSAT NEWS SERVICE BULLETIN 022.05 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 22, 1994
TO ALL RADIO AMATEURS BT

BID: $ANS-022.05

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date UTC Mode Phs NCS Alt NCS

06-Feb-94 0530 B 057 W5IU WA5ZIB
12-Feb-94 2200 B 063 W9ODI VE2LVC
20-Feb-94 0200 B 070 WA5ZIB W5IU
28-Feb-94 0430 B 068 WB6LLO W9ODI

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. If neither of the Net Control Stations show up, any participant is invited to act as the NCS.

/EX
SB SAT @ AMSAT $ANS-022.06
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 022.06 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 22, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-022.06

Weekly OSCAR Status Reports: 21-JAN-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1993 Dec 27-Jan 31
Mode-B : MA 0 to MA 180 | OFF
Mode-B : MA 180 to MA 220 |
Mode-S : MA 220 to MA 230 |<- S transponder; B trsp. is OFF
Mode-BS : MA 230 to MA 250 | Blon/Blat 240/-5
Mode-B : MA 250 to MA 256 | OFF
Omnis : MA 250 to MA 150 | Move to attitude 180/0, 31-Jan-94

L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Jan 31-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 145 |<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 240/0, Apr 04
Poor Sun angle and battery testing need maximum OFF time.

[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current FO-20 operating schedule:
From January '94 thru March '94, the analog mode and the
digital mode will be on alternately for a week at a time.
ANALOG MODE:
26-JAN-94 8:20 -TO- 02-FEB-94 6:50 UTC
09-FEB-94 7:15 -TO- 16-FEB-94 7:40 UTC
23-FEB-94 8:05 -TO- 02-MAR-94 6:40 UTC
09-MAR-94 7:05 -TO- 16-MAR-94 7:30 UTC
23-MAR-94 7:52 -TO- 30-MAR-94 8:15 UTC
DIGITAL MODE: Unless otherwise noted above.
[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

AO-16: Operating normally. [WH6I]

LO-19: Operating normally. [WH6I]

KO-23: Up and running. Busy as usual. The most recent image files have
been blank. [WH6I]

PoSAT: G3AAJ reports than an agreement has been signed regarding the
PoSAT schedule and that amateur access to PoSAT will commence on
the 28th or 29th of January '94. [G3IOR]

KO-25: G3RWL had a personal communication from the ground controllers
stating that KO-25 will open up for amateur radio communications
in early Febuary '94. [G3IOR]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly
OSCAR status reports. If you have a favorite OSCAR which you work on a
regular basis and would like to contribute to this bulletin, please send
your observations to WD0HHU at his CompuServe address of 70524,2272, on
INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO
area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current
set of orbital elements are not generating the correct AOS/LOS times at
your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you
provide will be of value to all OSCAR enthusiasts.

/EX

605. Re: Ftp for macintosh/radio????

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-23 23:35:44 UTC
From: gg0o+@andrew.cmu.edu
Message-ID: <YhEkbEa00iV3A6M_g3@andrew.cmu.edu>
Source record: 272042

Try akutaktak.andrew.cmu.edu - There's you'll find SOFTKISS, a chooser-level KISS emulator, along with other stuff. The author of SOFTKISS (a CMU student), owns a Mac; you should be able to get more info from him as well.

73...

606. Tektronix O'Scope for Sale

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 00:18:09 UTC
From: exejecx@gsusgi2.gsu.edu
Message-ID: <exejecx.759370689@gsusgi1.gsu.edu>
Source record: 272047

I have (1) Tektronix Model 2215 60MHZ Dual Trace O'Scope in
excellent condition. With front cover and 2 probes.
Make offer. Contact Jim Carroll
1-404-978-2760
exejecx@gsusgi2.gsu.edu

607. Yellowstone Park Served by Repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 00:59:59 UTC
From: miles@mbs.telesys.utexas.edu
Message-ID: <miles-230194185741@slip-2-64.ots.utexas.edu>
Source record: 272044

Is Yellowstone served by one or more repeaters? Does any repeater offer coverage of much, most or all of the park?

Thank you.

= = = = = = = = = = = = = = = = = = = =
_ Miles Abernathy, N5KOB =
| |__ miles@mbs.telesys.utexas.edu =
_| | POB 7580, Austin TX 78713 =
\ * / University of Texas @ Austin =
\/ tel. (512) 471-6521 U.S.A. =
= = = = = = = = = = = = = = = = = = = =

608. Re: Global Alert For All: Jesus is Comin

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 01:48:45 UTC
From: jimbedient@delphi.com
Message-ID: <9401232043591.jimbedient.DLITE@delphi.com>
Source record: 272076
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc

```
>I remember reading somewhere that the Lost Ark of the Covenant was really an
>extraterrestrial sub-space transceiver, left behind by the same beings that
>gave some of their construction and architecture expertise to the Egyptians,
>Mayans, etc.

>--
>|O| Blake Schreckenbach, | "It's a 106 miles to Chicago, we've got a full
> |O
>|
>|O| KC5DRP | tank of gas, half a packet of cigarettes, It's
> |O
>|
>|O| University of Texas | dark, and we're wearing sunglasses. Hit it."
> |O
>|
>|O| at San Antonio | -- Jake & Elwood Blues | blake@lonestar.utsa.edu
>|O
> |

Cool. Do you have it for sale?

Jim WH6EF
```

609. Re: RAMSEY FX TRANSCEIVERS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 02:14:17 UTC
From: kg7bk@indirect.com
Message-ID: <CK43Jv.K9n@news.direct.net>
Source record: 272050

Greg Bullough (greg@netcom.com) wrote:
: ...and f'god's sake give people an option outside of the diode matrix.
: Even if it's an add-on kit. A friend of mine and I drew up an arrangement
: that used a couple of EPROMs and a thumbwheel switch to twiddle the PLL
: lines. Would have cost fifty or so bucks and a lot of time to make one,
: probably twenty bucks each in 500 quantity. Greg

The last FX-146 kit that I ordered from Ramsey had a coupon for just such
an EPROM controller from TechnoLogic Concepts, 1803 Mission St., Suite 308,
Santa Cruz, CA 95060.

73, Cecil, kg7bk@indirect.com

610. Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 03:06:26 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <CK45ys.9II@ve6mgs.ampr.ab.ca>
Source record: 272056
Cross-posted to: can.forsale,rec.radio.amateur.misc

dominique.cormann@canrem.com (Dominique Cormann) writes:

>I have the following for sale or trade:
< A list of Equipment illegal for use on CB frequencies deleted. It is >
< illegal to sell this equipment for use in the CB service. Also deleted>
< are the comments of misplaced pride of it's operation on that service >

I am responding publicly about this, since the machine Dominique uses, a BBS called Canada Remote (canrem) Systems situated in Toronto Ontario Canada, is incapable of receiving inbound electronic mail.

Dominique, I have records of your previous postings indicating that your are using this equipment illegally in the CB (GMRS Class D) service (December 17 1993). I have forwarded this information, along with the previous articles where you admitted using the equipment illegally, to the Department for Science and Technology Canada, formerly Communications Canada, for them to deal with as they wish.

>The reason I am selling this, is that I am getting my HAM license soon, and
>am starting to look for a 2 meter radio. I will also trade the above setup,
>for a good 2 meter setup, make me an offer.

Not if I can help it. I will use any influence I have left as the Former Public Service Director of the Northern Alberta Radio Club, and any avenues of information transfer, such as the Packet Radio system, to ensure that people of your kind are carefully scrutinized. This will not prevent you receiving your ticket, but it may make you very uncomfortable when your past catches up with you.

For your sake, I do hope you have a very thick and resistent skin, and that you prove me wrong in my assumptions that you will provide us all a poor example of of how one disrespects the appropriate regulations of our fine Amateur Radio (HAM) service. If my assumption is correct, I do hope that the self policing action of the Amateur Radio Service is up to the task of making your life a living hell ...

Ciao, 73 de VE6MGS/Mark Salyzyn -sk-

611. International Callsign Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 03:38:02 UTC
From: k1zat@bah.COM
Message-ID: <Pine.3.05.9401232202.B13715-a100000@booz.bah.com>
Source record: 272052

Does anyone know of a server that can be TELNET'd that has a
INTERNATIONAL callsign data base or CD-ROM on it? Whats
the address? Buffalo.edu does not support international
that I know of.

/*\
! JD DELANCY | Lizzie Borden took an axe !
! VM: 1-800-862-4511 Box 9276 | And plunged it deep in to the !
! VOICE: 301-763-4943 or 3474 | VAX.. !
! | Don't you just hate people who !
! Email: k1zat@bah.com | do all the things YOU wanted to !
! AX25: K1ZAT@K3HKI.#SOMD.MD.NA | do ?? !
/*\

612. Advanced Computer Controls info

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 04:28:38 UTC
From: afabro@magnus.acs.ohio-state.edu
Message-ID: <2hvipm$dld@charm.magnus.acs.ohio-state.edu>
Source record: 272046

73,

Tony N8RRRB

Anthony P. Fabro :"This is what life is about, working."
afabro@magnus.acs.ohio-state.edu : Gary Burbank
Amateur Radio Call N8RRB : Cincinnati Radio Personality

---

613. Daily Summary of Solar Geophysical Activity for 23 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 04:47:20 UTC
From: oler@rho.uleth.ca
Message-ID: <9401240447.AA21472@rho.uleth.ca>
Source record: 272058
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

```
/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

23 JANUARY, 1994

/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT
------------------------------------------------------------

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 023, 01/23/94
10.7 FLUX=118.3 90-AVG=103 SSN=105 BKI=2111 0102 BAI=003
BGND-XRAY=B2.5 FLU1=6.0E+05 FLU10=9.5E+03 PKI=2212 2122 PAI=005
BOU-DEV=011,008,008,007,003,008,002,010 DEV-AVG=007 NT SWF=00:000
XRAY-MAX= C2.9 @ 1303UT XRAY-MIN= B2.2 @ 0307UT XRAY-AVG= B3.4
NEUTN-MAX= +001% @ 2140UT NEUTN-MIN= -003% @ 0610UT NEUTN-AVG= -0.2%
PCA-MAX= +0.1DB @ 0755UT PCA-MIN= -0.3DB @ 1530UT PCA-AVG= +0.0DB
BOUTF-MAX=55349NT @ 1502UT BOUTF-MIN=55324NT @ 1906UT BOUTF-AVG=55339NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+073,+000,+000
GOES6-MAX=P:+132NT@ 1657UT GOES6-MIN=N:-051NT@ 0721UT G6-AVG=+097,+029,-027
FLUXFCST=STD:110,110,105;SESC:110,110,105 BAI/PAI-FCST=005,005,020/010,010,018
KFCST=1111 2111 1111 2111 27DAY-AP=005,003 27DAY-KP=1121 2211 0100 1122
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 22 JAN 94 was 50.0.
The Full Kp Indices for 22 JAN 94 are: 3+ 2- 1+ 2- 2- 1+ 2- 2o

SYNOPSIS OF ACT
--------------------

Solar activity was low for the past 24 hours. Region 7654
(N09W21) produced one C-class flare and maintained its general
complexity in white light and H-alpha. New Region 7660
(S08E71) rotated over the east limb as bright plage that may
contain small spots. Surging was reported on the east limb near
N08 and S01 that may be signaling the return of regions that
were active last rotation.

STD: Region 7654 has been reclassified as having a delta
configuration.
```

Solar activity forecast: solar activity is expected to be
low. Isolated C-class flares are possible from Region 7654.

The geomagnetic field has been at quiet levels for
the past 24 hours.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet for the next two days, becoming active
by the end of the forecast period in response to disturbed
solar wind associated with a filament disappearance on
21 Jan and a positive polarity, cross-equatorial coronal hole
near solar disk center today.

Event probabilities 24 jan-26 jan

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 24 jan-26 jan

A. Middle Latitudes
Active 05/05/30
Minor Storm 01/05/20
Major-Severe Storm 01/01/05

B. High Latitudes
Active 05/05/35
Minor Storm 01/05/25
Major-Severe Storm 01/01/05

HF propagation conditions were normal over all regions.
Good propagation is expected to persist over the next 48 hours,
through 25 January inclusive. High and polar latitude paths
may see minor signal degradation return on 26 January in
response to the above-mentioned filament and coronal hole
related disturbances.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N05W36 220 0110 HSX 02 001 ALPHA
7654 N10W22 206 0560 DKI 08 023 BET
7657 N13W50 234 0060 DAO 08 009 BET
7658 N12E02 182 0030 CRO 04 007 BET
7659 S14E36 148 0010 BXO 07 004 BET
7660 S08E70 114 0000 AXX 00 001 ALPHA
REGIONS DUE TO RET
NMBR LAT
7645 N13 085

7646 S09 087
7649 S19 079

LISTING OF SOLAR ENERGETIC EVENTS FOR 23 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1544 1544 1545 170
1822 1824 1824 180

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 23 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 23/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
22 Jan: 0102 0109 0114 C1.6 SF 7654 N10W00
0411 0414 0420 SF 7657 N11W26
0619 0622 0625 B3.5
1911 1919 1926 B6.2 SF 7654 N08W10

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Region 7654: 1 0 0 2 0 0 0 0 002 (50.0)
Region 7657: 0 0 0 1 0 0 0 0 001 (25.0)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (25.0)

Total Events: 004 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
22 Jan: 0102 0109 0114 C1.6 SF 7654 N10W00 III
1911 1919 1926 B6.2 SF 7654 N08W10 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the

x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

614. Warning About FT-415/815 mod on world

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 05:19:21 UTC
From: ijordan@freenet2.scri.fsu.edu
Message-ID: <2hvlop$1g9@mailer.fsu.edu>
Source record: 272051

```
--
* * Ian Jordan * *
```

615. nearby broadcast antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 05:59:51 UTC
From: tmrdpsrs@engvms.unl.edu
Message-ID: <1994Jan23.235951.1@engvms.unl.edu>
Source record: 272053

Hello All,

I have a question about a possible interference problem that I may soon be experiencing.

I am considering a move from my current QTH to a new apartment. However, the apartment I'm considering is located immediately next to three transmitting towers. All three are commercial broadcast stations, one FM (102.7 MHz), one TV (Channel 10) and one AM (1240 kHz). I am currently active on 2 m, 440 MHz, and am very active on HF for shortwave listening and will soon be working the HF ham bands. I am worried that moving so close to the towers will cause problems with the performance of my equipment (noise, desensing, images, intermod, etc.)
I plan to set up some dipoles very close to the tower sites and am worried that it could ruin my enjoyment of the radio hobby if all the RF causes problems. Has anybody had any experience with this??? Is it anything to worry about??? Any experiences anyone has had (or even just bold speculations from more seasoned operators/listeners) would be greatly appreciated.

Thanks in advance,

Ron Synowicki, KG0HX
TMRDPSRS@ENGVMS.UNL.EDU

616. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 06:06:26 UTC
From: wb6w@netcom.com
Message-ID: <wb6wCK4EAq.I8w@netcom.com>
Source record: 272054

Steven Jackson (jackson@longlast.cs.nyu.edu) wrote:
: Hello all, and good luck to the LA residents.

: What kind of communications did amateurs take part in during the emergency
: out there? I love to speculate (the less you know, the more you guess) but
: I would like to know for sure what kind of things kick into action when
: something like that strikes.

I listened to some of the comms in Socal. What I heard reminded me very
much of what was going on here (NorCal) after our 7.1 in '89. CelTel
has had a LOT of publicity as has Internet. At the same time, I've seen
NO media mention of Amateur Radio activity down there. Sheesh!

While CelTel seems to indicate that any boob can provide comms in a disaster,
keep in mind that CelTel relies on landline and that the CelTel "HT" is
just as subject to dead battery syndrome and a 2m HT. The difference is that
the ham has (hopefully) had some training on *HOW* to handle disaster comms
and some idea of where hir next battery charge is coming from.

The experience with cell tel in '89 was that it didn't work very well when
the batteries were charge and not at all when they weren't.

- Glenn wb6w

617. Re: LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 06:21:07 UTC
From: ez006683@othello.ucdavis.edu
Message-ID: <CK4Ez8.K6z@ucdavis.edu>
Source record: 272055

Chris Thomas (CSMSCST@MVS.OAC.UCLA.EDU) wrote:

: While I understand your (theoretical) point, as a matter of fact
: several of our employees had *much better* luck with their cell
: phones than with their home phones in reaching us in the first 24
: hrs following the quake. One of our managers was able to stay in
: touch *only* via her cell phone - she had no trouble getting a dial
: tone on the cell system, while her home phone had a several minute

Do you work for the University? If so why do UCLA employees need
cell-phones? No wonder my reg fees are going up another $600 next year!
Gotta keep our secretaries and ticket writers in BMW's this is So. Cal.
after all!

: wait for a dial tone, and then usually got an "all circuits busy"
: msg after dialing.

Funny, I've owned cell=phones in the past and I never heard a dial tone!
(on the cell phone anyway :-))

: -- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)I
Hope I'm wrong and we don't really pay the staff that much.

73,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
--

618. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 09:43:30 UTC
From: jeffl@comix.UUCP
Message-ID: <744@comix.UUCP>
Source record: 272069

In article <9401230124.A9637wk@support.com> steven.rosenberg@support.com writes:
>If this is the case, shouldn't Ramsay's ads lead off with the following
>words in big letters:
>DO NOT USE THIS AS YOUR PRIMARY RADIO. ONLY PURCHASE THIS KIT IF YOU
>PRIZE THE THRILL OF CONSTRUCTION FAR ABOVE ANY PRACTICAL USE OF SAID
>EQUIPMENT.
>On the contrary, I think Ramsay is trying to push these kits to people
>who "can't afford" a pre-made Japanese radio. And that is a travesty.
>Steven Rosenberg, KC6FYL

Heh-heh. I doubt that the thrill of construction would be attempted
unless one were reasonably certain of the outcome. One of the major
problems with the current crop of kit manufacturers is that they do
NOT offer an assembled and tested version as Heathkit did. I'm sure
every customer wonders whether the kit has something wrong that would
make the sale of the assembled unit difficult. The answer is that
the typical current product is machine assembled and that the technology
of the human assembled kits and the machine assembled Japanese radios
are radically different. Pretend that you were given all the parts,
pieces, and docs necessary to assemble your favorite mobile radio.
Lots of surface mount parts, miniature connectors, flex boards,
fragile LCD displays, and sub-min screws. I could probably assemble
it (because I've built products as bad), but suspect that the average
ham would find it impossible. So the kit manufacturer uses technology
where the builder has at least a chance of success.

There was also some question of the type of test equipment required.
If you know what you're doing, nothing more than a watts-guesser,
voltmeter, oscilloscope, and another radio is needed. Most of the
tuned circuits can be peaked instead of swept. A known weak on
the air signal will suffice for the receiver. A scanner with
a discriminator output can be used to set the transmitter frequency.
The discriminator audio (not the speaker audio) from the scanner
can be used to set the tx deviation against a known transmitter.
A sweep generator, spectrum analyzer, and a service monitor are
nice, but not necessary.

Where I see the Ramsey kits are from builders that want me to
either "clean it up" or "make it work". Usually the problem is
creative assembly, sloppy soldering, or mechanical (case) problems.
I've helped out with 3 vhf kits and know about 2 others.

There is an interesting difference between the builders and
what we used to call the "appliance operators". Every once in
a while, I drag my Cushman CE-6 service monitor to the repeater

site and call out tx frequency and deviation for everyone checking
into the local net. I've noticed that the builders tend to
take my numbers seriously while the others pretend that there
is no problem. (I have a standing offer to set the mic gain, deviation,
and tx frequency on anything a club member can drag into the office.)
An amazing number of operators literally don't care what they sound
like on the air and expect everyone to tolerate their over-deviation,
buzz, alternator whine, and distortion. Yech.

--

Jeff Liebermann Box 272 1540 Jackson Ave Ben Lomond CA 95005
408.336.2558 voice wb6ssy@ki6eh.#nocal.ca.usa wb6ssy.ampr.org [44.4.18.10]
408.699.0483 digital_pager 73557,2074 cis [don't]
jeffl@comix.santa-cruz.ca.us scruz.ucsc.edu!comix!jeffl

619. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 13:10:20 UTC
From: mosier@fagan.uncg.edu
Message-ID: <mosier.63.0@fagan.uncg.edu>
Source record: 272062

In article <2hmper$ppo@solaris.cc.vt.edu> benchoff@groupw.cns.vt.edu (Phil Benchoff) writes:
>I know this has been discussed several times on this list. I am
>looking for a list of famous hams.

Here's my list, gleaned from others:

SOME FAMOUS HAMS...

9K2CS Prince Yousuf Al-Sabah
9M1 King of Malaya
EA0JC Juan Carlos, King of Spain
FO5GJ Marlon Brando aka Martin Brandeaux, actor
G3TZH Tony Dolby, brother of "the" Dolby
GB1MIR Helen Sharman, astronaut
HS1A Bhumiphol Adulayadej, King of Thailand
JY1 King Hussein of Jordan
JY2 Queen of above
K2ORS Jean Shepard, author
K4LIB Arthur Godfrey, TV performer (SK)
K6DUE Roy Neal, television reporter
K7TA Clifford Stoll, author & scientist
K7UGA Senator Barry Goldwater
KB2GSD Walter Cronkite, newsman
KC4OCA Gordon Barnes, weatherman
KD6OY Garry Shandling, comedian
LU1SM Carlos Saul Menem, President of Argentina
N4KET David French, CNN newsman
N4RH Ralph Haller, FCC Public Radio Bureau chief
N6FUP Stu Cook, baseball player
N6KGB Stewart Granger (born James Stewart), actor
N6YOS Priscilla Presley, actress
NK7U Joe Rudi, baseball player
SU1VN/P Prince Talal of Saudi Arabia
SV2ASP/A Monk Apollo
U2MIR/UV3AM Musa Manarov, cosmonaut
UA1LO Yuri Gagarin, cosmonaut (SK)
VK2KB Sir Allan Fairhall, politician
VU2RG Rajiv Gandhi, Prime Minister of India (SK)
VU2SON Sonia Gandhi, XYL of VU2RG
W0ORE Owen Garriot, astronaut
W5LFL Tony England, astronaut
W6EZV General Curtis LeMay (SK)
W6QYI Cardinal Roger Mahony
W6ZH Herbert Hoover Jr (ARRL President, son of HH) (SK)

W8JK John Kraus (astronomer/electrical engineer/antenna guru)
WA4CZD Chet Atkins, guitarist
WA4SIR Ron Parise, astronaut
WA7WYV Andy Griffith, actor
WB4KCG Ronnie Milsap, singer
WB6ACU Joe Walsh, singer
WB6RER Andy Devine, actor (SK)
OE3AH Anton Hapsburg, Pretender to throne of Austro-Hungarian Empire
KZ3Y Prophet Elijah
VR6TC Tom Christian, great (great-great ??) grandson of Fletcher
Christian, from the original Bounty mutineers. He lives on Pitcairn Island.

EVEN MORE FAMOUS HAMS...

KA9FAT The Maytag repairman
SW1SH Inventor of the intermittent windshield wipers
V0LVO Famous car maker (and his true QTH!)
Mc8HAM CEO of McDonald's
PER0T A recent presidential candidate
AX1GOP Another recent presidential candidate
JA3NYC Owner of Empire State Building
VE3WON Manager, Toronto Blue Jays
A1PIG Madonna
IM6GUN Matt Dillon (Gunsmoke)
N3POP Orville Reddenbacker
KA4CNN Ted Turner
CU5YRS Mike Tyson
CU8YRS Jim Bakker
N5KKK David Duke
G3BYE Princess Dianna
N6ET Steven Spielberg
W2TOP/10 David Letterman

AND SOME SILENT KEYS...

K1NG Elvis Presley
K0MOO Merlin Perkins
W6FLY Amelia Earhart
P0LKA Lawrence Welk
K0ZAP Nicolai Tesla
C0ORS Adolph Coors
W2UAW Jimmy Hoffa
K2SNL John Balluchi
W8CAR Henry Ford
W4KFC Col. Sanders

AND A FEW OTHER FAMOUS ONES HEARD ON THE AIR...

RG8U
R2D2

steve
mosier@fagan.uncg.edu

620. Icom tuning dial

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 13:34:04 UTC
From: jwa@tellabs.com
Message-ID: <1994Jan24.133404.29854@tellab5.tellabs.com>
Source record: 271982

I purchased an Icom 745 about two weeks ago.
After connecting it to my Kenwood PS-50 power
supply (they are compatable), I noticed, that
the VFO dial only tuned the radio about 100 Hz
per 5 revolutions when the TS button was in.

My Icom R71 moved about 10 kHz per revolution.
I came to the conclusion that there was something
wrong with the rotary sensor unit.

Icom radios use a rotary sensor to detect the rotation
of the tuning knob. The sensor is a phonolic board that
has switch contacts plated on the surface. It also has
a rotor with a metal wiper.

The wiper is made up of very fine wires that are smaller than
human hairs. The rotor moves along three plated switch tracks
on a phonolic board. One track is a common ring that connects
to the center solder tab on the board. The inner and outer
tracks have alternating squares and connect to the outer pins.
When the wiper moves along the tracks it makes and brakes
the connection between the inner and outer rings. The middle
ring connects to the + 5 volt supply.

I called Icom and the replacement cost $50.00!! I decided it
would be cheaper to repair the part. Also, in order to change
it, the front panel will have to be removed.

I tried contact cleaner and WD-40 but it didn't work. The part
is simply worn out. After connecting a scope to the outer contacts
I noticed that there was a considerable amount of contact bounce.

The outer pins of the rotary dial is connected to the micro-
processor and the inner pin connects to +5 volts. The contact
bounce is probably confusing the uP. I connected a .001
capacitor to each outer lead and the other end of each capacitor
to the inner lead. The bounce was cleaned up and tuning knob
works fine!

I saved my self $50.00 and the aggravation of removing the
radio's front panel. I'm shure, sooner or later, it will
ware out completely but I did buy some time.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-4590

1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440
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*
THE BOWTIE FILTER

621. Amateur Radio Newsline #858 21 Jan 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 13:56:24 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <fZyGjGG8yLpG053yn@dorsai.dorsai.org>
Source record: 272070
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text is transcribed from the audio service by Dale Cary and is first published on Genie.

Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #108 - POSTED 01/22/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newsline is posted on this CBBS twice monthly. For current information updates, please call

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Los Angeles..................... (213) 462-0008
Los Angeles (Instant Update Line)..... (805) 296-2407
Seattle.......................... (206) 368-3969
Seattle.......................... (206) 281-8455
Tacoma........................... (206) 927-7373
Louisville....................... (502) 894-8559
Dayton........................... (513) 275-9991
Chicago.......................... (708) 289-0423
New York City.................... (718) 353-2801
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Melbourne, FL..... (407) 259-4479

For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

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For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

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Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[858]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not for *
* air over ham radio. Repeat, not for broadcast. This is just *
* a reminder that the address for the Newsline Support Fund is *
* Newsline, in care of Dr. Norm Chalfin, K6PGX, Post Office *
* Box 463, Pasadena, CA 91102. Again, and as always, we thank *
* you. That ends the closed circuit with Newsline report *
* number 858 for release on Friday January 21, 1994. *
* *
* *

The following is a QST

Californians are awakened to one of the biggest quakes in history. As usual, Amateur Radio plays a key role in health and welfare.

*****
CALIFORNIA QUAKE '94

At 4:31 am a tremor of tremendous magnitude rocked the Los Angeles basin. Almost immediately, communications in and out of

the nations second largest city became nearly impossible. Phone networks and other traditional means of communications became overloaded and useless. But, as usual, years of training resulted in amateur radio coming to the rescue in one of the most heroic stories in the history of our hobby.
"The wake up call came at 4:31 am last Monday morning and within seconds Los Angeles area hams had already swung into action. The quake was centered in the San Fernando Valley just northwest of Los Angeles. First came the work of the Public Seismic Network. A collection of hams and amateur seismologists who meet weekly on the air to compare data collected against actual seismic events. When an area event occurs, they collect felt reports on the air. And can often locate the general area of the quake within minutes by this method.
Handling this flood of calls, some under very difficult conditions, was Dorothy Darby, N6ZNC. Within the first half hour following the quake the Los Angeles RACES Organization known as the Disaster Communications Service was on the air from many of the Sheriffs stations in the area. Providing interagency communications between county sheriff, fire and the city organizations, as well as area hospitals and shelters. This reporter being the District Communications Officer for the Cresenta Valley Sheriffs Station was kept busy providing operators for that location which works with the cities of Pasadena, Glendale, and Burbank. The Glendale operators had their own set of problems, as the parking structure at the police station, where the emergency operations center is located, had collapsed destroying a number of city vehicles in the process. The hams responding to the city of San Fernando facility found it without power mains and generator power. And ended up rigging a handheld to the stations rooftop antenna. As we go to air hams are still on duty throughout the Los Angeles Basin keeping the lines of communications open. And this particular ham got reminded on more than one occasion of his phonetics, Tiny California Quake." Andy Jarema, K6TCQ.

"Santa Clarita, CA, a city that few of you had heard of until now, when this quake put it on the map. This is a community that has been cut off from the rest of Los Angeles after the collapse of the Highway 14 overpass onto Interstate 5. There was no power for twenty one hours. Telephone service, especially out of state calling is still sporadic. Except for ham radio, Santa Clarita was a community isolated from the city to the south.
I got a chance to see the devastation of the Northridge quake first hand as I drove into work on Tuesday afternoon. A trip that normally takes only 40 minutes dragged on for the better part of four and a half hours. As I sat bumper to bumper on a single lane road that parallels Interstate 5, the destructive force of this quake was evident to everywhere you looked. Highways torn apart. Twisted rebar. Mashed concrete.

But we Angrlenos seem to accept this type of natural fury as being a part of the price we have to pay to live here. So, as I inched my way into the city I also scanned the three most heavily used VHF and UHF bands in the area.
Many repeaters normally alive with chatter were silent. They were victims of being on remote mountaintops that had lost power. But other channels were alive. Repeaters whose owners had been smart enough to install battery or solar power to take over when city power failed. Each was loaded with some sort of quake related traffic. 147.705 was dedicated to working with the Red Cross and still is. 146.79 was holding forth with Santa Clarita Valley Emergency Communications. 224.52 and 224.58 were providing road closure information. 224.52 was also making its autopatch available for health and welfare calls. The number of repeaters taking part is list far to long to report here. These are just a few that I heard personally.
Later in the afternoon I used the ham station at work to scan the high frequency bands. Emergency communications nets were everywhere on 75, 40 and 20 meters. Most were associated with the ARRL'S Amateur Radio Emergency Service. Each was handling a myriad of health and welfare messages into and out of the Los Angeles Metro Area.
As we go to air, many of these nets are still on the air. Telephone service is returning to normal and many amateur radio assistance operations will soon be winding down. But the ongoing aftershocks of the Northridge quake are a constant reminder of what it costs to live here in the southland, and it's why being a ham can be vital to your very survival." Bill Pasternak, WA6ITF.
As we go to air, the California earthquake story is still emerging. We'll keep you updated in future Newsline reports.

*****
AMSAT-NA OPPOSES FCC "INSTANT LICENSING" PROPOSAL

AMSAT-North America says it does not want to see an instant ham license in the United States. The ham radio space research organization has filed comments with the FCC in opposition to the instant licensing proposal contained in a Notice of Proposed Rule Making, PR Docket 93.267.
Under the FCC's proposal, unlicensed persons who pass an amateur license examination for the first time would immediately be permitted to operate for up to 120 days. This, using self-assigned call signs, while waiting for their licenses to arrive.
But in its opposition filing, AMSAT cited the potential for abuse by persons who have no intention of taking a ham radio test and want to be able to bootleg without being noticed. It also says that it will be impossible to verify the self-assigned calls since they would not be registered in any data base.
AMSAT very strongly believes that the guaranteed anonymity of a self-assigned call sign system would multiply the potential for

interference by unlicensed persons with amateur radio operation. This the organization says is particularly relevant to the Amateur satellite service because the 2-meter, 10-meter and 70-cm bands, which presently contain the most popular satellite uplinks and downlinks, are also among the most likely to be affected by such interference. They say that the international nature of ham radio satellite operation means that problems could be caused for amateurs, and governmental authorities, in other countries as well as in the United States.
As an alternative to instant licensing, AMSAT urges the FCC to pursue the use of electronic filing and processing of amateur license applications. This is the same position that has been taken by the American Radio Relay League.

*****
ARRL BOARD MEETS

The American Radio Relay League's Board of Directors is holding its first annual meeting of 1994 in a very chilly Hartford, Connecticut as this newscast is going to air. The board is expected to take action on a number of important matters including the FCC proposal for a vanity call sign assignment system. Tune into Newsline for a full report on ARRL board actions next week.

*****
VANITY CALL DOCKET

The text of the NPRM in Personal Radio Docket 93-305, dealing with the Commission's proposed Vanity Call Sign program, is available electronically on America Online, Compuserve, Genie, BIX and the National Video Network. On most of these services the file is named vanity with a possible file extension designator attached.
The same information is also available over Internet from the ARRL information file server. To obtain it, simply send a message over Internet to infoarrl.org that says only send FCC-93-305. That's infoarrl.org and the message must only read SEND FCC-93-305.
The file is also available for downloading from the ARRL bulletin board at 203-666-0578 with the file name vanity. It will be printed in February issue of QST magazine.

*****
STROKE CW

When a ham in Fargo, North Dakota suffered a stroke, he lost almost all ability to communicate. His voice was gone, and he was immobilized. But he could tap out morse code with his finger and that gave him hope. It became the job of Paul Linnell, WQ0M to make known the thoughts and needs of Kurt Hall, W0AZV.
"The first time I was up to see him we tried communicating by

having Kurt tap out CW on my hand and on my arm and also by trying to squeeze my hand. Because he was so weak, it was very difficult to make a whole lot of sense out of the CW that he sending, but he did let us know that he could communicate.
So my second trip up I brought along a straight key and a little oscillator. I knew we were in for a problem when Kurt, when he got a hold of the key wanted to move it sideways. I then thought he was used to a bug. He immediately sent out the word bug on the straight key so I knew we were going to have some problems. Kurt is right handed and here he was laying in the hospital bed tying to send with his left hand. Also being very weak from the stroke and he was still able to send my call and his call. And even when I left that day sent 73 so when knew he was able to communicate." Paul Linnel, WQ0M.
Newsline joins with the amateur radio community of Fargo, North Dakota a full and speedy recovery.

*****
ISRAEL ACCEPTS CEPT LICENSE

From overseas, word that Israel has joined the move toward a world-wide universal ham radio license. IK1PHC reports that the Israeli Ministry of Post and Telecommunications has accepted CEPT recommendation TR 61-01. This means that any ham who holds a license in any nation that is a signatory to the CEPT agreement can freely operate an amateur station in Israel without asking for a reciprocal permit. No effective date of the change has been announced.

*****
UK SCANNER STING

For the second time in less than a year, authorities in the United Kingdom have again tuned the tables on scanner enthusiasts who eavesdrop on emergency service radio channels. This, by issuing a false distress call and then arresting those who showed up on the scene.
As 1993 drew to a close South Yorkshire police launched the undercover sting after finding evidence that criminals were cashing in on information that they intercepted over the airwaves. As they did last spring, police dispatchers broadcast a phony report that aliens were invading earth and had been spotted in a nearby town. Yes, aliens, as in little green men from Mars, and the like.
Anyhow, reports are that several people who showed up at the address given in the bulletin. They were arrested at the scene and charged with acting illegally on information broadcast in an official police radio channel.
Under British law it is not illegal for scanner buffs to eavesdrop on emergency communications. It is against the law to take any action based on any information that might be heard.

A similar sting last year in central London netted more than a dozen scanner addicts who showed up at the site of another supposedly downed alien spaceship. All were forced to pay heavy fines and a few of them actually did jail time.

*****
AMSAT AUSTRIA TO MEET

The first ever meeting of AMSAT-Austria will take place Saturday, April 16th at the Technical High School of Electronic and Telecommunication in Innsbruck. The main goals of the gathering are to present papers about basic amateur satellite technology along with seminar sessions dealing with modes-s operation, analysis of telemetry and other assorted topics. The preliminary list of lecturers includes I2KBD, ON6UG, DG2CV, OE1VKW and OE1WDC. All satellite users are welcome to attend this one-day meeting. For further information you can contact OE7FTJ at his callbook address.

*****
SUPERBALL RISES, THEN FALLS

Superball 94, the Utah balloon carrying amateur radio telemetry and an amateur television camera had a life of about three hours. The launch of Superball took place Friday, January 7th, at 16:26 UTC. The balloon initially headed northeast as expected. Telemetry was copied on both 2 and 15 meters, and ATV sent back video of the balloon.
But then Superball began to change course as it came out of the Troposphere. At about 18:04 UTC the balloon unexpectedly burst. A quick drop in the differential pressure from 1.11 to 1.03 was one of the first clues that something had changed radically. Hams in eastern Utah actually watched the rupture on ATV and later saw the parachute deploy. Telemetry on 15 meters was copied in Ohio with an signal report of 579 after the package came to rest.
The landing site is in Utah's Uinta Mountains in the neighborhood of Wolf Creek Summit, a 9500-foot pass. Plans are to locate and retrieve the payload with the help of snowmobiles and the Wasatch County Search and Rescue Team as weather permits.

*****
LA BEACON OUT

In DX, several sources report that the LA7DFA beacon has not been active from Jan Mayen since last April. LA7DFA himself says that he is looking for a rig to install permanently as beacon transceiver at the club station. He says that they also need a linear and a rugged yagi for the bad weather. LA7DFA plans to return to there in April 94 and hopes to have this equipment to take with him.

*****
GHANA

Also, XT2BW is now active from Burkina Faso but will be leaving at the end of January to spend a few months on vacation with his family in Ghana. He says that he will apply for a licence and will be active when time permits. QSL him via WB2YQH.

*****
GORDO

Famed ham radio instructor Gordon West, WB6NOA, says that he is now available to speak at your club meeting, hamfest, banquet or what have you. Gordo says that he has been able to rearrange his hectic personal appearance schedule so as to permit him to accept even more invitations from yacht clubs, ham radio clubs, SWL groups and other personal radio organizations.
West says that he requires a minimum of 90 days lead time for such appearances, and has talks available on a wide variety of subjects including Tropo Ducting, an Introduction to Radio Waves using laser light technology to demonstrate reflection and refraction, a presentation on the Global Positioning System, plus other interesting seminar sessions far to numerous to mention here. For more information on these interesting Gordon West, WB6NOA seminars and talks, contact Gordo at 2414 College Drive, Costa Mesa, CA 92626.

*****
ORIENTEERING

Amateur radio will play a major role in a national contest taking place in central Alabama.
Hams are heading to the hills, literally. It's their way of helping during a championship orienteering meet taking place in Alambama's largest State Park.
"Basically orienteering is a sport involving following a course marked on a map through the forest. And whoever completes the course the fastest wins." Tom Lamb, N4OAJ.
Tom is counting on at least a dozen hams during the weekend of January 22nd. Contest checkin points are spreadout over a large area inside the park. With so many stations, so far apart, Lamb knows how valuable amateur radio will be to the events success.
"With courses spreading out through the forest, the longest course is about ten kilometers long, that is about six miles. We have a got a lot of people scattered in far places. So one of the ways that amateur radio ties in is helping us to organize much the way that a road race is organized. But a road race is normally is tied around a road so that things are planned closer together. We are a lot more spreadout. So amateur radio is going to help us organize the different areas like the start/finish, results and those sorts of things." Tom Lamb, N4OAJ.

As many as 200 participants from across the nation are expected for the orienteering championships. Lamb expects the event to run smoothly, thanks in part to the contributions of amateur radio operators.
The hams will be helping not just with routine communications, but with any emergencies that come up, as well.

*****

For this week, that's all from the Amateur Radio Newsline.
You can write to us at Post Office Box 463 in Pasadena, CA 91102.

****** * * Newsline Copyright 1993 all rights are reserved. * * *

622. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 14:13:42 UTC
From: greg@netcom.com
Message-ID: <gregCK50uu.7uq@netcom.com>
Source record: 272063

In article <2ht226$a0s@unbc.edu> lyndon@unbc.edu (Lyndon Nerenberg) writes:
>greg@netcom.com (Greg Bullough) writes:
>>I suspect someone receiving a
>>Notice of Apparent Liability from the FCC would not consider it
>>to be trivial.
>
>Aren't US hams required to learn the reg's prior to obtaining their ticket?

Of course.

They are also required to own a spectrum analyzer, or to know where
to get access to one.

And how to use it.

And of course, our no-code techs understand clearly that they can't
trust a manufacturer to produce a design that won't get them in
trouble.

Gee, Lyndon, I'm overwhelmed by your sympathy for a kid who
sees an inexpensive VHF/UHF rig and puts it on the air.

Greg

623. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 14:22:25 UTC
From: greg@netcom.com
Message-ID: <gregCK519D.84u@netcom.com>
Source record: 272064

In article <9401230124.A9637wk@support.com> steven.rosenberg@support.com writes:
>
>
>On the contrary, I think Ramsay is trying to push these kits to people
>who "can't afford" a pre-made Japanese radio. And that is a travesty.

Steven has hit it on the head. As hams, we have for years said "can't afford a commercial rig? Home-brew or build a simple kit." Then QST and all the other magazines which bang this drum (which quite handily fills up magazine pages with circuits that few ever build) reap big advertising dollars from kit companies.

We, as a hobby, actively encourage newcomers to try these things out.

As a hobby which has a tradition of mentoring ("elmering"), we are doing the Right Thing(TM) when we identify something like a Ramsey kit which is apt to blow a new ham's radio budget out the window while discouraging him or her, and leaving him without a working rig. I'd much rather see a Novice/Tech find an old but serviceable IC-2 (and maybe put the Ramsey 'brick' on it) than have him or her get their hopes up on the FX- kits, only to be disappointed.

I fell into this as a newcomer. I bought a Heath HR10-B and found out that construction was a LOT harder than thinking about it. And for the price, I *could* have found a used, solid, working receiver and saved much grief. I still would have done some construction, (QRP transmitter, Xtal calibrator, etc.) but would have initially tackled less imposing projects.

Keep in mind, this was with a Heathkit, which was absolutely the best. I think all of us who knew Heath know that Ramsey is no Heath.

Greg

624. Callsign Servers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 15:06:26 UTC
From: rdixon@stargate.acs.ohio-state.edu
Message-ID: <Pine.3.05.9401241049.A2684-9100000@stargate.acs.ohio-state.edu>
Source record: 272067

The recently mentioned alternatives to the Buffalo callsign server are of no particular use.

mudgate.imsa.edu 2000 just connects you thru to Buffalo, so why make two hops.

plan9.njit.edu 2000 has been shut down and users are directed to Buffalo.

It appears that the server in Buffalo is really the only one there is.

Bob

625. MFJ's 20m SSB Travel Radio: No RIT?!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 16:00:06 UTC
From: andy@clark.net
Message-ID: <2i0ra6$2na@clarknet.clark.net>
Source record: 272068

I'm looking at MFJ's new 20m SSB "Travel Radio" (TM) in their 1994 catalog. Nice compact unit, running 12 watts, for only $219 (not a kit). For a few more dollars, you can buy a plug-in CW adapter. Looks neat, if QRP is your bag.

But, where's the RIT?? How can you work SSB/CW without an RIT? Am I missing something here? No RIT control is visible in the photo, nor is there mention of one. Even their QRP CW rigs have an RIT, and so does every other QRP kit on the market.

How very strange, indeed...

K4ADL

626. ARLX004 TAPR Annual meeting

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 16:52:59 UTC
From: arrl@BIX.com
Message-ID: <$arlx004.1994@ampr.org>
Source record: 271949
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

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SB SPCL @ ARL $ARLX004
ARLX004 TAPR Annual meeting

ZCZC AX36
QST de W1AW
Special Bulletin 4 ARLX004
From ARRL Headquarters
Newington CT January 21, 1994
To all radio amateurs

SB SPCL ARL ARLX004
ARLX004 TAPR Annual meeting

Packet meeting scheduled

Tucson Amateur Packet Radio (TAPR) has scheduled its annual meeting
for March 4-6 in Tucson at the Best Western Inn at the Airport.

The annual meeting will feature presentations and papers on several
new hardware projects, discussions, and hands-on demonstrations.

The afternoon session on Saturday will feature a mini-symposium on
future directions in amateur packet radio.

For more information contact Program Chairman Keith Justice, KF7TP,
at 602-461-8687, or contact TAPR, 8987-309 East Tanque Verde Road,
No. 337, Tucson AZ 85749. Their voice mail system number is
817-383-0000; the fax number is 817-566-2544.
NNNN
/EX
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627. ARLB010 QSL Bureau statistics

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 16:53:54 UTC
From: arrl@BIX.com
Message-ID: <$arlb010.1994@ampr.org>
Source record: 271947
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
SB QST @ ARL $ARLB010
ARLB010 QSL Bureau statistics

ZCZC AG74
QST de W1AW
ARRL Bulletin 10 ARLB010
From ARRL Headquarters
Newington CT January 21, 1994
To all radio amateurs

SB QST ARL ARLB010
ARLB010 QSL Bureau statistics

QSL bureau statistics

In 1993 ARRL members sent about 7.25 tons of QSL cards to the ARRL
Outgoing QSL Bureau, and the Bureau shipped them out. This was
2,182,000 cards for DX destinations.

The US Incoming QSL Bureau's volunteers sorted just over two million
cards in 1993, as well.

Information on the operation of the QSL Bureaus is on pages 98 and
99 of QST for January 1994.
NNNN
/EX
```

628. ARLX005 Scholarships announced

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 16:54:28 UTC
From: arrl@BIX.com
Message-ID: <$arlx005.1994@ampr.org>
Source record: 271948
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
SB SPCL @ ARL $ARLX005
ARLX005 Scholarships announced

ZCZC AX37
QST de W1AW
Special Bulletin 5 ARLX005
From ARRL Headquarters
Newington CT January 21, 1994
To all radio amateurs

SB SPCL ARL ARLX005
ARLX005 Scholarships announced

Scholarships announced

The Foundation for Amateur Radio will administer 49 scholarships for
the 1994-95 academic year to assist licensed amateurs who are
students.

The awards, from 500 to 2000 dollars, are available to full time
college students, including those who have been accepted for 1994.

Additional information and application forms should be requested
before April 30, 1994, from FAR Scholarships, 6903 Rhode Island
Ave., College Park MD 20740.
NNNN
/EX
```

629. ARLX006 Film gets honors

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 16:54:59 UTC
From: arrl@BIX.com
Message-ID: <$arlx006.1994@ampr.org>
Source record: 271946
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
SB SPCL @ ARL $ARLX006
ARLX006 Film gets honors

ZCZC AX38
QST de W1AW
Special Bulletin 6 ARLX006
From ARRL Headquarters
Newington CT January 21, 1994
To all radio amateurs

SB SPCL ARL ARLX006
ARLX006 Film gets honors

Film gets honors

Ham Radio Horizons, a film introducing non-hams to Amateur Radio,
was a finalist in the New York Festivals International Non-Broadcast
Media competition for 1993.

The 49-minute film is part of the CQ Communications video library,
which also includes films on satellite operation, DXing, contests,
and packet radio.

Executive producer of the film was ARRL Northern New Jersey Section
Manager Rich Moseson, NW2L.

The awards were presented January 14 in New York City.
NNNN
/EX
```

630. Omni VI/ FT990 comparisons

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 18:04:45 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-240194100218@fp2-st-affairs-11.uoregon.edu>
Source record: 272071

In a recent posting, I mentioned that purchased an Omni VI within the last month. Since that posting, several hams have replied asking for my opinions of the radio.

One of those hams was asking for my comparison of the Omni VI with the FT-990 since he was contemplating the purchase of one or the other rigs.

To help him and others who might be in the same quandry, has anyone performed any side by side comparisons or have direct experience with each radio?

If so, please post your likes/dislikes about each.

Thanks,
Steve

631. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 18:15:54 UTC
From: kchen@apple.com
Message-ID: <2i138q$knu@apple.com>
Source record: 272073

mosier@fagan.uncg.edu (Stephen Mosier) writes:

>AND A FEW OTHER FAMOUS ONES HEARD ON THE AIR...

>RG8U
>R2D2

You forgot 5Z4GT. I thought I might fully rectify the e^Homission.

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

632. SWR meters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 18:23:59 UTC
From: doc@webrider.central.sun.com
Message-ID: <2i13nvINNfl9@cronkite.Central.Sun.COM>
Source record: 272074

Greetings -

I'm curious as to my options on getting an SWR meter. I've naturally heard much about the Bird meter, but that's a pretty expensive choice.

I'm interested in feedback on other, less expensive models. My usage would be primarily for 50 watts or less and 2m/440, although I do have plans for getting an HF rig in the reasonably near future. Naturally I looking at the price/performance ratios. I'm definitely looking for accuracy, but am unwilling to pay several hundred dollars more if the difference is vanishingly small.

Many thanks for any insights,

73

Steve

--
-- Steve Bunis, Sun Microsystems ***DoD #0795*** 93-ST1100
-- Itasca, IL ***AMA #682049***
-- ***HRCA #HM125617**
-- *** N9VLP ***

633. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 18:35:59 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2i14efINN50s@abyss.West.Sun.COM>
Source record: 272075

In article <2hp2ts$38m@linus.mitre.org> m14494@mwvm.mitre.org (Mike White) writes:
>Dana Myers writes:
>> The difference is that the IC24AT was factory built and then adjusted
>> by the factory to specified tolerances.
>
>I don't know about Icom specifically, but this is generally
>not true of consumer electronics. The published specs for
>most electronics represent an average based on samples
>taken from the production run. The statement at the end of
>the specs that says "Specifications subject to change without
>notice" really means "Your radio may not do this well". Only
>a very few manufacturers offer "guarenteed specs", in which
>each and every unit is guarenteed to meet the spec. When I
>bought a stereo receiver a while back, I went with Tandberg
>because unlike almost every other manfacturer, they
>guarentee their specs. Check the spec sheet for the radio in
>question; if it doesn't say they're guarenteed, they aren't.

My statement really meant "they're built to specified tolerances,
and they're adjusted to specified tolerances". However, manufacturing
costs can be kept down considerably if you manufacture something in
such a manner as to eliminate the requirement for adjustment after
manufacture. Certainly an Icom HF radio needs to be aligned when it
is built; however, the trend has been towards designing things with
components specified for values and tolerance consistent enough to
obviate alignment. Using a ceramic or crystal resonator for the
quadrature FM detector circuit rather than a tunable coil is an
example of this.

I still tend to question the assertion that comms gear is
built without alignment and the specs can change as a result
of a poorly working radio. The manufacturer may change specs,
but not because of production line variation. If you buy the
service manual for any modern two-way radio, there is invariably
an alignment section. Granted, these sections are getting shorter
as radios are designed to obviate alignment *and* perform well,
but I don't believe that no functional check/alignment takes
place. Maybe we ought to ask Icom, Kenwood, Yahoo, etc.

My real point is that the manufacturing and components are
highly consistent in commercial products, and that alignment
is done on standardized test jigs. This was in response to
a discussion about Ramsey kits where I was suggesting that Ramsey
kits need to be "alignable" given the variation of components
and 'manufacturing' (i.e. kit building technique).

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

634. WWCR 5.810MHZ 8pm 12pm Eastern(CHECK IT OUT!!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 19:01:17 UTC
From: aghoddo@eos.ncsu.edu
Message-ID: <1994Jan24.190117.4386@ncsu.edu>
Source record: 271932
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner

I thought some of you might be interested to check out a very interesting program called the Hour of the Time by William Cooper on WWCR(world wide christian radio). There are two programs nightly at 8pm and 12pm. Enjoy!

635. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 20:36:44 UTC
From: alanb@sr.hp.com
Message-ID: <CK5IL9.1y7@srgenprp.sr.hp.com>
Source record: 271930

Clark Savage Turner (turner@safety.ics.uci.edu) wrote:

: Reference number 2, some filters don't do so well at this, and some narrow
: filters have a "ring", or hollow sound to them. Many don't like this at
: all. Most IF filters don't have much ring, though some, many audio filters
: (except DSP I understand) can ring pretty badly.

Even analog filters can be designed for low ringing. The problem is that most crystal IF filters, and some audio analog filters, are designed for a "flat-top" response, which tends to aggravate the ringing problem.

DSP/digital bandpass filters have ringing as well, although it is easier to control than with analog filters. You should be able to do 100 Hz or so bandwidth using either analog or digital techniques with negligible audible ringing. Any narrower than that, and you will be limited by the stability and tuning rate of the HF transceiver anyway.

AL N1AL

636. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 21:01:46 UTC
From: alanb@sr.hp.com
Message-ID: <CK5Jqz.2p9@srgenprp.sr.hp.com>
Source record: 271928

Kein{nen Paul (k23690@lehtori.cc.tut.fi) wrote:

: Clark Savage Turner (turner@safety.ics.uci.edu) wrote:

: > Most IF filters don't have much ring, though some, many audio filters
: > (except DSP I understand) can ring pretty badly.

: What should the audio filter frequency (and phase response) look like
: to avoid ringing. A high-Q single stage bandpass sounds horrible, but
: how does a filter with flat passband (eg. Butterworth or elliptic)
: sound like or is it really required to use Bessel-response in order
: to get rid of the hollow sound produced by noise peaks.

Another name for ringing is "pulse response" since CW dots and dashes are really pulses of RF. The filter shape with best pulse response for a given bandwidth is, I believe, Gaussian. This is closely approximated by a series of cascaded single-resonator filters, all tuned to the same frequency. Examples of a "resonator" would be an LC tuned circuit, a quartz crystal, or a tuned cavity.

You get a better shape factor by using more resonators. (Shape factor is the ratio of the high-attenuation bandwidth [e.g. 30 dB] to the low-attenuation bandwidth [e.g. 3 dB].) For example, a single resonator with a 100-Hz bandwidth would have about the same bandwidth (and pulse response) as a cascade of three 200-Hz filters, but the shape factor would be much better with the three resonators (in this case, 32:1 for one resonator, 3:1 for three resonators.)

Butterworth and Chebyshev filters have flatter passbands and better shape factors, but at the expense of poorer pulse response (ringing).

AL N1AL

637. Re: nearby broadcast antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 21:09:51 UTC
From: alanb@sr.hp.com
Message-ID: <CK5K4G.2xF@srgenprp.sr.hp.com>
Source record: 271929

tmrdpsrs@engvms.unl.edu (tmrdpsrs@engvms.unl.edu) wrote:

: I am considering a move from my current QTH to a new apartment. However, the
: apartment I'm considering is located immediately next to three transmitting
: towers. All three are commercial broadcast stations, one FM (102.7 MHz), one
: TV (Channel 10) and one AM (1240 kHz). I am currently active on 2 m, 440 MHz,
: and am very active on HF for shortwave listening and will soon be working
: the HF ham bands.

Yup, you likely will have some problems. You will need a high-pass
filter between your HF antenna(s) and transceiver. Assuming you don't
want to operate the 160 meter band (1.8 MHz), it shouldn't be hard to
design a filter that cuts off 1240 kHz and passes above 3.5 MHz. Check
out any recent edition of the ARRL Handbook for cookbook filter design tables.

Even with the high-pass filter, you probably will have trouble with
harmonics from the AM station. 3 x 1240 = 3720 kHz, which will probably
wipe out the top of the 80 meter novice band. For your shortwave listening,
you will probably hear a distorted version of the AM station every 1240 kHz
throughout the HF spectrum.

For 2 meters and 440 MHz, you probably want bandpass filters. I bet someone
makes these ready-made -- check out the ads in the ham magazines. Otherwise,
it shouldn't be too hard to build a strip-line filter from designs in
the VHF Manual or the RF Interference handbook.

AL N1AL

638. 3CX1200D7

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 21:12:33 UTC
From: taylor@tix.timeplex.COM
Message-ID: <9401242112.AA09738@tix.timeplex.com>
Source record: 271941

Is there anyone out there who has any experience with the Eimac 3CX1200D7 ? This tube is an improved design over the 3CX1200A7. The 3CX1200A7 is not recommended by EIMAC for new designs. This is due to a tendency to parasitics and is partially caused by the tube filament structure and the high feedthru capacitance. Any amplifier builders out there can comment ?

KC2WE Seth Taylor---domain:taylor@tix.timeplex.com

639. RACES Bulletin #310

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 21:39:54 UTC
From: enge@almaden.ibm.COM
Message-ID: <199401242141.NAA07150@ucsd.edu>
Source record: 271940

```
Bid : $RACESBUL.310
Subject : RB 310 Training 3/3

From: W6WWW@KD6XZ.#NOCAL.CA.USA.NOAM
To : RACES@ALLUS

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES (W6SIG@WA6NWE.CA)
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832 916-262-1600
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.310 RELEASE DATE: January 24, 1993
SUBJECT: TNG - Training for RACES people - Part 3/3

23. Non-commercial events supporting governmental approved
charitable
organizations that qualify within the guideline of the government
department responsible for such activities.

24. General public service communications:
a. Information and assistance communications during local
unusual
environmental conditions when RACES communications is not
required.
b. Radio relay communications in support of distant
disasters.

25. Mutual aid communications; i.e., how and when personnel and
equipment may be used to support another government's incident.

26. Mobilization and authority to be on duty. Personnel are not
self dispached. Record keeping requirements, showing name, ID
number or callsign, date/time on duty, date/time off duty, etc.

27. Organizational assignments, Delegate responsibilities, Staff
in depth. Assign work, create work, and see that the work
accomplished. Make expectations known. The RACES unit should be
an on-going activity and not just another "dire emergency
resource".
EOM
Station of Origin W6WWW @ KD6XZ.#NOCAL.USA
```

640. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 21:55:09 UTC
From: reisert@sttng.mlo.dec.com
Message-ID: <1994Jan24.215509.22610@peavax.mlo.dec.com>
Source record: 271931

Get the new Amateur Radio Almanac from CQ Magazine (edited by Doug Grant, K1DG). It has all this and more.

- Jim AD1C

--
Jim Reisert AD1C Internet: reisert@mlo.dec.com
Digital Equipment Corp. UUCP: ...decwrl!mlo.dec.com!reisert
146 Main Street - MLO3-6/C9 Voice: 508-493-5747
Maynard, MA 01754 FAX: 508-493-0395

641. Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 22:02:48 UTC
From: jchappel@sanders.lockheed.com
Message-ID: <jchappel.102.759448963@sanders.lockheed.com>
Source record: 271937
Cross-posted to: can.forsale,rec.radio.amateur.misc

In article <CK45ys.9II@ve6mgs.ampr.ab.ca> mark@ve6mgs.ampr.ab.ca (Mark Gregory Salyzyn) writes:
>Newsgroups: can.forsale,rec.radio.amateur.misc
>Distribution: na
>Path: rapnet!butch!netcomsv!decwrl!spool.mu.edu!howland.reston.ans.net!math.ohio-state.edu!cyber2.cyberstore.ca!nntp.cs.ubc.ca!alberta!ve6mgs!mark
>From: mark@ve6mgs.ampr.ab.ca (Mark Gregory Salyzyn)
>Subject: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)
>Message-ID: <CK45ys.9II@ve6mgs.ampr.ab.ca>
>Lines: 37
>Organization: VE6MGS Gateway
>References: <60.668.5285.0N191767@canrem.com>
>Date: Mon, 24 Jan 1994 03:06:26 GMT

>>The reason I am selling this, is that I am getting my HAM license soon, and
>>am starting to look for a 2 meter radio. I will also trade the above setup,
>>for a good 2 meter setup, make me an offer.

>Not if I can help it. I will use any influence I have left as the Former
>Public Service Director of the Northern Alberta Radio Club, and any avenues
>of information transfer, such as the Packet Radio system, to ensure that people
>of your kind are carefully scrutinized. This will not prevent you receiving
>your ticket, but it may make you very uncomfortable when your past catches up
>with you.

>For your sake, I do hope you have a very thick and resistent skin, and that you
>prove me wrong in my assumptions that you will provide us all a poor example of
>of how one disrespects the appropriate regulations of our fine Amateur Radio
>(HAM) service. If my assumption is correct, I do hope that the self policing
>action of the Amateur Radio Service is up to the task of making your life
>a living hell ...

>Ciao, 73 de VE6MGS/Mark Salyzyn -sk-

Mark - Who died and left you the job of being judge and jury? Did you ever
do anything in your lifetime that you are not regretful of? Are you that
perfect? I only know of one man that was that perfect..and he is not
holding our mistakes against us. Be a little more tolerant Mark, perhaps
this poor soul can be re-educated into a useful individual. You sure are a
poor example of Ham Radio Brotherhood! A P/R spokesman for ham radio you
are not, and you sure do not represent my sentiments...and I can assure you
I worked just as hard as you did for my ham privledges ..and I hold '
em just as high...but give it a break, Mark.

73 OT
-=Joel=-
===
|~~~~~~|
| Joel B. Chappell - KC1SG Lockheed Sanders |
| Principal Engineer Nashua, NH 03061 |
| |
| -= Standard Disclaimer: All opinions are mine. =- |
| |
| jchappel@rapnet.sanders.lockheed.com |
| Fido: 1:132/204.1 |
| |
~~~~~~
~~~~~~

642. cw test

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 22:10:37 UTC
From: "James F. Foerster" <U12566@uicvm.uic.edu>
Message-ID: <94024.161037U12566@uicvm.uic.edu>
Source record: 271934

OK, got my tech and passed the general theory and will try to go get
5 wpm next week.

How does the test go? is it the standard one-sided QSO I've been hearing
on MORSE TUTOR? Is there a standard format, do do the VE's get to
do it hoiwever they want?

643. Re: Engine Noise

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 22:33:03 UTC
From: donh@hpcuhe.cup.hp.com
Message-ID: <47540032@hpcuhe.cup.hp.com>
Source record: 271961

You didn't say if the plugs you put in have a built in resistor. It
sounds as if the plugs you removed did have the resistors built in.
You can usually tell if the plugs are resistive if they have an 'R'
somewhere in the part number. Your vehicle has resistive wiring but
that alone is obviously not enough!

```
*****************************************************************************
* The opinions expressed are mine, and mine alone *
* *
* - You can lead a horse to water, but a pencil must be lead - *
* *
* Cessna 172A Driver, N7770T @ PAO - - WB6LPJ OM *
* KD6QQW XYL *
*****************************************************************************
```

644. VOA/Worldnet Coverage of Clinton's State of the Union Speech

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 22:41:14 UTC
From: ck@VOA.GOV
Message-ID: <CK5oCr.1nB@VOA.GOV>
Source record: 271938
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.misc,rec.video.satellite

Our public relations people thought this might be of interest to the subscribers to these groups. I am simply posting the announcement for them, so please don't reply to me.

==========

VOA AND WORLDNET TV TO PROVIDE SIX-LANGUAGE, LIVE COVERAGE OF PRESIDENT CLINTON'S STATE OF THE UNION ADDRESS

*
*

Washington, D.C., Jan. 24 -- The Voice of America and WORLDNET TV will provide live, simultaneous coverage in six languages of President Clinton's annual "State of the Union" address beginning at 0200 UTC, Wednesday, Jan. 26.

The Voice of America will be providing worldwide coverage of the speech and the response by the opposition Republican Party. The shortwave frequencies for the worldwide English broadcast are listed below. VOA will also be providing regional shortwave coverage of the speech in Russian, Portuguese and Spanish.

WORLDNET TV will offer live, simultaneous translations of the speech in Arabic, French, Portuguese, Spanish and English. WORLDNET TV can be seen via satellite outside of the United States. Interested viewers should contact their local cable company or United States consulate for viewing information.

The Voice of America and WORLDNET TV are the radio and television international broadcasting services of the U.S. Information Agency. VOA broadcasts 1,100 hours of programming in more than 40 languages to a weekly audience estimated in the hundreds of millions.

Frequencies for VOA English Broadcast

English to Europe, the Middle East and North Africa

792 KAV (379 meters)
1197 MUN (251 meters)
1260 RHO (238 meters)
1548 KWT (194 meters)
3980 MUN (75.4 meters)
5965 WER (50.3 meters)
5995 WER (50.0 meters)
6040 WOF (49.7 meters)

6180 MOR (48.5 meters)
7130 KAV (42.1 meters)
7170 WOF (41.8 meters)
9635 KAV (31.1 meters)
11905 MUN (25.2 meters)

English to South Asia

7115 COL (42.2 meters)
7130 KAV (42.1 meters)
9635 KAV (31.1 meters)
11705 COL (25.6 meters)
15250 COL (19.7 meters)
17740 PHT (16.9 meters)
21550 PHP (13.9 meters)

English to Africa

621 BOT (483 meters)
1530 SAO (196 meters)
7265 BOT (41.3 meters)
7280 BOT (41.2 meters)
7405 GA (40.5 meters)
9575 BY (31.3 meters)
9885 BOT (30.3 meters)
11965 BOT (25.1 meters)

English to Latin America

5995 GA (50.0 meters)
6130 GA (48.9 meters)
7405 GA (40.5 meters)
9455 GB (31.7 meters)
11580 GB (25.9 meters)
15120 DL (19.8 meters)
15205 GB (19.7 meters)

English to East Asia and Oceania

1575 BAK (190 meters)
11925 PHT (25.2 meters)
15185 PHX (19.8 meters)
15290 PHT (19.6 meters)
17710 PHX (16.9 meters)
17740 PHT (16.9 meters)
17820 PHP (16.8 meters)
21550 PHP (13.9 meters)
21570 PHT (13.9 meters)

*
*

FOR FURTHER INFORMATION CONTACT:
BUREAU OF BROADCASTING EXTERNAL AFFAIRS +1 202-619-2538

645. Re: SWR meters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 22:42:28 UTC
From: jholly@cup.hp.com
Message-ID: <CK5oEs.FBL@cup.hp.com>
Source record: 271933

Steve Bunis SE Southwest Chicago (doc@webrider.central.sun.com) wrote:
: Greetings -

: I'm curious as to my options on getting an SWR meter. I've
: naturally heard much about the Bird meter, but that's a pretty
: expensive choice.

I would not exactly call the Bird meter a SWR meter, although one can obtain the SWR from the readings. The Bird meter is an in-line wattmeter. reads the power to and fro, and with this information and a little work with the bamboo sticks one can come up with the SWR.

If you want something that is approxiamate, and will give you readings in SWR, why not buy one of the cheapo RS swr meters? Or one of the other cheapo swr meters handled by HRO, AES and the like? They generally are quite satisfactory. Now on the other hand if you want to know your power out....

73, Jim, WA6SDM
jholly@cup.hp.com

646. Re: Yellowstone Park Served by Repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 22:45:42 UTC
From: gold@monkfish.nosc.mil
Message-ID: <1994Jan24.224542.20283@nosc.mil>
Source record: 271936

Miles Abernathy (miles@mbs.telesys.utexas.edu) wrote:
: Is Yellowstone served by one or more repeaters? Does any repeater offer
: coverage of much, most or all of the park?

: Thank you.

: =
: _ Miles Abernathy, N5KOB =
: | |__ miles@mbs.telesys.utexas.edu =
: _| | POB 7580, Austin TX 78713 =
: \ * / University of Texas @ Austin =
: \/ tel. (512) 471-6521 U.S.A. =
: =

The last time I was in Yellowstone (7 years ago), there was
no repeater operating in the park. I did contact a person on
a fire tower on 146.52. In fact, I used 146.52 simplex most of
the time I was in the park. You might try that frequency when you
get there.

Harry Gold KF6SA

647. Novice/Tech test maker?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 22:54:17 UTC
From: jahern@geohub.gcn.uoknor.edu
Message-ID: <17345.jahern@geohub.gcn.uoknor.edu>
Source record: 271935

I'm looking for a program to make up tests for the no-code tech test
(novice + tech q-pool) to run on an IBM clone.

Autoexam does this, but the only version I've found (SIMTEL mirrors)
still has the old question pool. I HAVE the new question pool as text,
but it is no simple matter fudging it for Autoexam.

Oh, yeah, I need it in about 2 hours! Well, I can give it to the students
next week, but I'd like to have it for tonight.

Thanks,

Jud
(This file must be converted with BinHex 4.0)

```
:#Ne*6P9&9#j658F!58*02dP#66m!N!3"Y3#3",D')!d++bf34#X0#R`J5R9N)%&
SCA*Z)%Y$09**)*!05@jdCA*ZCA3k)'TKD'9bEN"RC@pSG@)ZCf0Z,R9[Dfj[FLj
PC(8JI!d+I#"(C@pXEfGj)#BJ4f9[F'KjFfPMFb#3#%*TG'jPG$SJDQ&SCA*Z3(9
[DfGMELjLDA4ZCA3JN!Ym$3Tm)&9ZDACPFR0TG(NJEfBJ6fYXB@K[E@%J)#*2F'P
ZD@pZFb"PH("bCA0cC@3JD'9bC5"bC@CXC@0d)(4SC5"PER4TFQ9m$3Tm)%j[FQe
KEL`J6dXJ)$Fc-$%j)*!)9@jTGQ9bFfPdH5`JD@iJEfjP)'0[ERCPEQPPER3JE'p
MBA4TEfiZ)L!JI!d++bf34#X0#Jd+%ld!!!:
```

```
+---------------------------------------------------------------------+
| Jud Ahern KC5RI Internet: jahern@geohub.gcn.uoknor.edu |
| Geology & Geophysics Bitnet: jahern@uokgcn.bitnet |
| University of Oklahoma "Opinions expressed here reflect the entire|
| Norman, OK 73019 University, in one convenient location." |
+---------------------------------------------------------------------+
```

648. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 23:26:29 UTC
From: drumhell@claudette.nrl.navy.mil
Message-ID: <CK5qG5.4GJ@ra.nrl.navy.mil>
Source record: 271939

From an eirlier posting:

>KD6OY Garry Shandling, comedian

According to the callbook Garry Shandling holds an Advanced Class
ticket. I once saw him interviewed, and he mentioned that he was an
electrical engineering student. He never metioned if he graduated, but I
assume he gave up college when his career took off.

--
David Drumheller phone: (202) 767-3524
Acoustics Division, Code 7140 fax: (202) 404-7732
Naval Research Laboratory
Washington, DC 20375-5350 e-mail: drumhell@claudette.nrl.navy.mil

649. Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-24 23:27:55 UTC
From: jherman@uhunix.uhcc.Hawaii.Edu
Message-ID: <CK5qIJ.63z@news.Hawaii.Edu>
Source record: 272072

In article <CK45ys.9II@ve6mgs.ampr.ab.ca> mark@ve6mgs.ampr.ab.ca (Mark Gregory Salyzyn) writes:
>dominique.cormann@canrem.com (Dominique Cormann) writes:
>
>>I have the following for sale or trade:
> < A list of Equipment illegal for use on CB frequencies deleted. It is >
> < illegal to sell this equipment for use in the CB service. Also deleted>
> < are the comments of misplaced pride of it's operation on that service >
>
>I am responding publicly about this, since the machine Dominique uses, a BBS
>called Canada Remote (canrem) Systems situated in Toronto Ontario Canada, is
>incapable of receiving inbound electronic mail.
>

<Mark's actions deleted>

Yeah Mark! I'm glad to see someone take the initiative to help out the government in getting these people fined and put in jail if necessary. There will be many armchair-lawyers out there who will accuse you of playing ham cop (or whatever Dana called me) who are willing to sit back and complain without lifting a finger to do anything, so be prepared to get a 3rd degree burn.

This is ``self-policing'' in its finest! [Meaning that we police ``ourselves'', not just ``myself'']

Jeff NH6IL

650. Re: DSP Audio Filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 01:00:00 UTC
From: jack.treger@channel1.com
Message-ID: <40.1099.2426.0NE1659B@channel1.com>
Source record: 272023

```
CO>I have an FT-990. I also have the Timewave DSP-59. If you liked what the
CO>SCAF filters in the 990 did, the DSP-59 will knock your socks off. On CW
CO>it can can go down to 50Hz bandpass, all you hear is the tone with virtually
CO>no ringing!! But it really shines on SSB with its 2 noise reduction and
CO>heterodyne elimination algorithms. Try one some time, you'll be amazed!!
CO>I have had the DSP-59 for about 8 months, and now I can't do without it!
```

Do you know how the DSP-59 copares to the JSP NIR-10 unit?

 SLMR 2.1a -

651. Need MASTR II Conversion Instr.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 01:16:30 UTC
From: seanp@garnet.msen.com
Message-ID: <2i1rte$e3r@nigel.msen.com>
Source record: 271942

Could someone please mail me the ascii version of the instructions
to convert a GE MASTR II mobile to repeater use? I was able to find
the Micor instructions, but I have just run into a boatload of MASTR II's
and I can't find the mod anywhere.

I'll post it if need be.

Thanks..

Sean

652. Re: WWCR 5.810MHZ 8pm 12pm Eastern(CHECK IT OUT!!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 01:30:28 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CK5w6v.1Ey@ucdavis.edu>
Source record: 271943
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner

aghoddo@eos.ncsu.edu wrote:

: I thought some of you might be interested to check out a very interesting
: program called the Hour of the Time by William Cooper on WWCR(world wide
: christian radio). There are two programs nightly at 8pm and 12pm. Enjoy!

Please post this to rec.radio.amateur.pulpit.religion

--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
--

653. FCC Daily Digest - 1994-01-24

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 05:11:50 UTC
From: bruce@pixar.com
Message-ID: <1994Jan25.051150.26176@pixar.com>
Source record: 271963

[This is the third consecutive FCC Daily Digest that I have downloaded]
[and published to rec.radio.amateur.misc . Now I'd like to know if anyone]
[is reading them, and if you think they are worthwhile or just a waste of]
[bandwidth. Reply by E-MAIL ONLY, DO NOT POST. Bruce@Pixar.com]

Vol. 13, No. 14 January 24, 1994

NEWS RELEASE

FCC FILINGS

PUBLIC NOTICE

PUBLIC INFORMATION COLLECTION REQUIREMENTS SUBMITTED TO
OFFICE OF MANAGEMENT AND BUDGET FOR REVIEW - Contact:
Judy Boley at (202) 632-0276

****

ADDENDA: The following items released January 21 were
not listed on Digest 13:

NEWS RELEASES

PIRATE RADIO STATION ABOARD THE MOTOR VESSEL "FURY" SHUT
DOWN IN CHARLESTON, SOUTH CAROLINA

JAMES W. OLSON NAMED CHIEF OF CABLE SERVICES BUREAU'S
COMPETITION DIVISION

FCC CALENDAR OF EVENTS FOR THE WEEK OF JANUARY 24

PUBLIC NOTICE

NOTICE OF CHANGE OF RELEASE DATE - The FCC was closed
Thursday, January 20, 1994. All items dated and
scheduled to be released on January 20 by the FCC's
Office of Public Affairs, News Media Division, were
actually released on Friday, January 21.

TEXTS

ALLNET COMMUNICATIONS SERVICES, INC. V. CENTRAL TELEPHONE COMPANY OF OHIO, AND CENTRAL TELEPHONE COMPANY OF NEVADA. Granted joint motion and dismissed with prejudice Allnet's complaint against Central Telephone-Ohio and Central Telephone-Nevada seeking damages resulting from alleged violations of the Commission's rate of return prescription for the period January 1, 1989 through December 31, 1990. (By Order [DA 94-49] adopted January 11 by the Chief, Formal Complaints and Investigations Branch, Common Carrier Bureau)

COMSAT CORPORATION. Authorized Comsat to participate in a program involving construction of certain additional INTELSAT satellites, and provisions of authorized services. (By MOO&A [DA 94-37] adopted January 7 by the Acting Chief, Common Carrier Bureau)

INTERNATIONAL TELECHARGE, INC. (ITI)V. PACIFIC TELESIS GROUP. Granted joint motion and dismissed with prejudice ITI's complaint against Pacific Telesis seeking to recover damages from alleged violations of the Commission's rules in connection with Pacific's computation and assessment of terminating carrier common line charges. (By Order [DA 94-47] adopted January 10 by the Chief, Formal Complaints and Investigations)

AT&T COMMUNICATIONS. Denied Tel-Save Inc.'s petition to reject, or to suspend and investigate, AT&T's Tariff FCC No. 12, Transmittal No. 6162, introducing SelectCall, an AT&T long distance service that permits customers to receive direct dialed calls originated over AT&T network from subscriber-authorized telephone numbers and have those calls automatically reverse-billed to the customer without the assistance of a company operator. (By Order [DA 94-66] adopted January 21 by the Chief, Tariff Division, Common Carrier Bureau)

ONCOR COMMUNICATIONS, INC. V. PACIFIC TELESIS GROUP. Granted joint motion and dismissed with prejudice Oncor's complaint against Pacific Telesis relating to primary interexchange carrier freeze practices. (By Order [DA 94-50] adopted January 11 by the Chief, Formal Complaints and Investigations Branch)

LIGHTCOM INTERNATIONAL, INC. Authorized Lightcom to establish channels of communication between the U.S. and INTELSAT Atlantic and Pacific Ocean Region satellites for the provision of INTELSAT business service and to provide international private line service. (By O&A [DA

94-51] adopted January 4 by the Chief, International Facilities Division)

WILTEL, INC. V. THE AMERITECH OPERATING COMPANIES, ET AL. Granted joint motion and dismissed as moot WilTel's complaint against Ameritech, et al, seeking damages resulting from alleged violations of the Commission's rate of return prescription for the period January 1, 1989 through December 31, 1990. (By Order [DA 94-45] adopted January 11 by the Chief, Formal Complaints and Investigations Branch)

R & R COMMUNICATIONS, INC. Ordered R & R to forfeit $2,000 for willful violation of the Communications Act and the Commission's rules by marketing an amateur radio transceiver that had been modified to operate on non-amateur frequencies. (By Order [DA 94-40] adopted January 7 by the Chief, Field Operations Bureau)

January 24, 1994

FCC FILINGS

The following is a list of filings of more than routine interest received at the Commission on dates shown and AVAILABLE FOR INSPECTION for one week in the Office of Public Affairs, Room 200:

January 13

Amendment of the Commission's Rules to Establish New Personal Communications Services (Gen. Docket 90-314). Reply - Comsat Corporation; Northern Telecom Inc.; Ameritech; ROLM Company; National Rural Telecom Association; Association of Public-Safety Communications Officials-International, Inc.; Comcast Corporation; Association of Independent Designated Entities; GTE Service Corporation; Motorola Inc.; Secretary of Defense/National Communications System; National Emergency Number Association; Rand McNally; Association for Maximum Service Television, Inc.; Encompass; Federal Communications Bar Association; Wireless Information Networks Forum; PCS Action, Inc.; American Wireless Communication Corporation; Office of the Attorney General/State of Texas; TRW Inc.; Telocator; General Communication, Inc.; Ericsson Corporation; PMN, Inc.; Cellular Telecommunications Industry Association; Fixed Point-to-Point Communications Section of the Network Equipment Division of the Telecommunications Industry Association; McCaw Cellular Communications, Inc.; American Petroleum Institute; NYNEX Corporation; MCI Telecommunications Corporation; Apple Computer, Inc.; Loral Qualcomm Satellite Services; Nextel Communications, Inc.; Southwestern Bell Corporation; Radiofone Inc.

Amendment of the Commission's Rules to Provide Additional Frequencies for Cordless Phones (ET Docket 93-235). Reply - Forest Industries Telecommunications

In the Matter of Policies and Rules Concerning Toll Fraud (CC Docket 93-292). Comments - Association of College and University Telecommunications Administrators, Inc.; Flex Communications ; XIOX Corporation;

January 14

Amendment of the Commission's Rules to Establish a Permanent Replacement for the Current Method of Funding the Universal Fund and Adopt a Temporary Revenue Based Method for Allocating USF Costs Among Interexchange Carriers (RM-8408). Comments - Organization for the Protection and Advancement of Small Telephone

(over)
-2-

Companies; City of Faith, SD; Siskiyou Telephone; Ameritech; U S West Communications; St. Joseph Telephone and Telegraph Company; National Telephone Association; Southwestern Bell Telephone Company; Cathey, Hutton and Associates, Inc.; Opposition - Sprint Communications

Amendment of the Commission's Rules and Establishment of a Joint Board (CC Docket 80-286). Comments - National Rural Telecom Association; Pacific Bell and Nevada Bell

Amendment of the Commission's Rules to Implement a Vanity Call Sign System of Choice in the Amateur Service (PR Docket 93-305). Comments - Don Daso, WZ3Q

In the Matter of Policies and Rules Concerning Toll Fraud (CC Docket 93-292). Comments - Bell Atlantic; U S West Communications, Inc.; MCI Telecommunications Corporation; International Communications Association; Interexchange Carrier Industry Committee Toll Fraud Subcommittee; GTE Service Corporation; TeleDesign Management, Inc.; Vanguard Cellular Systems, Inc.; National Telephone Cooperative Association; McCaw Cellular Communications, Inc.; Cellular Telecommunications Industry Association; BellSouth Telecommunications, Inc.; Pacific Bell and Nevada Bell; American Telephone and Telegraph Company; National Cellular Resellers Association; United Fire and Casualty Company/United Life Insurance Company; Competitive Telecommunications Association; State of South Carolina Office of Information Resources; Quantum Logic, Inc.; Florida Public Service Commission; USL Capital; Arizona Payphone Association and Nevada Payphone Association; Leucadia National Corporation; Puerto Rico Telephone Company and the Puerto Rico Communications Corporation; Rochester Telephone Corporation; Florida Pay Telephone Association, Inc.; LinkUSA; Ericsson Corporation; U.S. Intelco Networks, Inc.; Southwestern Bell Corporation; Metro-North Commuter Railroad; Hewlett-Packard Company; Utilities Telecommunications Council; Ameritech Corporation; Ad Hoc Telecommunications Users Committee; Communications Managers Association, et al.; Planned Parenthood of New York City; Reynolds and Reynolds; United States Telephone Association; Independent Payphone Association of New York, Inc.; American Petroleum Institute; Aeronautical Radio, Inc.; Sprint Corporation; NYNEX Corporation

January 18

Amendment of the commission's Rules to Establish a Permanent Replacement for the Current Method of Funding the Universal Fund and Adopt a Temporary Revenue Based Method for Allocating USF Costs Among Interexchange Carriers (RM-8408). Comments - Kerrville Telephone Company

Amendment of the Commission's Rules to Establish New Personal Communications Service (Gen. Docket 90-314). Reply - Telephone and Data Systems, Inc.

In the Matter of Policies and Rules Concerning Operator Service Access and Pay Telephone Compensation (CC Docket 91-35). Reply - American Public Communications Council

(over)
-3-

In the Matter of Policies and Rules Concerning Toll Fraud (CC Docket 93-292). Comments - North American Telecommunications Association; American Public Communications Council; Prince; Holyoke Mutual Insurance Company in Salem; Bechtel Power Corporation; CamBar; Southeast Alaska Regional Health Corporation; Iowa Farm Bureau Federation; Universal Gym Equipment, Inc.; News Journal Company; King County Fire Protection District No. 39; Liberty Financial; Colgate-Palmolive Company; Charles River Laboratories; Washington Education Association; Albany International

In the Matter of Simplification of the Depreciation Prescription Process (CC Docket 92-296). Opposition - National Association of Regulatory Utility Commissioners

Amendment of the Commission's Rules to Implement a Vanity Call Sign System of Choice in the Amateur Service (PR Docket 93-305). Comments - Kenneth Widelitz, AB6FO

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Bruce Perens AB6YM Bruce@Pixar.com 510-215-3502

654. Daily Summary of Solar Geophysical Activity for 24 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 05:14:48 UTC
From: oler@rho.uleth.ca
Message-ID: <9401250514.AA27058@rho.uleth.ca>
Source record: 271945
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

24 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 024, 01/24/94
10.7 FLUX=129.1 90-AVG=104 SSN=106 BKI=1012 0110 BAI=002
BGND-XRAY=B3.8 FLU1=6.2E+05 FLU10=1.0E+04 PKI=2112 0111 PAI=003
BOU-DEV=008,004,009,016,004,005,005,002 DEV-AVG=006 NT SWF=00:000
XRAY-MAX= C1.3 @ 1634UT XRAY-MIN= B3.2 @ 0322UT XRAY-AVG= B5.4
NEUTN-MAX= +003% @ 0915UT NEUTN-MIN= -002% @ 0320UT NEUTN-AVG= +0.3%
PCA-MAX= +0.1DB @ 0825UT PCA-MIN= -0.4DB @ 0705UT PCA-AVG= +0.0DB
BOUTF-MAX=55344NT @ 1453UT BOUTF-MIN=55331NT @ 1820UT BOUTF-AVG=55339NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+077,+000,+000
GOES6-MAX=P:+127NT@ 1909UT GOES6-MIN=N:-050NT@ 0839UT G6-AVG=+099,+026,-025
FLUXFCST=STD:130,130,135;SESC:130,130,135 BAI/PAI-FCST=005,020,020/010,018,020
KFCST=2233 3222 3334 4422 27DAY-AP=003,003 27DAY-KP=0100 1122 1110 1111
WARNINGS=*SWF
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 23 JAN 94 was 50.0.
The Full Kp Indices for 23 JAN 94 are: 2- 2- 1o 2- 2- 1o 2- 2-

SYNOPSIS OF ACT

Solar activity was at low levels. Region 7661 (N08E37)
was numbered today. The flux has experienced a significant
increase, possibly due to Region 7661.

Solar activity forecast: solar activity is expected to be
mostly at low levels.

The geomagnetic field has been at quiet levels for
the past 24 hours.

Geophysical activity forecast: the geomagnetic field is
expected to be at unsettled to active levels, due to a coronal

hole.

Event probabilities 25 jan-27 jan

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 25 jan-27 jan

A. Middle Latitudes
Active 05/35/35
Minor Storm 01/25/25
Major-Severe Storm 01/10/10

B. High Latitudes
Active 05/35/35
Minor Storm 01/25/25
Major-Severe Storm 01/10/10

HF propagation conditions continued normal over all
regions. Similar conditions are expected on 25 January. A
coronal disturbance should result in minor signal degradation
for transpolar and transauroral circuits on 26 and 27 January.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N04W50 221 0100 HSX 02 001 ALPHA
7654 N09W35 206 0580 DKI 10 022 BET
7657 N10W63 234 0040 CRO 07 005 BET
7658 N12W12 183 0090 DSO 05 010 BET
7659 S12E26 145 0010 BXO 06 003 BET
7661 N08E38 133 0030 CSO 03 005 BET
7660 S08E57 114 PLAGE
REGIONS DUE TO RET
NMBR LAT
7649 S19 079

LISTING OF SOLAR ENERGETIC EVENTS FOR 24 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1233 1237 1239 7654 N07W32 C1.1 SF 260
1247 1247 1247 240 20

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 24 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
24/ 1303 1406 1436 N13W04 LDE C1.2 93

INFERRED CORONAL HOLES. LOCATIONS VALID AT 24/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
58 N30W00 S14W07 N08W26 N30W00 186 ISO POS 011 10830A
59 N60E38 N30E18 N36W02 N60E38 165 EXT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
23 Jan: 1242 1302 1313 C2.9 1F 7654 N06W17
2344 2347 2351 B4.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7654: 1 0 0 0 1 0 0 0 001 (50.0)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (50.0)

Total Events: 002 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

655. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 05:46:03 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2i2bmrINN5hu@abyss.West.Sun.COM>
Source record: 271920

In article <2ht0ia$9r8@unbc.edu> lyndon@unbc.edu (Lyndon Nerenberg) writes:
>jeffl@comix.UUCP (Jeff Liebermann) writes:
>
>[Lots of good common sense arguments deleted for brevity]
>
>>6. The Ramsey kits are not state of the art, high quality,
>>or a fabulous bargain. They are adequate for the purpose intended:
>>a kit for those that still believe that radio construction is a
>>part of ham radio and that believe they may profit from the
>>experience.
>
>Exactly. I picked up a pair of Ramsey's (2m, 440) to run on packet. Why?
>For one, it seemed silly to buy an all-singing all-dancing 400 memory PL
>rig just to wire down onto one frequency for packet. The Ramsey kit is
>easily interfaced to a packet modem.

I agree it doesn't make sense to put a general purpose radio on packet.
For one thing. most general purpose radios are too prone to desense
and/or intermod from other radios in the shack (I run VHF packet,
VHF and HF voice/data). I use a Motorola MCX100 for packet, I have
a Motorola Maxar-80 set up that is on loan to a high-level BBS, I
have a GE Custom MVP with GaAsFET amplifier as a backup radio.
Guess what? I spent under $60 on each radio, including buying the
manual from the manufacturer. I had the experience of tinkering
with well-built, high-performance radios. An FX-440, for example,
is de-sensed by anything transmitting below 440MHz.

>As for price, the Ramsey kit is marginally less expensive than a comparable
>single band radio WITH THE SAME FEATURES. I defy you to find a commercially
>manufactured 2m (or 440) rig, with as few features as the Ramsey, to compare
>the price to. When you do, *then* we'll argue about the relative expense of
>the Ramsey kit.

Well, I've pointed out three radios that are far superior to the
Ramsey FX-146, and I bought all of them for under the cost of one
Ramsey FX-146 and cabinet.

>I agree that the front end on the Ramsey kit is wider than it should be.
>I was aware of this from the outset. Prior to buying it, I asked around
>about it's good and bad points. If you did not do this, that's your problem.
>It should be noted that the 2m kit comes with an addendum that states
>quite plainly that the 2m kit is prone to intermod, and provides alternate
>component values for the front-end filter that will tighten things up. I'm
>not sympathetic at all to the whining about wide front-ends' since this
>whining almost always comes from the same people that want DC-to-daylight

>coverage.

The UHF kit has no warning that normal component tolerances can render
the radio deaf; the one I sampled requires 50mV for a useful quieting
at 446Mhz.

>One thing about the Ramsey kit that does interest me is the PLL design. It
>appears to be able to lock up quickly after large frequency shifts. I'm
>curious to see if this can be exploited to run frequency-hopping spread
>spectrum. Not being an RF guru I might well be on drugs, but that's another
>reason why I bought a kit - there is enough room (and design documentation)
>in the kit that I can get my fat fingers in there and try out my ideas.

The method to generate useful SS is either by DDS frequency hopping
or I/Q modulated carrier. PLL approach to SS is doomed to relatively
few hops/second and/or considerable "bounce" in the desired frequency.

>It's a shame that the Amateur Experimental Service has turned into the
>Amateur Appliance Service.

It is a shame amateurs won't take advantage of readily available
high-quality surplus to use as a platform for experimentation and spend
considerable effort defending junk radios that don't even come up to the
performance standards of a Part 15 cordlesst telephone. :-)

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

656. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 05:49:58 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2i2bu6INN5k5@abyss.West.Sun.COM>
Source record: 271919

In article <741@comix.UUCP> jeffl@comix.UUCP (Jeff Liebermann) writes:
>
>4. Consistancy is difficult to achieve. This is because of
>accumulated component tolerances. Volume manufacturers compensate
>for this with incoming inspection, grading, post-assembly
>component value selection, and statistical performance analysis.
>A small kit manufacturer cannot do any of these economically.
>What it usually done is to use low gain, low impedance, inefficient,
>and broad band design with a large number of adjustments to compensate
>for component and construction variables. The result is increased
>cost.

C'mon, another way to deal with component and construction variation
is to provide tune-up instructions and methods to compensate for
the tolerances. Ramsey does neither.

>6. The Ramsey kits are not state of the art, high quality,
>or a fabulous bargain. They are adequate for the purpose intended:
>a kit for those that still believe that radio construction is a
>part of ham radio and that believe they may profit from the
>experience.

Yeah, if people just built them for the experience, that would be
one thing. But people get the impression they can put those radios
on the air and use them like a normal radio, too.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

657. LA Comms

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 05:54:58 UTC
From: Roger.Vargo@f943.n102.z1.fidonet.org
Message-ID: <759497522.AA03726@mcws.fidonet.org>
Source record: 271954

Excuse my butting in here...

The cellular "problem" after the quake was two fold. First, there was the general system overload when everyone grabbed their cell phone to either report an earthquake or let a loved one know they were ok.

Secondly, some cell sites were affected by the loss of power. Driving around I saw several sites later in the day that were conected to portable generators.

The problem of communications was also compounded by the overload and partial shut down of the land line telephone system.

I didn't even bother to fire up the packet system last week during the emergency. The frequencies around here are normally crowded and I didn't want to make matters worse. Just monitoring the voice traffic over some of the major repeaters was enough!

I don't have any real backup for my packet system. My radio is a handheld connected to an outside antenna, so it will run off it's own battery. My TNC will work off a battery since it is 12-v but I usually just use it on a converter. The big problem in an emergency would be my computer which is like a boat anchor on the AC line. When I get a laptop I'll consider myself portable (or at least transportable).

73/Roger, N6YDT at the east end of the San Fernando Valley.

658. RFD: talk.politics.rush-limbaugh

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 06:06:17 UTC
From: cstone@husc8.harvard.edu
Message-ID: <2i2csp$dfr@scunix2.harvard.edu>
Source record: 271966

```
================================
RFD: talk.politics.rush-limbaugh
================================

This is a formal request of discussion for the creation of a Rush
Limbaugh-related newsgroup. Please direct all followups to news.groups.

PRPOSED CHARTER:

The unmoderated group talk.politics.rush-limbaugh will serve as a forum
for the discussion of issues raised by Rush Limbaugh's radio show, TV
show, books, newsletters, and other media. It will also act as a place
for Rush listeners to talk about Rush fandom such as the opening of new
Rush Rooms in various cities, methods of obtaining tickets to Rush's TV
show, Rush's appearances in public and on other TV shows, and so on.
This function, however, is likely to be secondary to the group's primary
mission of hashing out the issues of the day, and hence the group shall
be part of the talk.politics.* hierarchy.

It is *essential* to note that posters of *all* ideological stripes will
be welcome on talk.politics.rush-limbaugh. Articles critical of Rush are
to be afforded the same respect as articles in support of Rush. It is
hoped that the creation of the new group will inspire intelligent
political discussion by using Rush's thoughts as a springboard.

BACKGROUND AND RATIONALE:

On the newsgroup alt.fan.rush-limbaugh, we have been discussing the
possibility of formally incorporating the group into the talk.politics.*
or rec.arts.* hierarchy for some time now. The former was chosen largely
because political, as opposed to fandom, discussions dominate the group
now. Several people, myself among them, have argued that a rec.arts.*
placement would be better because Rush usually insists he is an entertainer
first and a pundit second. However, support for a
talk.politics.rush-limbaugh appears more widespread.

With a recent onslaught of insulting posts and namecalling by radical
conservatives and Rush-haters alike, the creation of a moderated
newsgroup has some intuitive appeal. However, in my opinion, the spirit
of free inquiry demands that the group be unmoderated. In an highly
charged ideological forum such as talk.politics.rush-limbaugh, the
potential censorship costs of moderation will prove too high.

Alt.fan.rush-limbaugh is one of the largest alt.* newsgroups, and I fully
admit that I think the high rate of traffic on alt.fan.rush-limbaugh
indicates that Rush-related subjects deserve a formal place on the usenet
hierarchy. Moreover, Rush's radio show has become increasingly accepted
```

by the mainstream, non-ideological media as of late. Rush has also exhibited far more staying power than comparable talk show hosts. It is also essential to note that many sites to not offer access to alt.* groups, and given that -- for good or ill -- Rush's popularity has soared in recent years, people from those sites deserve the opportunity to discuss Rush just as much their counterparts elsewhere. On the liberal side of the aisle, the net also offers the perfect place for Rush's thought to be subject to rigid scrutiny.

VOTES

If the proposal comes to a vote, I shall contact Ron Dippold within twenty-one days of today's date.

--
////// // // ////// // ////// Christopher Stone
// // // // // // // cstone@husc.harvard.edu
// ////// ///// // ////// (617) 493-7523
// // // // // // // 366 Lowell Mail Center
////// // // // // // ////// Cambridge, Massachusetts 02138

659. FCC RF Spectrum Allocation?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 07:02:04 UTC
From: gasper@rintintin.Colorado.EDU
Message-ID: <gasper.759481324@rintintin.Colorado.EDU>
Source record: 271959

Hi Everybody,

Does anybody out there have any idea where I can find the current FCC RF Spectrum Allocation? I've tried doing searches in archie, gopher and wais with all kinds of keywords. Any suggestions will be greatly appreciated! Thanks! :-)

==
Robert E. Gasper	Education is the vehicle by which we grow,
ITP Graduate Student	and life is the vehicle by which we are
gasper@ucsu.colorado.edu	educated. Keep on learning!
==

660. Yeasu FT416 mods wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 09:42:35 UTC
From: mpeter@elektra
Message-ID: <2i2pib$elu@elna.ethz.ch>
Source record: 271950

hello,
are there any mods for the yeasu FT416 available ?
I'm looking for:
- extendet TX (got 140MHz .. 150MHz)
- extendet RX (got 136MHz .. 176MHz)
- repeater switch on beep, 1750 Herz like the euro version has
(got the american version without that tone)
- hidden, undocumented features

Thanks for any hints

Martin

--
Martin Peter, ETH Zuerich e-mail: mpeter@ee.ethz.ch
Computing Support Group tel: 41 1 623 5286
ISG Gloriastrasse 35 fax: 41 1 252 0954
8092 Zurich/ Switzerland

661. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 10:58:43 UTC
From: k23690@lehtori.cc.tut.fi
Message-ID: <2i2u13$oud@cc.tut.fi>
Source record: 271951

Alan Bloom (alanb@sr.hp.com) wrote:

> Kein{nen Paul (k23690@lehtori.cc.tut.fi) wrote:

[Deleted]

> : What should the audio filter frequency (and phase response) look like
> : to avoid ringing. A high-Q single stage bandpass sounds horrible, but
> : how does a filter with flat passband (eg. Butterworth or elliptic)
> : sound like or is it really required to use Bessel-response in order
> : to get rid of the hollow sound produced by noise peaks.

> Another name for ringing is "pulse response" since CW dots and dashes
> are really pulses of RF. The filter shape with best pulse response for
> a given bandwidth is, I believe, Gaussian.

If the typical telegraph speeds would be 60 - 150 WPM, then the shape
of typical CW-filters (250 - 700 Hz) would be very important. At typical
CW-speeds (10-20 WPM) and rise and fall times (5-10 ms) the required
bandwidth is about 100 Hz or below and thus the shape of a much wider
(analogue) CW-filter doesn't radically alter the keyed waveform.

I think that the reason for the howling sound in CW-filters is that
in high-Q filters a noise pulse at (or close to) the center of the
passband is causing an oscillation that slowly decays into the
background noise. The higher the (loaded) Q is, the longer (more cycles)
this decay takes.

> This is closely approximated
> by a series of cascaded single-resonator filters, all tuned to the same
> frequency. Examples of a "resonator" would be an LC tuned circuit, a
> quartz crystal, or a tuned cavity.

Yes, this is true for connected resonators, but you have to control the
connection between the resonators and the loaded-Q for each resonator to
get the shape you want. You can get e.g. Butterworth and Chebyshev responses
by manipulating these parameters.

However, if cascade separate individual resonators (separated by amplifying
stages or use many active filter stages) tuned to the same frequency,
the responses of individual stages add together and the resulting response
is similar to very high-Q single resonator. I cascaded 175 Hz (-3 dB) wide
audio filters, three stages was still usable, but four stages sounded
horrible. The combined response for four stages is -12 dB at the 175 Hz
bandwidth or about 70 Hz for -3 dB.

The filter was used to monitor a distant VHF-beacon and thus most of the time there was only noise in the passband causing this howling sound. I am going to stagger tune each rection to a slightly diffrent frequency to get the combined -3 dB bandwidth to 150 - 200 Hz and hope to get rid of some of this howling.

Paul OH3LWR

662. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 12:43:39 UTC
From: k2ph@cbnewsj.cb.att.com
Message-ID: <CK6rCz.Htw@cbnewsj.cb.att.com>
Source record: 271955

From article <2i138q$knu@apple.com>, by kchen@apple.com (Kok Chen):
> mosier@fagan.uncg.edu (Stephen Mosier) writes:
>
>>AND A FEW OTHER FAMOUS ONES HEARD ON THE AIR...
>
>>RG8U
>>R2D2
>
>
> You forgot 5Z4GT. I thought I might fully rectify the e^Homission.
>

Let's not forget 5R4GY as well. Famous in Collins circles.

73,
Bob K2PH

--

Bob Schreibmaier K2PH | UUCP: ...!att!mtdcr!bob
AT&T Bell Laboratories | Internet: bob@mtdcr.att.com
Middletown, N.J. 07748 | ICBM: 40o21'N, 74o8'W

663. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 14:04:26 UTC
From: wvanhorn@magnus.acs.ohio-state.edu
Message-ID: <2i38ta$ki6@charm.magnus.acs.ohio-state.edu>
Source record: 271956

Kein{nen Paul wrote:

>If the typical telegraph speeds would be 60 - 150 WPM, then the shape
>of typical CW-filters (250 - 700 Hz) would be very important. At typical
>CW-speeds (10-20 WPM) and rise and fall times (5-10 ms) the required
>bandwidth is about 100 Hz or below and thus the shape of a much wider
>(analogue) CW-filter doesn't radically alter the keyed waveform.

>I think that the reason for the howling sound in CW-filters is that
>in high-Q filters a noise pulse at (or close to) the center of the
>passband is causing an oscillation that slowly decays into the
>background noise. The higher the (loaded) Q is, the longer (more cycles)
>this decay takes.

I used crystal filters in old tube receivers for many years and always thought that ringing was an inevitable result of narrow bandwidths. In fact, I though that basic information theory (Turing, Naiquist, et al.) dictated it. I used to think that an effective bandwidth of some 200-300 Hz. was about minimum and that less than that would cause so much ringing that weak signals would be lost. Then modern 250 Hz. CW filters made me realize that as little as 100 Hz. may be OK.

A few months ago I built a kit of W9GR's DSP unit, described in QST September, 1992. One of the modes it provides is a CW filter with 30 Hz. bandwidth. (Yes, I said 30 Hz!) It has a center frequency of 750 Hz. and is very effective in copying CW. To my ears, it does very little ringing, yet is usable with quite high-speed CW.

Now I doubt that the basic physical laws have been "repealed". One can question whether the passband is really as narrow as 30 Hz. I have not analyzed it on laboratory-grade instrumentation, but I have made a rough measure of bandwidth. Using my Kenwood TS940, I tuned in the carrier of a local broadcast station. With the transceiver in CW mode, I offset the tuning to get a 750 Hz. beat note, then tuned up and down, noting the frequency on the digital counter. I can verify that the 6 dB. bandwidth is something like 30 Hz. - certainly less than 50.

Can someone with a great deal more technical knowledge than I have state just what is the minimum usable bandwidth for a 10-20 WPM CW signal, and how much audible ringing is truly inescapable?

73, Van - W8UOF
* *
* It ain't wot you don't know 't gets you into trouble. *
* It's wot you know 't ain't true. - "Mr. Dooley" *

* *
wvanhorn@magnus.acs.ohio-state.edu

664. Power Line Interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 14:05:37 UTC
From: drs@ccd.harris.com
Message-ID: <1994Jan25.140537.16951@ccd.harris.com>
Source record: 271988

For the past 3 years I have been trying to track down some noise that appears to be coming from the power lines. I have walked around with a portable radio, driven around (for miles in all directions) in my car seeking the source. The source seems to come from one of the two power poles across the street from me.

This noise tends to show up in the Winter time or on cool or rainy Summer days. In the Summer time I might have the noise on a day that remains cloudy (therefore cooler). In the Winter time the noise also tends to also show up mostly (but not always) at night time when it is cooler. We are talking about Florida, so in the Winter time it doesnt normally get that cold. Now here is the weird part: The noise has a cyclic period of about 1.5 seconds on and 1.5 seconds off. This part doesn't vary. If I have the noise, it has this period. Now there are no capacitors on the power poles around me. The pole that I suspect has a transformer on it. Can a transformer do this? How? Is there some sort of capacitor or protection circuit on these xfmrs that can do this?

Normally, I cannot determine the source (this changes). My 20 meter beam seems to tell me which pole the noise comes from, but if I walk up to the pole, with a portable radio I normally am not able to zero in on it. I have called the power company in the past to repair a problem which I was able to point them to. I am reluctant to call them on this one, even though it tears up all from 1500 khz to 21 mhz. I have heard that this sort of interference can originate miles away and be picked up by the power lines at some distant point (my house). I imagine I'll call the power company for resolution, but would like any input I can get before I do it. Please don't tell me to go beat on the pole!

--

Doug Snowden
drs@ccd.harris.com
N4IJ

665. Re: MFJ's 20m SSB Travel Radio: No RIT?!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 14:14:50 UTC
From: greg@netcom.com
Message-ID: <gregCK6vKq.202@netcom.com>
Source record: 271960

In article <2i0ra6$2na@clarknet.clark.net> andy@clark.net (Andrew M. Cohn) writes:
>
>But, where's the RIT?? How can you work SSB/CW without an RIT?

Learn how to tune?

> Am I missing
>something here? No RIT control is visible in the photo, nor is there mention
>of one. Even their QRP CW rigs have an RIT, and so does every other QRP kit
>on the market.

A lot of operators lived without RIT. Many of the 'boat anchors' didn't
have RIT. The most recent rig not to have it was, I guess, the Heath HW-
series.

After all, if ONE station has RIT, that's more than enough.

Greg

666. TF3CW QSL address

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 14:44:16 UTC
From: ham@wam.umd.edu
Message-ID: <2i3b80$jeq@cville-srv.wam.umd.edu>
Source record: 271957

I worked TF3CW on Sunday afternoon, and wonder if anyone has a recent QSL direct address for him?

Thanks!

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 123 QSLed on dipoles __________| Dipoles! Antenna!

667. FOR SALE: Z-100 Computer - "Good Packet radio terminal"

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 14:57:20 UTC
From: tmetzger@bbn.com
Message-ID: <mkacqgINNkqu@news.bbn.com>
Source record: 271958
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.packet,

FOR SALE:

> Zenith Z-100 Business computer.
> Older model
> Monitor,keyboard, two 5 1/4" drives, all one unit
> Z-Dos operating system.
> Some Compilers, WP software, Communications software.

> Best Offer.

Was recommended vvvvvvvvvvvvvvvvv

You might post to one of the ham radio newsgroups, and state that it
would be a good terminal for a packet radio station.

Tim Metzger
tmetzger@ccs1.bbn.com
(617)-873-2551

668. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 16:03:42 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2i3fsu$7lh@news.acns.nwu.edu>
Source record: 271973

In article <CK5Jqz.2p9@srgenprp.sr.hp.com>, Alan Bloom <alanb@sr.hp.com> wrote:
>Kein{nen Paul (k23690@lehtori.cc.tut.fi) wrote:
>
>
>: Clark Savage Turner (turner@safety.ics.uci.edu) wrote:
>
>: > Most IF filters don't have much ring, though some, many audio filters
>: > (except DSP I understand) can ring pretty badly.
>
>: What should the audio filter frequency (and phase response) look like
>: to avoid ringing. A high-Q single stage bandpass sounds horrible, but
>: how does a filter with flat passband (eg. Butterworth or elliptic)
>: sound like or is it really required to use Bessel-response in order
>: to get rid of the hollow sound produced by noise peaks.
>
>Another name for ringing is "pulse response" since CW dots and dashes
>are really pulses of RF. The filter shape with best pulse response for
>a given bandwidth is, I believe, Gaussian. This is closely approximated
>by a series of cascaded single-resonator filters, all tuned to the same

... a few lines on filters and shape factors have been deleted for brevity ..

>
>Butterworth and Chebyshev filters have flatter passbands and better shape
>factors, but at the expense of poorer pulse response (ringing).

If we broaden the definition of ringing to allow for noisy signals, of
the kind encountered on the low HF bands such as 80m, then there might
be more than one source of ringing:

1. As Al described. Ringing that arises out of improper pulse
response.

2. Progressive coloration of background white noise as the filter
bandwidth is narrowed. Consider the following thought experiment:
A white noise source that produces broadband output from 300Hz to 3KHz
is fed into a fir filter. These filters have a flat phase response and
with enough stages they have impressive shape factors. Lets say that the
filter has a center frequency of 750Hz. As the filter is narrowed, a
progressively pure 750Hz tone will emerge. This tone can also make
copying a CW signal difficult.

I suppose one could easily experiment by using the filter
with signals with different Signal-to-Noise ratios.

Rajiv
aa9ch
r-dewan@nwu.edu

669. Re: MFJ's 20m SSB Travel Radio: No RIT?!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 16:06:07 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.94Jan25110609@prince.cs.columbia.edu>
Source record: 271972

greg@netcom.com (Greg Bullough) writes:

> In article <2i0ra6$2na@clarknet.clark.net> andy@clark.net (Andrew M. Cohn) writes:
> >
> >But, where's the RIT?? How can you work SSB/CW without an RIT?
>
> Learn how to tune?

Yeah, why do you need RIT anyway? I'm serious, when I work HF it's just another useless knob on the rig. Maybe I'm dense, but I've never managed to figure out what it's for. I hardly ever touch it. If the station you want to contact is operating normally, you just zero-beat him and that's it. The only time I can think it might be useful is if you want to contact a DX station who is operating on split transmit/receive frequencies, but then they're usually too far apart (anywhere from 3 KHz to a couple of hundred KHz) for the average +/- 2 1/2 KHz RIT control to do any d--n good. Maybe it would be good for switching in and out to tune in the one oddball in every net who can't be bothered to get any closer than somewhere in the general ballpark of the net frequency, but that's about all I can imagine. What do you use this knob for?
-Steve, WB3I

670. SPLog - It Ain't Free!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 16:44:00 UTC
From: mario.campos@cld9.com
Message-ID: <7.14390.976.0N5ABB75@cld9.com>
Source record: 272024

To All Hams World-Wide,

I spotted a reference to a FREE logging program on a conference that I monitor on USENET. I had the article published in our Club newsletter as well as mailed to over 75 Hamclubs throughout Calif., Hawaii, the East Coast!

A friend of mine sent for this program. He received his program but it isn't free. I find this sort of advertising to be deceptive and misleading. I find that $49.99 is not exactly free or did I miss something when I read the following description to SPLog.

The following text was excerpted from the post on USENET and the docs that came with SPLog!
---

* * * FREE LOGBOOK SOFTWARE * * *
^^^^^^^^^^^^^^^^^^^^^
Greetings to all.

Latest version of very popular Logging software SPLog is now available to the world at large.

For your free copy, send a formatted disk of your choice
^^^^^^^^^
(IBM format) with SASE (Foreign stamps are No Good in Canada) to:

Peter Pfeiffer
63 Beaver Cr.
Brantford, Ont.
N3P 1T3
Canada

Please do not send thin envelopes. Try to send a disc mailer and I will re-use it to return your disc.
This is a free offer so try not to put me to any expense.
^^^^^^^^^^

The following is an excerpt from SPLog's documentaion files
^^^
8.0 SPLog License

SPLog is NOT a Public Domain program and is NOT free. SPLog is copyright (C) 1990-1994 by Alpha Business Software.

Regular Registration Price $49.99
^^^^^
Version Introducion (Until May 1, 94) $39.99

^^^^^
Registered Users: Upgrade Diskette $15.00
^^^^^
Non-registered users of this program are granted a limited one
month license to SPLog to evaluate the programs suitability for their
requirements. Any usage of SPLog beyond evaluation time period
requires registration of each copy of the program used. Use of non-
registered copies of SPLog beyond the original evaluation period is
prohibited.

I plan to send a copy of this post to Peter, VE3NPL@VE3EUK.#SCON.ON.CAN.NA,
via packet as well as all the shareware, hamradio conferences available to
me through the Internet as well as copies to editors of various hamradio
publications!

73,

mario.campos@nitelog.com (Mario Campos)
N6ALS@K6LY#NOCAL.CAL.USA.NA

Message written at 10:44am, on Tuesday, January 25, 1994.
---
* [R2.00o] * Usenet * Nitelog BBS * Monterey CA * 408-655-1096

671. Mail order info for multi-system VCR, FAQ

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 17:07:11 UTC
From: nchak@ctp.com
Message-ID: <1994Jan25.170711.13361@ctp.com>
Source record: 271878
Cross-posted to: rec.video,rec.radio.amateur.misc,sci.electronics

I am considering buying a multi-sytem VCR to take to India. It must play NTSC and PAL. Is there a list of mail-order places that might stock an item such as this?

I tried J&R Music World, they list an AIWA for $380 and another for $500. B&H has some professional stuff for $1850 (too much for me).

Also, where is the FAQ for this newsgroup?

Thanks,

Navaneeth
--

Navaneeth Chakravarti, x456 Cambridge Technology Partners
e-mail: nchak@ctp.com Voice: (517) 372-8400
chakrava@egr.msu.edu (617) 374-8456

672. how can I find Kiss definition

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 18:01:28 UTC
From: beppe@csr.unibo.it
Message-ID: <CK762H.CH3@dm.unibo.it>
Source record: 271962

I'm intrested to know kiss protocol definition
If you can help me
Please mail
beppe@csr.unibo.it

673. Re: FCC RF Spectrum Allocation?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 18:07:58 UTC
From: rjk@access1.digex.net
Message-ID: <rjk.759520576@access1>
Source record: 271965

I don't have handy at the moment where on the net you might find this, but the FCC's spectrum allocations are set forth in Part 2 of its Rules. You need Subpart B of Part 2 of Title 47 of the Code of Federal Regulations. In legalese (not that the foregoing was actually English) that is "47 C.F.R. sections 2.100 - 2.108 and it is called the "Allocation, Assignment, and Use of Radio Frequencies," more commonly called, the Table of Allocations.

I recall seeing that there is a Gopher site somewhere that is experimentally offering access to at least some portions of CFR, but unfortunately I don't have the reference handy at the moment.

Good luck.
--
Bob Keller (KY3R) rjk@telcomlaw.win.net Tel 301.229.5208 Fax 301.229.6875

674. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 18:18:20 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2i3npc$4bt@vixen.cso.uiuc.edu>
Source record: 271969

wvanhorn@magnus.acs.ohio-state.edu (William E Van Horne) writes:

>Kein{nen Paul wrote:
....

>Can someone with a great deal more technical knowledge than I have
>state just what is the minimum usable bandwidth for a 10-20 WPM CW
>signal, and how much audible ringing is truly inescapable?

>73, Van - W8UOF

I assume that G is an average-size letter in Morse and the
transmission is at 120 wpm (2 characters/s). G's sound is:

111011101000

where 1 corresponds to key on, and the last 3 pauses are character delmiters.
Assuming that a single sinusoid cycle has 2 items (00, 10, 01 or 00),
G has 6 transitions or cycles or Hz.
So the minimum bandwith at 120 wpm would be
2 characters/s * 6 cycles/character =12 Hz.
Multiple by 2-3 so that dots and dahs are flatter and (probably) by 2 if
you want to copy the other sideband.

The bandwith at 120 wpm is in the range of 24-72Hz, assuming no drift,
no off-tuning and well shaped signals.

Ignacy Misztal, NO9E
University of Illinois
ignacy@uiuc.edu

675. Ham Radio and More talkshow

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 18:33:49 UTC
From: ginsburg@wellfleet.COM
Message-ID: <9401251826.AA21834@pobox.wellfleet>
Source record: 271964

My local Talk America Radio Network affiliate (1510 in the Boston area) didn't run "Ham Radio and More" this past Sunday evening. Did anyone in a different part of the country hear the show, or was it QRT nationally?

--
Scott Ginsburg Voice: 508-436-3836 | too much DX,
Wellfleet Communications Internet: ginsburg@wellfleet.com | too little
2 Federal St. Amateur Radio: WA2CJT | time...
Billerica, MA 01821

676. Where is FAQ on EMF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 19:35:32 UTC
From: pmarsh@metro.mccneb.EDU
Message-ID: <9401251935.AA14487@metro.mccneb.edu>
Source record: 271967

A friend in Seattle is looking for info on electro-magnetic fields (EMF). Gary Coffman mentioned a FAQ dealing with the subject. Could Gary or someone please advice where I might ftp a copy? If anyone knows of other relevant materials, bibliographies, etc., could you please send them to me? (Please send direct -- avoid clogging the bandwidth.)

Thanks. Paul Marsh N0ZAU pmarsh@metro.mccneb.edu

677. Re: FCC RF Spectrum Allocation?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 19:46:41 UTC
From: nsyslaw@riogrande.acs.ncsu.edu
Message-ID: <1994Jan25.194641.12850@ncsu.edu>
Source record: 271980

Robert J. Keller (rjk@access1.digex.net) wrote:

: I don't have handy at the moment where on the net you might find this,
: but the FCC's spectrum allocations are set forth in Part 2 of its Rules.
: You need Subpart B of Part 2 of Title 47 of the Code of Federal
: Regulations. In legalese (not that the foregoing was actually English)
: that is "47 C.F.R. sections 2.100 - 2.108 and it is called the
: "Allocation, Assignment, and Use of Radio Frequencies," more commonly
: called, the Table of Allocations.

: I recall seeing that there is a Gopher site somewhere that is
: experimentally offering access to at least some portions of CFR, but
: unfortunately I don't have the reference handy at the moment.

If you have a WWW Browser (such as Mosaic), we have an Amateur Radio
page that has links to the FCC Part 97 rules and regs.

Right now the files are in text format, but that will soon change
as I'm formatting them for html soon.

The URL is
http://www.acs.ncsu.edu:80/HamRadio

: Good luck.
: --
: Bob Keller (KY3R) rjk@telcomlaw.win.net Tel 301.229.5208 Fax 301.229.6875

Enjoy!

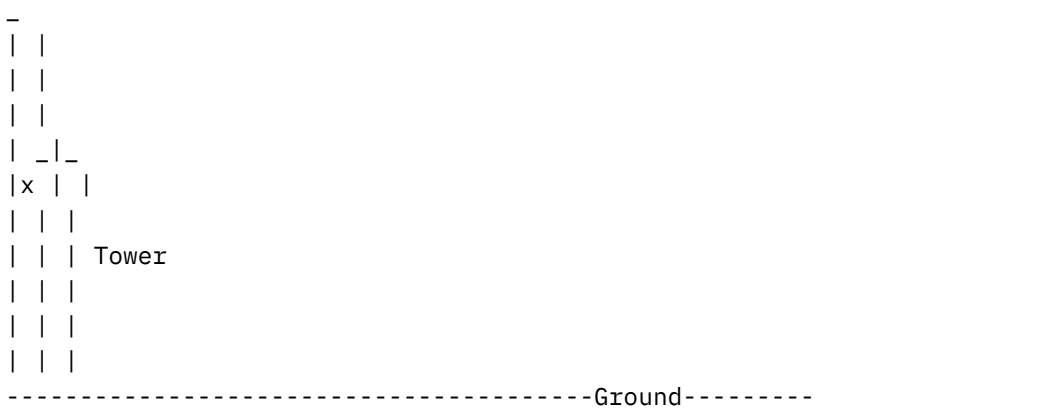
--
Lou Williams (nsyslaw@acs.ncsu.edu) | aka: KE4ARM
Unix Systems Programmer | Phone: (919) 515-2794
NCSU Administrative Computing Services | FAX: (919) 515-3787

January 20th, 1993, The Raw Deal Countdown continues:
Day 366 for the poor & middle class.
Day 385 for the rich & the dead. (due to retroactivity)
1094 Days remaining for all of us.
----

678. Computing antenna coverage

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 19:48:24 UTC
From: cravit@world.std.com
Message-ID: <CK7B0q.JH3@world.std.com>
Source record: 271978
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

A friend of mine asked me this question, and I do not know the answer. If one has an antenna (say a vertical or something, as opposed to a beam) that is x feet above ground level, how does one compute the approximate coverage area of that antenna (in square miles)? For example, see the following diagram



If we assume that the distance x is, say, 200 feet and that the ground around the antenna is relatively flat, is there a way to estimate the area of coverage for that antenna?

Thanks,

/MC

--
Matthew Cravit, N9VWG | All opinions expressed here are
Michigan State University | my own. I don't speak for The World,
East Lansing, MI 48825 | and they don't speak for me (luckily
E-Mail: cravit@world.std.com | for both of us).

679. Advanced Computer Controls question

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 19:48:26 UTC
From: afabro@magnus.acs.ohio-state.edu
Message-ID: <2i3t2a$m7s@charm.magnus.acs.ohio-state.edu>
Source record: 271975

Thanks.

Tony N8RRB
afabro@magnus.acs.ohio-state.edu

680. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 19:49:33 UTC
From: alanb@sr.hp.com
Message-ID: <CK7B2M.o6@srgenprp.sr.hp.com>
Source record: 271968

Kein{nen Paul (k23690@lehtori.cc.tut.fi) wrote:

: ... I cascaded 175 Hz (-3 dB) wide
: audio filters, three stages was still usable, but four stages sounded
: horrible. The combined response for four stages is -12 dB at the 175 Hz
: bandwidth or about 70 Hz for -3 dB.

: The filter was used to monitor a distant VHF-beacon and thus most of the
: time there was only noise in the passband causing this howling sound.
: I am going to stagger tune each rection to a slightly diffrent frequency
: to get the combined -3 dB bandwidth to 150 - 200 Hz and hope to get rid
: of some of this howling.

I think you would do better to cascade 3 stages of 300-400 Hz bandwidth
(or 4 stages of slightly wider bandwidth.) That would give you the desired
150-200 Hz bandwidth with less ringing than if you stagger-tuned
resonators with 175 Hz bandwidth.

AL N1AL

681. Electronic Journal of the ASA (EJASA) - January 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 20:10:03 UTC
From: klaes@verga.enet.dec.com
Message-ID: <2i3tvp$e8d@nntpd.lkg.dec.com>
Source record: 271970
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc,rec.arts.sf.science

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or - klaes%verga.enet.dec.com@uunet.uu.net

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When sending your article submissions, please be certain to include either a network or regular mail address where you can be reached, a telephone number, and a brief biographical sketch.

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DETECTABILITY OF EXTRATERRESTRIAL TECHNOLOGICAL ACTIVITIES
PART 2

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Second United Nations/European Space Agency Workshop
on Basic Space Science

Co-organized by The Planetary Society in cooperation with the
Governments of Costa Rica and Colombia, 2-13 November 1992,
San Jose, Costa Rica - Bogota, Colombia

==========

Ultraviolet Rays

Our planet Earth's atmosphere is opaque to radiation in the ultraviolet waveband due to ozone and molecular absorption. As a result, astronomy in these wavelengths has to be carried out from above the atmosphere, preferably with artificial satellites.

The band divides rather naturally into two regions. The region 300 > lambda > 120 nanometers can be studied using techniques similar to those used in optical astronomy. At shorter wavelengths, however, it is difficult to find materials which reflect radiation at normal incidence. Rather, the incident radiation is simply absorbed by the mirror material with little or no reflection.

Perhaps the main problem for using this waveband as a detector for extraterrestrial intelligence is that at wavelengths shorter than 91.2 nm, the Lyman limit for hydrogen, interstellar gas becomes opaque, probably due to photoelectric absorption by neutral hydrogen in the Lyman continuum. This effect is particularly important for objects localized inside our Milky Way galaxy.

In spite of all these limitations, in 1974, H. Wischnia used the facilities of the Orbiting Astronomical Satellite (OAO, also called COPERNICUS) to search for ultraviolet laser pulses around the nearby stars Epsilon Eridani, Tau Ceti, and Epsilon Indi (Tarter, 1991). The observations were carried out in ultraviolet wavelengths below 0.28 micrometers.

Of particular interest in this waveband are the Lyman series of absorption lines with wavelengths of 1214 A, 1024 A, 971 A, 948 A, and 937 A (where A is Angstrom), corresponding to the various fully excited states of the hydrogen atom. The predominant line is the so-called "Lyman Alpha" of 1024 A. It is quite possible that an extraterrestrial civilization could choose to generate a signal which

may lie close to, or preferably right within, the absorption region. The background radiation of our Sun (and presumably other solar-type stars) is down by a factor of 10exp6 at Lyman Alpha wavelengths when compared with the output of visible light. Such a reduction offers a considerable improvement in the signal-to-noise ratio.

X-Rays

Elliot (1973) pointed out that X-rays are not appropriate as a means of transmitting a continuous stream of information because of their high quantum noise. As a means of sending and receiving the "first beacon signal", however, he considered that X-rays could have certain advantages. Elliot analyzed the X-ray emissions of the terrestrial nuclear explosions carried out in the early 1960s. When a nuclear weapon explodes, about seventy percent of the energy released is in the form of kilovolt X-rays. This X-ray pulse is formed in less than one microsecond. If the explosion occurs above eighty kilometers, the X-rays are not absorbed by the atmosphere and are free to propagate into space.

Other advantages of using the X-ray pulse generated by a high-altitude nuclear explosion are: (a) The pulse is short and will not be broadened or appreciably attenuated by propagation through the interstellar medium; (b) there are not stringent requirements on the receiver, since the pulse covers a broad X-ray spectrum; and (c) the X-ray flux involved is much larger than that of a solar-type star, a natural source of X-rays.

Elliot estimated the distance at which the United States "Starfish" nuclear test could be detected by our present technology of X-ray detectors. Assuming that the energy of the explosion is equivalent to 1.4 megatons and that the X-ray pulse was equally intense in all directions, he found that this explosion should be detected from a distance of d~400 Astronomical Units, about ten times the radius of Pluto's solar orbit.

Supposing that all the terrestrial nuclear powers [3] pooled their nuclear weapons stockpiles to produce a single explosion in space (E~2x10exp4 megatons). Considering that the X-ray pulse could be concentrated into a conical beam of about thirty degrees in angle with no loss of radiation, a typical terrestrial X-ray detector should be able to detect a signal from a distance of ~190 light years.

==========
3 - In 1989 the United States and the Soviet Union had almost 55,000 nuclear warheads with a combined destructive power of 15,500 megatons (Source: Bulletin of Atomic Scientist, 1990).
==========

Fabian (1977) suggested that a supercivilization (in the transition from Kardashev's Type I to Type II) could - in the same sense of the proposals by Drake and Shklovskii - drop material onto

a neutron star. This material could be impinged onto the surface at about one-third of the velocity of light. About ten percent of the rest mass energy of the matter will emerge as radiation, predominantly as X-rays if the mass flow rate exceeds ~10exp16 F gm sec-1, F being the fraction of the surface onto which matter falls.

Thus, to produce an X-ray flash as energetic as that suggested by Elliot (1973), ten tons of matter of any composition would have to be dropped onto a neutron star. According to Fabian (1977), such a flash will be broadband and almost omnidirectional, although some beaming may occur if the neutron star possesses a strong magnetic field.

The above arguments show that an object of about one kilometer in size and 10exp16 gm dropped onto a neutron star could produce an X-ray pulse (E~10exp36 ergs) strong enough to be easily detectable throughout the Milky Way galaxy. Harwit and Salpeter (1973) argue that the soft gamma-ray burst observed by Klebesadel et al (1973) may be due to comets falling onto the surface of a neutron star. If an advanced civilization could cause individual objects that might be easily found in the neutron star's neighborhood to fall onto the star in a pre-arranged pattern, this could be detected across the galaxy.

Gamma Rays

Viewing et al (1977) pointed out that an alternative method for SETI could be the detection of alien artifacts. Because most of the different models for interstellar propulsion (Mallove and Matloff, 1989) produce copious quantities of gamma rays, they proposed the search for this kind of radiation from the antimatter annihilation process. Harris (1986) showed that interstellar spacecraft as gamma-ray sources will be most easily recognized by their proper motions. Their velocities, being substantial fractions of the velocity of light, will be at least one hundred times as large as the highest velocities characteristic of normal astronomical objects. No steady gamma-ray source is known with a proper motion as large as one degree per year.

For spacecraft of sufficient size, the poor angular resolution of current gamma-ray telescopes imposes a limit on identification rather than detection. Of the Compton Gamma-Ray Observatory (GRO) instruments, EGRET has an angular resolution of 1.6 degrees at 100 MeV. The best possible resolution of BATSE is 0.5 degrees (Kurfess, 1985, Morris, 1985). In the most favorable circumstances - purely tangential velocity close to c; observations made over the ten-year lifetime of GRO - these resolutions will be able to detect the motion of spacecraft at distances of ~100 parsecs and ~300 parsecs, respectively. The distinctive line emission from these objects is readily detectable if the spacecraft is sufficiently massive. A consumption of ~(1 to 10)Rexp2 tons per second of antimatter is necessary for detection by GRO of a spacecraft at a distance R in pc (Harris, 1991b).

Harris (1991a) reported the negative results of a search for the linear alignments of burst along a potential spacecraft trajectory, using burst locations and spectra observed by the 1978-1980 inter-planetary network of gamma-ray detectors.

Improvements in the measurement of gamma-ray source positions may be expected from two directions. For steady sources and very bright transients, larger detectors will achieve improved signal-to-noise ratios and hence better source positions for a given angular resolution. However, the positions of most of the gamma-ray bursts are measured more accurately from the event delay times across interplanetary distances (Harris, 1991b). Progress in this field is dependent on future space mission launch schedules.

Particle Astronomy

Atomic Microscopic Particles

Another technique of astronomical investigation relies on the observation of microscopic particles which stream toward Earth in huge numbers from different directions. They include elementary particles such as electrons, protons, and heavier and complex atomic particles. The more energetic of these particles are frequently referred to as cosmic rays. Another amazing particle that could be use as an "information carrier" is the neutrino.

Neutrinos

A neutrino is a weakly interacting particle that travels at essentially the speed of the light and has an intrinsic angular momentum of 1/2 (h/4 PI). Neutrinos are produced on Earth by natural radioactivity, nuclear reactors, and high-energy accelerators. There are six types of neutrinos and three flavors of neutrinos and anti-neutrinos. Each are associated with a massive lepton that experiences weak, electromagnetic, and gravitational forces, but not strong interactions. The known leptons are electrons, muons, and taus (in increasing order of their rest masses).

Because neutrinos interact only weakly with matter, they can reach us from otherwise inaccessible regions where photons are trapped. Hence, with neutrinos, we can look inside stars and examine directly energetic physical processes that occur only in stellar interiors. Large detectors, consisting typically of hundreds or thousands of tons of material, are required to observe "astronomical neutrinos".

The neutrino burst detected from Supernova 1987A confirmed the basic theory of core collapse and refined our views of neutrino properties. Twenty neutrinos in the energy range from 6 to 39 MeV were detected over ~12 seconds (Chevalier, 1992). Given the distance to the Large Magellanic Cloud galaxy and the sensitivity of the instruments, the results were consistent with an emission of about 10exp58 neutrinos in the supernova. To have a real idea about the difficulties in the detection of this particle, it was estimated that during those ~12 seconds, more than 10exp11 neutrinos passed through

each square centimeter of Earth. Our technology was only capable of detecting twenty of them.

There have been several proposals to use collimated neutrino beams in the energy range from 1 to 100 GeV as a potential means for telecommunication over global distances of 10exp3 - 10exp4 kilometers (Saenz et al 1977, Uberall et al 1979). Similar proposals for telecommunication for not only global but also interstellar and intergalactic distances were investigated by Subotowicz (1979) and Pasachoff and Kutner (1979).

The main difficulty of all these ideas is the low cross-section of interaction of the neutrino and their very low detection efficiency. Subotowicz (1979) suggested that some advanced civilizations may deliberately shut out emergent civilizations such as ours from the conversation. Generation and detection of neutrinos is so difficult that an advanced civilization may purposely choose such a system in order to find and communicate only with their own level of development.

Electrons, Protons, and Heavy Particles (Cosmic Rays)

Highly energetic protons, neutrons, electrons, positrons, and a wide variety of heavier nucleons constitute the cloud of galactic cosmic ray particles. Anti-nucleons consisting of antimatter have been sought: During the 1980s, anti-protons were found. Unstable sub-nuclear particles are not expected to figure significantly as carriers of cosmic information. Their short lifetimes preclude travel over long distances in the Universe, unless the most extreme energies are assumed.

The energy range of galactic, or possible extragalactic, cosmic ray particles that we can hope to use as carriers of information lies between 10exp11 eV and 10exp21 eV. However, most of the stable cosmic rays are charged, therefore studies at high angular resolution, high spectral (energy) resolution, or high time resolution are not likely to yield a great deal of "information". Galactic magnetic fields scramble all "memory" of where and how the particles originated and make uncertain the time of origin, including the initial energy of the particle.

This kind of information carrier presents several disadvantages for interstellar communication. Due to the electric charge of electrons and protons and their interaction with the magnetic interstellar fields (~ 5x10exp(-6) Gauss), a Lorentz force will act on both particles, but with opposite direction. The relevant relativistic equations are V/c = ((1-(Mexp2 x cexp4))/Eexp2)exp(1/2) and R=MV/QB(1-Vexp2/cexp2)exp(1/2)sen(alpha), where c is the speed of light, V is the particle velocity, M is the particle mass, Q is charge, B is the magnetic flux density, E is the particle energy, R is the curvature radius, and alpha is the angle between the galactic field and the direction of the particle beam.

Assuming the beam is aimed properly, it will curve around and just barely reach the target if R is one-half the distance thereto (Freitas, 1977). If we send a message via high energy protons across ten light years, E must be at least 1.4x10exp16 eV if alpha equals ninety degrees. Of course this assumes a nice uniform B field all the way, a dubious proposition at best. In view of the galactic deflection problem, it is difficult to see how charged particle beams could represent a communication mode for advanced extraterrestrial civilizations.

Macroscopic Objects

The planet Earth is incessantly bombarded by matter whose information content is far from negligible. For example, the stream of extraterrestrial matter gives direct information about the abundance of the elements in the sites where the matter was produced, which mainly involves the history of the solar system. Meteorites are one such group of objects which can be handled and subjected to laboratory tests and analyzes. Meteoric dust brought to Earth by rain or snow can be studied in the same way. The difference here is that these particles or objects can be examined and re-examined in a leisurely way. They are not so transient as individual photons or fermions.

There have been some speculations that a simple biological system carrying a message and capable of self-replication in suitable environments may be one possible channel for interstellar communication (Yokoo and Oshima, 1979, and Nakamura, 1986). These kinds of ideas have several and severe objections. For example, the impossibility to predict the environment of the target star in order to favor the self-replication of the molecular structure, the impossibility to avoid the destruction of the content of the message by the molecular mutations, and the impossibility for us to distinguish between a "natural" organism and a real biological interstellar message.

Direct Techniques

With the development of the Space Age, the way has been opened for a more direct approach to many phases of extraterrestrial exploration. Such probes can transport sensing devices for direct measurements at distant locations and telemeter their findings back to Earth. The human race's capacity for observation and interpretation of diverse and unexpected phenomena make manned exploration the ultimate goal.

In the past thirty years, there have been several proposals of rapid space probes (v > 0.1 c) for interstellar travel purposes, including pulsed fusion and antimatter-powered rockets, laser-pushed light sails, and interstellar ramjets (Mallove and Matloff, 1989). The scale of the undertaking, from both a technological and economic perspective, is such that they are unlikely to be realized for at least one century (Crawford, 1990).

The most ignored factor in discussing interstellar flight is the kinetic energy that must be invested in the ship to make its tons of matter move at a substantial fraction of the speed of light (Oliver, 1981; Purcell, 1959; von Hoerner, 1962). This turns out to be the dominant energy requirement and is thus a useful lower bound on the total. If, in assessing the cost of interstellar travel, we find this lower bound too big, all the other costs can be negligible.

Bracewell (1960, 1975) and Freitas (1980a) have discussed the possible superiority of interstellar probes in missions of galactic exploration. Freitas (1980b) and Valdes and Freitas (1980) have raised the issue of self-organized machines in related context. The non-detectability of the proposed probes has been used as an argument to establish that we are the only technological civilization in the entire Milky Way galaxy (Tipler, 1980).

Under the assumption that an extraterrestrial probe will be interested in life in our solar system, a near-Earth search was carried out for these kinds of artificial objects by Freitas and Valdes (1980, 1983, 1985). Other proposals to search for extraterrestrial artifacts in our neighborhood were proposed by Papagiannis (1978, 1985).

References

Abt, H. A., Astrophysical Journal, vol.294, L103, 1985

Beech, M., Blue Stragglers as Indicators of Extraterrestrial Civilizations?, Earth, Moon, and Planets, vol.49, pp.177-186, 1990

Beskin, G. M., et al., Results of Searches for Optical Signals of Extraterrestrial Intelligence, USA-USSR Joint Conference on the Search for Extraterrestrial Intelligent Life, A.P.S. Conference Series, vol.47, pp. 380-390, 1993

Betz, A., A Direct Search for Extraterrestrial Laser Signals, Acta Astronautica, vol.13, No.10, pp.623-629, 1986

Breetz, L. D., Electronic Aerospace Systems Convention (EASTCON) Record, p.68, 1968

Billingham, J., and Tarter, J. C., Detection of the Earth with the SETI Microwave Observing System Assumed to be Operating out of the Galaxy, Acta Astronautica, vol.26, No.3-4, pp.185-188, 1992

Bracewell, R. N., Communications from Superior Galactic Communities, Nature, vol.186, pp.670-671, 1960

Bracewell, R. N., The Galactic Club: Intelligent Life in Outer Space, H. Freeman & Co., San Francisco, 1975

Chevalier, R. A., Supernova 1987A at Five Years of Age, Nature, vol.355, pp.691-696, 1992

Cordes, J. M., and Lazio, T. J., Interstellar Scattering Effects on the Detection of Narrow-Band Signals, Astrophysical Journal, vol.376, pp.123-134, 1991

Crawford, I. A., Interstellar Travel: A Review for Astronomers, Q. Jl. Royal Astro. Soc., vol.31, pp.377-400, 1990

Demming D., and Mumma, M. J., Modeling of the 10-micrometer Natural Laser Emission from the Atmospheres of Venus and Mars, Icarus, vol.55, pp.356-368, 1983

Dyson, F. J., Search for Artificial Stellar Sources of Infrared Radiation, Science, vol.131, pp.1667-1668, 1959

Dyson, F. J., The Search for Extraterrestrial Technology, in Perspectives in Modern Physics (Essays in Honor of Hans Bethe), R. E. Marshak (Editor), John Wiley & Sons, New York, 1966

Elliot, J. L., X-Ray Pulses for Interstellar Communication, in Communication with Extraterrestrial Intelligence, Carl Sagan (Editor), pp.398-402, MIT Press, Cambridge, Massachusetts, 1973

Fabian, A. C., Signaling Over Stellar Distances with X-Rays, J. of the British Interplanetary Society (JBIS), vol.30, pp.112-113, 1977

Freitas, R. A., High Energy Particle Beams for CETI, Spaceflight, vol.19, p.379, 1977

Freitas, R. A., Interstellar Probes: A New Approach for SETI, J. of the British Interplanetary Soc., vol. 33, pp.95-100, 1980a

Freitas, R. A., A Self-Reproducing Interstellar Probe, J. of the British Interplanetary Soc., vol.33, pp.251-264, 1980b

Freitas, R. A., and Valdes, F., A Search for Natural or Artificial Objects Located at the Earth-Moon Libration Points, Icarus, vol.42, pp.442-447, 1980

Freitas, R. A., and Valdes, F., A Search for Objects Near the Earth-Moon Lagrangian Points, Icarus, vol.53, pp.453-457, 1983

Freitas, R. A., and Valdes, F., The Search for Extraterrestrial Artifacts (SETA), Acta Astronautica, vol.12, No.12, pp.1027-1034, 1985

Harris, M. J., On the Detectability of Antimatter Propulsion Spacecraft, Astrophysics and Space Science, vol.123, pp.297-303, 1986

Harris, M. J., A Search for Linear Alignments of Gamma Ray Burst Sources, J. of the British Interplanetary Soc., vol.43, pp.551-555, 1991a

Harris, M. J., SETI Through the Gamma Window: A Search for Interstellar Spacecraft, in Bioastronomy: The Search for Extraterrestrial Life, J. Heidemann and M. J. Klein (eds.), Lectures Notes in Physics 390, Springer-Verlag, Berlin, 1991b

Harwit, M., and Salpeter, E. E., Radiation From Comets Near Neutron Stars, Astrophysical Journal, vol. 186, L37-L39, 1973

Jugaku, J., and Nishimura, S., A Search for Dyson Spheres Around Late-Type Stars in the IRAS Catalog, in Bioastronomy: The Search for Extraterrestrial Life, J. Heidemann and M. J. Klein (Eds.), Lectures Notes in Physics 390, Springer-Verlag, 1991

Kardashev, N. S., Transmission of Information by Extraterrestrial Civilizations, Soviet Astronomy, vol.8, No.2, pp.217-220, 1964

Kardashev, N. S., On the Inevitability and the Possible Structures of Supercivilizations, in The Search for Extraterrestrial Life: Recent Developments, M. D. Papagiannis (Editor), pp.497-504, Reidel Pub. Co., Boston, Massachusetts, 1985

Kardashev, N. S., and Zhuravlev, V. I., SETI in Russia, paper presented at the IAA/COSPAR/IAF/NASA/AIAA symposium on SETI: A New Endeavor for Humankind, The World Space Congress, Washington, D.C., August 30, 1992. To appear in a special issue of Acta Astronautica.

Kingsley, S. A., The Search for Extraterrestrial Intelligence (SETI) in the Optical Spectrum, EJASA, Vol. 3, No. 6, January 1992

Klebesadel, R. W., Strong, I. B., and Olson, R. A., Observations of Gamma Ray Burst of Cosmic Origin, Astrophysical Journal, vol.182, L85-L88, 1973

Kurfess, S. M., paper presented at the Univ. of Washington, 1985, Physics Summer Institute Nuclear Astrophysics, Seattle, July-August, 1985.

Lawton, A. T., Infrared Interstellar Communication, Spaceflight, vol.13, No.3, pp.83-85, 1971

Learned, J. G., Pakvasa, S., Simmons, W. A., and Tata, X., Timing Data Communication with Neutrinos: A New Approach to SETI, pre-print of the University of Hawaii UH-511-750-92, 1992

Lemarchand, G. A., El Llamado de las Estrellas, Lugar Cientifico, Buenos Aires, 1992a

Lemarchand, G. A., and Sagan, C., Detectivity of Collisional Early Warning Radar Systems of Galactic Civilizations, in preparation, 1993

Lemarchand, G. A., Beskin, G. M., Colomb, F. R., and Mendez, M., Radio and Optical SETI from the Southern Hemisphere, Free-Space Laser Communications V, Special Symposium "SETI in the Optical Spectrum", SPIE Conference Proceeding, Vol. 1867, January, 1993

Mallove, E., and Matloff, G., The Starflight Book: A Pioneer's Guide to Interstellar Travel, John Wiley & Sons, New York, 1989

Morris, D., paper presented at the Univ. of Washington, 1985, Physics Summer Institute Nuclear Astrophysics, Seattle, July-August, 1985

Nakamura, H., SV40 DNA: A Message from Epsilon-Eridani?, Acta Astronautica, Vol.13, No.9, pp.573-578, 1986

Oliver, B. M., Search Strategies, in Life in the Universe, J. Billingham (Editor), MIT Press, Cambridge, Massachusetts, 1981

Ostro, S. J., et al., Asteroid Radar Astrometry, Astronomical Journal, vol.102, pp.1490-1502, 1991

Pasachoff, J. M., and Kutner, M. L., Neutrinos for Interstellar Communication, Cosmic Search, vol.1, No.3, pp.2-8, 1979

Papagiannis, M. D., Are We Alone or Could They be in the Asteroid Belt?, Q. J. R. Astro. Soc., vol.19, p.277, 1978

Papagiannis, M. D., An Infrared Search in Our Solar System as Part of a More Flexible Search Strategy, in The Search for Extraterrestrial Life: Recent Developments, M. D. Papagiannis (Editor), Reidel Pub. Co., Boston, Massachusetts, 1985

Purcell, E., Radio Astronomy and Communication Through Space, U.S. Atomic Energy Commission Report BNL-658, 1961

Rather, J. D., Lasers Revisited: Their Superior Utility for Interstellar Beacons, Communications, and Travel, J. of the British Interplanetary Soc., vol.44, pp.385-392, 1991

Reeves, H., Atoms of Silence: An Exploration of Cosmic Evolution, MIT Press, Cambridge, Massachusetts, 1984

Ross, M., The Likelihood of Finding Extraterrestrial Laser Signals, J. of the British Interplanetary Soc., vol.32, pp.203-208, 1979

Ross, M., Design of an Optical Receiver for Space Signals, J. of the British Interplanetary Soc., vol.33, pp.89-94, 1980

Saenz, A. W., Uberall, H., Kelly, F. J., Padgett, D. W., and Seeman, N., Telecommunications with Neutrino Beams, Science, vol.198, pp.295-297, 1977

Sagan, C., and Shklovskii, I. S., Intelligent Life in the Universe, Holden-Day, Inc., San Francisco, California, 1966

Sandage, A. R., Astrophysical Journal, vol.58, pp.61, 1952

Schwartz, R. N., and Townes, C. H., Interstellar and Interplanetary Communication by Optical Masers, Nature, vol.190, pp.205-208, 1961

Shvartsman, V. F., SETI in the Optical Range with the 6-meter Telescope: MANIA, in Bioastronomy: The Next Steps, G. Marx (Editor), pp.389-390, Kluwer Academy Pub., 1988

Slysh, V. I., Search in the Infrared to Microwave for Astro-engineering Activity, in The Search for Extraterrestrial Life: Recent Developments, M. D. Papagiannis (Editor), Reidel Pub. Co., Boston, Massachusetts, 1985

Subotowicz, M., Interstellar Communication by Neutrino Beams, Acta Astronautica, vol.6, pp.213-220, 1979

Subotowicz, M., and Paprotny, Z., Impact of CETI-SETI on the Development of Biology [B], Astronomy [A], Radio Astronomy [R], Astrophysics [AP], and Culture [C] - "BARAPC", in Space: Mankind's Forth Environment, L. G. Napolitano (Editor), XXXII International Congress, Rome 1981, pp.385-395, Pergamon Press, Oxford, 1982

Sullivan, W., We Are Not Alone, McGraw-Hill Co., New York, 1964 (revised in 1966 and 1993)

Sullivan III, W. T., Brown, S., and Wetherill, C., Eavesdropping: The Radio Signature of the Earth, Science, vol.199, pp.377-388, 1978

Sullivan, W. T., Eavesdropping Mode and Radio Leakage from Earth, in Life in the Universe, p.377-390, MIT Press, Cambridge, MA, 1981

Tarter, J. C., SETI and Serendipity, Acta Astronautica, vol.11, No.7-8, pp.387-391, 1984

Tarter, J. C., Summary of SETI Observing Programs, SETI Institute, October 1991

Tarter, J. C., SETI in the United States, paper presented at the IAA/COSPAR/IAF/NASA/AIAA symposium on SETI: A New Endeavor for Humankind, The World Space Congress, Washington, D.C., August 30, 1992. To appear in a special issue of Acta Astronautica.

Tipler, F. J., Extraterrestrial Intelligent Beings do not Exist, Q. J. R. Astro. Soc., vol.21, p.267, 1980

Townes, C. H., At What Wavelengths Should We Search for Signals from Extraterrestrial Intelligence?, Proc. Natl. Acad. Sci. U.S.A., vol.80, pp.1147-1151, 1983

Uberall, H., Kelly, F. J., and Saenz, A. W., Neutrino Beams: A New Concept in Telecommunications, J. Wash. Acad. Sci., vol.69, No.2, pp.48-54, 1979

Valdes, F., and Freitas, R. A., Comparison of Reproducing and Non-Reproducing Starprobe Strategies for Galactic Exploration, J. of the British Interplanetary Soc., vol.33, pp.402-408, 1980

Vallee, J. P., and M. Simard-Normandin, Observational Search for Polarized Emission from Space Vehicles/Communication Relays Near the Galactic Centre, Astron. Astrophys., vol.243, pp.274-276, 1985

Viewing, D. R., Horswell, C. J., and Palmer, E. W., Detection of Starships, J. of the British Interplanetary Soc., vol.30, pp.99-104, 1977

von Hoerner, S., The Search for Signals from Other Civilizations, Science, vol.134, pp.1839-1843, 1961

von Hoerner, S., The General Limits of Space Travel, Science, vol.137, pp.18, 1962

Whitmire, D. P., and Wright, D. P., Nuclear Waste Spectrum as Evidence of Technological Extraterrestrial Civilizations, Icarus, vol.42, pp.149-156, 1980

Yeomans, D. K., Ostro, S. J., and Chodas, P. W., Radar Astrometry of Near-Earth Asteroids, Astronomical Journal, vol.94, pp.189-200, 1987

Yeomans, D. K., Chodas, P. W., Keesey, M. S., and Ostro, S. J., Asteroid and Comet Orbits Using Radar Data, Astronomical Journal, vol.103, pp.303-317, 1992

Yokoo, H., and Oshima, T., Is Bacteriophage PHI X 174 DNA a Message from an ETI?, Icarus, vol.38, pp.148-153, 1979

Errata -

The following are corrections of errors made in Part 1 of this article in the December 1993 issue of the EJASA. I regret the errors and apologize for them. I thank Guillermo A. Lemarchand for finding and correcting the information. - The Editor

The text reads:

TYPE II: A civilization capable of utilizing and channeling the entire radiation output of its star. The energy utilization would then be comparable to the luminosity of our Sun, about 4x1026 Watts.

It should read 4x10exp26 Watts.

The text reads:

structures in the range 3 Kelvin s T s 300 K, the consumption of energy in the range 1 Luminosity (Sun) s L s 10exp12 L(Sun), structures with sizes up to 100 kiloparsecs (kpc), and distances up to Dw 1000 megaparsecs (mpc). One parsec equals 3.26 light years.

It should read "3 Kelvin s Ts 300 K" (the symbol is minor or equal combination of < and =). The next line should read "1 Luminosity (Sun) s Ls 10exp12 L (Sun)". Where it says Dw 1000 megaparsecs (mpc) it should read "~ 1000 megaparsecs (Mpc)", using the symbol of "almost equal" and "Mpc", not milliparsecs (mpc).

The text reads:

now, only a small fraction of the whole Haystack has been explored (w 10exp(-15) - 10exp(-16)).

Instead of w it should read ~.

The text reads:

modest "Type 0" (w10exp13 W/Hz, Rw0.4 A.U., Dw5000 m, and lambdaw1 m) to the transition from "Type I" to "Type II" (w2x10exp24 W/Hz, Rw0.4 A.U., Dw10 m, lambdaw1 mm).

Replace w per ~, and Rw per r, Dw per ~, and so on.

The text reads:

In 1993, MANIA was used from the 2.15-meter telescope of the Complejo Astronomico El Leoncito in Argentina, to examine fifty nearby solar-type stars for the presence of laser pulses (Lemarchand et al, 1993).

This MANIA project did *not* take place in 1993.

The text reads:

resonance line. If we consider that the typical spectral line width might be about 1, and if we assume that a ten percent absorption

After 1 it should read 1 armstrong.

The Author -

| |
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682. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 20:31:07 UTC
From: alanb@sr.hp.com
Message-ID: <CK7Czx.1zw@srgenprp.sr.hp.com>
Source record: 271974

William E Van Horne (wvanhorn@magnus.acs.ohio-state.edu) wrote:

: I used crystal filters in old tube receivers for many years and always
: thought that ringing was an inevitable result of narrow bandwidths. ...
: I used to think that an effective bandwidth of some
: 200-300 Hz. was about minimum and that less than that would cause so
: much ringing that weak signals would be lost. ...

: Can someone with a great deal more technical knowledge than I have
: state just what is the minimum usable bandwidth for a 10-20 WPM CW
: signal, and how much audible ringing is truly inescapable?

For a single-resonator bandpass filter, I believe that the formula is

TC = 1 / (PI*BW)

Where TC is the time constant of the ringing (time it takes the tone to die off to .37 the initial value), PI = 3.14, and BW = 3 dB bandwidth of the filter. If you have a number of isolated, cascaded, identical resonators, then I think the above formula is still approximately correct, where BW is now the 3 dB bandwidth of the entire filter. Someone more knowledgable than I might want to post the exact formula.

When all the resonators are tuned to the same frequency, the filter shape has a humped, or rounded response. You can think of a "flat-top" filter as being made of a number of narrow-band (high-Q) filters stagger-tuned across the passband. Since each filter has a much narrower bandwidth than the filter as a whole, flat-top filters have worse ringing than "round-top" filters.

You can also make a flat-top filter by overcoupling resonators that are nominally tuned to the same frequency. Although it's not as easy to visualize, this method has exactly the same ringing problem as the stagger-tuned method.

Bottom line: There is a tradeoff between having good pulse response (less ringing) with a round-top filter, versus having a flat passband and good ultimate rejection (but poorer pulse response).

So to answer your question about minimum usable filter bandwidth:
It depends on your desired keying speed (baud rate). 48 wpm Morse code results in 20 dots per second, or 0.025 seconds between dots (50% on/off ratio.) Let's assume the tone must die off to 5% (-26 dB) of its maximum value during this off time. That requires 3 time constants:

TC = 3 / (PI*BW) ---> BW = 3 / (PI*TC)

BW = 3 / (3.14*0.025) = 38 Hz

For a flat-top filter, the bandwidth must be greater, as discussed above.

Digital filters, whether implemented by a DSP or some other way, have a similar problem. If an IIR (infinite impulse response) filter is used, the analysis is exactly the same as with an analog filter. FIR (finite impulse response) filters have the advantage that the response decays exactly to zero at some point. (Whereas IIR and analog filters theoretically have an infinite "tail.") But even with an FIR filter, the ringing gets longer the narrower the bandwidth.

AL N1AL

683. Re: Omni VI/ FT990 comparisons

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 21:49:24 UTC
From: 00tlzivney@leo.bsuvc.bsu.edu
Message-ID: <1994Jan25.164924.26421@bsu-ucs>
Source record: 271879

In article <milewski-240194100218@fp2-st-affairs-11.uoregon.edu>,
milewski@oregon.uoregon.edu (Steve Milewski) writes:
> In a recent posting, I mentioned that purchased an Omni VI within the last
> month. Since that posting, several hams have replied asking for my opinions
> of the radio.
>
> One of those hams was asking for my comparison of the Omni VI with the
> FT-990 since he was contemplating the purchase of one or the other rigs.
>
> To help him and others who might be in the same quandry, has anyone
> performed any side by side comparisons or have direct experience with each
> radio?
>
> If so, please post your likes/dislikes about each.
>
> Thanks,
> Steve

The latest issue of Radio Communications has a good (i.e., informative)
review of the OMNI VI. THe respected reviewer notes that the Ten Tec
still has the very best close in selectivity and performance of any rig
available to amateurs. The margin is as much as 20 db better than the
high priced competition.

Terry Zivney, N4TZ

684. The DSP nobody mentioned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 21:51:16 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-250194133201@fp2-st-affairs-11.uoregon.edu>
Source record: 271971

While a guest at the Willamette Valley DX Association meeting a few months ago, they had a demonstartion of a DSP filter which completely blew everyone away.

The main difference between the particlar unit they demonstrated and all the other units we've heard about here on the net is that fact that the filtration is all software configurable.

In addition to running the library of filters already included with the unit, you can design your own by using your PC. From what I understand of how it works, the computer samples the audio that you are analyizing. Then, this audio is displayed graphically. By highlighting the "peaks" of the display and drawing "cut-off" lines at the noise, you can build your own library of filters for various operating situations.

Thus, it is possible to construct a filter for the specific characteristics of an individual voice (great for those skeds on crowded bands, eh?).

At the meeting, a demonstration of how the filter can be used to help pull out extremely weak signals from atmospheric noise was also performed. In this instance they used a sample of a moonbounce CW signal. Without the filter, one would be hard pressed to even imagine the existence of a signal. With it, you could copy very distinctly. Don't get me wrong, it was still extremely weak, but you could copy it.

Everyone was impressed, to say the least. Especially when they found that the cost was only in the $330 range. Apparently these things sold out at Dayton last year and the backlog on orders was phenomenal.

A friend of mine, Steve, AI7W, bought one recently and here's a short description from him:

My DSP's model is the DSP-120, it's made by Digital Interactive Signal Corp.. It has 8 programable filter memories and connects to the parallel interface of a P.C. (386 with VGA or better). It provides a real time audio spectrum display and a digital recording feature as well as providing a number of ways to custom design filters. Sets of 8 filter designs can be stored as files on the P.C. making it possible to have an almost unlimited number of filters.

If you're interested in DSP, this is definitely wirth looking into.

685. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 21:54:51 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2i44fb$e2h@news.acns.nwu.edu>
Source record: 271983

In article <2i3npc$4bt@vixen.cso.uiuc.edu>,
Ignacy Misztal <ignacy@ux2.cso.uiuc.edu> wrote:
>wvanhorn@magnus.acs.ohio-state.edu (William E Van Horne) writes:
>
>>Kein{nen Paul wrote:
>.............................
>
>>Can someone with a great deal more technical knowledge than I have
>>state just what is the minimum usable bandwidth for a 10-20 WPM CW
>>signal, and how much audible ringing is truly inescapable?
>
>>73, Van - W8UOF
>
>I assume that G is an average-size letter in Morse and the
>transmission is at 120 wpm (2 characters/s). G's sound is:

I think you should consider the worst case - not just the average
case. The worst case is with numbers such as 5.

The average english word length (from ARRL Handbook) is 25 dots.

So, 120 wpm represents a rate of 120*25/60= 50 dots/sec.

>
>111011101000
>
>where 1 corresponds to key on, and the last 3 pauses are character delmiters.
>Assuming that a single sinusoid cycle has 2 items (00, 10, 01 or 00),
>G has 6 transitions or cycles or Hz.
>So the minimum bandwith at 120 wpm would be
> 2 characters/s * 6 cycles/character =12 Hz.
>Multiple by 2-3 so that dots and dahs are flatter and (probably) by 2 if
>you want to copy the other sideband.
>
>The bandwith at 120 wpm is in the range of 24-72Hz, assuming no drift,
>no off-tuning and well shaped signals.

Each dot is encoded by an dot time length on and a dot time length off, i.e., a
cycle of twice the dot lenght. This is like multiplying a 50Hz square wave
with a 750 Hz tone. To maintain some semblance of square shape,
one would want to include the fundamental and at least the third harmonic.
This results in a minimum bandwidth of 150Hz. If you include the 5th
harmonic then this goes up to 250Hz.

Rajiv
aa9ch

r-dewan@nwu.edu

686. Re: Computing antenna coverage

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 22:01:01 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2i44qt$e6i@news.acns.nwu.edu>
Source record: 271984
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

In article <CK7B0q.JH3@world.std.com>,
Matthew B Cravit <cravit@world.std.com> wrote:
>A friend of mine asked me this question, and I do not know the answer.
>If one has an antenna (say a vertical or something, as opposed to a
>beam) that is x feet above ground level, how does one compute the
>approximate coverage area of that antenna (in square miles)? For
>example, see the following diagram
> _
> | |
> | |
> | |
> | _|_
> |x | |
> | | |
> | | | Tower
> | | |
> | | |
> | | |
> ----------Ground---------
>
>If we assume that the distance x is, say, 200 feet and that the ground
>around the antenna is relatively flat, is there a way to estimate the
>area of coverage for that antenna?

Approximately, for Line-of-Sight propagation:
d = sqrt(2h)
where d is the maximum distance (radius if the area is flat) in miles
h is the height above average terrain in feet.

Rajiv
aa9ch
r-dewan@nwu.edu

687. Callbook Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 22:01:58 UTC
From: sconahan@ccantares.wcupa.EDU
Message-ID: <Pine.3.07.9401251758.A21727-9100000@ccantares.wcupa.edu>
Source record: 271979

Willie Smith writes:

>...Did the internet call book go away,...

No, it hasn't vanished, it can still be reached by telnet at

cc.buffalo.edu 2000

(notice the word "callsign" is omitted from the address). 73
--
Shawn T. Conahan, Ph.D.
N3CGT
sconahan@ccantares.wcupa.edu

688. Re: ICOM-R1 frequency shift -- CORRECTION

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-25 23:21:46 UTC
From: daniel@synchrods.com
Message-ID: <9401252321.AA18965@synchrods.synchrods.com>
Source record: 271977

Daniel Senderowicz <daniel@synchrods.com> wrote:

>Sometime ago a problem appeared in my ICOM R1 receiver. If I
^^
>move the tuning knob while the radio is off, one of the memories
>(it only has 2) will be shifted by -16 kHz, in other words if it
>was tuned at 6060 it will appear at 6044 next time I'll turn it
>on. The other memory is fine, remaining at whatever frequency
>was. If I don't move the knob, the frequency will remain
>undisturbed. Did anybody experience anything like this? Thanks,
>
>Dan.

Sorry fellows, I made a typo on the posting. I was referring to
the ICOM IC-R70.

I also checked the problem by turning off the receiver with the
0.1kHz button pushed on. In this case the shift is 1.6kHz. I'm
puzzled, I don't know if this is a mechanical or an electrical
problem. Thanks to those who sent me ideas. Cheers,

Dan.

689. Internet Callbooks on line.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 00:06:41 UTC
From: gosset@pbr322.ceingebi.unam.MX
Message-ID: <9401260006.AA01384@pbr322.ceingebi.unam.mx>
Source record: 271976

Hello everyone:

There is an Internet accessible call sign server sponsored
by the Rhode Island 2x2 Amateur Repeater Association, in the
Anomaly Amateur Radio Server:

telnet ns.risc.net (155.212.2.2) login:hamradio
(BuckMaster and Buffalo Callbooks on line)

73 & DX de XE1RGL.

690. Re: WWCR 5.810MHZ 8pm 12pm Eastern(CHECK IT OUT!!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 00:36:08 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <5KJHjGG8ynrC053yn@dorsai.dorsai.org>
Source record: 271981
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner

In article <CK5w6v.1Ey@ucdavis.edu>, Daniel D. Todd wrote:
> aghoddo@eos.ncsu.edu wrote:
>
> : I thought some of you might be interested to check out a very interesting
> : program called the Hour of the Time by William Cooper on WWCR(world wide
> : christian radio). There are two programs nightly at 8pm and 12pm. Enjoy!
>
> Please post this to rec.radio.amateur.pulpit.religion

The show is anything but religion, you see WWCR also means World Wide
Conspiricy Radio. Anyone want to take a vote on starting an
alt.radio.conspiricy newsgroup for WWCR listeners? C'mon all you Tom
Valentine and Pastor Pete fans, this is for you.

< ^^>
< "Big Steve" Coletti >
< Shortwave Listener, Broadcaster, Computer Consultant >
< and all around nice guy >
< Internet: bigsteve@dorsai.dorsai.org ==== S.COLETTI2@genie.geis.com >
< UUCP: Steve_Cole@islenet.com ==== steveny@lopez.marquette.mi.us >
< Fidonet: 1:278/712 US Mail: P.O. Box 396, New York, NY 10002 >
< Voice: +1 212 995-2637 >
~~~~~~
~~~~~~

691. Hy-Gain telephone no.?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 03:39:18 UTC
From: Bob.Albert@f943.n102.z1.fidonet.org
Message-ID: <759608693.AA03889@mcws.fidonet.org>
Source record: 272004

Does anyone have an 800 number for Telex/Hy-Gain? My tribander driven element broke in the earthquake and I want to see if they can supply parts for it.. 73 DE K6DDX

692. Re: nearby broadcast antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 04:34:00 UTC
From: root@jackatak.raider.net
Message-ID: <D8sqgc2w165w@jackatak.raider.net>
Source record: 271991

alanb@sr.hp.com (Alan Bloom) writes:
> tmrdpsrs@engvms.unl.edu (tmrdpsrs@engvms.unl.edu) wrote:
> : I am considering a move from my current QTH to a new apartment. However, t
> : apartment I'm considering is located immediately next to three transmitting
> : towers.
>
> Yup, you likely will have some problems. You will need a high-pass
> filter between your HF antenna(s) and transceiver.
This may be a case where the "new" and "great" technology is working
against you. The typical solid-state ricebox of today is NOT built to
operate in the near field of a strong RF source...

An older "hollow-state" rig will not have the same problems, though it
is more likely to have a 1240KHz 2nd IF, which makes for real fun...

About 1976, I helped a ham install a dipole for 75 meters, with one
end of a long concatonary arch (hey, I never said I could type or
spell ;^) attached at the radome of the FM antenna on a 350 foot
broadcast tower with the AM running.... yep, 1240KHz! The antenna was
flat-topped at 150 feet up, directly over the transmitter shed. He had
the strongest signal on 75 at the time...unless you count W2HCW and
his 3-element beam! His SP600 wasn't bothered by the 1240KHz STRONG
local signal.

I don't know if a modern solid-state rig can deal with all the RF
floating around, but a tube rig without a 1240 IF sure could...
So, take the less expensive route and buy an older HF rig at a HamFest
and stop worrying...
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

693. Collins Tubesters?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 05:36:03 UTC
From: tjenkins@pnet16.cts.com
Message-ID: <CK8283.Gu3@nctams1.uucp>
Source record: 271989

Anyone know where I can get a line on the solid state Tubesters for the Collins 32/75 line? Thanks in advance.

--Tom

UUCP: nctams1.navy.mil!pnet16!tjenkins
INET: tjenkins@pnet16.cts.com

694. A43YY - QSL route

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 05:54:52 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2i50jc$ev3@geraldo.cc.utexas.edu>
Source record: 271985

Does anyone know anything about A43YY and a QSL route? I have
been getting QSL cards from Japan but I am not the QSL manager.
I know how the misinformation started - quite innocently and
understandably - but would like to tell people how to reach this
op when I send their cards back. The W6GO/K6HHD list gives A47RS
(the A4 club station) as the route for A43XX, but I dunno whether
XX and YY are related in any way. I have the latest international
callbook and A43YY is not listed there.

Thanks for any help or suggestions,

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

695. Daily Summary of Solar Geophysical Activity for 25 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 05:56:15 UTC
From: oler@rho.uleth.ca
Message-ID: <9401260556.AA01903@rho.uleth.ca>
Source record: 271994
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

25 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 025, 01/25/94
10.7 FLUX=132.1 90-AVG=104 SSN=116 BKI=0220 0011 BAI=002
BGND-XRAY=B4.5 FLU1=4.8E+05 FLU10=1.0E+04 PKI=1211 2111 PAI=004
BOU-DEV=003,017,013,004,004,004,007,009 DEV-AVG=007 NT SWF=00:000
XRAY-MAX= M1.6 @ 1836UT XRAY-MIN= B3.6 @ 0759UT XRAY-AVG= B6.4
NEUTN-MAX= +002% @ 2225UT NEUTN-MIN= -001% @ 2220UT NEUTN-AVG= +0.1%
PCA-MAX= +0.1DB @ 2150UT PCA-MIN= -0.3DB @ 1440UT PCA-AVG= -0.0DB
BOUTF-MAX=55345NT @ 0257UT BOUTF-MIN=55334NT @ 2131UT BOUTF-AVG=55340NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+070,+000,+000
GOES6-MAX=P:+116NT@ 2122UT GOES6-MIN=N:-049NT@ 0734UT G6-AVG=+089,+034,-032
FLUXFCST=STD:130,135,135;SESC:130,135,135 BAI/PAI-FCST=015,015,015/012,022,018
KFCST=2224 5222 2223 4222 27DAY-AP=003,004 27DAY-KP=1110 1111 1022 2110
WARNINGS=*SWF
ALERTS=**MINFLR:M1.6/1N@1836,N09W48(7654);**SWEEP:II=1@1852-1902UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 24 JAN 94 was 56.0.
The Full Kp Indices for 24 JAN 94 are: 2o 1- 1o 2- 0o 1- 1o 1o

SYNOPSIS OF ACT

Solar activity was moderate. Region 7654 (N08W50)
produced an M1/1N long duration flare at 25/1836Z. Region 7658
(N13W24) continued to grow rapidly during the period. Its area
has increased from 90 to 160 mils in the last 24 hours.

Solar activity forecast: solar activity is expected to be
low to moderate due to Regions 7654 and 7658.

STD: Extremely intense Fe XIV and Fe X emissions were observed
on the east limb yesterday, 24 January. At the present time,
no associated Ca XV emissions have been observed from this
highly emissive area. The responsible solar region has not

yet been spotted, but should rotate into view shortly.

The geomagnetic field has been at quiet levels for
the past 24 hours.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled at mid latitudes and active to minor
storm at high latitudes. A coronal hole will be favorably
positioned during the next three days. A disappearing filament
may also contribute to a disturbance on day one.

Event probabilities 26 jan-28 jan

Class M 25/25/25
Class X 05/05/05
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 26 jan-28 jan

A. Middle Latitudes
Active 25/25/25
Minor Storm 10/10/10
Major-Severe Storm 05/05/05

B. High Latitudes
Active 25/25/25
Minor Storm 10/10/10
Major-Severe Storm 05/05/05

HF propagation conditions were normal over all regions. A
minor SWF was observed in conjunction with the M1.6 flare.
Minor signal degradation over the high and polar latitudes is
still expected over the next 48 to 72 hours. Nothing
particularly significant is anticipated, although degradation
should push propagation qualities to occasionally very poor
levels during high-latitude substorm activity, for transauroral
and transpolar circuits. Middle latitudes should observe
mostly near-normal propagation, with above normal fading and
some multipathing possible during the local night hours.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N04W63 221 0100 HSX 02 001 ALPHA
7654 N08W49 207 0620 CKO 08 018 BET
7657 N11W78 236 0030 CRO 08 003 BET
7658 N12W25 183 0200 DAO 09 013 BET
7659 S13E11 147 0000 AXX 02 002 ALPHA
7660 S09E42 116 0000 AXX 00 001 ALPHA

7661 N08E25 133 0050 DSO 04 008 BET
REGIONS DUE TO RET
NMBR LAT
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 25 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1639 1642 1647 7654 N10W49 C1.4 SF 120
1820 1836 1853 7654 N09W48 M1.6 1N 500 28 II

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 25 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
25/ 1852 1902 N09W48 RSP M1.6 33 1

INFERRED CORONAL HOLES. LOCATIONS VALID AT 25/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
24 Jan: 0118 0151 0156 B5.9
1005 1025 1029 B6.9
1233 1237 1239 C1.1 SF 7654 N07W32
1303 1406 1436 C1.2 SF 7658 N13W04
1629 1633 1635 C1.3
1858 1901 1904 C1.2
2101 2113 2116 C1.0
2124 2127 2131 B8.8
2229 2233 2237 B8.4 SF 7654 N07W33
2313 2317 2321 B8.7
2358 0001 0004 B6.2

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7654: 1 0 0 2 0 0 0 0 002 (18.2)
Region 7658: 1 0 0 1 0 0 0 0 001 (9.1)
Uncorrellated: 3 0 0 0 0 0 0 0 008 (72.7)

Total Events: 011 optical and x-ray.

EVENTS WIT

```
Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
24 Jan: 1233 1237 1239 C1.1 SF 7654 N07W32 III
1858 1901 1904 C1.2 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **
```

696. Re: Ham Radio and More talkshow

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 05:59:26 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCK83B3.EoC@netcom.com>
Source record: 271986

In article <9401251826.AA21834@pobox.wellfleet> ginsburg@wellfleet.com writes:
>
>My local Talk America Radio Network affiliate (1510 in the Boston area) didn't
>run "Ham Radio and More" this past Sunday evening. Did anyone in a different
>part of the country hear the show, or was it QRT nationally?
>
>--
>Scott Ginsburg Voice: 508-436-3836 | too much DX,
>Wellfleet Communications Internet: ginsburg@wellfleet.com | too little
>2 Federal St. Amateur Radio: WA2CJT | time...
>Billerica, MA 01821

Hi, Scott:

After a 30 minute lag due to technical problems, the show finally went on
at 6:30pm EST.

Fred Maia, W5YI, was the guest of honor. Due to the short time he had,
Fred briefly summarized everything his empire has available for hams and
ham-wanna-bees.

They also had time for two callers at the end of the show.

I also heard the show on 1510AM, WSSH.

73,
Scott

--
==
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
the World - world.std.com pub/hamradio
==

697. Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 06:46:43 UTC
From: demetre@phaethon.intranet.gr
Message-ID: <2i53kj$56k@helios.intranet.gr>
Source record: 271987
Cross-posted to: can.forsale,rec.radio.amateur.misc

>The reason I am selling this, is that I am getting my HAM license soon, and
>am starting to look for a 2 meter radio. I will also trade the above setup,
>for a good 2 meter setup, make me an offer.

Not if I can help it. I will use any influence I have left as the Former
Public Service Director of the Northern Alberta Radio Club, and any avenues
of information transfer, such as the Packet Radio system, to ensure that people
of your kind are carefully scrutinized. This will not prevent you receiving
your ticket, but it may make you very uncomfortable when your past catches up
with you.

I was shocked from this message !! I always thought that Amateur Radio
was created and is still popular due to it's promotion of friendship !!
So what if the man was a "pirate", what matters *now* is the fact that
he is going straight !!! If he seems to be sincere about his "turn around"
he should be given the chance to do so !!!
Every possible effort must be made to reform the radio pirates with the
real *amateur" way, not with threats and vengence like you have done !!

73's

698. Re: Callbook Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 07:41:51 UTC
From: jlw3@cec1.wustl.edu
Message-ID: <2i56rv$2hq@bigfoot.wustl.edu>
Source record: 272009

Shawn Conahan (sconahan@ccantares.wcupa.EDU) wrote:
: Willie Smith writes:

: >...Did the internet call book go away,...

: No, it hasn't vanished, it can still be reached by telnet at

: cc.buffalo.edu 2000

: (notice the word "callsign" is omitted from the address). 73
: --
: Shawn T. Conahan, Ph.D.
: N3CGT
: sconahan@ccantares.wcupa.edu

Is it just me or does this really not work? I have always used the other
one, but I tried this out--
callsign.cs.buffalo.edu 2000 works much better from here (considering that
cs.buffalo.edu gives me an "unknown host" reply)

699. PacTel Rates

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 08:25:48 UTC
From: wosborne@nmsu.edu
Message-ID: <WOSBORNE.94Jan26082548@gauss.nmsu.edu>
Source record: 271995

I saw a posting here about PacTel lowering their rates for basic service to phone patches and controllers on repeaters as a result of the help hams had been in the quake. Will someone with info on this please repost. We would like to show it to US West and see if we can get the same deal out of them. Thanks Bill--AA5ZQ

700. House Resolution 2623 to limit amateur radio liability

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 12:33:29 UTC
From: marcbg@netcom.com
Message-ID: <$hr2623.1994@ampr.org>
Source record: 271996
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

103rd Congress 10/15 Print
1st Session (Text Only)

H.R.2623

To amend the Communications Act of 1934 in order to facilitate utilization
of volunteer resources on behalf of the Amateur Radio Service.

_____

IN THE HOUSE OF REPRESENTATIVES
June 13, 1993

Mr. Slattery introduced the following bill; which was
read and referred to the Energy and Commerce Committee

_____

A BILL

To amend the Communications Act of 1934 in order to facilitate
utilization of
volunteer resources on behalf of the Amateur Radio Service.

Be it enacted by the Senate and House of Representatives of
the United States of America in Congress assembled,

SECTION I. SHORT TITLE
This Act may be cited as the "Amateur Radio Volunteer Services
Act of 1993."
SECTION II. FINDINGS AND PURPOSE
(a) Findings. - The Congress finds and declares that -
(1) Since 1982, following the enactment of P.L. 97-259,
the Federal Communications Commission has been authorized to
utilize volunteer assistance of licensees in the Amateur Radio
Service for:
(A) the preparation and administration of amateur
radio license examinations, and
(B) on-air monitoring for violations in the Amateur
Radio Service;
(2) these volunteer services provided by individual
amateur radio licensees have greatly enhanced the self-regulatory
character of the Service, and have saved the Commission countless
hours of staff time and other resources; and
(3) the success of these volunteer programs to date
should be noted, encouraged and expanded;
(4) Public Law 102-538 now authorizes the Commission to
accept the voluntary, uncompensated and unreimbursed services of

amateur radio organizations in administration of club and military recreation station call signs;
(5) a principal threat to the continuation of each of these programs is the perception that volunteers put personal assets at risk in the event of actions against them, as the result of their provision of the volunteer services;
(6) this perception may result in non-participation of volunteers or withdrawal from volunteer service;
(7) the protection of voluntarism in these specific programs, through clarification and limitation of the personal risks assumed by the volunteer in connection with such participation in these enumerated programs, is necessary and reasonable.

Amateur Radio Volunteer Services Act of 1993.
Page Two

(b) Purpose. - It is the purpose of this Act to -
(1) protect the provision of volunteer services to the Federal Communications Commission as provided for in the

Communications Act of 1934, as amended, in the administration of the Amateur Radio Service; and
(2) sustain the availability of volunteer programs which benefit the Amateur Radio Service, which has provided a model of self-administration and self-enforcement among the radio services administered by the Federal
Communications Commission.

SECTION III. FACILITATION OF VOLUNTEER SERVICES TO THE FEDERAL COMMUNICATIONS COMMISSION IN PROGRAMS BENEFITTING THE AMATEUR RADIO SERVICE

Section 4(f)(4) of the Communications Act of 1934, as amended [47 U.S.C. 4(f)(4)], is hereby amended to include a new subparagraph (K) to read as follows:
(K) Except as provided otherwise herein, no individual licensee in the Amateur Radio Service who provides volunteer services pursuant to subparagraphs (A), (B) and (C) of this paragraph, or pursuant to paragraph (g)(3)(B) hereinbelow, shall incur personal financial responsibility for any alleged damage, loss or injury from any act or omission of the volunteer from the provision of such volunteer services, if such individual was acting in good faith and within the scope of such individual's official function and duties in providing the volunteer services as defined in subparagraphs (A), (B) or (C) of this paragraph, or as defined in paragraph (g)(3)(B); and provided that such damage, loss or injury was not caused by willful and wanton misconduct by such individual.

--
Marc B. Grant 214-231-3998
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

701. JOINT RESOLUTION To recognize achievements of radio amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 12:34:38 UTC
From: marcbg@netcom.com
Message-ID: <$jr90.1994@ampr.org>
Source record: 271997
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

JOINT RESOLUTION S.J.Res. 90 & H.J.Res.199

To recognize achievements of radio amateurs, and to establish
support for such amateurs as National Policy

WHEREAS, Congress has expressed its determination in section 1 of the
Communications Act of 1934 [47 U.S.C. 151] to promote safety of life and
property through the use of radio communication;

WHEREAS, Congress, in section 7 of the Communications Act [47 U.S.C. 157],
has established a policy to encourage the provision of new technologies and
services;
WHEREAS, Congress, in section 3 of the Communications Act of 1934, defined
radio stations to include amateur stations operated by persons interested in
radio technique without pecuniary interest;

WHEREAS, the Federal Communications Commission has created an effective
regulatory framework through which the amateur radio service has been
able to
achieve the goals of the service;

WHEREAS, these regulations, set forth in part 97, of title 47 of the Code of
Federal Regulations, clarify and extend the purposes of the amateur radio
service as a --
(1) voluntary noncommercial communication service particularly with
respect to providing emergency communications;
(2) as a contributing service to the advancement of the
telecommunications
infrastructure;
(3) as a service which encourages improvement of an individual's
technical
and operating skills;
(4) as a service providing a national reservoir of trained operators,
technicians and electronics experts; and
(5) as a service enhancing international good will;

WHEREAS, Congress finds that members of the amateur radio service
community has
provided invaluable emergency communications services following such
disasters
as Hurricanes Hugo, Andrew and Iniki, the Mt. St. Helens eruption, the Loma
Prieta earthquake, tornadoes, floods, wild fires and industrial accidents in
great number and variety across the Nation; and

WHEREAS, Congress finds that the amateur radio service has made a contribution
to our nation's communications by its crafting, in 1961, of the first earth satellite licensed by the Federal Communications Commission, by its proof-of-concept for search and rescue satellites, by its continued exploration of the
low earth orbit in particular pointing the way to commercial use thereof in the
1990s, by its pioneering of communications using reflections from meteor trails, a technique now used for certain government and commercial communications, and by its leading role in development of low-cost, practical data transmission by radio which increasingly is being put to extensive use in,
for instance, the land mobile service:

Now, therefore, be it
Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,
SECTION 1. FINDINGS AND DECLARATIONS OF CONGRESS.
Congress finds and declares that --
(1) radio amateurs are hereby commended for their contributions to technical progress in electronics, and for their emergency radio communications
in times of disaster;
(2) the Federal Communications Commission is urged to continue and enhance the development of the amateur radio service as a public benefit by adopting rules and regulations which encourage the use of new technologies within
the amateur radio service; and
(3) reasonable accommodation should be made for the effective operation of amateur radio from residences, private vehicles and public areas, and that regulation at all levels of government facilitate and encourage amateur radio operation as a public benefit.

--
Marc B. Grant 214-231-3998
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

702. FCC ISSUED CALL SIGN UPDATE

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 12:36:59 UTC
From: marcbg@netcom.com
Message-ID: <$arlb012.1994@ampr.org>
Source record: 271998
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

```
SB QST @ ARL $ARLB012
ARLB012 FCC call sign update

ZCZC AG76
QST de W1AW
ARRL Bulletin 12 ARLB012
>From ARRL Headquarters
Newington CT January 24, 1994
To all radio amateurs

SB QST ARL ARLB012
ARLB012 FCC call sign update

FCC ISSUED CALL SIGN UPDATE

The following is a list of the FCC's most recently issued call signs
as of January 1.

District Group A Group B Group C Group D
Extra Advanced Tech/Gen Novice

0 AA0PX KG0XT N0ZVT KB0NLT
1 AA1IF KD1TF N1RBP KB1BEY
2 AA2QX KF2TH N2XPB KB2QVK
3 AA3GT KE3LP N3RFS KB3BAB
4 AD4OO KR4KT ++ KE4IUQ
5 AB5SB KJ5UA ++ KC5EUX
6 AB6ZM KN6XD ++ KE6EJD
7 AB7AT KI7UQ ++ KC7AEN
8 AA8NR KG8GG ++ KB8RAN
9 AA9JX KF9TH N9VWX KB9IWO
Hawaii ++ AH6NE WH6QU WH6CRB
Alaska ++ AL7PM WL7PP WL7CHL
Virgin Is. WP2D KP2CC NP2GY WP2AHU
Puerto Rico ++ KP4WC ++ WP4MMN

++All call signs in this group have been issued in this area.
NNNN
/EX
--
Marc B. Grant 214-231-3998
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX
```

703. Of Wouff Hongs and Royal Rites

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 13:46:12 UTC
From: jwittich@b4pph107.bnr.ca
Message-ID: <1994Jan26.134612.8836@brtph560.bnr.ca>
Source record: 272002

Hi, everybody. Well, its about spring, and that means we are
getting ready for the local HamFest round here. Im looking
at the hamfest flyer, and one on the events listed is
The Royal Order of Whoff Hong Induction. Well ya see, Im kind
of a new guy, and dunno what thats all about. I asked about it
the local 2 meter repeater, and you should have heard the
snickers and snorks. I quickly surmised that it was a secret.
So keeping with the spirit of fun, I will not just ask
what this is all about, but I do have a few questions:

1. Is it something that the OFs will enjoy at us new guys expense?

2. Is it an event that I would prefer no one had a camera at?

3. Would I be any less likely to get home that night than any
other night?

4. Will my health insurance cover anything thats likely to happen?

5. Is there a potential for any embarassment to any involved?

6. Could I be black-mailed for being there?

7. Why am I so paranoid about this?

Thanks guys, and heres the Email address:
jwittich@b4pph107.bnr.ca

I will let you know what happened (maybe) in May.
C ya.

-=Jeff=- AC4ZO BNR claims they know nothing of my employment
here. Specially when my attorney calls.
---

704. **YAESU PARTS HELP**

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 14:33:22 UTC
From: bcobb@wkuvx1.wku.edu
Message-ID: <1994Jan26.083322.9993@netnews.wku.edu>
Source record: 271992

HELP!!! I HAVE A FT-901DM (HF RIG) WHICH NEEDS SOME PARTS..ANYBODY
HAVE A NUMBER FOR YAESU PARTS OR AN IDEA WHERE OLDER YAESU PARTS CAN
BE FOUND? THANKS... BOB KA4CLL

705. Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 14:49:14 UTC
From: robocop@clark.net
Message-ID: <2i5vta$tt@explorer.clark.net>
Source record: 271993
Cross-posted to: can.forsale,rec.radio.amateur.misc

In article <2i53kj$56k@helios.intranet.gr>,
Demetre Koumanakos <demetre@phaethon.intranet.gr> wrote:
>>The reason I am selling this, is that I am getting my HAM license soon, and
>>am starting to look for a 2 meter radio. I will also trade the above setup,
>>for a good 2 meter setup, make me an offer.
>
>Not if I can help it. I will use any influence I have left as the Former
>Public Service Director of the Northern Alberta Radio Club, and any avenues
>of information transfer, such as the Packet Radio system, to ensure that people
>of your kind are carefully scrutinized. This will not prevent you receiving
>your ticket, but it may make you very uncomfortable when your past catches up
>with you.
>
>I was shocked from this message !! I always thought that Amateur Radio
>was created and is still popular due to it's promotion of friendship !!
>So what if the man was a "pirate", what matters *now* is the fact that
>he is going straight !!! If he seems to be sincere about his "turn around"
>he should be given the chance to do so !!!
>Every possible effort must be made to reform the radio pirates with the
>real *amateur" way, not with threats and vengence like you have done !!

If he was in this country, and the FCC caught him, he would get in very
serious trouble. If we allow this sort of thing to thing to persist,
we'll have a service that will be unusable. How do we know this person
will stay straight, we don't.

Matt Roberts n3gzm

706. Re: Power Line Interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 14:55:24 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan26.145524.6118@ke4zv.atl.ga.us>
Source record: 272007

In article <1994Jan25.140537.16951@ccd.harris.com> drs@ccd.harris.com (Doug Snowden) writes:
>Please don't tell me to go beat on the pole!

Well that's what the power company is going to do. Many problems like this are due to something coming loose mechanically on the pole. Jarring it is the way they pin it down. This *is* best left to professionals, however, since a possibility exists that striking the pole could make a permanent short, or drop something on you.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

707. Re: FCC RF Spectrum Allocation?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 16:02:13 UTC
From: luc@ele.etsmtl.ca
Message-ID: <1994Jan26.160213.6499@cumin.telecom.uqam.ca>
Source record: 272000

In article <rjk.759520576@access1> rjk@access1.digex.net (Robert J. Keller) writes:
>
>I don't have handy at the moment where on the net you might find this,
>but the FCC's spectrum allocations are set forth in Part 2 of its Rules.
>You need Subpart B of Part 2 of Title 47 of the Code of Federal
>Regulations. In legalese (not that the foregoing was actually English)
>that is "47 C.F.R. sections 2.100 - 2.108 and it is called the
>"Allocation, Assignment, and Use of Radio Frequencies," more commonly
>called, the Table of Allocations.
>
>I recall seeing that there is a Gopher site somewhere that is
>experimentally offering access to at least some portions of CFR, but
>unfortunately I don't have the reference handy at the moment.
>
>Good luck.
>--
>Bob Keller (KY3R) rjk@telcomlaw.win.net Tel 301.229.5208 Fax 301.229.6875
>

I would guess that you could get that info at M.I.T.

on the ftp site : /pub/telecom-archives or something like that .

they also have a very good http site (hypertext)

.... hope that helps ...

Luc Gagnon T.P. VE2 LGN

E.T.S. - Quebec University
Montreal Quebec Canada

luc@ele.etsmtl.ca

---

708. FT-767 Info.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 16:12:03 UTC
From: gallaghe@gdc.COM
Message-ID: <1994Jan26.161203.7084@gdc.com>
Source record: 271828

I have a friend that is looking to buy a FT-767. He is aware that the early units had some bugs but does not know extactly what they were. If anyone can shed some light in this area I would greatly appreciate it. Also, if fixes for the bugs are available where would one get them?

Thanks,

Rob

P.S. - please email me directly.

--
****
* *
* Robert Gallagher *
* Amateur Call - KD1MF *
* Performance Vehicle - 1972 340 Rally Challenger, 1 of 8123 made *
* email - gallaghe@gdc.com *
* tele: (203) 754-1811 ext. 7612 *
* *
****

709. Re: TF3CW QSL address

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 16:28:27 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.94Jan26112827@gdstech.GRUMMAN.COM>
Source record: 271924

I have a 1991 listing that says to use the TF buro.
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

710. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 16:44:37 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2i66ll$m9t@vixen.cso.uiuc.edu>
Source record: 272006

rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:

>In article <2i3npc$4bt@vixen.cso.uiuc.edu>,
>Ignacy Misztal <ignacy@ux2.cso.uiuc.edu> wrote:
>>wvanhorn@magnus.acs.ohio-state.edu (William E Van Horne) writes:
>>
>>>Kein{nen Paul wrote:
>>.............................
>>
>>>Can someone with a great deal more technical knowledge than I have
>>>state just what is the minimum usable bandwidth for a 10-20 WPM CW
>>>signal, and how much audible ringing is truly inescapable?
>>
>>>73, Van - W8UOF
>>
>>I assume that G is an average-size letter in Morse and the
>>transmission is at 120 wpm (2 characters/s). G's sound is:

Sorry, I meant 20 wpm or 120 chars/second.

Ignacy, NO9E

711. Re: Yeasu FT416 mods wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 16:56:29 UTC
From: ijordan@freenet2.scri.fsu.edu
Message-ID: <2i67bt$b55@mailer.fsu.edu>
Source record: 271999

Read the FT-415 mods. Exactly the same internally. Get 'em of FTP from world.std.com! But the extend tx mod will kill your Automatic repeater offset (ARO), so you have to be willing to loose that.

--
* * Ian Jordan * *

712. Re: Warning About FT-415/815 mod on world

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 16:58:32 UTC
From: ijordan@freenet2.scri.fsu.edu
Message-ID: <2i67fo$bbq@mailer.fsu.edu>
Source record: 272001

Sorry guys. Mail problems. The warning was that after you do the mod for the ft-415/815 that is on world.std.com, you loose your Automatic Repeater Offset (ARO) capability. It's a tradeoff. Bummer.

--
* * Ian Jordan * *

713. htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 17:12:25 UTC
From: ah301@yfn.ysu.edu
Message-ID: <ah301-260194121225@129.228.248.39>
Source record: 271892
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

I have pretty much narrowed down my choice to these two 2m ht's.

I'd like to get comments and opinions from people in the net who
have actually used both.

currently, I am leaning towards the dj-162 because of its wide
receive.

please email responses if possible.
thanks in advance.

jerry

714. Re: Power Line Interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 17:15:02 UTC
From: patrick_tatro@stortek.com
Message-ID: <patrick_tatro.7.7C558180@stortek.com>
Source record: 272014

In article <1994Jan25.140537.16951@ccd.harris.com> drs@ccd.harris.com (Doug Snowden) writes:
>From: drs@ccd.harris.com (Doug Snowden)
>Subject: Power Line Interference
>Date: Tue, 25 Jan 1994 14:05:37 GMT

>For the past 3 years I have been trying to track down some noise that appears
>to be coming from the power lines. I have walked around with a portable radio,
>driven around (for miles in all directions) in my car seeking the source. The
>source seems to come from one of the two power poles across the street from me.

> This noise tends to show up in the Winter time or on cool or rainy
>Summer days. In the Summer time I might have the noise on a day that remains
>cloudy (therefore cooler). In the Winter time the noise also tends to also
>show up mostly (but not always) at night time when it is cooler. We are talking
>about Florida, so in the Winter time it doesnt normally get that cold. Now here
>is the weird part: The noise has a cyclic period of about 1.5 seconds on and
>1.5 seconds off. This part doesn't vary. If I have the noise, it has this
>period. Now there are no capacitors on the power poles around me. The pole that
>I suspect has a transformer on it. Can a transformer do this? How? Is there
>some sort of capacitor or protection circuit on these xfmrs that can do this?

> Normally, I cannot determine the source (this changes). My 20 meter
>beam seems to tell me which pole the noise comes from, but if I walk up to
>the pole, with a portable radio I normally am not able to zero in on it.
>I have called the power company in the past to repair a problem which I was
>able to point them to. I am reluctant to call them on this one, even though
>it tears up all from 1500 khz to 21 mhz. I have heard that this sort of
>interference can originate miles away and be picked up by the power lines at
>some distant point (my house). I imagine I'll call the power company for
>resolution, but would like any input I can get before I do it. Please don't
>tell me to go beat on the pole!

>--

>Doug Snowden
>drs@ccd.harris.com
>N4IJ

Doug

We have Ham Radio Elmers on Internet who might be able to help you. Kim Elmore N5OP can be reached at elmore@brightband.rap.ucar.edu

Kims experience with RFI and EMI might be what you need. Give him an EMAIL and see.

73's

Patrick Tatro N0WCG

715. Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 17:21:47 UTC
From: jchappel@sanders.lockheed.com
Message-ID: <jchappel.105.759604903@sanders.lockheed.com>
Source record: 272020
Cross-posted to: can.forsale,rec.radio.amateur.misc

In article <2i53kj$56k@helios.intranet.gr> demetre@phaethon.intranet.gr (Demetre Koumanakos) writes:
>Path: rapnet!butch!netcomsv!decwrl!concert!news-feed-1.peachnet.edu!ukma!eng.ufl.edu!spool.mu.edu!howland.reston.ans.net!EU.net!news.forth.gr!helios.intranet.gr!phaethon!demetre
>From: demetre@phaethon.intranet.gr (Demetre Koumanakos)
>Newsgroups: can.forsale,rec.radio.amateur.misc
>Subject: Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)
>Date: 26 Jan 1994 06:46:43 GMT
>Organization: Intracom sa
>Lines: 22
>Distribution: na
>Message-ID: <2i53kj$56k@helios.intranet.gr>
>References: <60.668.5285.0N191767@canrem.com> <CK45ys.9II@ve6mgs.ampr.ab.ca>
>NNTP-Posting-Host: phaethon.intranet.gr

>>The reason I am selling this, is that I am getting my HAM license soon, and
>>am starting to look for a 2 meter radio. I will also trade the above setup,
>>for a good 2 meter setup, make me an offer.

>Not if I can help it. I will use any influence I have left as the Former
>Public Service Director of the Northern Alberta Radio Club, and any avenues
>of information transfer, such as the Packet Radio system, to ensure that people
>of your kind are carefully scrutinized. This will not prevent you receiving
>your ticket, but it may make you very uncomfortable when your past catches up
>with you.

>I was shocked from this message !! I always thought that Amateur Radio
>was created and is still popular due to it's promotion of friendship !!
>So what if the man was a "pirate", what matters *now* is the fact that
>he is going straight !!! If he seems to be sincere about his "turn around"
>he should be given the chance to do so !!!
>Every possible effort must be made to reform the radio pirates with the
>real *amateur" way, not with threats and vengence like you have done !!

>73's

Right on Demetre, an Elmer this guy will never be with that attitude!

73
===
|~~~~~~|
| Joel B. Chappell - KC1SG Lockheed Sanders |
| Principal Engineer Nashua, NH 03061 |
| |
| -= Standard Disclaimer: All opinions are mine. =- |

```
| |
| jchappel@rapnet.sanders.lockheed.com |
| Fido: 1:132/204.1 |
| |
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

716. CW filters and DSP-9: A recap of mimimum bandwidth

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 17:29:21 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2i699h$6sc@news.acns.nwu.edu>
Source record: 272021

In the thread on minimum bandwidth required for CW signal:

Ignacy, NO9E wrote:
The bandwith at 20 wpm (corrected from 120wpm in an earlier post) is in the
range of 24-72Hz, assuming no drift, no off-tuning and well shaped signals.
^^^^^^^

For CW at 120WPM I wrote:
To maintain some semblance of square shape, one would want to include
the fundamental and at least the third harmonic. This results in a
minimum bandwidth of 150Hz. If you include the 5th harmonic then this
goes up to 250Hz.
This scaled for 20WPM results in a minimum bandwidth estimate of 30-50Hz.
^^^^^^^^
Al, N1AL wrote:
So to answer your question about minimum usable filter bandwidth:
It depends on your desired keying speed (baud rate). 48 wpm Morse code
results in 20 dots per second, or 0.025 seconds between dots (50%
on/off ratio.) Let's assume the tone must die off to 5% (-26 dB) of
its maximum value during this off time. That requires 3 time constants:
TC = 3 / (PI*BW) ---> BW = 3 / (PI*TC)
BW = 3 / (3.14*0.025) = 38 Hz
For a flat-top filter, the bandwidth must be greater, as discussed above.
Scaled to 20wpm, it is 16Hz. or greater for flat top filter.
^^^^
So Ignacy and my estimate, arrived from different approaches, pretty
much agree. Al's estimate, derived using yet another approach, is
lower. Al assumes that a decay to 5% of a dot signal by the time the
next one starts is ok. I do not quite know how this would sound,
but if you require that this occur in half the `off' time then his
estimate would creep up to 32Hz. Is this reasonable?

Rajiv
aa9ch
r-dewan@nwu.edu

717. Re: Callbook Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 18:21:43 UTC
From: scott migaldi <scottm@csg.mot.com>
Message-ID: <759608832-0-10086@gremlin.isca.uiowa.edu>
Source record: 272003

I also cannot get a conection to cc.buffalo.edu 2000 but calsign.cs.buffalo.
edu 2000 works just fine.

718. Re: Power Line Interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 18:23:54 UTC
From: clh6w@faraday.clas.Virginia.EDU
Message-ID: <CK91ru.2Gq@murdoch.acc.Virginia.EDU>
Source record: 272026

In article <1994Jan25.140537.16951@ccd.harris.com>,
Doug Snowden <drs@ccd.harris.com> wrote:
>For the past 3 years I have been trying to track down some noise that appears
>to be coming from the power lines...
>
>resolution, but would like any input I can get before I do it. Please don't
>tell me to go beat on the pole!
>
From a pratical standpoint, i.e. finding the noise, beating on the pole may
show exactly where the moise comes from.
AM radio will not give much directionality from line noise. It propagates
great distances at AM frequencies. You need 200+ MHz. which probably doesn't
help you much. Try a Aircraft frequency scanner and shield it with your body
to get idea of direction.
Don't be shy about calling power company if you are pretty sure it is their
problem. They are inviolation of FCC regulation and probably have some more
serious problem festering if it cycles at 1-2 seconds and has such a wide
band width. Most power companies have RFI "sniffers" that can locate it
to within a bolt on the pole.
I've had much experience with power companies all over the country. Some
are good abt helping--some are not. Often if nothing is solved in a few
months, I threaten to complain with state utility commission. Every time
I've done that, the problem was corrected within 2 days!
Good luck--it can be a frustrating nuisance.
73, Ned AB6FI

719. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 18:54:11 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.94Jan26135411@gdstech.GRUMMAN.COM>
Source record: 271845

Then there's that famous Russian Op that I always hear in the CW part
of the band when I'm operating: UP5LID

--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

720. Ioncap source wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 18:57:52 UTC
From: steve@hi.com
Message-ID: <steve-260194135213@brainiac.hi.com>
Source record: 272027
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

I'm looking for the source for Ioncap, which I understand to have been developed by the US Gov't and be in the public domain. I suppose I could get it through NTIS on 9-track tape for a hundred or so bucks, but I'm hoping someone knows of an ftp site for it.

While we're at it, how about the source for minimuf?

Thanks,
-Steve

Steve Byan internet: steve@hicomb.hi.com
Hitachi Computer Products (America), Inc.
1601 Trapelo Road phone: (617) 890-0444
Waltham, MA 02154 FAX: (617) 890-4998

721. Re: Callbook Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 19:01:53 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.94Jan26140153@gdstech.GRUMMAN.COM>
Source record: 271849

It looks like th cc.buffalo is a typo. Try:

telnet cs.buffalo.edu 2000

--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

722. Re: Art & Millie of K6MYK

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 19:18:12 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2i6flkINN728@abyss.West.Sun.COM>
Source record: 271917

In article <arog.759188308@BIX.com> arog@BIX.com (arog on BIX) writes:
>I just talked with Art and Millie Gentry. Art is w6mep and I've forgotten
>Millie's call. These are the folks that put the first Los Angeles two-meter
>repater on the air in the mid.fifties and are very special folks to a lot
>of us that hung out there...
>
>Both are fine and only had modest damage to things... other than the
>kind of mess that happens when racks and such get slammed about by
>an earthquake.

Of course, the W6MEP repeater, known as the "Duck Mountain"
machine, was down for a few days until the site could be reached
and the errant PA fixed :-)

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

723. Re: Power Line Interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 19:27:08 UTC
From: hlester@helium.gas.uug.arizona.edu
Message-ID: <2i6g6c$p1t@organpipe.uug.arizona.edu>
Source record: 272017

In article <1994Jan26.145524.6118@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
>In article <1994Jan25.140537.16951@ccd.harris.com> drs@ccd.harris.com (Doug Snowden)
writes:
>>Please don't tell me to go beat on the pole!
>
>Well that's what the power company is going to do. Many problems like
>this are due to something coming loose mechanically on the pole. Jarring
>it is the way they pin it down. This *is* best left to professionals,

An employee of our power company (Tucson Electric Power) is employed to track
down power line interference by using radio direction finding equipment. He has a variety
of radios in his truck, as well as a hand-held yagi (that looks as if
it's cut for around 450 MHz). He is getting to be really good at this, and has
recently helped me out by getting some ten or so poles in my neighborhood
repaired. No more noise!

The point of all this is that taking a sledgehammer to a pole is not the only
way to pin down the noise.

Howard KE7QJ

724. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 19:31:04 UTC
From: alanb@sr.hp.com
Message-ID: <CK94vu.K5z@srgenprp.sr.hp.com>
Source record: 272005

Rajiv Dewan (rdewan@casbah.acns.nwu.edu) wrote:

[I wrote:]

: >Butterworth and Chebyshev filters have flatter passbands and better shape
: >factors, but at the expense of poorer pulse response (ringing).

: ... there might be more than one source of ringing: ...

: 2. Progressive coloration of background white noise as the filter
: bandwidth is narrowed. ...

That's right. A very narrow band-pass filter can make broadband noise sound like a raspy tone. I believe that flat-top filters also make this problem worse than Gaussian filters of the same bandwidth.

AL N1AL

725. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 19:47:22 UTC
From: alanb@sr.hp.com
Message-ID: <CK95Mz.Krt@srgenprp.sr.hp.com>
Source record: 272008

Ignacy Misztal (ignacy@ux2.cso.uiuc.edu) wrote:
: wvanhorn@magnus.acs.ohio-state.edu (William E Van Horne) writes:

: >Kein{nen Paul wrote:

: >Can someone with a great deal more technical knowledge than I have
: >state just what is the minimum usable bandwidth for a 10-20 WPM CW
: >signal, and how much audible ringing is truly inescapable?

: I assume that G is an average-size letter in Morse and the
: transmission is at 120 wpm (2 characters/s). ...

120 wpm is 2 WORDS per second, or about 10 characters per second.

In my previous posting, I analyzed the required bandwidth based on
a ringing fall-off rate of three time constants during the "off"
time between dits and dahs. Ignacy's method of looking at the
frequency content of the baseband signal (i.e. the keying rate)
is also valid.

The highest pulse repetition frequency is when you are sending a
string of dits (for example, the letter H or the number 5.)
My previous example of 48 wpm results in 20 dots per second.
A Morse code signal can be considered to be an AM (ampltidude
modulated) signal that is 100% modulated with a square wave, in
this case a 20 Hz square wave. Since an AM signal has two sidebands,
the bandwidth must be at least 40 Hz.

My previous result was 38 Hz, in good agreement with the above result.
The required bandwidth is proportional to keying speed so, for example,
24 wpm would require about 20 Hz, etc.

AL N1AL

726. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 19:53:46 UTC
From: alanb@sr.hp.com
Message-ID: <CK95xn.L1H@srgenprp.sr.hp.com>
Source record: 272010

Rajiv Dewan (rdewan@casbah.acns.nwu.edu) wrote:

..
: Each dot is encoded by an dot time length on and a dot time length off, i.e., a
: cycle of twice the dot lenght. This is like multiplying a 50Hz square wave
: with a 750 Hz tone. To maintain some semblance of square shape,
: one would want to include the fundamental and at least the third harmonic.
: This results in a minimum bandwidth of 150Hz. ...

It's actually twice that, since the modulated 750 Hz tone has two sidebands.

AL N1AL

727. Re: nearby broadcast antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 19:56:59 UTC
From: alanb@sr.hp.com
Message-ID: <CK9630.L64@srgenprp.sr.hp.com>
Source record: 272011

Jack GF Hill (root@jackatak.raider.net) wrote:
: This may be a case where the "new" and "great" technology is working
: against you. The typical solid-state ricebox of today is NOT built to
: operate in the near field of a strong RF source...

: An older "hollow-state" rig will not have the same problems, ...

The tube rigs weren't perfect either. I remember my old 75A2 was useless
on the 160 meter band because of strong local BC stations. You could
hear some crud on 80 meters too, mostly harmonics.

AL N1AL

728. Re: Power Line Interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 20:01:22 UTC
From: alanb@sr.hp.com
Message-ID: <CK96AB.LCu@srgenprp.sr.hp.com>
Source record: 272012

Doug Snowden (drs@ccd.harris.com) wrote:
: For the past 3 years I have been trying to track down some noise that appears
: to be coming from the power lines. ...

: The noise has a cyclic period of about 1.5 seconds on and
: 1.5 seconds off. This part doesn't vary. If I have the noise, it has this
: period.

The above raises my suspicions that the noise may not be originating in the
power pole itself. What other buildings are fed from the same transformer
that is on that pole? Do any of them have some electrical device with a
3-second on/off cycle time?

AL N1AL

729. Re: Callbook Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 20:12:24 UTC
From: scott migaldi <scottm@csg.mot.com>
Message-ID: <759614757-0-13891@chop.isca.uiowa.edu>
Source record: 271889

In note <759608832-0-10086@gremlin.isca.uiowa.edu>, scott migaldi writes:
>I also cannot get a conection to cc.buffalo.edu 2000 but calsign.cs.buffalo.
~~~~~~~ should have
typed callsign. My misteak (HI)

>
>
>

The opinions in this post are mine and my cat's, not my employer's.
scottm@csg.mot.com (Scott F. Migaldi)
~~~~~~~

730. Re: ANS-022 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 20:14:29 UTC
From: tavernin@sun1.interlan.com
Message-ID: <CK96w6.211@rd1.InterLan.COM>
Source record: 272013

In article <199401232257.OAA06991@AMSAT.Org>, cowdin@pogo.DEn.mmc.COM (Dave Cowdin) writes:
>
> STS-60 ASTRONAUTS ISSUED HAM CALL SIGNS
>
> Astronauts Charles F. Bolden, Jr. of Columbia, South Carolina and Ronald M.
> Sega of Seabrook, Texas, have been issued amateur radio call signs in
> preparation for their joint U.S.-Russia science mission. The Spacehab
>

I wonder how long they had to wait for their tickets ...

Sorry, but after waiting 12 weeks and still no word from Gettysburg, I think I'm allowed to be a little sarcastic ...

Victor Tavernini
Racal-Datacom, Inc.

tavernin@sun1.interlan.com

731. Ham shop in Burlington, VT??

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 20:38:33 UTC
From: wetzel@med.uvm.edu
Message-ID: <1994Jan26.203833.1345@emba.uvm.edu>
Source record: 272025

Can anyone tell me of a Ham radio shop selling ARRL books or other repeater
maps and eventually 2M handhelds in the Burlington, VT area.
I have seen adds in 73 but shipping of $5 for a $6 book seems excessive.

Thanks

Dan Wetzel

732. Of Wouff Hongs and Royal Rites

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 20:50:02 UTC
From: waco@cbnewst.cb.att.com
Message-ID: <CK98JI.G2J@cbnewst.cb.att.com>
Source record: 272015

jwittich@b4pph107.bnr.ca (Jeffrey Wittich) writes

>Hi, everybody. Well, its about spring, and that means we are
>getting ready for the local HamFest round here. Im looking
>at the hamfest flyer, and one on the events listed is
>The Royal Order of Whoff Hong Induction. Well ya see, Im kind
>of a new guy, and dunno what thats all about. I asked about it
>the local 2 meter repeater, and you should have heard the
>snickers and snorks. I quickly surmised that it was a secret.

Yep, it is a secret.

> So keeping with the spirit of fun, I will not just ask
>what this is all about, but I do have a few questions:
>
>1. Is it something that the OFs will enjoy at us new guys expense?

You're very perceptive.

>2. Is it an event that I would prefer no one had a camera at?

Yep.

>3. Would I be any less likely to get home that night than any
> other night?

I would hope not.

>4. Will my health insurance cover anything thats likely to happen?

Best check it out.

>5. Is there a potential for any embarassment to any involved?

Of course not.

>6. Could I be black-mailed for being there?

Only if someone knows about it.

>7. Why am I so paranoid about this?

Probably been on too many snipe hunts as a bag holder.

>Thanks guys, and heres the Email address:
>jwittich@b4pph107.bnr.ca
>
>I will let you know what happened (maybe) in May.

Probably will be unable to break the sworn code of silence due
to great bodily peril involved for doing so.

>C ya.
>
>---
>-=Jeff=- AC4ZO BNR claims they know nothing of my employment
> here. Specially when my attorney calls.
>---

Jeff,

I must confess I don't know much more about it than you. It's one of
the most mystic parts of the hobby. Enjoy the hamfest.

73,

John, WB9VGJ

==
John L. Broughton | snail mail: Room 1K-322
AT&T | 1200 E. Warrenville Rd.
| P.O. Box 3045
| Naperville, IL 60566-7045
| (708) 713-4319
| e-mail: john.l.broughton@att.com
| att!john.l.broughton
| air mail: WB9VGJ
==

733. Help .. Yaesu 301S manual

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 21:34:50 UTC
From: JMG@tntech.edu
Message-ID: <01H856E6MJVCDRPZCE@tntech.edu>
Source record: 272016

Help!

Does anyone have a copy of the Yaesu 301S manual.. recently purchased
one that needs to be realigned and don't have a manual.

thanks

Jeff

734. Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 21:43:24 UTC
From: jchappel@sanders.lockheed.com
Message-ID: <jchappel.106.759620599@sanders.lockheed.com>
Source record: 272018
Cross-posted to: can.forsale,rec.radio.amateur.misc

In article <2i5vta$tt@explorer.clark.net> robocop@clark.net (matt roberts) writes:
>Path: rapnet!butch!netcomsv!decwrl!olivea!sgigate.sgi.com!sgiblab!swrinde!cs.utexas.edu!h
owland.reston.ans.net!paladin.american.edu!europa.eng.gtefsd.com!uunet!news.sprintlink.net
!news.clark.net!news.clark.net!not-for-mail
>From: robocop@clark.net (matt roberts)
>Newsgroups: can.forsale,rec.radio.amateur.misc
>Subject: Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)
>Date: 26 Jan 1994 09:49:14 -0500
>Organization: Clark Internet Services, Inc., Ellicott City, MD USA
>Lines: 31
>Distribution: na
>Message-ID: <2i5vta$tt@explorer.clark.net>
>References: <60.668.5285.0N191767@canrem.com> <CK45ys.9II@ve6mgs.ampr.ab.ca>
<2i53kj$56k@helios.intranet.gr>
>NNTP-Posting-Host: explorer.clark.net
>Mime-Version: 1.0
>Content-Type: text/plain; charset=US-ASCII
>Content-Transfer-Encoding: 7bit

>In article <2i53kj$56k@helios.intranet.gr>,
>Demetre Koumanakos <demetre@phaethon.intranet.gr> wrote:
>>>The reason I am selling this, is that I am getting my HAM license soon, and
>>>am starting to look for a 2 meter radio. I will also trade the above setup,
>>>for a good 2 meter setup, make me an offer.
>>
>>Not if I can help it. I will use any influence I have left as the Former
>>Public Service Director of the Northern Alberta Radio Club, and any avenues
>>of information transfer, such as the Packet Radio system, to ensure that people
>>of your kind are carefully scrutinized. This will not prevent you receiving
>>your ticket, but it may make you very uncomfortable when your past catches up
>>with you.
>>
>>I was shocked from this message !! I always thought that Amateur Radio
>>was created and is still popular due to it's promotion of friendship !!
>>So what if the man was a "pirate", what matters *now* is the fact that
>>he is going straight !!! If he seems to be sincere about his "turn around"
>>he should be given the chance to do so !!!
>>Every possible effort must be made to reform the radio pirates with the
>>real *amateur" way, not with threats and vengence like you have done !!

>If he was in this country, and the FCC caught him, he would get in very
>serious trouble. If we allow this sort of thing to thing to persist,
>we'll have a service that will be unusable. How do we know this person
>will stay straight, we don't.

> Matt Roberts n3gzm

One listen on 14.313 Matt will show you that one's background has nothing to do with how good an operator or ham he will be. Listen during some of the DX pile-ups, the majority of the guys that transmit out of band, because they forget how to run the "split" on their transceiver, have 2by1 callsigns. I know of a number of hams that got their start on CB radio, and are good hams and legal operators, even though their early days in radio were not too savory. What Demetre and I ahve been trying to say is, give the guy a break, he may change and be a perfectly fine ham if someone were to extend the right hand of fellowship to him and get him squared away. The problem is that some guys get too vindictive, and and get their Jr. FCC hat on, and can't see the forest for the trees.

73

===

|~~~~~~|
| Joel B. Chappell - KC1SG Lockheed Sanders |
| Principal Engineer Nashua, NH 03061 |
| |
| -= Standard Disclaimer: All opinions are mine. =- |
| |
| jchappel@rapnet.sanders.lockheed.com |
| Fido: 1:132/204.1 |
| |
~~~~~~
~~~~~~

735. Scanner Forsale

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 23:00:04 UTC
From: rickie@phantom.com
Message-ID: <2i6slk$6ev@dockmaster.phantom.com>
Source record: 272019
Cross-posted to: alt.radio.scanner,rec.radio.amateur.misc

ForSale: Realistic Pro - 2021
200 Channel Programming.

Asking: 175.00 or Best Offer!

Rickie@phantom.com

736. Re: Of Wouff Hongs and Royal Rites

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-26 23:34:36 UTC
From: prvalko@vela.acs.oakland.edu
Message-ID: <2i6umc$n5a@oak.oakland.edu>
Source record: 272022

Jeff,

The only thing that is more secret is the blood initiation rites that all the extra-class hams that don't change their callsigns have to go through!

Still gives me the willies!

73, =paul= WB8ZJL

737. help with ft690r

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 00:50:47 UTC
From: tjenn@lonestar.utsa.edu
Message-ID: <1994Jan27.005047.24264@ringer.cs.utsa.edu>
Source record: 271885

i had to replace the final trans. on my ft690r
and forgot where a capacitor and a resistor went
would anyone have a schematic or have a ft 690r
that they could look at and tell me?

i also managed to break a wire loose too,
one end is conected to a post at th rear
cornner near the final trans. and goes towards the
side by the standby jack, its a toroidal choke.

help if you can
thanks
terrance
n5vzu

738. Re: WWCR 5.810MHZ 8pm 12pm Eastern(CHECK IT OUT!!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 01:06:59 UTC
From: clinehe@cherokee3.rtsg.mot.com
Message-ID: <2i743j$1f1@delphinium.cig.mot.com>
Source record: 271858
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner

In article <5KJHjGG8ynrC053yn@dorsai.dorsai.org>, bigsteve@dorsai.dorsai.org (Steve Coletti) writes:
|> |> The show is anything but religion, you see WWCR also means World Wide
|> Conspiricy Radio. Anyone want to take a vote on starting an
|> alt.radio.conspiricy newsgroup for WWCR listeners? C'mon all you Tom
|> Valentine and Pastor Pete fans, this is for you.

Don`t forget the Hour of the Time with William Cooper!
They are usually entertaining and address subjects you won't here elsewhere.
How about alt.new_world_order?

739. Re: Icom tuning dial

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 02:17:25 UTC
From: engberg@edfue0.ctis.af.mil
Message-ID: <2i787l$1q2@iris.mbvlab.wpafb.af.mil>
Source record: 271881

Thanks, Jack, for the tip on the Icom dial. Hope this gets into the "mods"
archives in the future.
Just curious if this applies to the Icom 735 - will look at it tonight.
I hope you didn't wear out that tuning dial in two weeks!
73,
--

Bob Engberg
phone: 907-552-7172
e-mail: engberg@ctis.af.mil
packet: K0MVL@KL7AA
snail: Science Applications International Corp.
911 W. 8th Ave., Suite 401
Anchorage, AK 99501

740. How to "Convert" Ham Radio HyperCard Stack?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 02:23:40 UTC
From: miles@mbs.telesys.utexas.edu
Message-ID: <miles-260194202250@slip-7-14.ots.utexas.edu>
Source record: 271882
Cross-posted to: rec.radio.amateur.misc,comp.sys.mac.hypercard

I have a copy of the Macintosh Novice Ham Stack, dated mid-93, used for drilling folk who want to become ham radio operators. It has been personalized by a person named Mark, and I can't figure out how to insert my daughter's name.

When she completes a practice test and tries to save her score, she gets this error message: "This stack has not been converted. It must be converted before it can be modified."

This may involve the fact that I am using HyperCard 2.1. The stack shows a padlock symbol, but is not locked in the Get Info box.

Any ideas? Thank you.

= = = = = = = = = = = = = = = = = = = =
_ Miles Abernathy, N5KOB =
| |__ miles@mbs.telesys.utexas.edu =
_| | POB 7580, Austin TX 78713 =
\ * / University of Texas @ Austin =
\/ tel. (512) 471-6521 U.S.A. =
= = = = = = = = = = = = = = = = = = = =

741. Re: 10meters, anyone want to try it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 02:44:54 UTC
From: Leland Van Koten <leevankoten@delphi.com>
Message-ID: <19940126.21445478.leevankoten@delphi.com>
Source record: 271883

Jeffrey R. Luszcz <jrl2@crux1.cit.cornell.edu> writes:

> I just got my HF privs, and was wondering if there
>are any nets or clubs operating on 10m now? I heard
>Costa Rica and Phenoex,Az this afternoon from Ithaca,NY
>.. I was wondering if there are any freqs that people
>normally listen to for contacts?

Jeff -- There is really no "calling frequency" on 10 meters, although some people occasionally try to set one up. Just get on and call CQ, or answer someone else who is doing so. There are still a lot of 10 meter nets around, especially with the 10-10 chapters, but propagation is so unpredictable that it's tough to say what ones you could contact. If you hear a net that sounds interesting, don't hesitate to jump in -- you can wait until they ask for check-ins, or just give your callsign at a break in the conversation.

You'll find a lot of action next summer, when sporadic-E propagation returns on a regular basis. You won't work a lot of DX on this mode, but you can work all over the U.S. and Canada. I hope we run into each other, since New York is one of the few states I still need on 10 meters. We're too far for ground-wave, but too close except for very strong sporadic-E openings. And since I operate 100 watts into a wire antenna, back-scatter is pretty tough.

Congratulations on the upgrade, and I hope to see you on 40 or 80 meter CW!

73 de Lee/KE3FB in Md.
leevankoten@delphi.com

742. Re: No-Code Tec. license

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 02:54:39 UTC
From: Leland Van Koten <leevankoten@delphi.com>
Message-ID: <19940126.21543979.leevankoten@delphi.com>
Source record: 271884

<Graylan_Vincent@walnut.prs.k12.nj.us> writes:

>know code well) and someone showed me a book. I think it was called
>"Now Your Talking", but I'm not sure. I really want to find out how to get
>started with some cheap, but good equipment. What is the name of the
>booklet at Radio Shack that I can get?

Graylan -- You have it correct -- the book is "Now You're Talking," and it
is available at many Radio Shacks (as well as direct from the American Radio
Relay League). Radio Shack also has some other license preparation material,
but I think this is the best one.

There
is nothing wrong with starting with a No-Code Tech. license (that's the way
most people are starting these days), but try to learn the CW. Radio Shack
has some good CW tapes from Gordon West, and it's really not hard if you keep
at it. The biggest thing to know is that EVERYBODY hits a couple of plateaus
in learning CW where it seems as though you're not picking anything up, and are
even having difficulty with what you already learned. The first two times I
tried to learn CW, I hit these plateaus, thought I couldn't learn it, and quit.
In fact, after one of these plateaus, you tend to pick things up pretty easily
for the next few sessions. It's almost like your brain is just taking time to
really absorb what you've learned.

Good luck!

73 (best wishes) de (from) Lee/KE3FB in Md.
leevankoten@delphi.com

743. Re: 10meters, anyone want to try it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 03:58:41 UTC
From: LMARRIN@delphi.com
Message-ID: <19940126.22584112.lmarrin@delphi.com>
Source record: 271888

While there are no formal calling freqs in the Ten Meter Novice band, there are several freqs that are good places to call CQ.

I find 28.400 has a lot of US ops, and 28.495 can get foriegn DXers when the band is in good shape. For CW, 28.150 is also sort of an informal calling freq. 28.135 is used as an AMTOR calling frequency.

73 from Leigh/KM6JE in Santa Barbara.

744. Re: PacTel Rates

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 04:25:23 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CK9tMC.GEG@ucdavis.edu>
Source record: 271887

William Osborne (wosborne@nmsu.edu) wrote:
: I saw a posting here about PacTel lowering their rates for basic
: service to phone patches and controllers on repeaters as a result of
: the help hams had been in the quake. Will someone with info on this
: please repost. We would like to show it to US West and see if we can
: get the same deal out of them. Thanks Bill--AA5ZQ

As far as I know Pac-Tel has always done this. OUr local club repeater is
also listed as a priority number since it is used for emergency and could
be important during emergencies. I would be surprised if you couldn't
get residential rates on your machine.

good luck,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
--

745. Daily Summary of Solar Geophysical Activity for 26 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 04:30:39 UTC
From: oler@rho.uleth.ca
Message-ID: <9401270430.AA06305@rho.uleth.ca>
Source record: 271905
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

26 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 026, 01/26/94
10.7 FLUX=127.8 90-AVG=105 SSN=090 BKI=1352 4432 BAI=018
BGND-XRAY=B3.8 FLU1=1.2E+06 FLU10=9.8E+03 PKI=1353 4432 PAI=017
BOU-DEV=008,025,079,016,058,046,020,017 DEV-AVG=033 NT SWF=00:000
XRAY-MAX= M1.5 @ 0136UT XRAY-MIN= B3.3 @ 1349UT XRAY-AVG= B7.0
NEUTN-MAX= +003% @ 0535UT NEUTN-MIN= -001% @ 2350UT NEUTN-AVG= +0.3%
PCA-MAX= +0.1DB @ 2150UT PCA-MIN= -0.4DB @ 2005UT PCA-AVG= -0.0DB
BOUTF-MAX=55348NT @ 0758UT BOUTF-MIN=55312NT @ 1929UT BOUTF-AVG=55336NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+065,+000,+000
GOES6-MAX=P:+122NT@ 1531UT GOES6-MIN=N:-088NT@ 0738UT G6-AVG=+088,+033,-029
FLUXFCST=STD:130,132,130;SESC:130,132,130 BAI/PAI-FCST=020,015,010/022,018,010
KFCST=3345 4333 3344 4322 27DAY-AP=004,018 27DAY-KP=1022 2110 1355 3322
WARNINGS=*SWF
ALERTS=**MINFLR:M1.5/1B@0136,N08W51(7654)
!!END-DATA!!

NOTE: The Effective Sunspot Number for 25 JAN 94 was 65.0.
The Full Kp Indices for 25 JAN 94 are: 1o 2o 1+ 1- 2- 1o 1+ 1o

SYNOPSIS OF ACT

Solar activity was moderate. Region 7654 (N08W63)
produced a long duration M1/SF flare at 26/0136. The event was
preceded by a C2/SF which peaked at 26/0118 and was followed by
a C6/SF which peaked at 26/0200. The region continues to show
growth as it approaches the west limb. Regions 7658 (N12W38)
and 7661 (N08E11) have also shown some growth this period. All
other regions are stable.

Solar activity forecast: solar activity is expected to be
low to moderate due to the continued growth of Regions 7654,
7658, and 7661.

The geomagnetic field has been at quiet to mostly active
levels with a brief period of minor storming occurring during
the 06-09Z period at middle latitudes and minor to major
storming occurring during the 12-18Z time frame at higher
latitudes.

Geophysical activity forecast: the geomagnetic field is
expected to be at unsettled to active levels for the next two
days due to a favorably positioned coronal hole. Levels
should be quiet to unsettled on day three.

Event probabilities 27 jan-29 jan

Class M 45/45/45
Class X 05/05/05
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 27 jan-29 jan

A. Middle Latitudes
Active 25/35/15
Minor Storm 20/10/01
Major-Severe Storm 05/05/01

B. High Latitudes
Active 20/25/20
Minor Storm 35/25/10
Major-Severe Storm 05/05/01

HF propagation conditions were normal over all but the
high and polar latitude paths where the effects of the sporadic
geomagnetic storming produced periods of poor propagation.
Conditions appeared to be improving slightly toward the end of
the UTC day. Additional periods of minor signal degradation
can be expected over the next day or two as effects from a well
placed coronal hole begin to degrade propagation. Deterioration
will be strongest (with fair to occassionally very poor)
propagation over the high and polar latitude night-sector
circuits.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N04W76 220 0110 HSX 02 001 ALPHA
7654 N09W63 207 0680 DKI 08 014 BET
7658 N12W38 182 0160 DAO 10 014 BET
7659 S12W00 144 0010 HSX 02 003 ALPHA
7661 N08E11 133 0110 DAO 04 008 BET
7657 N11W91 235 PLAGE
7660 S09E29 115 PLAGE

REGIONS DUE TO RET
NMBR LAT
7648 N07 024

LISTING OF SOLAR ENERGETIC EVENTS FOR 26 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0129 0136 0141 7654 N08W51 M1.5 1B 60
1232 1232 1232 160
2227 2237 2241 7654 N10W68 C1.6 SF 320

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 26 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 26/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
58 N18W29 S20W36 S10W46 N30W36 191 ISO POS 015 10830A
59 N59E19 N28W18 N30W21 N59E19 161 EXT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
25 Jan: 0057 0117 0135 C1.8 SF 7654 N08W34
0154 0158 0221 SF 7654 N08W43
0340 0345 0348 C1.2 SF 7658 N13W12
0543 0546 0551 B6.7
0810 0814 0819 B6.4 SF 7654 N11W37
1256 1305 1307 B7.6 SF 7661 N06E31
1351 1355 1407 B9.9 SF 7654 N11W41
1419 1422 1429 SF 7654 N09W47
1442 1446 1452 C1.1
1459 1505 1510 C1.2 SF 7654 N08W42
1525 1607 1619 C1.1 SF 7658 N12W20
1639 1642 1647 C1.4 SF 7654 N10W49 27 34
1808 1814 1819 C2.7 66 57
1820 1836 1853 M1.6 1N 7654 N09W48 28 85 36
2007 2007 2010 SF 7654 N11W49
2040 2044 2051 C3.1 SF 7654 N10W48 37 210 310
2057 2057 2104 SF 7654 N11W51
2147 2157 2201 B9.2 SF 7654 N10W49
2228 2233 2238 C1.2 SF 7654 N06W49
2311 2315 2320 SF 7654 N11W53
2347 2352 0005 C1.3

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

```
C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7654: 5 1 0 13 1 0 0 0 014 (66.7)
Region 7658: 2 0 0 2 0 0 0 0 002 ( 9.5)
Region 7661: 0 0 0 1 0 0 0 0 001 ( 4.8)
Uncorrellated: 3 0 0 0 0 0 0 0 004 (19.0)

Total Events: 021 optical and x-ray.

EVENTS WIT
-----------------------------------------------------------------

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---------------------------
25 Jan: 0340 0345 0348 C1.2 SF 7658 N13W12 III,Continuum
1351 1355 1407 B9.9 SF 7654 N11W41 III
1639 1642 1647 C1.4 SF 7654 N10W49 V
1820 1836 1853 M1.6 1N 7654 N09W48 II

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **
```

746. ANARTS RTTY NEWS BULLETIN 793 23/01/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 05:40:14 UTC
From: dave@eram.esi.com.au
Message-ID: <5147@eram.esi.com.au>
Source record: 271927
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS NEWS BULLETIN 793 23/01/94 PAGE 1/5.

SUNDAY TRANSMISSION SCHEDULES.
3.545 mhz 0930 utc VK2BQS (Jim)
7.045 mhz -3 0030 utc VK2CTD (COL)
14.070 mhz (amtor/fec) 0030 utc VK2DPM (ALAN)
14.091 mhz 0030 utc VK2BQS (JIM)
146.675 mhz 0030/0930 utc VK2JPA (PAT)
144.850 mhz (ax25 bbs) VK2JPA AT VK2RWI
146.675 mhz (rtty mmbbs/repeater) VK2RTY

Views expressed in this news bulletin are not necessarily
those of the Broadcast Officer, the Relay Officers, or of the
Society.

Local news for VK2 WIA members
==============================
As a result of a meeting of concerned members of the WIA which
was held in Sydney recently, a committee has been formed to
encourage independent candidates to seek election to the
Council of the NSW Division of the WIA at the forthcoming
Council elections.

The committee consists of Peter Naish VK2BPN, Bob Mayer
VK2BMU, John Brooke VK2FUR, Alan Dark VK2XAT, Roger Henley
VK2ZIG. No member of the committee will stand as a candidate.

The committee can be contacted at PO Box 372 West Ryde NSW
2114.

Guidelines for the preparation of programs for transmission by
--- Amateur Radio Teletype
======================
from Frank VK2FJL
part 2.
----

(2) UNSHIFT-ON-SPACE.
Some RTTY machines and most computers automatically change
from (FIGS) to (LTRS) every time a (space) is received.
To defeat this feature when text containing both spaces and
figures is being prepared : e.g. Satellite predictions, it

is necessary to insert a (FIGS) immediately before each
upper case character which follows a (space).

(3) PARAGRAPHS.
Commence each paragraph with an extra (CR)(LF) - i.e.double
spacing - and type four spaces plus a (LTRS) or (FIGS) be-
fore commencing the text.

(4) HEADINGS.
Un-numbered headings should commence at the lefthand margin
and be underlined using the hyphen on the next line, with
double spacing both above and below the underlined heading.

(5) PUNCTUATION.
Your layout will look neater and text be more readable if
the following suggestions are used.

(A) FULL STOP - This follows directly behind the previous
letter, but allow two spaces after each full stop.
This may later be expanded or contracted to fill the
line to the right-hand margin.

(B) COMMA - This also follows directly behind the previous
letter, but with only one space to follow.

(C) HYPHEN - When used to punctuate a sentence - type
(SPACE)(FIGS)(HYPHEN)(LTRS)(SPACE) and resume the text.
This can later be expanded to two spaces on either side
if required for line fill.

(D) QUESTION MARK - This looks better when preceeded by a
space and followed by two spaces. Like the full stop,
This may be expanded or contracted for line fill.

(E) COLON - Also provides clearer text when preceeded and
followed by at least one space.

(6) TABOO'S.
The use of the following characters should be avoided as
different keyboards will them as print different things :
semi-colon, equals, percent, dollar sign, pound sign, plus,
ampersand, quotes, maltese cross, exclamation mark and
the bell.
The question mark, colon, hyphen and apostrophe also differ
on some keyboards, but as their use cannot be restricted
entirely, it is obviously impossible to please all of the
people all of the time.

more next week

IPS weekly report
---

14 January - 20 January 1994

Issue no.: 03

Date of issue: 21 January 1994

Date 14 15 16 17 18 19 20
10cm 90 96 100 105 101 103 105
A 18 18 14 23 21 21 (10 estimated)
T 63 42 11 41 59 25 29

Summary of activity

Solar activity was very low 14th-15th January, and 17th-20th. Activity was high on 16th with an M6 flare.

The geomagnetic field at Learmonth (WA) ranged from unsettled to unsettled to active with a minor storm period during local night on 19th.

Ionospheric F2 critical frequencies at Sydney were slightly above predicted values on 14th and 18th, near normal most of 15th, 17th and 20th, and slightly below on part of 15th, and 19th. Sporadic E blanketing was often present from 15th - 18th January.

Comment:
Sporadic E was often observed this week. HF conditions may have been degraded due to mild geomagnetic activity which has more or less persisted since January 11th. The source of this enhanced geomagnetic activity is thought to be a broad south polar coronal hole.

IPS Monthly predicted smooth T-indices

Year JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

1994 34 33 33 34 31 29 27 24 22 21 19
1995 19 18 17 16 15 14 14 13 12 11 11 10
1996 10 9 9 8 8 7 8 8 9 10 11 12
1997 13 14 16 18 20 22 25 28 32 35 40 46

Forecast for the next week (21 - 27 January)

Solar : Low, chance for isolated low level M class flare.

Geomagnetic: Mostly unsettled with active period expected during January 22-23 and January 27-29 (coronal holes).

Ionospheric: Propagation conditions are expected to be fair, with degradations expected on January 22, 23 and 27 to 29.

Courtesy of IPS Radio and Space Services

VK2SG RTTY DX NOTES 14 JAN 94

VK2SG RTTY DXNOTES FOR WEEKENDING 14 JAN 1994 (BID RTDX0114)

OUR INFORMATION THIS WEEK CAME FROM: 9X5LJ, DJ3IW AND THE
CENTRAL-EUROPE DX CLUSTER NODE DB0SPC, I5FLN, IK5AAX AND THE
IK5PWJ PACKET CLUSTER, W2JGR AND THE NJ0M NODE THE TWIN-CITIES
DX PACKET CLUSTER, WA1MPB, WA4MCZ, W5KSI, WX5L AND ZS5S.

THANK YOU ALL FOR YOUR ASSISTANCE.

BANDPASS

FRIDAY 7

0912-14080 5W1KT 0942-14086 S53AX
1208-21084 VK6HD 1235-14091 VK4FRT
1327-21091 FG5FI 1335-21082 4U1ITU
1346-21085 4X6UO 1354-21090 OD5PL
1545-21085 C6A/AA5AU 1607-21088 VP5/WA0VQR

SATURDAY 8

0336- 7080 VP5/WA0VQR 0942-14088 K5KWG/ZA
1109-14084 UX0KC 1159-14083 US8AR
1252-21091 OD5PL QSL HB9CRV 1338-21090 5R8DS
1341-21087 4X6UO 1423-14082 YL2GD
1425-14089 OK1AJN 1518-14090 LY1BZB
1630-14088 J28JJ 1803- 7040 UR0HQ
1810- 7040 UN5PR 1815- 7041 4X/OK1FGC
1819- 7035 S52OR 1821- 3590 YL1ZR
1823-14084 WH6I 1832- 7039 4Z85TA
1834-28082 PJ2MI 1838-28084 A22MN
1841-28082 HP2CWB 1845-28077 HH2PK
1859- 7041 RZ1AWT 1908- 7033 TA2FT
1910- 7032 SV1ATS 2123-14101 C6A/AAAU
2127- 7038 CN8NP 2134-21078 PJ0/N9FTC
2155-14076 A22MN 2206- 3578 SV2BFN
2215- 7035 VK6HD 2217- 7038 UZ9CWA
2241-21093 KP2N 2309- 7037 HH2PK

SUNDAY 9

0012-14086 VP5/WA0VQR 0150- 7075 UR0HQ
0234- 7087 S57MM 0234- 3590 C6A/AA5AU
0341- 3601 HP1XBH 0521- 7078 8P6AW
0637-14082 UU2JI 0657-21084 UN5PR
0705-14083 UX0FF 0900-14083 BZ1QL
0902-21086 HL9FC 0941-14086 VK7YP
1053-21086 CU1AC 1055-21091 UR5LBX
1101-21081 A45ZX 1107-21078 UR0HQ
1115-14087 KP2N 1142-28082 V50CM
1201-21081 S57MM 1241-21082 J28JJ

1252-21084 9K2IC 1329-21098 GU4RWP
1331-21085 PJ2MI 1335-21088 A22MN
1351-21095 SV2BFN 1352-21082 4Z85TA
1356-21083 HH2PK 1406-21098 HP1XBH
1414-21102 HP1AC 1453-21075 C6A/AA5AU
1454-21082 XE1/DJ6OV 1600-21093 GI0KOW
2148- 7039 VK6HD 2325-14092 HS0A

MONDAY 10

TYPICAL REPORT "THE DAY AFTER CONTEST"

1349-14084 LY2ZZ 1720-14086 VP5/WA0VQR
1751-21088 PJ0/N9FTC

TUESDAY 11

1345-14088 RW6XW 1434-14084 UX0KC UKRAINE
1440-14085 GI0AIQ 1452-14087 UT5RP
1556-21084 VQ9WL 1626-21090 5R8DS
1652-21086 PJ2MI

WEDNESDAY 12

0109-14086 S92ZM 1053-14085 LY2BBF
1142-28082 U50CM 1303-14083 VQ9TS
1308-14083 A45XC 1638-21088 S53J
1706-21083 5R8LD 1909-14084 TZ6FIC
1913-14084 P4/W1EKT

THURSDAY 13

WWV A= 23 K= 3 2153-14088 V50PV

NOTES OF INTEREST.

SAINT PETER / SAINT PAUL, PY0. THE THREE WEEK DXPEDITION THAT
WAS TO TAKE PLACE 10 JANUARY, WILL BE DELAYED UNTIL 20 JANUARY
AND WILL BE FOR TWO WEEKS. QSL RTTY CONTACTS TO KARL, PS7KM.

PETER 1 ISLAND, 3Y. THIS DXPEDITION IS ON SCHEDULE AND THE
FIRST MEMBERS OF THE GROUP SHOULD BE ON THE FALKLANDS NOW.
LOOK FOR VP8BZL FOR A FEW DAYS FROM PORT STANLEY. ARRIVAL ON
PETER 1 AROUND 1 FEBRUARY, DEPARTURE ON 16 FEBRUARY.

FOR NEXT WEEK'S BULLETIN, SEND YOUR BANDPASS AND NOTES OF
INTEREST TO JULES, W2JGR AT W2TKU.#SRQ.FL.USA.NA

REMEMBER, DX DON'T SLEEP.
GL DE BOB, WB2CJL AT W5KSI.#NOLA.LA.USA.NA
[via HF PACTOR]

Coming events

1994

February 4th ANARTS meeting

12th-13th EA WW RTTY
Contest

March 19th-20th BARTG WW RTTY
Contest

April 16th-17th SARTG WW AMTOR
Contest

FOR DISPOSAL

FREEBIE - (But you collect it)

A SAGEM 2000(TX35DS) PRACTICALLY AS NEW WITH 8 inch DISPLAY
AND FLOPPY DISC ATTACHMENT... MANUALS ARE INCLUDED...

PHONE (02) 451-6314 Bill Storer..

IF NO INTEREST SHOWN IT GOES TO THE TIP IN A WEEK.

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065
Australia, for such matters as membership and general
enquiries. Enquiries can also be made by packet to the
President (Col) VK2CTD, or the Secretary (Pat) VK2JPA @ VK2RWI.

News items may be sent to Broadcast Officer PO Box 60
Blacktown 2148 Australia, or by packet to VK2JPA @ VK2RWI.

The Internet address for the Broadcast Officer is :
patl@extro.edu.su.oz.au

The Society welcomes news items on any digital subjects from
anywhere in the broadcast coverage area. We know we reach New
Zealand and many South Pacific islands, and we are looking
forward to news from your areas to let other amateurs know
what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer

That concludes ANARTS NEWS 793 23/01/94.

Inserted by VK2BQS Jim, Vice-President ANARTS.
--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

747. Re: 10meters, anyone want to try it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 06:30:53 UTC
From: jtriolo@delphi.com
Message-ID: <9401270129591.jtriolo.DLITE@delphi.com>
Source record: 271886

> I just got my HF privs, and was wondering if there
>are any nets or clubs operating on 10m now? I heard
>Costa Rica and Phenoex,Az this afternoon from Ithaca,NY

First, congrats on the 10m privileges! The only net I know of is here in Virginia at 28.470 Wednesday at 0000Z. But conditions from New York to Virginia are rarely any good on 10 meters to have a conversation (if you're even lucky enough to hear a Virginia station).

>.. I was wondering if there are any freqs that people
>normally listen to for contacts?

Best thing to do is just scan around the band. I don't think there are any frequencies that are used regularly for contacts. If you want to call CQ, find a clear frequency somewhere in the middle of the band and start calling.

Hope this helps out..

73 de Jason, KD4ACG

Jason D. Triolo -- Colonial Heights, VA | ----------
Amateur Radio: KD4ACG | This space for rent.
Internet : JTRIOLO@delphi.com | Call today!
Fidonet : 1:264/219.1 | ----------
---

748. Re: CW filters and DSP-9: A recap of mimimum bandwidth

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 08:29:59 UTC
From: k23690@lehtori.cc.tut.fi
Message-ID: <2i7u27$mc2@cc.tut.fi>
Source record: 271890

Rajiv Dewan (rdewan@casbah.acns.nwu.edu) wrote:

> In the thread on minimum bandwidth required for CW signal:

[Estimates between 16 and 72 Hz arrived from different approaches]

This approach is based on the Modulation and Demodulation chapter in
the ARRL handbook.

The baud rate BR is defined as WPM / 1.2 and thus 20 WPM is about 16.7 Baud.
The bandwidth BW is define as K * BR. Both CCIR and FCC recomend K = 3
for non-fading circuits and K = 5 for (selectively) fading circuits.
Thus 20 WPM requires 50 Hz or 83 Hz if 5th harmonic is included.

In the same chapter, there is a graph with rise and fall time vs. maximum
speed and rise/fall time vs. required bandwidth. If 5 ms rise and fall
times are used (recomended by the ARRL) the maximum speed for non-fading
circuits is 60 WPM and 45 WPM for fading circuits.

At 5 ms rise/fall times the occupied bandwidth is about 150 Hz (-23 dB).
If we assume typical speeds (12-20 WPM), the transmitted spectrum is
dominated by frequency components from the rise/fall transition and not
from the information contents of the signal. Except for a relatively few
high speed operators, the rise/fall time recomendation could be increased,
which would reduce the occupied bandwidth.

Using receiver filters which are narrower than 150 Hz will increase the
post-detection rise/and fall times, but the impulse response of the
filter becomes more critical. At below 50 Hz and the third harmonic is
attenuated making aural reception very hard but machine reception of
20 WPM should be possible down to 17 Hz bandwidth.

Paul OH3LWR

Phone : +358-31-213 3657
X.400 : G=Paul S=Keinanen O=Elisa-Tampere A=ELISA C=FI
Internet: Paul.Keinanen@Telebox.tele.fi
Telex : 58-100 1825 (ATTN: Keinanen Paul)
Mail : Hameenpuisto 42 A 26
FIN-33200 TAMPERE
FINLAND

749. Need info on CCW

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 10:12:36 UTC
From: SPEMG1@cf.ac.uk
Message-ID: <SPEMG1.6.000A3618@cf.ac.uk>
Source record: 271891

I need info on Coherent CW (Rigs, Kits, Books etc.). Can anybody point me to the right direction please

750. ARLB013 Promos available

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 12:55:30 UTC
From: marcbg@netcom.com
Message-ID: <$arlb013.1994@ampr.org>
Source record: 271894
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

```
SB QST @ ARL $ARLB013
ARLB013 Promos available

ZCZC AG77
QST de W1AW
ARRL Bulletin 13 ARLB013
>From ARRL Headquarters
Newington CT January 25, 1994
To all radio amateurs

SB QST ARL ARLB013
ARLB013 Promos available

Video promos available

Effective February 1, ARRL public information officers and public
information coordinators may request from ARRL Headquarters
videotape copies of a new set of public service announcements.

The VHS-format tapes feature astronaut Linda Godwin, N5RAX, and
Nobel Prize-winning physicist Dr Joe Taylor, K1JT, of Princeton
University.

The full-color PSAs include testimonials from Godwin and Taylor in
varying lengths for both commercial and public-access television
use.
NNNN
/EX

--
Marc B. Grant fax 214-231-3998
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX
```

751. ARLD006 1A0 operation planned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 13:00:11 UTC
From: marcbg@netcom.com
Message-ID: <$arld006.1994@ampr.org>
Source record: 271895
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

SB DX @ ARL $ARLD006
ARLD006 1A0 operation planned

ZCZC AE04
QST de W1AW
DX Bulletin 6 ARLD006
>From ARRL Headquarters
Newington CT January 25, 1994
To all radio amateurs

SB DX ARL ARLD006
ARLD006 1A0 operation planned

SOVEREIGN MILITARY ORDER OF MALTA. After more than three years of amateur radio silence, 1A0 may be available soon. IK0FVC, I0JBL, I0HCJ and I0IJ will attempt an operation from 1A0KM January 26 through 31. Plans call for 80 through 10 meters with the possibility of some WARC band action too. QSL via I0IJ.
NNNN
/EX

--
Marc B. Grant fax 214-231-3998
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

752. DSP-9 Filters (and others) -- New Thread

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 13:39:12 UTC
From: root@jackatak.raider.net
Message-ID: <24cTgc1w165w@jackatak.raider.net>
Source record: 271843
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

The thread of DSP-9 (etc) Digital Filters and bandwidth/ringing has pretty well wound down, and while I do not mean to fire that discussion up, I am seeking information on a different aspect of these lovely little devices:

Several hams using these filters have reported problems, both on the Nets and to the manufacturers, when engaging both the Heterodyne (tone) processing filter *AND* the random noise filter. The audio becomes distorted.

A Ham from Louisiana offered the suggestion, that had been offered him and seemed to work well, that the unit would work OK if the operator would simply turn off their tranceiver's speech processor.

There followed a VERY heated argument about how the speech processing circuit processes OUTBOUND audio only and has NOTHING to do with the INBOUND audio going to the processor. However, when the (RF) Speech Processors were turned off, the DSP-9 (and DSP-59 and a few other brands as well) *ALL* responded as they were supposed to...

The question was immediately raised: "What could the (RF) speech processor have to do with the incoming audio?"

I speculated, and am seeking confirmation here, that the *RF* speech processor circuitry is engaged all the time the "compression" button is engaged, that unlike the final amp which is biased to cut-off, the speech processor runs, with no input, all the time. This would explain why the simple turning-off of the processor eliminates the problem, as does moving the DSP unit OFF the top of the radio and placing it a few feet away.

A glance at the block diagram of my rig and a quick look at the schematic seems to bear this hypothesis out, but I am still unsure and seek additional input and thought...

The real motive is: I have a DSP-9 that I intend to install in my mobile, but I have NO CHOICE about where to position the unit -- it MUST go right on top of the transceiver or not at all. I do NOT use a speech processor for a variety of reasons, but some of my co-pilots do...

So, anyone care to show me the error of my thinking? Confirm my wild-ass guess? Hit the "N"? Add me to the .killfile?
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
| Jack GF Hill |Voice: (615) 459-2636 - Ham Call: W4PPT |
| P. O. Box 1685 |Modem: (615) 377-5980 - Bicycling and SCUBA Diving |

```
| Brentwood, TN 37024|Fax: (615) 459-0038 - Life Member - ARRL |
| root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose" |
+--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--*--+
```

753. New QRZ! Ham Radio Callbook CDROM: $15.95

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 14:25:44 UTC
From: info@ditdah.Morse.Net
Message-ID: <1994Jan27.142544.14429@ditdah.Morse.Net>
Source record: 271914

Through the end of this month, Morse Telecom is offering the new QRZ! Ham Radio CDROM for $15.95. This CD contains the updated US callbook with DOS and Windows software for viewing it. Also included are hundreds of ham related programs for packet, satellite tracking, contest logging, NOS's, CW training, radio mods and much, much more.

This special price is only valid for a few more days. To take advantage this, you must call us at 800-706-4046 or 516-887-4046, during normal business hours, 9AM to 5PM, EST.

754. FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 14:40:43 UTC
From: haga@zach.fit.edu
Message-ID: <CKAM3v.I2M@zeno.fit.edu>
Source record: 271915

My god, ive been paitently waiting for my call sign to come in... it's been
well over 9 weeks now, and it still hasn't arrived.... Does anyone know
a number that i may call to check up to see if they have even issued it
but maybe not have mailed it yet or something? im tired of waiting!!

--
Larry.....
haga@zach.fit.edu

****
Hey, Uncle Charlie, I took my test and passed, I got my raido, Now, how long
till I can TALK on it? already been 9 Weeks and counting
****

755. SuperMorse 4.xx

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 15:07:58 UTC
From: mosier@fagan.uncg.edu
Message-ID: <mosier.66.0@fagan.uncg.edu>
Source record: 271904

Will Turner said that wuarchive.wustl.edu has Supermorse 4.04 in /mirrors/msdos/hamradio. But the wuarchives were wiped out last week and that directory path no longer exists. Does anyone know of any other source for Supermorse 4.xx?

steve
mosier@fagan.uncg.edu

756. Is there a faq list for GMRS?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 15:19:43 UTC
From: reda@gandalf.rutgers.edu
Message-ID: <Jan.27.10.19.43.1994.3681@gandalf.rutgers.edu>
Source record: 271911

Does anyone know where I could get more info on GMRS (general mobile
radio service).

Specifically, how to apply for a license, and is there a test involved?

TIA,
FRank

--

Frank J. Reda, Assistant Director, Rutgers University Computing Services
reda@gandalf.rutgers.edu

757. Re: The DSP nobody mentioned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 16:07:58 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.759686878@BIX.com>
Source record: 271912

milewski@oregon.uoregon.edu (Steve Milewski) writes:

>A friend of mine, Steve, AI7W, bought one recently and here's a short
>description from him:

> My DSP's model is the DSP-120, it's made by Digital Interactive
>Signal Corp.. It has 8 programable filter memories and connects to
>the parallel interface of a P.C. (386 with VGA or better). It provides
>a real time audio spectrum display and a digital recording feature
>as well as providing a number of ways to custom design filters. Sets
>of 8 filter designs can be stored as files on the P.C. making it
>possible to have an almost unlimited number of filters.

>If you're interested in DSP, this is definitely wirth looking into.

Could you post contact information on Digital Interactive, please?
This does sound interesting.

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715

758. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 16:25:16 UTC
From: wvhorn@magnus.acs.ohio-state.edu
Message-ID: <2i8ptc$27g@charm.magnus.acs.ohio-state.edu>
Source record: 271907

In article <CKAM3v.I2M@zeno.fit.edu>,
The Pyrotechnic <haga@zach.fit.edu> wrote:
>My god, ive been paitently waiting for my call sign to come in... it's been
>well over 9 weeks now, and it still hasn't arrived.... Does anyone know
>a number that i may call to check up to see if they have even issued it
>but maybe not have mailed it yet or something? im tired of waiting!!

First of all, you're not supposed to "bother" the FCC until 90 days have
passed. Secondly, my license (Gen.) took 10 weeks and 5 days to arrive
back in December.

Keep in mind that Nov.-Dec.-Jan. is major holiday time for federal "workers"
and so everything slows down.

Patience.

---Bill VanHorne

759. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 16:32:25 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2i8qap$3u7@news.acns.nwu.edu>
Source record: 271861

In article <CK95xn.L1H@srgenprp.sr.hp.com>, Alan Bloom <alanb@sr.hp.com> wrote:
>Rajiv Dewan (rdewan@casbah.acns.nwu.edu) wrote:
>
>..
>: Each dot is encoded by an dot time length on and a dot time length off, i.e., a
>: cycle of twice the dot lenght. This is like multiplying a 50Hz square wave
>: with a 750 Hz tone. To maintain some semblance of square shape,
>: one would want to include the fundamental and at least the third harmonic.
>: This results in a minimum bandwidth of 150Hz. ...
>
>It's actually twice that, since the modulated 750 Hz tone has two sidebands.
>
>AL N1AL
>

Yes. It will be just like 100% amplitude modulation of 750Hz carrier with
a 50Hz square tone. Thanks for correcting me. I had lost sight of the
carrier. I was thinking of a DC square wave. Again, assuming that
the third harmonic is relevant for no ringing in the output, the minimum
bandwidth is 60Hz (for 20wpm). This is for no ringing in the output.

If one just considers the ability to copy a signal and accept ringing
provided that it permits copying of the signal, then
the minimum would drop. I have copied 20wpm signals while using a 30Hz
bandwidth FIR filter in the W9GR unit. There was lots of ringing but
I could still copy. The ringing could have been from insufficient
bandwidth or pinking of the noise by the narrow filter.

It may be that the fundamental is enough for copying but that more bandwidth
is needed to curtail ringing.

Rajiv
aa9ch
r-dewan@nwu.edu

760. Re: Is there a faq list for GMRS?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 16:41:33 UTC
From: bobw@col.hp.com
Message-ID: <2i8qrt$11n@hp-col.col.hp.com>
Source record: 271910

Frank J. Reda (reda@gandalf.rutgers.edu) wrote:
: Does anyone know where I could get more info on GMRS (general mobile
: radio service).

: Specifically, how to apply for a license, and is there a test involved?

: TIA,
: FRank

: ----
: Frank J. Reda, Assistant Director, Rutgers University Computing Services
: reda@gandalf.rutgers.edu

Check the rec.radio.cb FAQ.

I know, its not really cb, but it used to be.

Bob

Bob Witte / HP PMO (Colo Springs) / bobw@col.hp.com / KB0CY / (719) 590-3230

761. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 16:42:49 UTC
From: ham@wam.umd.edu
Message-ID: <2i8qu9$26m@cville-srv.wam.umd.edu>
Source record: 271925

In article <CKAM3v.I2M@zeno.fit.edu>,
The Pyrotechnic <haga@zach.fit.edu> wrote:
>My god, ive been paitently waiting for my call sign to come in... it's been
>well over 9 weeks now, and it still hasn't arrived.... Does anyone know
>a number that i may call to check up to see if they have even issued it
>but maybe not have mailed it yet or something? im tired of waiting!!
>
Well, if you absolutely MUST call and find out how it's going, the number
is 717-337-1212. They will generally be very nice about it, but remember
that any time spent gabbing about why your license isn't out yet will
detract from the ONE day a week that they run ham licenses.

No, there's no logging system up there, either, meaning that your appli-
cation sits in a big, FIFO stack until its turn comes up, and your
info is entered into the computer and printed up. Yes, this means that
if your license hasn't been printed, there is really no way of checking
(save for someone looking through the stack itself) to see where yours
is on the queue.

Yes, the system stinks. Yes, it needs a serious overhaul, which it is
probably getting in the next two years (instant licensing, electronic
applications, choice of callsigns, reduced waiting times...). Consider
that we're living "the old days." That should be some consolation in
a few years.

Patience is a virtue.

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 123 QSLed on dipoles __________| Dipoles! Antenna!

762. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 16:53:18 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CKAs8v.4tz@hpqmoea.sqf.hp.com>
Source record: 271918
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Jerry Sy (ah301@yfn.ysu.edu) wrote:

: currently, I am leaning towards the dj-162 because of its wide
: receive.

: jerry

Wide receive is literal for all this class of radio, they tend to be very prove to losing the ability to hear an Amateur band signal when there are strong out-of band signals about. The only cure is having tight filtering around the amateur band, and this precludes wide range reception.

You'll not be far wrong if you think of them as a box containing 3 things:

1) a "scanner" with performance that places it at the cheap end of the scanner market, and less frequency coverage than usual.

2) A reasonable quality amateur band transmitter.

3) An amateur band receiver with only the performance of a cheap scanner, that is very susceptible to strong unwanted signals.

There are many people who have these and are delighted with them. Possibly due to being in areas away from non-amateur transmitters, or perhaps because they don't know what they've missed because they never heard it....

The Tandy hand-held may now be the only amateur hand-held that has not seriously compromised its performance as an amateur band radio.

I understand that some hand-helds now have computer game modes. Could they have been included to give the user something to do while in areas where blocking is frequent?

Ok, I've got strong opinions in this area, but if scanning was your prime interest, you probably wouldn't have got a licence.

If you can't hear 'em, you can't work 'em. whoever said it first is probably long dead, but it is still true. Also don't you just always lose contact just at a critical point in a talk-in etc.

Cheers
David

763. HAM licence and after

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 16:53:50 UTC
From: cs922150@ariel.cs.yorku.ca
Message-ID: <CKAs9q.3ux@ariel.cs.yorku.ca>
Source record: 271830

Hi all,
I am going to take the Ham test _basic , tomorrow. now i was wondering and want some advice on what type of radio should i get and what make, what should i be looking for in a handheld, what price is good for a beginner, etc, after i get my licence. i can only work above 30MHz as you all know, so i was thinking of a dual bander - 2m and 70cm handheld. is this a good choice, or what else will you sugggest. at the moment , more important is the price range i am going to be loooking at for a reasonable set.
For the set that you suggest where can i get it in Toronto.

Thanks in advance you your much appreciated advice to this (hopefully) very new Ham op.

mail me if possible to :

cs922150@ariel.cs.yorku.ca

Thanks

Choy Liao
York University
Toronto
Canada.

764. Sideband Technology Inc.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 17:35:08 UTC
From: ab376@FreeNet.Carleton.CA
Message-ID: <CKAu6K.4Hy@freenet.carleton.ca>
Source record: 271909

Recently liberated from our corp. lab, what appears to be a VHF
Transceiver. Rig was built by Sideband Technology Inc. of Scottsville
N.Y. Model number is the ACSB Pioneer 1000. Appears to be a 4 Channel
Xtal controlled with Xtals for 154.450 Mhz. Looks like a straight forward
VHF rig from the Main board, but underneath is another board chock full of
chips in what appears to be the audio section.

Anybody any info on these rigs? Would love a manual or even a schematic.

Regards
--
##
Mike Ligeza Snr.- VE3UIL
Ottawa, Ontario
Canada

765. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 18:22:30 UTC
From: levin@bbn.com
Message-ID: <LEVIN.94Jan27132230@medea.bbn.com>
Source record: 271908

In article <2i3fsu$7lh@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:

If we broaden the definition of ringing to allow for noisy signals, of
the kind encountered on the low HF bands such as 80m, then there might
be more than one source of ringing:
. . .
2. Progressive coloration of background white noise as the filter
bandwidth is narrowed. . . .

You've nailed the head on the hit as far as I'm concerned, especially
on the low bands. As I narrow the digital filter (the built-in audio
filter on the Yaesu 990) to eliminate QRM the noise acquires a pitch
which obscures the tone I'm trying to distinguish. If only there were
some way (maybe there is! I'm no expert with using the RF gain
control, for instance) to desensitize the receiver to the noise without
desensitizing it to the weak CW signal.

/JBL
=
Nets: levin@bbn.com | "GO TO JAIL. Go directly to jail. Do not pass
POTS: (617)873-3463 | Go. Do not collect $200."
KD1ON (@KB4N.NH.USA) | -- Parker Brothers

766. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 18:28:50 UTC
From: cravit@world.std.com
Message-ID: <CKAwo4.6Hz@world.std.com>
Source record: 271913

In article <2i8ptc$27g@charm.magnus.acs.ohio-state.edu>,
William VanHorne <wvhorn@magnus.acs.ohio-state.edu> wrote:

>passed. Secondly, my license (Gen.) took 10 weeks and 5 days to arrive
>back in December.

My Technician license took 10 weeks and 3 days to arrive (I got it 2
weeks ago).

>Patience.

Concurred. It will come _eventually_. If it does not come within 90
days after the test date, call the ARRL VEC before you call the FCC.
They can verify when the FCC received the paperwork, and may advise
you to wait to call the FCC.

/Matthew N9VWG

--
Matthew Cravit, N9VWG | All opinions expressed here are
Michigan State University | my own. I don't speak for The World,
East Lansing, MI 48825 | and they don't speak for me (luckily
E-Mail: cravit@world.std.com | for both of us).

767. How to "Convert" Ham Radio HyperCard Stack?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 19:09:45 UTC
From: Daniel.W.Collison@dartmouth.edu
Message-ID: <2i93hp$fj4@dartvax.dartmouth.edu>
Source record: 271831
Cross-posted to: rec.radio.amateur.misc,comp.sys.mac.hypercard

There's an easy solution. You're right, it does have to do with the fact that you're using HyperCard (2.1), which is a newer version than was used to make the original stack.

All you have to do is choose "Convert Stack" from the "File" menu. If the "File" menu isn't visible, type the "Apple" key and the spacebar at the same time to make it show. If you still have trouble, send me E-mail and I'll help out.

Dan N1PNE
dwc@dartmouth.edu

768. rsgb gb2rs news 30th jan

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 19:15:30 UTC
From: ted@tedb.demon.co.uk
Message-ID: <759698130snz@tedb.demon.co.uk>
Source record: 271829
Cross-posted to: rec.radio.amateur.misc,uk.radio.amateur

Good morning. It's Sunday the 30th of January and here is the GB2RS news broadcast, prepared by the Radio Society of Great Britain.

First the headlines:- The RSGB has a new Executive Vice-President and a new Membership Liaison Committee Chairman; RadCom was due to be posted to RSGB members last week; and attention all those running Thinking Day stations.

Clive Trotman, GW4YKL, is the RSGB's Executive Vice-President for 1994. He was elected by the RSGB Council at its January meeting. In order to carry out the EVP's duties, Clive has relinquished the Chairmanship of the Membership Liaison Committee (MLC). The new MLC Chairman is Peter Sheppard, G4EJP, who is the Zonal Council Member for the North of England. The RSGB's Membership Liaison Committee deals with matters concerning the Society's service to members, including the Liaison Officer (RLO) scheme, the GB2RS news bulletin and Morse practice transmissions.

The Guides Thinking Day on the Air will take place during Saturday the 19th and Sunday the 20th of February. A list of participating British GB Stations and of countries permitting Third Party Greetings Messages for this event is available from the RSGB Headquarters on receipt of a Self Addressed Stamped Envelope, size A5 or larger. The address is: RSGB Lambda House, Cranborne Road, Potters Bar, Herts, postcode EN6 3JE. Please mark the envelope 'TDOTA 1994 List'.

The February edition of Radio Communication (RadCom) has been posted to all RSGB members. It contains the full text of the speech made by the new RSGB President Ian Suart, GM4AUP. There is also a letter from the Portuguese AMSAT organisation explaining the negotiations which will lead to PO-SAT OSCAR 28 becoming available to the Amateur Satellite Service.

Next Tuesday, the 1st of February, marks the official opening of the amateur radio station of the South-East Essex Sixth Form College in Benfleet, Essex. It will be attended by the Principal, Governors, local press and radio, with the formal opening being performed by Jeff Stanton, G6XYU, whose company has been associated with amateur radio work at the College for several years. The callsign is GX7PRU, and it represents the culmination of work within the College by George Brown, G1VCY who teaches Electronics and Physics there. Amateur radio is now assuming a high profile within the College, and it is intended to integrate it into the curriculum at the earliest possible time. Any contacts with the station will be welcomed, particularly those with other schools, the packet radio address is GX7PRU @ GB7DUG and all messages will be answered by students at the College.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO. From Antarctica, LA9YBA is signing 3Y9YBA

now, from the Tierro Mountains region, in Zone 13. Check 10.102MHz around 0100 UTC. From Aruba, K4PI will sign P49I from now until Tuesday the 1st of February, taking in the CQ WW 160m CW Contest. From St Peter and Paul Rocks, the callsigns PY0SP and PY0SK will be aired by a group of Brazilian amateurs from Tuesday the 1st of February for two weeks. Activity will be on all bands from 160 to 6 metres on CW, SSB and RTTY. From Kenya, 5Z4JD will be especially active on the 160 metre band in the coming weeks.

Rally news now and we have one/two events this week:

Fenland Repeater & Lincs Packet Groups Junk Sale and Rally is being held at the Horncastle Youth Centre, Horncastle, Lincolnshire. The event starts at 10.30am, with talk-in on channel S22.

The fourth Lancastrian Rally is being held at the University of Lancaster. Doors open at 11.00am, or 10.30 for disabled visitors. The rally features many trade stands and a bring and buy stall.

We know of only one rally for next Sunday the 6th of February:

The South Essex Amateur Radio Society Radio Rally is to be held at The Paddocks, Long Road, Canvey Island, Essex. This is at the end of the A130. Doors open at 10am. The disabled visitors' parking area is near the main door entrance. The event features trade stands and a bring & buy stall. Refreshments will be available and talk-in will be on two metres, channel S22. Further details can be obtained from Ken, G0BBN on 0268 755350.

Next some dates for your diary:

The 1994 RSGB VHF Convention is to be held at its usual venue, Sandown Race Course, Esher, Surrey on Sunday the 20th of February. See January's RadCom for full details of the comprehensive lecture programme. Note that this event is being held much earlier in the year than usual.

The 1994 RSGB London Amateur Radio and Computer Show is to be held during Saturday the 12th and Sunday the 13th of March, at the Lee Valley Leisure Centre, Picketts Lock Lane, Edmonton, London. This is the usual venue, but with a new name. The February RadCom contains full details of the comprehensive lecture programme. This event is being run by RadioSport Limited, in conjunction with the RSGB and the Southgate Amateur Radio Club. There will be no RSGB National Convention this year so the Society will be putting on a larger stand at the London Show.

HF contest news now:

The results of the 1993 RSGB SSB Field Day have been published. Open Section winner is the Lichfield 'A' Station, G3WAS/P, with 864,960 points. Lichfield's 'B' Station is runner up. Restricted Section winners are Plymouth Radio Club, G3PRC/P; second is Torbay Amateur Radio Society. A photograph of Lichfield's winning station appears on the cover of the February RadCom, and the full results can be found on page 82. The ARRL CQ Worldwide 160m Contest takes place this weekend, it started at 2200 UTC on Friday, and finishes today Sunday at 1600 UTC. The last of the RSGB LF Cumulative events take place

during the next few days. An 7.0MHz Cumulative takes place today, Sunday the 30th and again on Saturday the 5th of February. Both run from 1000 - 1200 UTC. The RSGB LF Cumulative 1.8MHz Contest in the current series is next Friday the 4th of February from 2000 - 2200UTC. The RSGB LF Cumulative 3.5MHz Contest takes place next Sunday, the 6th of February, from 1600 to 1800 UTC. December's RadCom, page 84, gives detailed information on all of these LF Cumulative Contests.

Next some VHF contest news:

February's RadCom contains the results of the RSGB 70MHz Trophy Contest. The single-operator winner is G3KSR with 23,422 points from 78 contacts. The Open Section was won by GM4DSP/P with 49,320 points from 80 contacts. Best DX was GM4DSP/P to GJ6MXL/P at 647km. The second event in the RSGB 70MHz Cumulative Contest is today, Sunday the 30th from 1000 to 1200 UTC. There are three sections:- Fixed station single operator, Open and Listeners. The RSGB 432MHz Fixed, AFS and Listeners Contest takes place next Sunday, the 6th of February, from 0900 to 1500 UTC. There are three sections:- Single operator fixed, Multiple operator fixed and Listeners. See December's RadCom page 83 for details for both of these VHF events.

The results of two Direction Finding contests have been published in the February RadCom. The Ripon and District Qualifying Event was won by Mr A Mead of the Colchester DF Club, and the Torbay HF Qualifying Event was won by Brian Bristow of the Mid-Thames DF Club.

Special event stations this weekend include:
GB4CAA, County Air Ambulance, operated by members of the West Bromwich Central Radio Club in aid of the Country Air Ambulance appeal in concert with thirteen other through the Midlands. The station is located at the The Sandwell Hotel, High Street, West Bromwich and will be operational on HF, VHF and UHF from 10am to 5pm, throughout this weekend. Visitors are very welcome to visit the station. The other Air Ambulance appeal stations are listed in January's RadCom. GB4FFL, Fight For Life, is run by members of the Salop Amateur Radio Society in support of the Air Ambulance appeal. The station is operational from a site near the old Control Tower at Condor Airfield, Shropshire and will be on the air from 9am to 6pm, during this weekend. All are welcome to visit the station.

And now the solar factual data:

The period from the 17th to the 23rd of January has seen little solar activity and no flares of any note. The recent spate of geomagnetic activity has now died down. The sunspot indices steadily rose over the period, from 34 on the 17th up to 105 by the 23rd. The mean level was at about the 70s. Solar flux levels have not changed much and averaged 108 units. The geomagnetic Ap index was very unsettled up to the 19th, being up to sub-storm levels of 27 units on the 18th. Activity then declined to quiet levels and was only 5 units by the 23rd. The period averaged an Ap index of 17 units. The state has been 'nil, nothing to report' throughout the period. The aa indices, as reported by the British Geological Survey for the period from the 11th to the 17th of January, saw daily averages of around 42.3 nanoTeslas, about K4 - which is very

unsettled. There was little variation day to day. The only very disturbed period was late on the 11th with 6 hours at 101 nanoTeslas, about K5. The X-Ray Flux has generally declined from B4.6 on the 17th down to B1.8 by the 20th. It averaged B2.4 units for the period.

Now the ionospheric data for Central France:

The F2 daytime critical frequencies at Poitiers as reported by Meudon averaged 8.1MHz, though levels increased with the decline in geomagnetic activity from 7.9MHz on the 17th up to 9.0MHz by the 23rd. The daily highs are now between 12.00 and 14.00 hours. The darkness hour lows averaged 2.5MHz and hardly varied day to day. They are centred about 06.00 hours.

Now the ionospheric data for the north:

The F2 daytime critical frequencies at Ekaterinberg averaged 7.1MHz, and the darkness hour lows averaged 2.2MHz. The availability of solar data is continuing to decline, the Penticton observatory that now records the world standard of solar flux has now decided to delete the daily 2,800MHz east/west solar scans which showed where the active regions were. The new soft X-Ray telescope images recorded by the Yohkoh satellite. A co-operative effort by the USA, the UK and Japan has replaced this data with full solar disc pictures.

And lastly the solar forecast:

This week, the active side of the sun will be rotating away, solar flux levels are expected to be about 100, though the 90 day mean on the 23rd was 102. The geomagnetic activity is expected to be quiet around an Ap of 5. In the south the daylight MUFs are expected to be about 24MHz and the darkness hour lows about 7.5MHz; for the north, levels will be lower.

And that's the end of the solar information.

Finally in the main news, SSL has informed the Society that as of last Wednesday morning, the latest callsigns issued were in the G0 U J and G7 R O series, and Novice calls in the 2 0 A H and 2 1 C M series.

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

Next, the local news.

NEWS FOR THE SOUTH EAST

First, news of a new group newly formed in Kent - the Kent IP Group. Anyone who is interested in joining this group is asked to contact the Chairman, Chris, G6AHK on 0892 822849, for further details.

Meetings for Tuesday the 1st of February:

Chelmsford Amateur Radio Society has a talk entitled 'Cellular Communications - Part 1' by Colin, G4IIK. Further information from Charles, G0GJS on 0245 256654.

Solent Amateur Television and Radio Club meets for its Annual General Meeting and a Surplus Equipment/Junk Sale. For further details contact Kerry, G6CPE on 0794 514811 or Alan, G1APD on 0703 476029.

Stevenage and District Amateur Radio Society has a 'Hints and Tips - a Round Robin Help-Line evening. Take along your ideas. Details from Neil, tel: 0438 350882.

Meetings for Wednesday the 2nd of February:

Aylesbury Vale Radio Society has a talk on 'Foreign QSOs' by Liz, G0ETU. For further details contact Martyn, G4XZJ, on 0296 81097.

Chesham and District Amateur Radio Society has a Discussion Evening. For further information contact Ian, G0RTF on 0494 676391.

Dover Radio Club has a 'Novice Evening'. For further details of the club's activities contact Mick, G7NOR on 0304 825030.

Three Counties Amateur Radio Club has a talk on 'Amateur Astronomy' by John Smith. For further details contact Tom, tel: 0428 606298.

Worthing and District Amateur Radio Club has a Discussion evening. For further details contact G4GPX on 0903 753893.

Meetings for Thursday the 3rd of February:

Cray Valley Radio Society has a talk on 'Fine Tuning a DXpedition' by Bob Treacher. For further information contact Bob on 081 850 1386.

East Kent Radio Society has a talk entitled 'TV from the Goodwin Sands' by Brian, G8ZYZ, at Parkside. For further information contact Paul, G3VJF on 0227 364606.

Hoddesdon Radio Club has a Video entitled 'North Sea Trawler'. For further details contact Roy, G4UNL, on 081 804 5643.

Horndean and District Amateur Radio Club has a Junk Sale, starting at 7.30pm. Details from Stuart, G0FYX, tel: 0705 472846.

Horsham Amateur Radio Club has a talk on 'Amateur Radio 1949 Way' by Brian, G3GDU. Contact Peter, G8SUI on 073784 2150 for further details.

Maidenhead and District Amateur Radio Club has a talk entitled 'What has happened at the RSGB recently' by Council Member Neil Lasher , G6HIU. For details contact Neil, G0SVN, tel: 0628 25952.

Shefford and District Amateur Radio Society has a Members' Activity night. Contact Paul, G1GSN on 0462 700618 for further details.

Vange Amateur Radio Society has a Junk Sale. Contact Doris on 0268 552606 for further information.

Meeting for Friday the 4th of February:

Loughton and District Amateur Radio Society has a talk/demonstration on 'Using an Oscilloscope' by G3OPA. Call G8DZH on 081 508 3434 for details.

NEWS FOR SOUTH WEST

Meeting for Monday the 31st of January:

RSGB City of Bristol Group has a talk entitled 'Portishead Radio' by Larry Bennet. Contact Dave, G4NKT on 0272 62124 for further information.

Meeting for Tuesday the 1st of February:

Salisbury Radio and Electronic Society has a talk on 'A Radical New Licence Procedure' by G7GWF. Details from David on 0722 330971.

Meetings for Wednesday the 2nd of February:

South Bristol Amateur Radio Club has a 10 Metres Activity Evening. For more information telephone 0275 834282.

Trowbridge and District Amateur Radio Club has a Surplus Equipment and Silent Key Sale. Contact Ian, G0GRI on 0225 864698 for further information.

Meeting for Thursday the 3rd of February:

Yeovil Amateur Radio Club has a talk entitled 'The Worked All Britain Awards' by G1THG. Contact Cedric, G4JBL on 0258 473845 for further information.
Meetings for Friday the 4th of February:

Saltash and District Amateur Radio Club has a Computer Night with a talk and demonstration by Andrew and Phil. For further details contact Brian Giles, tel: 0752 844321.

Taunton and District Amateur Radio Club has a discussion on "The G5RV Antenna" led by Graham, G0GTR. Details from G3WNI, on 0823 680778.

NEWS FOR EAST ANGLIA

Meetings for Tuesday the 1st of February:

The Amateur Radio Club of Fakenham has an HF Open Forum. Contact Dave on 0485 528633 for further details.

Leiston Amateur Radio Club has a talk on 'Communications in Space' by Professor John Allen, at the Sizewell Sports & Social Club. Details from Bob, G0HSI on 0986 874800.

Sudbury and District Radio Amateurs has a talk on 'Measurements in the Shack' by Frank, G3FIJ. For further details contact Tony, G8LTY on 0787 313212.

Meetings for Wednesday the 2nd of February:

Ipswich Radio Club has a talk and film show entitled 'Poland' by Dr Grazyna (pronounced Gratzina). Call Sheila, G8HYE on 0473 742072 for details.

Martlesham Radio Society has a talk entitled 'Radio Experiences Abroad' by Dave, G4FRE/WG3I. For an entry ticket and further details contact Darren, G7BKO on 0473 227332 (office hours) or 0473 610601 (evenings).

Norfolk Amateur Radio Club has an 'NARC Film Archive Evening' with Jack, G3NJQ. For further details contact Sheila, G0KWP on 0603 618810.

Meeting for Thursday the 3rd of February:

Yarmouth Radio Club has a Junk Sale. Contact Tony, G3NHU, on 0493 721173 for details.

Meeting for Friday the 4th of February:

Cambridge and District Amateur Radio Club has a talk entitled 'Drive by Wire'(Modern Engine Management Systems) by Murray, G0PFG. Visitors welcome. For further information contact John, G0TIL on 0763 243570.

NEWS FOR THE MIDLANDS

Meetings for Tuesday the 1st of February:

Loughborough and District Amateur Radio Club has a talk entitled 'Audio' by Barry, G0LCU. For further details contact G8SNF by telephoning 0509 218259.

Grantham Radio Club has a talk on 'Sine Waves, Decibels and Falling off Logs' by Mike, G3PJR. Contact John, G8WWJ, 0476 65743 for further details.

Meetings for Wednesday 2nd of February:

Derby and District Amateur Radio Society has a Surplus Sale. For further details contact Hayley, G7PXA on 0773 856904.

South Birmingham Radio Society has a talk entitled 'Present Day Receivers' by Gordon, G3LEQ. For further details contact Roy, G8ACR on 021 474 3784.

Telford and District Amateur Radio Society has an 'Equipment Night'. For further details contact Dave, G4EIX, on 0952 588878.

Meetings for Thursday the 3rd of February:

Cannock Chase Amateur Radio Society has a talk on 'Radio Control of Model Aircraft' by John Duller. Contact Eric, G4ICE on 0543 502836 for details.

Vale of Evesham Radio Amateurs Club has a Magazine Swap night. For further details contact Alasdair by telephoning 0386 41508.

Meeting for Friday the 4th of February:

South Notts Amateur Radio Club has a Junk Sale. For further information contact Julie, G0SOU on 0602 216342.

Meeting for Sunday the 6th of February:

Charnwood Amateur Radio Contest Club has a discussion on 'Antennas for 160 Metres'. For further details telephone 0509 232927.

NEWS FOR THE NORTH OF ENGLAND

Meeting for Monday the 31st of January:

Sheffield Amateur Radio Club has a Construction night, organised by Roy, G0NRM. Further details from David, G0JJR Tel: 0742 446282.

Meetings for Tuesday the 1st of February:

Liverpool and District Amateur Radio Society has a discussion on Licensing Interpretation. Further details from Ian, G4WWX who is QTHR.

Mid-Cheshire Amateur Radio Society has a Construction night. Contact Mike, G7LQD on 0606 331210 for details on future activities and Morse/ RAE classes.

Wakefield and District Radio Society meets for a talk on 'Bits and Bobs' by Bob, G3WWF. Further details from Roy, G0TBY on 0924 893321.

Meetings for Wednesday the 2nd of February:

Denby Dale Amateur Radio Society has a talk entitled 'A Day in the Life of the Wakefield Coroner' by David Hinchliff. Details from G3ABS on 0484 606542.

Wirral Amateur Radio Society has a talk on 'The History of Transport in Wirral' by Glyn Parry. Further details from G3FOO, tel: 051 644 6094.

Meetings for Thursday the 3rd of February:

North Wakefield Radio Club has a Grand Surplus/Junk Sale. Booking-in starts at 7.30pm and the sale starts at 8pm. For further information contact John, G4RCG on 0924 362144.

Spen Valley Amateur Radio Society has a 'Construction Clinic'. Take along your Projects. For further details contact David, G1CTO on 0924 497767.

Trafford Amateur Radio Club has a talk on 'Introduction to TCP/IP' by Terry, G0CRF. For details contact Malcolm Collis on 061 748 8046.

Meetings for Friday the 4th of February:

South Manchester Radio Club has a talk on 'Zulus, part 2' by G0BJK. For further details contact Edward, G7FQY, tel: 061 969 1964.

Stockport Radio Society Computer Group has a talk on 'Turbolog' by G0JQI. For further details telephone 061 439 4952.

NEWS FOR SCOTLAND

The Grampian Repeater Group announces a new UHF Repeater, GB3BA on Channel RB1, opening today, the 30th of January at 1500. This Repeater is located at Durris, near Banchory, and is sited to cover the area South West of Aberdeen including Culter, Banchory and Stonehaven. Reports would be most welcome and should be made to GM4ZUK who is QTHR.

Meeting for Tuesday the 1st of February:

Dundee Amateur Radio Club has a lecture entitled 'Oliver Heavyside' by Leslie, GM0TGG. Details from GM4FSB who is QTHR.

Meeting for Friday the 4th of February:

Aberdeen Amateur Radio Society has a Junk Sale. Details from Gordon, GM7PXW who is QTHR.

NEWS FOR WALES

Meetings for Thursday the 3rd of February:

Meirion Amateur Radio Society has a video from the Smithsonian Institute entitled 'The Universe'. Contact Maurice, GW3GKZ on 0341 422447 for details.

Swansea Amateur Radio Society has a talk on 'Weather Satellites Picture Reception' by Graham, GW3SIY. For further details contact Graham, GW3SIY, on 0792 403527.

NEWS FOR NORTHERN IRELAND

Meeting for Friday the 4th of February:

Bangor and District Amateur Radio Society has a Construction evening with Crawford, GI0EZD. The venue is Room A13 (ground floor), Bangor Technical College and the start time is 8pm. For details contact Keith, GI0SSA on 0247 883315.

And that's the end of this week's GB2RS news broadcast, which was prepared by the Radio Society of Great Britain.

769. FCC form 610-V

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 19:21:39 UTC
From: Greg@epitome.er.doe.gov
Message-ID: <2i9483$n3c@cronkite.nersc.gov>
Source record: 271836

In the FCC announcement regarding vanity callsigns, they stated that every application for a specific callsign would have to be made on a form 610-V. I called the FCC in Washington and they said no such form exists. Knowing our government, it probably will take a year or two to design one, and another year or two to have it approved and printed in quantity.

Does a form 610-V already exist in some dusty government warehouse?

Greg
WA9EYY/3

770. Help - your Vertical Ant. experences.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 19:42:22 UTC
From: ddb@tntvax.ntrs.com
Message-ID: <1994Jan27.134222.1@tntvax>
Source record: 271839

I posted this on the ...antenna group, but more people read this so...

I'm looking to buy this weekend a ground independent vertical for HF. I have a very limited area (can go up as far as I want) and limited funds. 40m and 80m would be a big + but not a requirement.

What's your opinion on:
Cushcraft R5 (R7 too $)
Butternut HF6V
GAP Challenger DB-VIII
MFJ-1796
Others (?)

Dan (NY9K)

771. INDEX

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 20:03:00 UTC
From: STELLA_JOHN/HPMED_00@mailhub.CS.ITc.hp.COM
Message-ID: <d06jT2R000000000@MHS>
Source record: 271846

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INFO
2-METER
```

772. Is portable radio use possible in remote wilderness areas?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 20:14:29 UTC
From: ph600fgr@sdcc14.ucsd.edu
Message-ID: <60254@sdcc12.ucsd.edu>
Source record: 271848

I do much backpacking, and increasingly I go alone. I'm thinking about the possibility of bringing a communications radio with me. Do these things have a large enough range to work out in the wilderness? I typically find myself only in California.

What's the cost involved, and how big are the radios?

-Matt

--

Internet: mbharrin@ucsd.edu
Bitnet: MBHARRIN@UCSD.BITNET

773. Nobel Prize to 2 Hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 20:15:04 UTC
From: jahern@geohub.gcn.uoknor.edu
Message-ID: <17088.jahern@geohub.gcn.uoknor.edu>
Source record: 271838

The December, 1993, issure of Physics Today, published by the American Institute of Physics, has an article about Russell Hulse and Joseph Taylor, who recently received the Nobel prize in physics for their discovery of the first binary pulsar. Near the end of the article, Hulse is quoted: "I came to ham radio by way of radiotelescopes. In Joe's case it was the other way around."

Interesting, too, was the fact that Hulse "is the fifth graduate of the Bronx High School of Science to win the Nobel Prize in Physics."

+---+
| Jud Ahern KC5RI Internet: jahern@geohub.gcn.uoknor.edu |
| Geology & Geophysics Bitnet: jahern@uokgcn.bitnet |
| University of Oklahoma "Opinions expressed here reflect the entire|
| Norman, OK 73019 University, in one convenient location." |
+---+

774. Of Wouff Hongs and Royal Rites

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 20:27:34 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199401272033.MAA27010@ucsd.edu>
Source record: 271850

```
1. Is it something that the OFs will enjoy at us new guys expense?
not really.
2. Is it an event that I would prefer no one had a camera at?
not usually
3. Would I be any less likely to get home that night than any
other night?
nope...but usually it's late when it's performed.
4. Will my health insurance cover anything thats likely to happen?
yes.
5. Is there a potential for any embarassment to any involved?
a little
6. Could I be black-mailed for being there?
not to my knowledge...
7. Why am I so paranoid about this?
dunno. you do get a certificate out of it all....but we can't tell you what's
going to happen.
```

775. FTP site for Keps

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 21:28:57 UTC
From: ST1860@SIUCVMB.SIU.EDU
Message-ID: <199401272136.NAA04990@ucsd.edu>
Source record: 271867

Hi--

I know there is an ftp site out there for getting the keplarian elements. I use to remember what it was, but I have long since forgotten it. I would appreciate any help.....Thanx & 73's....Gary AA9JS

internet: st1860@siucvmb.siu.edu
bitnet: st1860@siucvmb.bitnet
packet: aa9js@kd9sg.#sil.il.usa

776. Feb. School Club roundup

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 22:10:00 UTC
From: mtrail@violet.berkeley.edu
Message-ID: <2i9e3o$fh8@agate.berkeley.edu>
Source record: 271876

The University of California (Berkeley) ARC, W6BB, hopes to
participate in the School Club Roundup in February, and is interested
in hearing from others schools planning to. Anyone have any ideas/
plans for suggested bands or frequencies?
Matt Trail KN6CR for W6BB

777. Re: Sideband Technology Inc.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 22:10:42 UTC
From: "F. Kevin Feeney" <fkf1@cornell.edu>
Message-ID: <2i9e52INNmf7@newsstand.cit.cornell.edu>
Source record: 271875

In article <CKAu6K.4Hy@freenet.carleton.ca> Mike Ligeza,
ab376@FreeNet.Carleton.CA writes:
>Recently liberated from our corp. lab, what appears to be a VHF
>Transceiver. Rig was built by Sideband Technology Inc. of Scottsville
>N.Y. Model number is the ACSB Pioneer 1000. Appears to be a 4 Channel
>Xtal controlled with Xtals for 154.450 Mhz. Looks like a straight
forward
>VHF rig from the Main board, but underneath is another board chock full
of
>chips in what appears to be the audio section.
>
>Anybody any info on these rigs? Would love a manual or even a schematic.
>
>Regards
>--
>##
########
> Mike Ligeza Snr.- VE3UIL
> Ottawa, Ontario
> Canada

Ahhh, I remember them - a little. I used to live in Rochester and they
were building them out on the west side of the city. I believe they are
Amplitude Compandored SSB rigs for VHF. Supposed to replace NBFM rigs
with closer channel spacing but still the simple channelised tuning (and
I think some autotuning with a pilot carrier suppressed -24 db or so)
I think this was the same kind of technology that UPS was supposed to
put into place in the 220-222 mhz region, but I guess it wasn't working
out that well. Not sure about the status of the company now. I'd be
curious about more info too. I think you can find some treatment of
ACSSB in the mid 70's-80's ARRL handbooks.

73 de Kevin, WB2EMS

778. Re: Sideband Technology Inc.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 22:17:22 UTC
From: rovero@oc.nps.navy.mil
Message-ID: <CKB78z.JKE@taurus.cs.nps.navy.mil>
Source record: 271871

In <CKAu6K.4Hy@freenet.carleton.ca>, ab376@FreeNet.Carleton.CA (Mike Ligeza) writes:
>
>
>Recently liberated from our corp. lab, what appears to be a VHF
>Transceiver. Rig was built by Sideband Technology Inc. of Scottsville
>N.Y. Model number is the ACSB Pioneer 1000. Appears to be a 4 Channel
>Xtal controlled with Xtals for 154.450 Mhz. Looks like a straight forward
>VHF rig from the Main board, but underneath is another board chock full of
>chips in what appears to be the audio section.

The ACSB means amplitude compandored side band. Not exactly the same
thing as a "normal" VHF-FM rig. Best used to talk with other ACSB
rigs.....

P.J. Rovero Internet: rovero@oc.nps.navy.mil
Code OC/Rv Packet: kk1d@k6ly
Naval Postgraduate School
Monterey, CA 93943

779. Re: Yellowstone Park Served by Repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 22:18:58 UTC
From: obrien@Aero.org
Message-ID: <2i9eki$4da@news.aero.org>
Source record: 271865

In article <miles-230194185741@slip-2-64.ots.utexas.edu>, miles@mbs.telesys.utexas.edu (Miles Abernathy) writes:
|> Is Yellowstone served by one or more repeaters? Does any repeater offer
|> coverage of much, most or all of the park?

Yellowstone is mountainous terrain, with significant ranges between the park and any other major population area. The result is that there are no amateur radio repeaters reachable from inside the park. The only activity I've ever heard has been on 146.52 simplex. In the summer, the fire lookout on Mt. Holmes, who is a ham, is often heard on that frequency.

There are park service repeaters galore, of course, on several peaks in the park, such as Mt. Holmes and Mt. Washburn. Attempts to get the Park Service to allow an amateur repeater on any of these hilltops have met with failure.
--
Mike O'Brien
obrien@aero.org

780. LAMARSfest is March 27th!!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 22:19:35 UTC
From: dalpert@merle.acns.nwu.edu
Message-ID: <dalpert-270194162008@aragorn16.acns.nwu.edu>
Source record: 271802

LAMARSFEST 1994 INFORMATION

State of Event: Illinois

City or Town:
Lake County, IL Fairgrounds, Grayslake, IL

Date of Event:
March 27, 1994

Name of Event:
LAMARSFEST 1994

Sponsor:
Libertyville & Mundelein Amateur Radio Society &
North Shore Radio Club

Directions to Event:
North & Southbound I-94 exit IL-120, West to US-45, continue West 1/3 mile
to Fairgrounds entrance on right. Alternative entrance off US-45 2 blocks N
of 120 on left.

Admission Fee:
$4.00 by mail with SASE by March 18; $5.00 at door. Swapfest tables
$10.00. Wall tables $15.00 Commercial tables $25.00 by advance reservation
only. No additional charge for power.

Time of Event:
Doors open at 8:00 AM, close at 2:00 PM
Setup at 6:00 AM. Advance commercial setup by reservation.

Talk-in:
147.945/.345 (North Shore Radio Club Repeater); 146.52 Simplex

Special Features:
Large indoor radio, computer & electronic swapfest; Commercial exhibitors;
Rest area; park free; public cafeteria.
VE testing 9:00 - Noon

Info & Reservations:
Frank Avellone, W9GLO
LAMARSFEST
93 P.O. Box 437
Lake Bluff, IL 60044
Tel: 708-234-4124 until 10:00 PM

****

HAMFEST LISTING AS FOLLOWS

GRAYSLAKE, (LAKE COUNTY) ILLINOIS
March 27, 1994
LAMARSFEST

The Libertyville & Mundelein Amateur Radio Society (LAMARS), assisted by the North Shore Radio Club, will hold its annual LAMARSFEST 94 at the Lake County Fairgrounds, Routes IL-120 & US-45. Large all indoor electronic, radio & computer swapfest, commercial exhibitors. Rest area, free parking, public cafeteria. VE testing 9:00 - Noon. General admission is $4 in advance with SASE, $5 at door. Swapfest tables $10; Wall tables $15; Commercial tables $25 by reservation only. Talk-in on 147.345+ NORTH SHORE RADIO CLUB repeater; 146.52 simplex. Doors open at 8:00 AM, setup from 6:00 AM. For information write LAMARSFEST 93, PO Box 437, Lake Bluff, IL 60044, or call Frank Avellone, W9GLO at 708-234-4124 before 10:00 PM.

--

_____

| Dave Alpert, KB9CNU | Packet Radio:
| 440 No. Western Ave. | KB9CNU@W8LVN.IL.US.NOAM
| Lake Forest, IL | Direct packet through ILWIN(145.57)
| 708-295-6078 (voice) | CI$: 70416,124
| 708-295-6926 (MACropoedia BBS) | America Online: Dalpert
| 708-295-1927 (FAX) | GEnie: DAlpert
| MS-DOS, Just Say NO! |
|_____| Friends don't let friends do DOS!

781. Re: Of Wouff Hongs and Royal Rites

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 22:25:48 UTC
From: (unknown)
Message-ID: <1994Jan27.222548.16298@zds-oem.zds.com>
Source record: 271874

In article <1994Jan26.134612.8836@brtph560.bnr.ca> jwittich@b4pph107.bnr.ca (Jeffrey Wittich) writes:
>Hi, everybody. Well, its about spring, and that means we are
>getting ready for the local HamFest round here. Im looking
>at the hamfest flyer, and one on the events listed is
>The Royal Order of Whoff Hong Induction. Well ya see, Im kind
>of a new guy, and dunno what thats all about. I asked about it
>the local 2 meter repeater, and you should have heard the
>snickers and snorks. I quickly surmised that it was a secret.
> So keeping with the spirit of fun, I will not just ask
>what this is all about, but I do have a few questions:
>
>1. Is it something that the OFs will enjoy at us new guys expense?
>
>2. Is it an event that I would prefer no one had a camera at?
>
>3. Would I be any less likely to get home that night than any
> other night?
>
>4. Will my health insurance cover anything thats likely to happen?
>
>5. Is there a potential for any embarassment to any involved?
>
>6. Could I be black-mailed for being there?
>
>7. Why am I so paranoid about this?
>

There is only one way to find the answers to these questions. Go to the induction. You might also check up on some of the older issues of QST for some of The Old Man's (T.O.M.) editorials. He explains some of the reasons for the Royal Order of the Wouff Hong. However, you got go to the induction to be a true member of the order. Have fun and enjoy yourself, if you always knew what was going to happen life wouldn't be any fun.

BTW, the early issues of QST are early 30's and earlier. Better check a good library.

Earl Morse
KZ8E
e.morse@zds.com
Royal Order of the Wouff Hong - 1991

782. general

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 22:26:06 UTC
From: yku01089@CAWC.YorkU.CA
Message-ID: <9401271726.ZM13455@rufous.yorku.ca>
Source record: 271870

```
subscribe newsgroup.
```

783. Re: Sideband Technology Inc.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 22:53:58 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan27.225358.12368@ke4zv.atl.ga.us>
Source record: 271899

In article <CKAu6K.4Hy@freenet.carleton.ca> ab376@FreeNet.Carleton.CA (Mike Ligeza) writes:
>
>Recently liberated from our corp. lab, what appears to be a VHF
>Transceiver. Rig was built by Sideband Technology Inc. of Scottsville
>N.Y. Model number is the ACSB Pioneer 1000. Appears to be a 4 Channel
>Xtal controlled with Xtals for 154.450 Mhz. Looks like a straight forward
>VHF rig from the Main board, but underneath is another board chock full of
>chips in what appears to be the audio section.
>
>Anybody any info on these rigs? Would love a manual or even a schematic.

This sounds like one of the test rigs for Amplitude Compandored Single SideBand. This is the mode UPS was going to use in taking over the 220-222 MHz spectrum before they decided to go with cellular phone, but after we lost the spectrum.

It's basically a single sideband radio with the audio compandored with a 2:1 compandor like dbx, and with a pilot tone injected for compandor tracking and AFC. It was supposed to give FM convienence in an SSB bandwidth. If you strip out the compandor and the pilot tone generator, you can move it to 2 meters where it can serve as a 4 channel SSB rig. Probably not worth the effort though.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

784. Re: The DSP nobody mentioned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 23:32:12 UTC
From: btoback@netcom.com
Message-ID: <btobackCKBApo.E2H@netcom.com>
Source record: 271893

In article <hamilton.759686878@BIX.com> hamilton@BIX.com (hamilton on BIX) writes:
>milewski@oregon.uoregon.edu (Steve Milewski) writes:
>
>>If you're interested in DSP, this is definitely wirth looking into.
^^^^^
Is this a pun?

-- Bruce Toback

785. Re: 10meters, anyone want to try it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-27 23:50:29 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-270194185029@k4dii.ksc.nasa.gov>
Source record: 271880

In article <jrl2.759277008@crux1.cit.cornell.edu>,
jrl2@crux1.cit.cornell.edu (Jeffrey R. Luszcz) wrote:
> I just got my HF privs, and was wondering if there
> are any nets or clubs operating on 10m now? I heard
> Costa Rica and Phenoex,Az this afternoon from Ithaca,NY
> . I was wondering if there are any freqs that people
> normally listen to for contacts?

Jeff-

The band hasn't been so good lately. Yes, you will find nets and clubs. For example, the Titusville, Florida, Amateur Radio Club sponsors a "Mosquito Net" on 28.333 MHz. They meet at 7 PM Eastern time, on Wednesdays. You can check in, and be assigned a "stinger number", for what its worth! Club members are frequently found on that frequency at other times.

A second "chapter" of the Mosquito net, is now operating in Orlando, Florida, on Tuesdays at 7 PM Eastern.

Of course, there is the granddaddy of all the ten meter nets. The "Ten-Ten International" club has regional nets, as I understand it. However, I don't have any better information. Membership to Ten-Ten requires contact with ten current members. You collect their "Ten-Ten Numbers", and send a copy of your log to the regional coordinator, along with some nominal registration fee.

I suggest you try calling "CQ Ten-Ten". Others more active than I, can give you information on how to get your own number.

What do you do with a Ten-Ten number? You exchange them! There are awards for various categories, depending on how many numbers you have collected. The purpose of the club is to promote Ten Meter activity.

73, Fred, K4DII
Mosquito Stinger #186
Ten-Ten #2579

786. Re: Is portable radio use possible in remote wilderness areas?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 00:17:13 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan28.001713.12744@ke4zv.atl.ga.us>
Source record: 271900

In article <60254@sdcc12.ucsd.edu> ph600fgr@sdcc14.ucsd.edu (Matthew Harrington) writes:
>I do much backpacking, and increasingly I go alone. I'm thinking
>about the possibility of bringing a communications radio with
>me. Do these things have a large enough range to work out in
>the wilderness? I typically find myself only in California.
>
>What's the cost involved, and how big are the radios?

There are a couple of types of amateur radios you might consider,
with the appropriate licenses of course. The first type is a VHF,
or UHF, or VHF/UHF handheld FM voice radio commonly called a HT by
amateurs. *If* there is a mountaintop repeater within your line of
sight, and there are many in California, you should be able to have
communications in the back country. Without a repeater, your signals
will normally be of limited range, basically no more than 3-5 miles
unless you are in a particularly favorable location. If you're on
a mountaintop, your range may extend out more than 100 miles. That's
why repeater stations are placed there. Usually you'll find someone
monitoring the repeater frequency around the clock. Power demands
for these handheld radios are modest, they're tiny, and antennas are
small. Name brands are Radio Shack (surprisingly good), Icom, Yaesu,
Kenwood, Alinco, and Standard. Prices run from $300 to $600 for new
radios, batteries, and other accessories. A Technician or higher class
amateur license is required.

The other type of radio that you might consider is a small SSB/CW
radio operating on the HF (High Frequency) spectrum. With the proper
choice of time of day, frequency, and condition of the Sun, the
ionosphere can act as a sort of repeater, refracting your signals
back to Earth at distant points. This can lead to worldwide
communications, though not to all points at once. Using the Earth's
natural repeater frees you from the restriction of being within line
of sight of an actual repeater, but it brings along a host of problems,
or challenges depending on how you look at it, of it's own. You must
develop an understanding of the factors influencing propagation. You
must become aware of different propagation modes, and you must keep
informed about the state of the Sun. There are few commercial radios
suitable for backpacking, antennas are large, and prices run from
$500-$5000 depending on how elaborate a radio you want. Some amateurs
use small home built CW radios. Others use so called QRP radios from
Ten-Tec, Yaesu, and (with modifications) from Icom. Radios are generally
bigger than the HTs, typically like a fat shoebox. Antennas, while
large, can be made of wire and thrown over convienent supports on
site. These aren't radios that you would normally be able to use while
on the move on foot. There are a couple of limited availability choices

for on the move HF. A company makes a handheld SSB radio for single band use. It's imported in limited numbers under different names. While fun to use, it probably shouldn't be counted on for reliable communications. The second choice is one of the various military manpack radios. These sometimes show up on the surplus market. They're bigger and tougher than the other choices, but make quite a load for a backpacker by themselves. To use any of these radios on any band aside from 10 meters, a General Class license or higher is required. Limited 10 meter voice operation and small CW segments are available with just a Technician plus Morse Code or Novice license. 10 meters generally isn't suitable for the medium range type of communications you're likely to want, it has wide "skip zones", but it does ocasionally offer long range contact possibilities with low power. HF is not channelized operation, and it's often difficult to reach someone at a specific location unless prearrangements are made.

So your amateur choices are VHF/UHF or HF. The former is better for reliable emergency communications provided you'll be in range of a repeater. The latter is the only thing if no repeater is available, but is erratic at best due to changing propagation, lack of standard channels being monitored, bulk of equipment, and the extra operator knowledge and skills (on both ends) required to use it effectively.

There is a third way that I haven't mentioned, amateur satellite operation. VITA demonstrated that a briefcase sized station can reliably send Email via Microsat from locations far in the bush. While I haven't heard of backpackers doing this routinely, there's no reason you couldn't use this method to keep in touch. Communications windows are fairly short, about 10 minutes each, and only when a Microsat is above your local horizon, about twice a day for a given satellite, but the method should be very reliable and predictable. You need small VHF/UHF radios, a TNC, and some sort of display and keyboard device, an HP95LX will work. Antennas are modest. A Technician or higher license is required.

Whatever radio system you choose, carry a solar panel to recharge the batteries if you're going to be out for more than a day.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

787. Re: Of Wouff Hongs and Royal Rites

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 00:58:29 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CKBEpH.407@ucdavis.edu>
Source record: 271898

Has induction to the royal order always been open, or was it at one time
"by invitation only" ?

thanks,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
--

788. Re: Is portable radio use possible in remote wilderness areas?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 01:04:09 UTC
From: andy@clark.net
Message-ID: <2i9oa9$4qg@clarknet.clark.net>
Source record: 271897

Matthew Harrington (ph600fgr@sdcc14.ucsd.edu) wrote:
: I do much backpacking, and increasingly I go alone. I'm thinking
: about the possibility of bringing a communications radio with
: me. Do these things have a large enough range to work out in
: the wilderness? I typically find myself only in California.

: What's the cost involved, and how big are the radios?

You can usually "work out in the wilderness", but your question is
rather vague. Are you a ham? Do you want two-way communications?
Do you want world-wide communications or just local capability for
emergencies? If we had a clue, we could help you! ;-)

789. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 01:29:21 UTC
From: timi@mendel.berkeley.edu
Message-ID: <timi-270194172921@kos4mac22.berkeley.edu>
Source record: 271901

Does anybody know the FCC's daily processing rate for Ham licenses
and upgrades?

- Tim Ikeda (timi@mendel.berkeley.edu)

790. Re: How to "Convert" Ham Radio HyperCard Stack?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 01:43:42 UTC
From: miles@mbs.telesys.utexas.edu
Message-ID: <miles-270194194118@slip-5-3.ots.utexas.edu>
Source record: 271902
Cross-posted to: rec.radio.amateur.misc,comp.sys.mac.hypercard

> All you have to do is choose "Convert Stack" from the "File" menu. If
> the "File" menu isn't visible, type the "Apple" key and the spacebar at
> the same time to make it show. If you still have trouble, send me
> E-mail and I'll help out.

Thanks to Don and the other folks who told me that command-spacebar would
allow me to access the menubar, and thereby Convert the stack. It worked!

= = = = = = = = = = = = = = = = = = = =
_ Miles Abernathy, N5KOB =
| |__ miles@mbs.telesys.utexas.edu =
_| | POB 7580, Austin TX 78713 =
\ * / University of Texas @ Austin =
\/ tel. (512) 471-6521 U.S.A. =
= = = = = = = = = = = = = = = = = = = =

791. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 02:49:06 UTC
From: ab510@FreeNet.Carleton.CA
Message-ID: <CKBJtu.45s@freenet.carleton.ca>
Source record: 271906

In a previous article, mosier@fagan.uncg.edu (Stephen Mosier) says:

>In article <2hmper$ppo@solaris.cc.vt.edu> benchoff@groupw.cns.vt.edu
>(Phil Benchoff) writes:
>>I know this has been discussed several times on this list. I am
>>looking for a list of famous hams.
>
>Here's my list, gleaned from others:
>
>SOME FAMOUS HAMS...
>
K2LSD Timothy Leary
W1RF Reginald Fessenden
WA3HR Babe Ruth
K2RCA General Sarnoff
G1LIZ Queen Elizabeth
R1JOE Josef Stalin
A1USA Uncle Sam
K3GMC Pres. General Motors
N0RM Gen Norman Swartzkof
KA7JJ Jesse James
M4BEL Ma Bell
CL0WN Charlie Chaplin
K5LEE Lee Iaccocca
K1LL Charles Ng
CH0P Jeffrey Dahmer
F1ZZ CEO Coca-Cola
T0KYO Emperor Hirohito
E1EIO Old McDonald
H0HO Santa Claus
W7KID Billy The Kid

--
GEORGE ATTALLAH - VE3KIA -OTTAWA CANADA
"THE LAST SURVIVOR OF THE GROUP OF ONE"
"THE ONLY ONE IN CAPTIVITY"

792. Daily Summary of Solar Geophysical Activity for 27 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 04:27:57 UTC
From: oler@rho.uleth.ca
Message-ID: <9401280428.AA10985@rho.uleth.ca>
Source record: 271847
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

27 JANUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 027, 01/27/94
10.7 FLUX=120.5 90-AVG=105 SSN=063 BKI=2443 3433 BAI=018
BGND-XRAY=B3.6 FLU1=9.9E+05 FLU10=9.8E+03 PKI=2343 3433 PAI=016
BOU-DEV=000,042,061,025,034,044,021,028 DEV-AVG=031 NT SWF=01:027
XRAY-MAX= M2.7 @ 0510UT XRAY-MIN= B3.3 @ 1245UT XRAY-AVG= C1.2
NEUTN-MAX= +002% @ 1505UT NEUTN-MIN= -003% @ 1135UT NEUTN-AVG= -0.2%
PCA-MAX= +0.1DB @ 2215UT PCA-MIN= -0.4DB @ 1915UT PCA-AVG= -0.0DB
BOUTF-MAX=55349NT @ 1402UT BOUTF-MIN=55319NT @ 1853UT BOUTF-AVG=55335NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+062,+000,+000
GOES6-MAX=P:+136NT@ 1553UT GOES6-MIN=N:-087NT@ 0706UT G6-AVG=+083,+030,-029
FLUXFCST=STD:120,115,110;SESC:120,115,110 BAI/PAI-FCST=015,010,015/018,010,015
KFCST=3333 4433 2223 3322 27DAY-AP=018,022 27DAY-KP=1355 3322 3345 4322
WARNINGS=*SWF
ALERTS=**SWEEP:II=2@0401-0420UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 26 JAN 94 was 56.0.
The Full Kp Indices for 26 JAN 94 are: 1+ 3o 5- 3- 4- 4- 3o 2+

SYNOPSIS OF ACT

Solar activity was at moderate levels. A M2/1B flare
erupted from Region 7654 (N07W78) at 0510UT. An unassociated
Type II radio emission was detected at 0401UT.

Solar activity forecast: solar activity is expected to be
at low to moderate levels until Regions 7654 and 7658 (N11W53)
depart the disk.

The geomagnetic field has been at quiet to active levels
for the past 24 hours.

Geophysical activity forecast: the geomagnetic field is
expected to be at active levels through the remainder of the
27 January. Quiet to unsettled levels are expected for the
remainder of the forecast period.

Event probabilities 28 jan-30 jan

Class M 45/45/45
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 28 jan-30 jan

A. Middle Latitudes
Active 20/10/20
Minor Storm 10/05/10
Major-Severe Storm 01/01/01

B. High Latitudes
Active 20/10/20
Minor Storm 10/05/10
Major-Severe Storm 01/01/01

HF propagation conditions were normal over the low and
middle latitudes. High and polar latitudes saw occasional
minor signal degradation during the local night hours due.
Near-normal propagation is expected over all regions during the
next 72 hours, particularly for the low and middle latitude
paths. High and polar latitudes should see gradual
improvements as well. Brief SWF activity is still expected at
times over daylit circuits during minor solar flare activity.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7652 N04W93 224 0040 HSX 02 002 ALPHA
7654 N09W78 209 0490 DKI 07 006 BET
7658 N12W53 184 0130 DAO 09 009 BET
7661 N08W02 133 0070 DAO 04 006 BET
7659 S12W14 145 PLAGE
7660 S09E16 115 PLAGE
REGIONS DUE TO RET
NMBR LAT
7648 N07 024
7650 N05 012
7653 S05 011

LISTING OF SOLAR ENERGETIC EVENTS FOR 27 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP

0341 0358 0409 7654 N08W68 C4.6 1N II
0456 0510 0531 7654 N11W65 M2.7 1B 51

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 27 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
27/ 0401 0420 N08W68 RSP C4.6 28 2
27/ 0840 0932 1003 LDE C1.3 83

INFERRED CORONAL HOLES. LOCATIONS VALID AT 27/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
58 N18W35 S20W53 S12W65 N30W43 188 ISO NEG 021 10830A
59 N56W03 N30W18 N68W43 N68W43 164 EXT
60 S05E32 S10E25 S10E25 N18E29 111 ISO NEG 002 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
26 Jan: 0019 0028 0033 C1.0
0054 0058 0103 C1.1
0107 0118 0124 C2.5 SF 7654 N07W50
0129 0136 0141 M1.5 1B 7654 N08W51 60 130 38
0150 0200 0208 C6.5 SF 7654 N07W50
0244 0247 0249 C1.0
0538 0541 0543 C1.4 SF 7654 N08W56 190 320
0611 0651 0657 C1.8 SF 7654 N07W56
0726 0733 0741 C1.3 62 25
0936 0939 0941 B7.3
1005 1011 1016 C1.0
1119 1142 1150 C4.6
1350 1359 1402 B5.9 SF 7658 N09W34
1552 1619 1624 C2.5 SF 7654 N10W61
1606 1607 1620 SF 7658 N11W35
1630 1633 1636 C1.9
1639 1642 1645 C3.7
1716 1721 1726 C1.3 SF 7654 N08W60
1849 1852 1854 C1.5 SF 7654 N09W62
2020 2025 2030 C1.0
2054 2058 2100 B7.2 SF 7654 N08W62
2117 2120 2122 B8.7 SF 7654 N09W63
2132 2137 2140 B8.6
2146 2146 2156 SF 7654 N09W64
2227 2237 2241 C1.6 SF 7654 N10W68

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

```
C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7654: 8 1 0 11 1 0 0 0 012 (48.0)
Region 7658: 0 0 0 2 0 0 0 0 002 ( 8.0)
Uncorrellated: 9 0 0 0 0 0 0 0 011 (44.0)

Total Events: 025 optical and x-ray.

EVENTS WIT
----------------------------------------------------------------

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
26 Jan: 0019 0028 0033 C1.0 III
0611 0651 0657 C1.8 SF 7654 N07W56 III
1552 1619 1624 C2.5 SF 7654 N10W61 III
1716 1721 1726 C1.3 SF 7654 N08W60 V
2117 2120 2122 B8.7 SF 7654 N09W63 III
2227 2237 2241 C1.6 SF 7654 N10W68 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **
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793. Re: QST Article on Balloon Tracking using GPS Rcvr

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 04:29:34 UTC
From: tcline@hplvec.LVLD.HP.COM
Message-ID: <21870059@hplvec.LVLD.HP.COM>
Source record: 271821

In rec.radio.amateur.misc, hpeach@ca.uky.edu (Harold G. Peach Jr.) writes:
> Several months ago there was an article in QST about a guy that was
> tracking balloons using data from a GPS receiver, transmitted back to a
> ground station. He had written a spreadsheet in MS-Excell that would
> graph the balloon's flight path based on the points reported back by the
> GPS receiver. Does anyone have a copy of his spreadsheet or the
> algorithim he used? Please e-mail me at <hpeach@ca.uky.edu>.
>
> ---
> Harold
> hpeach@ca.uky.edu

Hi Harold,

The article was "Persistence Gets the Derelict" (QST, August 1993, p35)
about our Edge of Space Sciences (EOSS) sixth balloon flight that we
launched near Denver but which took off for Nebraska.

Paul Ternlund, WB3JZV created the Macintosh PowerBook Excel program to
track the balloon's position as determined by the radio
direction-finding tracking team. Paul's phone is 303-699-7479 and his
email address is paul.ternlund@filebank.com .

That was EOSS-6 in May 1992, when we were experimenting with VOR
reception on the balloon. Since then we have had several successful
Loran-C balloon payloads with AX.25 packet telemetry and sponsored a
National Balloon Symposium. We hope our next EOSS-15 in February will
provide our first onboard GPS receiver AX.25 telemetry.

73

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ted_cline@hpisla.lvld.hp.com Fort Collins, CO 80526-1044 USA
(303) 493-1136

794. ORBS$028.OSCAR.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 05:02:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.6388.99.0C389E5B@drig.com>
Source record: 271834

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SB KEPS @ AMSAT $ORBS-028.O
Orbital Elements 028.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH,TX January 28, 1994
BID: $ORBS-028.O
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94024.05103246
Element set: 255
Inclination: 27.1974 deg
RA of node: 345.0665 deg
Eccentricity: 0.6022479
Arg of perigee: 148.8987 deg
Mean anomaly: 267.9531 deg
Mean motion: 2.05878528 rev/day
Decay rate: -1.57e-06 rev/day^2
Epoch rev: 7981
Checksum: 331

Satellite: UO-11
Catalog number: 14781
Epoch time: 94022.54990237
Element set: 659
Inclination: 97.7943 deg
RA of node: 44.0471 deg
Eccentricity: 0.0012732
Arg of perigee: 20.1247 deg
Mean anomaly: 340.0459 deg
Mean motion: 14.69126429 rev/day
Decay rate: 2.20e-06 rev/day^2
Epoch rev: 52892
Checksum: 298

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94024.51112470
Element set: 856
Inclination: 82.9229 deg
RA of node: 75.0490 deg
Eccentricity: 0.0013261
Arg of perigee: 65.1117 deg
Mean anomaly: 295.1421 deg
```

Mean motion: 13.72330004 rev/day
Decay rate: 2.9e-07 rev/day^2
Epoch rev: 33020
Checksum: 251

Satellite: AO-13
Catalog number: 19216
Epoch time: 94024.72776868
Element set: 868
Inclination: 57.8659 deg
RA of node: 271.7520 deg
Eccentricity: 0.7209858
Arg of perigee: 333.3841 deg
Mean anomaly: 3.3067 deg
Mean motion: 2.09727795 rev/day
Decay rate: -4.74e-06 rev/day^2
Epoch rev: 4300
Checksum: 343

Satellite: FO-20
Catalog number: 20480
Epoch time: 94022.02498298
Element set: 653
Inclination: 99.0150 deg
RA of node: 201.5769 deg
Eccentricity: 0.0540715
Arg of perigee: 310.7310 deg
Mean anomaly: 44.8065 deg
Mean motion: 12.83224067 rev/day
Decay rate: 3.2e-07 rev/day^2
Epoch rev: 18538
Checksum: 283

Satellite: AO-21
Catalog number: 21087
Epoch time: 94022.59338267
Element set: 418
Inclination: 82.9419 deg
RA of node: 250.4473 deg
Eccentricity: 0.0036137
Arg of perigee: 127.9378 deg
Mean anomaly: 232.5054 deg
Mean motion: 13.74532122 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 14958
Checksum: 311

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94023.25486395
Element set: 657

Inclination: 82.9234 deg
RA of node: 118.9396 deg
Eccentricity: 0.0029748
Arg of perigee: 149.4078 deg
Mean anomaly: 210.8818 deg
Mean motion: 13.74034012 rev/day
Decay rate: 6.9e-07 rev/day^2
Epoch rev: 14874
Checksum: 336

/EX

795. ORBS$028.MICRO.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 05:04:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.6389.99.0C389E5C@drig.com>
Source record: 271833

```
SB KEPS @ AMSAT $ORBS-028.D
Orbital Elements 028.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH,TX January 28, 1994
BID: $ORBS-028.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94023.72027674
Element set: 958
Inclination: 98.6014 deg
RA of node: 110.4232 deg
Eccentricity: 0.0010738
Arg of perigee: 258.1040 deg
Mean anomaly: 101.8939 deg
Mean motion: 14.29818845 rev/day
Decay rate: 9.0e-07 rev/day^2
Epoch rev: 20894
Checksum: 300

Satellite: AO-16
Catalog number: 20439
Epoch time: 94023.71142341
Element set: 759
Inclination: 98.6085 deg
RA of node: 111.4985 deg
Eccentricity: 0.0010626
Arg of perigee: 257.4103 deg
Mean anomaly: 102.5891 deg
Mean motion: 14.29874323 rev/day
Decay rate: 3.6e-07 rev/day^2
Epoch rev: 20895
Checksum: 302

Satellite: DO-17
Catalog number: 20440
Epoch time: 94023.19000664
Element set: 758
Inclination: 98.6093 deg
RA of node: 111.2588 deg
Eccentricity: 0.0010786
Arg of perigee: 258.6026 deg
Mean anomaly: 101.3939 deg
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Mean motion: 14.30012183 rev/day
Decay rate: 3.3e-07 rev/day^2
Epoch rev: 20889
Checksum: 287

Satellite: WO-18
Catalog number: 20441
Epoch time: 94023.72257873
Element set: 759
Inclination: 98.6090 deg
RA of node: 111.7965 deg
Eccentricity: 0.0011363
Arg of perigee: 257.4262 deg
Mean anomaly: 102.5650 deg
Mean motion: 14.29988660 rev/day
Decay rate: 2.2e-07 rev/day^2
Epoch rev: 20897
Checksum: 317

Satellite: LO-19
Catalog number: 20442
Epoch time: 94023.78031134
Element set: 758
Inclination: 98.6095 deg
RA of node: 112.0754 deg
Eccentricity: 0.0011686
Arg of perigee: 257.0604 deg
Mean anomaly: 102.9274 deg
Mean motion: 14.30082457 rev/day
Decay rate: 3.5e-07 rev/day^2
Epoch rev: 20899
Checksum: 296

Satellite: UO-22
Catalog number: 21575
Epoch time: 94022.73955110
Element set: 459
Inclination: 98.4491 deg
RA of node: 100.0846 deg
Eccentricity: 0.0008316
Arg of perigee: 9.2228 deg
Mean anomaly: 350.9110 deg
Mean motion: 14.36884103 rev/day
Decay rate: 7.7e-07 rev/day^2
Epoch rev: 13219
Checksum: 283

Satellite: KO-23
Catalog number: 22077
Epoch time: 94023.85609254
Element set: 354

Inclination: 66.0869 deg
RA of node: 222.1744 deg
Eccentricity: 0.0008987
Arg of perigee: 324.6351 deg
Mean anomaly: 35.4071 deg
Mean motion: 12.86283752 rev/day
Decay rate: -3.7e-07 rev/day^2
Epoch rev: 6822
Checksum: 309

Satellite: AO-27
Catalog number: 22825
Epoch time: 94024.20805866
Element set: 256
Inclination: 98.6679 deg
RA of node: 101.3787 deg
Eccentricity: 0.0008002
Arg of perigee: 272.5619 deg
Mean anomaly: 87.4646 deg
Mean motion: 14.27602782 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 1714
Checksum: 313

Satellite: IO-26
Catalog number: 22826
Epoch time: 94024.19945571
Element set: 257
Inclination: 98.6696 deg
RA of node: 101.3894 deg
Eccentricity: 0.0008709
Arg of perigee: 274.0164 deg
Mean anomaly: 86.0022 deg
Mean motion: 14.27705052 rev/day
Decay rate: 1.4e-07 rev/day^2
Epoch rev: 1714
Checksum: 300

Satellite: KO-25
Catalog number: 22830
Epoch time: 94023.12145410
Element set: 258
Inclination: 98.5680 deg
RA of node: 99.1055 deg
Eccentricity: 0.0010832
Arg of perigee: 241.2500 deg
Mean anomaly: 118.7594 deg
Mean motion: 14.28028626 rev/day
Decay rate: 3.2e-07 rev/day^2
Epoch rev: 1699
Checksum: 281

/EX

796. ORBS$028.WEATH.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 05:06:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.6390.99.0C389E5D@drig.com>
Source record: 271837

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SB KEPS @ AMSAT $ORBS-028.W
Orbital Elements 028.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX January 28, 1994
BID: $ORBS-028.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94024.84111918
Element set: 690
Inclination: 99.0714 deg
RA of node: 73.5136 deg
Eccentricity: 0.0014254
Arg of perigee: 265.0534 deg
Mean anomaly: 94.9011 deg
Mean motion: 14.13582049 rev/day
Decay rate: 6.6e-07 rev/day^2
Epoch rev: 47009
Checksum: 295

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94024.90557717
Element set: 589
Inclination: 98.5115 deg
RA of node: 38.2683 deg
Eccentricity: 0.0014216
Arg of perigee: 30.0469 deg
Mean anomaly: 330.1524 deg
Mean motion: 14.24859195 rev/day
Decay rate: 4.6e-07 rev/day^2
Epoch rev: 38220
Checksum: 311

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94023.43390413
Element set: 256
Inclination: 82.5388 deg
RA of node: 23.7309 deg
Eccentricity: 0.0015197
Arg of perigee: 225.1306 deg
Mean anomaly: 134.8627 deg
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Mean motion: 13.84705138 rev/day
Decay rate: 3.0e-07 rev/day^2
Epoch rev: 30232
Checksum: 282

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94022.60025047
Element set: 258
Inclination: 82.5388 deg
RA of node: 66.7138 deg
Eccentricity: 0.0015665
Arg of perigee: 267.7785 deg
Mean anomaly: 92.1551 deg
Mean motion: 13.16963643 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 26409
Checksum: 316

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94024.88940835
Element set: 493
Inclination: 99.1591 deg
RA of node: 10.3872 deg
Eccentricity: 0.0011598
Arg of perigee: 172.3595 deg
Mean anomaly: 187.7754 deg
Mean motion: 14.12952794 rev/day
Decay rate: 1.09e-06 rev/day^2
Epoch rev: 27498
Checksum: 345

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94023.59752591
Element set: 257
Inclination: 82.5221 deg
RA of node: 259.1929 deg
Eccentricity: 0.0013085
Arg of perigee: 276.2886 deg
Mean anomaly: 83.6783 deg
Mean motion: 13.84355919 rev/day
Decay rate: 6.0e-07 rev/day^2
Epoch rev: 24768
Checksum: 350

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94025.10426049
Element set: 975

Inclination: 82.5515 deg
RA of node: 8.9014 deg
Eccentricity: 0.0005987
Arg of perigee: 291.9052 deg
Mean anomaly: 68.1464 deg
Mean motion: 13.04413358 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 20424
Checksum: 280

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94023.30001472
Element set: 758
Inclination: 82.5480 deg
RA of node: 323.5522 deg
Eccentricity: 0.0014995
Arg of perigee: 189.5054 deg
Mean anomaly: 170.5826 deg
Mean motion: 13.84186867 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 18057
Checksum: 310

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94025.10148604
Element set: 877
Inclination: 98.8447 deg
RA of node: 49.7771 deg
Eccentricity: 0.0015332
Arg of perigee: 50.8207 deg
Mean anomaly: 309.4318 deg
Mean motion: 14.01330340 rev/day
Decay rate: -2.61e-06 rev/day^2
Epoch rev: 17366
Checksum: 295

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94023.60305417
Element set: 757
Inclination: 82.5264 deg
RA of node: 261.0126 deg
Eccentricity: 0.0014611
Arg of perigee: 90.7607 deg
Mean anomaly: 269.5239 deg
Mean motion: 13.83571525 rev/day
Decay rate: 8.6e-07 rev/day^2
Epoch rev: 16776
Checksum: 300

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94021.18358038
Element set: 665
Inclination: 82.5452 deg
RA of node: 273.5216 deg
Eccentricity: 0.0012567
Arg of perigee: 190.0068 deg
Mean anomaly: 170.0806 deg
Mean motion: 13.16458840 rev/day
Decay rate: 5.0e-07 rev/day^2
Epoch rev: 13201
Checksum: 268

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94024.83275922
Element set: 899
Inclination: 98.6348 deg
RA of node: 55.6700 deg
Eccentricity: 0.0012386
Arg of perigee: 295.2559 deg
Mean anomaly: 64.7335 deg
Mean motion: 14.22359980 rev/day
Decay rate: 1.03e-06 rev/day^2
Epoch rev: 14015
Checksum: 314

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94022.55531684
Element set: 661
Inclination: 82.5514 deg
RA of node: 219.5787 deg
Eccentricity: 0.0012818
Arg of perigee: 199.5298 deg
Mean anomaly: 160.5334 deg
Mean motion: 13.16827463 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 11729
Checksum: 321

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94023.09460165
Element set: 257
Inclination: 82.5520 deg
RA of node: 321.4145 deg
Eccentricity: 0.0021234
Arg of perigee: 275.1244 deg
Mean anomaly: 84.7497 deg
Mean motion: 13.82997383 rev/day

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Decay rate: 5.4e-07 rev/day^2
Epoch rev: 2003
Checksum: 285

/EX
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797. ORBS$028.MISC.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 05:08:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.6391.99.0C389E5E@drig.com>
Source record: 271926

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SB KEPS @ AMSAT $ORBS-028.M
Orbital Elements 028.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX January 28, 1994
BID: $ORBS-028.M
TO ALL RADIO AMATEURS BT

Satellite: MIR
Catalog number: 16609
Epoch time: 94024.89373306
Element set: 113
Inclination: 51.6149 deg
RA of node: 185.5066 deg
Eccentricity: 0.0004274
Arg of perigee: 238.4510 deg
Mean anomaly: 121.6066 deg
Mean motion: 15.59707808 rev/day
Decay rate: 3.418e-05 rev/day^2
Epoch rev: 45369
Checksum: 305

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94022.24851824
Element set: 430
Inclination: 28.4686 deg
RA of node: 93.3100 deg
Eccentricity: 0.0006047
Arg of perigee: 4.5503 deg
Mean anomaly: 355.5137 deg
Mean motion: 14.90434303 rev/day
Decay rate: 8.56e-06 rev/day^2
Epoch rev: 759
Checksum: 266

Satellite: GRO
Catalog number: 21225
Epoch time: 94021.73753211
Element set: 57
Inclination: 28.4607 deg
RA of node: 168.1175 deg
Eccentricity: 0.0003410
Arg of perigee: 4.1032 deg
Mean anomaly: 355.9593 deg
```

Mean motion: 15.39868197 rev/day
Decay rate: 3.487e-05 rev/day^2
Epoch rev: 3433
Checksum: 282

Satellite: UARS
Catalog number: 21701
Epoch time: 94022.08009544
Element set: 466
Inclination: 56.9837 deg
RA of node: 24.5158 deg
Eccentricity: 0.0005011
Arg of perigee: 99.9306 deg
Mean anomaly: 260.2285 deg
Mean motion: 14.96313760 rev/day
Decay rate: -1.61e-06 rev/day^2
Epoch rev: 12906
Checksum: 281

Satellite: POSAT
Catalog number: 22829
Epoch time: 94024.17496986
Element set: 249
Inclination: 98.6636 deg
RA of node: 101.3681 deg
Eccentricity: 0.0009514
Arg of perigee: 260.3974 deg
Mean anomaly: 99.6130 deg
Mean motion: 14.27999725 rev/day
Decay rate: 1.12e-06 rev/day^2
Epoch rev: 1714
Checksum: 324

/EX

798. Re: TF3CW QSL address

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 05:36:46 UTC
From: slay@netcom.com
Message-ID: <slayCKBrLB.IJo@netcom.com>
Source record: 271916

Scott Richard Rosenfeld (ham@wam.umd.edu) wrote:
: I worked TF3CW on Sunday afternoon, and wonder if anyone has a recent QSL
: direct address for him?

My QSL from TF3CW for a QSO in 1991 shows the following address:

Sigurdur Jakobsson
Bakkavor 34
170 Seltjarnarnes
ICELAND

73 de Sandy WA6BXH/7J1ABV

799. SWR/CB question.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 06:04:20 UTC
From: gereiswi@nmsu.edu
Message-ID: <2ia9t4INNoar@dns1.NMSU.Edu>
Source record: 271921

Sorry to post this here, but I got no responses on the CB group...bear with me.

I have a couple of questions about a CB problem. I have an ancient SBE Brute CB which I inherited. I purchased a new antenna, and hooked up the thing to an SWR meter.
1. For one thing, the connectors between the antenna and coax don't lend themselves to SWR-meter hookup. I hooked up the meter between the radio and the coax. Is this useless? Does it have to go between coax and antenna?
2. Also, thanks to some substance (syrup, honey, tar...) on the mic button, the radio got stuck on transmit whilst I unhooked the SWR meter. A minute later, I smelled that telltale smell, and noticed that the chassis was hot. What is likely to have been damaged? The measured (A la #1) SWR reading was somewhat lower than before, but the radio still seems to work. Is this something I can fix? What should I replace? Is this living fossil worth it? Any suggestions are much appreiated.

73 from a STILL un-callsigned guy, George

800. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 08:49:54 UTC
From: ncc2001@cwis.unomaha.edu
Message-ID: <1994Jan28.084954.29014@news.unomaha.edu>
Source record: 271832
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

robocop@clark.net writes:
> In article <ah301-260194121225@129.228.248.39>,
> Jerry Sy <ah301@yfn.ysu.edu> wrote:
> >I have pretty much narrowed down my choice to these two 2m ht's.
>
> >I'd like to get comments and opinions from people in the net who
> >have actually used both.
> >currently, I am leaning towards the dj-162 because of its wide
> >receive.
>
> The HTX202 is a good radio. It comes with the CTCSS, DTMF squelch, and
> it can store telephone numbers. It has 14 memories, I think.

Close, it has 16. I have a HTX-202 and it is one sturdy radio. I've dropped it several times (once while coming out of the attic after installing a 2M antenna) and have had no problem with it. I love my brick and would not trade it in for anything! It is great for packet, with the mag-mount antenna it goes moble, and with a simple 1/4 wave ground plane antenna it's a base station. When I use a 12v regulated power supply, I get almost 9 watts out on high. It is definitely worth it.

just my humble 2 cents worth.

73 de N0YBC Michael

--
Michael C. Fortner N0YBC	A bad day on 10 Meters is better
ncc2001@cwis.unomaha.edu	than a good day at work!
n0ybc @ wb0blr.#swia.ia.usa.na	

801. Radio Amateurs on USENET List Jan 1994 Part 1 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 12:33:09 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Jan28.1@ve6mgs.ampr.org>
Source record: 271781
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part1
Last-modified: $Date: 94/32/28 05 32$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
First part contains primarily European calls with US call district 0.

The index of parts:
Part 1 contains 4x1bq through wa0zvi
Part 2 contains nv1a through ka2zvz
Part 3 contains wn3a through kc4zwi
Part 4 contains kj5aa through kd6zwi
Part 5 contains aa7a through wa9zxm
Part 6 contains oa4hv through zs6tw

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
```

a return address, add optional `return user@host.domain'. For example:
Subject: Could be anything (sure!)
return wabbit@it.was.a.tewibble.storm.edu
lookup ka2nrc ve6tcp nm1d elmer
#
Last update January 28 1994
#
This document may be distributed freely, as long as there is no financial
gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
ISRAEL 4X,4Z
yosi@genius.tau.ac.il (Yossi Sharon) 4x1bq 93-12-11@
yosi@eng.tau.ac.il (Yossi Sharon) 4x1bq 93-12-11@
coolguy@circle.cs.jhu.edu (Guy Shechter) 4x1gs/n5uri 93-10-31
coolguy@cs.jhu.edu (Guy Shechter) 4x1gs/n5uri 93-10-24
avip@acri.fr (Avi Plotnik) 4x6lp 93-9-23
s2902081@techst02.technion.ac.il (Ben-Shalom Assi) 4z7aba 94-1-17@
s2301190@techst02.technion.ac.il (Yoram Rotbach) 4z9dea 94-1-17@
CYPRUS 5B
pci7787@zeus.tamu.edu (Ioannou Pantelis) 5b4acp 93-5-4@
PCI7787@TAMVENUS.TAMU.EDU (Ioannou Pantelis) 5b4acp 93-5-4@
JAMAICA 6Y
cheeky@cast.EDU.jm (Andrew) 6y5ew 93-6-5@
ALGERIA 7X
Nabil.Layaida@imag.fr (Layaida Nabil) 7x2kt 93-9-9@
layaida@imag.fr (Layaida Nabil) 7x2kt 93-9-9@

9A ???
sinisa@thphys.irb.hr (Sinisa Novosel) 9a7cwd 93-4-28@
9V Singapore
hky@nova.np.ac.sg (Hang Kim Yam) 9v1wi 93-12-9@
TAIWAN BV
idpt224@tpts1.seed.net.tw (Eugene Wang) bv2ci 93-4-9@
CHILE CE
amsat-ce@cecux1.cec.uchile.cl (Ignacio Martinez Astorquiza) ce2mh 93-9-18
poelcker@cec.uchile.cl (Patricio Eduardo Oelckers Alvarez) ce3eoa 93-9-18
rcadiz@tolten.puc.cl (Rodrigo F Cadiz) ce3ojy 93-4-23@
ce6ezg@enlaces.ufro.cl (Raul Eduardo Burgos Vivero) ce6ezg/ce6fyt 93-12-11
ce6fyt@ce6fyt.radio.cl (Raul Eduardo Burgos Vivero) ce6ezg/ce6fyt 93-12-11
ce2usm@inf.utfsm.cl (Rodrigo E Rodriguez) ce6nug 93-10-4@
rrodrigu@loa.disca.utfsm.cl (Rodrigo E Rodriguez) ce6nug 93-10-4@
ce6nug@k2cc-2.ampr.org (Rodrigo E Rodriguez) ce6nug 93-10-4@
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co2ja@amsat.org (Jose A Amador) co2ja 93-7-4@
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avale@bart.inescn.pt (Antonio Valentim Couto e Vale) ct1dzy 93-9-9@
avale@bart.inesn.pt (Antonio Valentim Cuoto e Vale) ct1dzy 93-9-9@
etjfonte@ci.ua.pt (Jose Miquel Fonte) ct1enq 93-12-14@
etjfonte@ua.pt (Jose' Miguel) ct1enq 93-12-15@
etjfonte@zeus.ua.ci.pt (Jose' Miguel) ct1enq 93-12-15@
etruben@ua.pt (Ruben Mendes) ct1etz 93-5-27@
etruben@zeus.ua.pt (Ruben Mendes) ct1etz 93-5-27@
etruben@ci.ua.pt (Ruben Mendes) ct1etz 93-6-28@
etruben@zeus.ci.ua.pt (Ruben Mendes) ct1etz 93-6-28@
etfaas@ua.pt (Fernando Santos) ct1ext 94-1-11@
etfaas@zeus.ci.ua.pt (Fernando Santos) ct1ext 94-1-11@
jluis@ci.ua.pt (Joao Luis Sousa) ct1ezw 93-12-25@
GERMANY DB-DH Y2-Y9
wk@muninn.sta.sub.org (Hubert Weikert) db1mq 93-3-30
weikert@muninn.sta.sub.org (Hubert Weikert) db1mq 93-3-30
weikert@cubenet.sub.org (Hubert Weikert) db1mq 93-3-30
100031.374@compuserve.com (Hubert Weikert) db1mq 93-3-30
bernd.meyer@fernuni-hagen.de (Bernd Meyer) db6ag 93-7-1
meyer@amundsen.fernuni-hagen.de (Bernd Meyer) db6ag 93-9-23
meyer@fernuni-hagen.de (Bernd Meyer) db6ag 93-9-23
Klaus.Leschhorn@lrz-muenchen.de (Klaus Dieter Leschhorn) db8ck 93-11-11
a2832af@lrz1.lrz-muenchen.de (Klaus Dieter Leschhorn) db8ck 93-11-11
leschhorn@lrz.lrz-muenchen.de (Klaus Dieter Leschhorn) db8ck 93-11-11
BTITMARS@ESOC.BITNET (Barry Titmarsh) dc0hk/g8sau 93-2-26
Vossen.pad@sni.de (Peter Vossen) dc0kk 93-7-7
erb@insu1.etec.uni-karlsruhe.de (Olaf Erb) dc1ik 93-6-6?
dc1ik@db0sao.ampr.org (Olaf Erb) dc1ik 93-5-1?
olaf@dc1ik.ampr.org (Olaf Erb) dc1ik 93-5-1?
erb@insu7.etec.uni-karlsruhe.de (Olaf Erb) dc1ik 93-5-1?

remco@hip-hop.suvl.ca.us (Remco Treffkorn) dc2xt 93-4-9
bern@kleopatra.Uni-Trier.DE (Jochen Peter Bern) dd0kz 93-2-3
bern@uni-trier.de (Jochen Peter Bern) dd0kz 93-2-3
bern@uni-trier.dbp.de (Jochen Peter Bern) dd0kz 93-2-3
kpj@kpj.hact.de (Klaus-Peter Jasper) dd8ko 93-2-15
kpj@hact.hact.de (Klaus-Peter Jasper) dd8ko 93-2-15
df1on@lifra.lif.de (Ines-Marein Koch) df1on 93-1-14
hschu@sunrise.rz.uni-ulm.de (Hermann Schumacher) df2dr 94-1-19
hschu@sunrise.e-technik.uni-ulm.de (Hermann Schumacher) df2dr 94-1-19
hschu@dulruu51.bitnet (Hermann Schumacher) df2dr 94-1-19
gregor@rnivh.rni.sub.org (Gregor Fismer) df2ic 94-1-23
uweb@hpbbn.bbn.hp.com (Uwe Behle) df3du 93-8-4
sinn@sol.cs.uni-sb.de (Markus Sinnwell) df3vl 93-5-17@
UNRZ45@daphne.rrze.uni-erlangen.de (Dieter Dippel) df4rd 93-3-31
tdobert@telemation.de (Torsten Dobert) df6lt 94-1-19
hans.streibel@fernuni-hagen.de (Hans Streibel) df8xq 93-8-5
streibel@galaxy.fernuni-hagen.de (Hans Streibel) df8xq 93-8-30
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roessel@rz.ba-freiberg.de (Gunter Roessel) dl2jtt 93-7-24@
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dl2kp@lifra.lif.de (Georg Prinz) dl2kp 93-1-14
kai@genepi.hanse.de (Kai Altenfelder) dl3lba/8q7ah 93-5-9?
nip43@rz.uni-kiel.d400.de (Oliver Harwart) dl3lbx 93-12-9@
t2372ca@cd1.LRZ-Muenchen.DE (Martin Rast) dl3rdr 93-3-12
Martin.Rast@cd1.lrz-muenchen.de (Martin Rast) dl3rdr 93-3-12
thewes@kappa.informatik.uni-dortmund.de (Berthold Thewes) dl3yei 93-3-10@
thewes@gamma.informatik.uni-dortmund.de (Berthold Thewes) dl3yei 93-3-17@
WKOEHLER@ESOC.BITNET (Hans Wolf Koehler) dl3zbj/ab6el/vk6bgv 93-10-31
wtpz2234@servus.rus.uni-stuttgart.de (Ralf Dieter Kloth) dl4ta 93-6-6
Konrad.Weigl@sophia.inria.fr (Konrad Weigl) dl4up 93-11-3@
weigl@sophia.inria.fr (Konrad Weigl) dl4up 93-11-3@
weigl@agram.doc.ic.ac.uk (Konrad Weigl) dl4up 93-11-3@
Planke@Systemtechnik.TU-Ilmenau.DE (Thomas Planke) dl5atp/y32jk 93-8-21
manfred@isi5.ssl.berkeley.edu (Manfred Bester) dl5kr/w6 93-12-25
manfred@ssl.berkeley.edu (Manfred Bester) dl5kr/w6 93-12-25
uho@informatik.uni-kiel.dbp.de (Ulrich Hoffmann) dl5lu 93-3-2
uho@informatik.uni-kiel.de (Ulrich Hoffmann) dl5lu 93-8-19
relsch@hpbbm.bbn.hp.com (Rainer Elschenbroich) dl5saf 93-8-3
stingl@fzi.de (Thomas Stingl) dl5sbs 93-3-30
schro@natter.sni.de (W [Django] F Schroeder) dl5yec 93-7-12
schroeder.pad@sni.de (W [Django] F Schroeder) dl5yec 93-11-28
schro@nessos.sni.de (W [Django] F Schroeder) dl5yec 93-11-28
ulrich@POOL.Informatik.RWTH-Aachen.DE (Ulrich Jungbluth) dl6ebn 93-10-31
Ulrich@melaten.ihf.rwth-aachen.de (Ulrich Jungbluth) dl6ebn 93-10-31

buettneb@guug.de (Ben Buettner) dl6rai 93-3-12
hein@zrz.TU-Berlin.DE (Stefan Hein) dl7aos 94-1-17@
hein@tubtmpo1.ee.TU-Berlin.DE (Stefan Hein) dl7aos 94-1-17@
root@chamber.in-berlin.de (Patrick Wendt) dl7auc/dd6pf 93-5-9@
pwendt@opal.cs.tu-berlin.de (Patrick Wendt) dl7auc/dd6pf 93-5-9@
kurpiers@rbg.informatik.th-darmstadt.de (Alexander Kurpiers) dl8aau 93-11-4@
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802. Radio Amateurs on USENET List Jan 1994 Part 2 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 12:33:26 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Jan28.2@ve6mgs.ampr.org>
Source record: 271780
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part2
Last-modified: $Date: 94/33/28 05 33$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Second part contains US call districts 1 and 2.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update January 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
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803. Radio Amateurs on USENET List Jan 1994 Part 3 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 12:33:36 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Jan28.3@ve6mgs.ampr.org>
Source record: 271782
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part3
Last-modified: $Date: 94/33/28 05 33$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Third part contains US call districts 3 and 4.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update January 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
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cnc23a@b4pph13e.bnr.ca (Ken Michael Edwards) n4zbb 93-9-23
benchoff@groupw.cns.vt.edu (Phil E Benchoff) kc4zen 94-1-23
benchoff@vt.edu (Phil W Benchoff) kc4zen 94-1-23
sdboyd@afsp.b30.INgr.COM (Stan D Boyd Sr) kc4zgf 93-6-28
sdboyd@ingr.com (Stan D Boyd Sr) kc4zgf 93-6-28
gt7479c@prism.gatech.EDU (Duncan Sinclair) kd4zgh 93-4-6@
croaker@highlite.gotham.COM (Francis A Ney Jr) n4zhg/ka3alr 93-8-6
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804. Radio Amateurs on USENET List Jan 1994 Part 4 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 12:33:50 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Jan28.4@ve6mgs.ampr.org>
Source record: 271783
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part4
Last-modified: $Date: 94/33/28 05 33$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Fourth part contains US call districts 5 and 6.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update January 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
US 5 District
jjohn@lawton.lonestar.org (John C Johnson Jr) kj5aa/n5wzx 93-1-5
fjkrizan@aud.alcatel.com (Frank J Krizan) wa5abu 93-12-27
fjkrizan@maverick (Frank J Krizan) wa5abu 93-12-27
NIX@bigbrd.AUd.alcatel.COM (Paul N Nix) wb5agf 93-7-20
martin@datacomm.ucc.okstate.edu (Martin G McCormick) wb5agz 93-10-24
mab3474@venus.tamu.edu (Myles A Barkman) kg5ai/n5kqx 93-2-7
mab3474@rigel.tamu.edu (Myles A Barkman) kg5ai/n5kqx 93-2-7
dube@cpdvax.CSc.ti.COM (Dube D Todd) ab5ap/n5pdk 93-5-16
Dube.Todd@f7009.n124.z1.fidonet.org (Dube D Todd) ab5ap/n5pdk 93-11-14
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cll4@Ra.MsState.Edu (Craig Ladane Lindsey) kc5aug 93-7-4@
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805. Radio Amateurs on USENET List Jan 1994 Part 5 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 12:34:04 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Jan28.5@ve6mgs.ampr.org>
Source record: 271784
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part5
Last-modified: $Date: 94/33/28 05 33$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Fifth part contains US call districts 7, 8 and 9.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update January 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
US 7 District
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jwalters@teleport.com (James H Walters) wb7aak 93-12-8
lynnr@srlr12.sr.hp.com (Richard Lynn Rhymes) wb7abp 93-7-29
lynnr@sr.hp.com (Richard Lynn Rhymes) wb7abp 93-7-29
kinzer@dtsdev0.sps.mot.com (Dave B Kinzer) ki7ad/kb7okq 94-1-8
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806. Radio Amateurs on USENET List Jan 1994 Part 6 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 12:34:20 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Jan28.6@ve6mgs.ampr.org>
Source record: 271779
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part6
Last-modified: $Date: 94/34/28 05 34$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Sixth part contains whatever is left over ... Canadian, Down under
and spots left here and there over the globe. Some Amateur Radio Related email
services are also itmeized at the bottom of the list.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update January 28 1994
```

#
This document may be distributed freely, as long as there is no financial
gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
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rec-radio-info@ve6mgs.ampr.ab.ca (rec.radio.info postings) rec.radio.info 93-8-25

807. Re: Ham Radio and More talkshow

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 13:23:55 UTC
From: jwa@tellabs.com
Message-ID: <1994Jan28.132355.6416@tellab5.tellabs.com>
Source record: 271825

In article <9401251826.AA21834@pobox.wellfleet> ginsburg@wellfleet.com writes:
>
>My local Talk America Radio Network affiliate (1510 in the Boston area) didn't
>run "Ham Radio and More" this past Sunday evening. Did anyone in a different
>part of the country hear the show, or was it QRT nationally?
>

There's a talk radio station, WLS in Chicago, that has a
radio host who is a Ham. I didn't hear it but last week
on his late night program, he mentioned that he would like
to devote a show to Ham Radio.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

"I'm a half breed"
"I can only breed through on side of my nose!"

Eddie Kantor

808. Weekly Solar Terrestrial Forecast & Review for 28 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 14:04:16 UTC
From: oler@rho.uleth.ca
Message-ID: <9401281404.AA12855@rho.uleth.ca>
Source record: 271866
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

```
--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
January 28 to February 06, 1994

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

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SOLAR AND GEOPHYSICAL ACT
-----------------------------------------------------

|10.7 cm|HF Propagation +/- CON|SID AU.BKSR DX| Mag| Aurora |
|SolrFlx|LO MI HI PO SWF %MUF %|ENH LO MI HI LO MI HI %|K Ap|LO MI HI|
--|-------|----------------------|-------------------------|----|--------|
28| 120 | G G P F 30 -10 70| 30 NA NA NA 02 10 25 30|4 18|NV LO MO|
29| 115 | G G F F 30 -05 70| 30 NA NA NA 01 10 20 35|3 12|NV NV MO|
30| 110 | G G P F 30 -10 65| 30 NA NA NA 02 15 25 30|4 15|NV LO MO|
31| 110 | G G F F 30 -05 70| 30 NA NA NA 01 10 20 35|3 12|NV NV MO|
01| 105 |VG G F F 30 00 70| 30 NA NA NA 01 10 15 35|3 12|NV NV LO|
02| 105 |VG G F F 30 00 70| 30 NA NA NA 01 05 10 40|2 10|NV NV LO|
03| 105 |VG G F F 30 +05 65| 30 NA NA NA 02 05 10 40|2 10|NV NV LO|
04| 100 |VG G F F 30 +10 65| 30 NA NA NA 02 05 10 40|2 10|NV NV LO|
05| 100 |VG G F F 30 +10 65| 30 NA NA NA 02 05 10 40|2 10|NV NV LO|
06| 100 |VG G P F 30 +05 65| 30 NA NA NA 02 10 15 40|2 12|NV NV MO|

PEAK PLANETARY 10-DAY GEOMAGNETIC ACT

_____________________________________________________________________________
| EXT
| VERY SEVERE STORM | | | | | | | | | HIGH |
| SEVERE STORM | | | | | | | | | MODERATE |
| MAJOR STORM | | | | | | | | | LOW - MOD. |
| MINOR STORM | | | | | | | | | LOW |
| VERY ACT
| ACT
| UNSETTLED |***|***|***|***|***|** |** |** |** |***| NONE |
| QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
| VERY QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
|-------------------|---|---|---|---|---|---|---|---|---|---|------------|
| Geomagnetic Field |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| Anomaly |
| Conditions | Given in 8-hour UT intervals | Intensity |
|_____________________________________________________________________________|

CONFIDENCE LEVEL: 65%
```

NOTES:
Predicted geomagnetic activity is based heavily on recurrent
phenomena. Transient energetic solar events cannot be predicted reliably over
periods in excess of several days. Hence, there may be some deviations from
the predictions due to the unpredictable transient solar component.

60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACT

```
------------------------------------------------------------
51 | J |
48 | J |
46 | J |
43 | J |
41 | J |
38 | M J |
36 | MM J |
33 | MM J |
31 | MM J |
28 | MM J |
26 | MM J |
23 | MM J A |
20 | AMM J A A AA |
18 | AMM J A AAA AAA AAA AA|
15 | AMM AJ AA AAAA AAAAA AAA AA|
13 | AMM AJ AAU U AAAA AAAAAUAAA AA|
10 | AMM AJ AAU U AAAAU U AAAAAUAAAU AA|
8 | AMMUU AJ U UAAUUUUUUU AAAAU U U AAAAAUAAAU AA|
5 | AMMUUQAJQUUU UAAUUUUUUUUU AAAAUQ UQU AAAAAUAAAUU AA|
3 |QAMMUUQAJQUUUQQUAAUUUUUUUUUQQQQAAAAUQQUQUQQAAAAAUAAAUUUQQQAA|
0 |QAMMUUQAJQUUUQQUAAUUUUUUUUUQQQQAAAAUQQUQUQQAAAAAUAAAUUUQQQAA|
------------------------------------------------------------
```

Chart Start Date: Day #334

NOTES:
This graph is determined by plotting the greater of either the planetary
A-index or the Boulder A-index. Graph lines are labelled according
to the severity of the activity which occurred on each day. The left-
hand column represents the associated A-Index for that day.
Q = Quiet, U = Unsettled, A = Active, M = Minor Storm,
J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

```
------------------------------------------------------------
151 | |
148 | * |
145 | ** |
142 | * ** |
139 | * ***** |
136 | * ***** * |
133 | ** ****** * |
130 | ** ****** ** * |
```

```
127 | ************ *** |
124 | ************** *** |
121 | *************** *** |
118 | ***************** *****|
115 | ****************** *****|
112 | ****************** ******|
109 | * ******************* *******|
106 | * * * ******************* *******|
103 |***** *** ********************* * *********|
100 |********* ********************** ************|
097 |********** *********************** ************|
094 |*********** ************************ *************|
091 |************* ************************** *************|
088 |*************** ****************************************|
085 |****************** ****************************************|
082 |************************************************************|
------------------------------------------------------------
Chart Start: Day #334

GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX
-----------------------------------------------

------------------------------------------------------------
106 | |
105 | **|
104 | ****|
103 | ********|
102 | ********************|
101 | ************************|
100 | ******************************|
099 | ********************************|
098 | ********************************************|
097 | ****************************************************|
096 | ************************************************************|
095 |************************************************************|
094 |************************************************************|
------------------------------------------------------------
Chart Start: Day #334

NOTES:
The 10.7 cm solar radio flux is plotted from data reported
by the Penticton Radio Observatory (formerly the ARO from
Ottawa). High solar flux levels denote higher levels of
activity and a greater number of sunspot groups on the Sun.
The 90-day mean solar flux graph is charted from the 90-day
mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS
---------------------------------------------

------------------------------------------------------------
161 | |
```

```
154 | * |
147 | * |
140 | ** |
133 | ** * *** |
126 | *** ***** |
119 | * *** ****** |
112 | ** * *** ****** * |
105 | ** ******* ****** *** |
098 |** * * ** ******* ******* **** |
091 |** ** ** ****************** **** |
084 |********* ****************** ***** |
077 |********** ****************** ****** |
070 |********** ********************** ****** |
063 |********** ********************** * *******|
056 |************ ************************ *******|
049 |************ * * ************************ * ********|
042 |************ ** ***************************** * ********|
035 |************ * ** ***************************** **********|
028 |************* * *** ****************************************|
021 |************************************************************|
-------------------------------------------------------------
Chart Start: Day #334

NOTES:
The graphical chart of sunspot numbers is created from the
daily sunspot number counts as reported by the SESC.

HF RADIO SIGNAL PROPAGATION PREDICTIONS (28 JAN - 06 FEB)

High Latitude Paths

_____________________________________________________
| EXT
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD | | | | | | | | | |
LEVEL | FAIR | **| **| **| **|***|***|***|***|***| **|
------- | POOR |* |* |* |* | | | | | |* |
65% | VERY POOR | | | | | | | | | |
| EXT
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-------------------------------------------------------

Middle Latitude Paths

_____________________________________________________
| EXT
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD | **|***| **|***|***|***|***|***|***|***|
LEVEL | FAIR |* | |* | | | | | | | |
------- | POOR | | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
```

```
| EXT
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------------

Low Latitude Paths

_____________________________________________________
| EXT
| VERY GOOD | | * | | | * | * | * | * | * | * |
CONFIDENCE | GOOD |***|* *|***|***|* *|* *|* *|* *|* *|* *|* *|
LEVEL | FAIR | | | | | | | | | |
------- | POOR | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
| EXT
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------------
NOTES:
NORTHERN HEMISPHERE SOUTHERN HEMISPHERE
High latitudes >= 55 deg. N. | High latitudes >= 55 deg. S.
Middle latitudes >= 40 < 55 deg. N. | Middle latitudes >= 30 < 55 deg. S.
Low latitudes < 40 deg. N. | Low latitudes < 30 deg. S.

POTENTIAL VHF DX PROPAGATION PREDICTIONS (28 JAN - 06 FEB)
INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

HIGH LAT

_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% | * | * | * | * | * | * | * | * | * | * | 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |-------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | | | | | | 60%| | | | | | | | | |
| 40% | * | * | * | * | * | **| **| **| **| * | 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*| | | | | |*|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

MIDDLE LAT

```
_____________________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%|*|*|*|*|*|*|*|*|*|*|
| 60% |***|***|***|***|***|***|***|***|***|***| 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | * | * | * | * | * | | 60%| | | | | | | | | |
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*| |*| | | | | | |
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

LOW LAT

```
_____________________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%|*|*|*|*|*|*|*|*|*|*|
| 60% |***|***|***|***|***|***|***|***|***|***| 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | * | * | * | * | **| **| **| **| **| **| 60%| | | | | | | | | |
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | | | |
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

NOTES:
These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACT

High Latitude Locations

```
_____________________________________________________
| EXT
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | * | * | * | * | | | | | |
70% | LOW |***|***|***|***|***|***| **| **| **|***|
| NOT
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INT
-----------------------------------------------------
```

Middle Latitude Locations

```
_____________________________________________________
| EXT
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | |
70% | LOW | * | * | * | | | | | | |
| NOT
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INT
-----------------------------------------------------
```

Low Latitude Locations

```
_____________________________________________________
| EXT
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | |
85% | LOW | | | | | | | | | |
| NOT
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INT
-----------------------------------------------------
```

NOTE:
Version 2.00b of our Professional Dynamic Auroral Oval Simulation Software Package is now available. This professional software is particularly valuable to radio communicators, aurora photographers, educators, and astronomers. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "COler@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

** End of Report **

809. Re: FCC form 610-V

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 14:50:16 UTC
From: drumhell@claudette.nrl.navy.mil
Message-ID: <CKCH7t.9ED@ra.nrl.navy.mil>
Source record: 271859

In article <2i9483$n3c@cronkite.nersc.gov> Greg@epitome.er.doe.gov (Greg Chartrand) writes:
> In the FCC announcement regarding vanity callsigns, they stated that
> every application for a specific callsign would have to be made on a
> form 610-V.
>
> [the rest deleted]

So what's all this stuff about vanity callsigns? Is it now, or will it be possible in the future to choose your own callsign, assuming, of course, that someone else doesn't already have it? (I wouldn't mind getting W4DMD.) I've been marginally active for the past four years, so I'm not familiar on the latest changes to the rules and regulations.

BTW, in the latest issue of QST I noticed that most of the two by three amateur callsigns (technician/general) have be issued. I assume that the FCC is now issuing novice callsigns to new tech/tech+/general licensees. Is this true? In light of this, is there any serious talk about reissuing callsigns from expired licenses?

-Dave
--
David M. Drumheller, KA3QBQ phone: (202) 767-3524
Acoustics Division, Code 7140 fax: (202) 404-7732
Naval Research Laboratory
Washington, DC 20375-5350 e-mail: drumhell@claudette.nrl.navy.mil

810. Re: FCC form 610-V

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 14:57:58 UTC
From: dts@world.std.com
Message-ID: <CKCHKn.4st@world.std.com>
Source record: 271860

In article <2i9483$n3c@cronkite.nersc.gov> Greg@epitome.er.doe.gov (Greg Chartrand) writes:
>In the FCC announcement regarding vanity callsigns, they stated that
>every application for a specific callsign would have to be made on a
>form 610-V. I called the FCC in Washington and they said no such form
>exists. Knowing our government, it probably will take a year or two to
>design one, and another year or two to have it approved and printed in
>quantity.
>
>Does a form 610-V already exist in some dusty government warehouse?
>
>Greg
>WA9EYY/3

You might want to wait until the "vanity" call sign program is actually adopted. So far, they've just put out a notice of PROPOSED rulemaking. Now is the time for comments, etc. The rule must go through a review process with public comment before it can be enacted.

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

811. Re: DSP-9 Filters (and others) -- New Thread

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 15:31:21 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2ibb49$da@news.acns.nwu.edu>
Source record: 271804
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <24cTgc1w165w@jackatak.raider.net>,
Jack GF Hill <root@jackatak.raider.net> wrote:
>
>The thread of DSP-9 (etc) Digital Filters and bandwidth/ringing has pretty
>well wound down, and while I do not mean to fire that discussion up, I am
>seeking information on a different aspect of these lovely little devices:
>
>Several hams using these filters have reported problems, both on the Nets
>and to the manufacturers, when engaging both the Heterodyne (tone)
>processing filter *AND* the random noise filter. The audio becomes
>distorted.

I have noticed this, both, in listening to broadcast stations and in
listening to demos done using recorded ssb qsos.

>
>A Ham from Louisiana offered the suggestion, that had been offered him and
>seemed to work well, that the unit would work OK if the operator would
>simply turn off their tranceiver's speech processor.
>
>There followed a VERY heated argument about how the speech processing
>circuit processes OUTBOUND audio only and has NOTHING to do with the
>INBOUND audio going to the processor. However, when the (RF) Speech
>Processors were turned off, the DSP-9 (and DSP-59 and a few other brands as
>well) *ALL* responded as they were supposed to...

I checked the schematic of my Kenwood TS850s. The compressor is not in
circuit during receive.

>
>The question was immediately raised: "What could the (RF) speech processor
>have to do with the incoming audio?"
>
>I speculated, and am seeking confirmation here, that the *RF* speech
>processor circuitry is engaged all the time the "compression" button is
>engaged, that unlike the final amp which is biased to cut-off, the speech
>processor runs, with no input, all the time. This would explain why the
>simple turning-off of the processor eliminates the problem, as does moving
>the DSP unit OFF the top of the radio and placing it a few feet away.
>
>A glance at the block diagram of my rig and a quick look at the schematic
>seems to bear this hypothesis out, but I am still unsure and seek
>additional input and thought...
>

>The real motive is: I have a DSP-9 that I intend to install in my mobile,
>but I have NO CHOICE about where to position the unit -- it MUST go right
>on top of the transceiver or not at all. I do NOT use a speech processor
>for a variety of reasons, but some of my co-pilots do...

I thought that it has more to do with the way in which the de-noiser and
the auto-notcher work. Crudely spreaking, the auto-notcher removes the
parts that are highly serially correlated and the denoiser removes the
parts that are least serially correlated. Both of these depend on the
time serial correlation characteristics of human voice. But this can
change with fast fades. Hence the problem.

Rajiv
aa9ch
r-dewan@nwu.edu

812. Interesting and unique things people do in Amateur Radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 15:57:11 UTC
From: jeffj@cbnewsm.cb.att.com
Message-ID: <CKCKBF.5C@cbnewsm.cb.att.com>
Source record: 271801

I was talking to a fellow ham, KC6WYA Barry, and he was telling me how he uses MIR's packet digipeater to work other hams around the country. I thought that was kinda unique and started thinking about other interesting things hams do in amateur radio. I've heard of hams playing Dungeon and Dragons via packet radio, chess on HF, weather on packet. Has anyone else heard or seen other interesting things being done with amateur radio?

Jeff
--
Jeff Jones AB6MB | Vote out those who voted for the North American
jeffj@seeker.mystic.com | Free Trade Agreement!
Infolinc BBS 510-778-5929 |

813. New Jersey Tax on Radio Transmitters?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 16:19:51 UTC
From: edmitch@microsoft.com
Message-ID: <CKCLDA.4rz@microsoft.com>
Source record: 271896

What ever resulted from the public hearing that
New Jersey was to have held a week or to ago?

Prior to the public hearing there was all sorts
of wild stories floating around the net. Now that
we are past the first hearing, what happened?

Ed Mitchell
KF7VY@N7FSP.WA.USA
edmitch@microsoft.com
"These opinions are my own and not the property of my
employer who has no responsibility for me or my
mouth."

814. Re: Help - your Vertical Ant. experences.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 16:25:21 UTC
From: t1terryb@cascade.ens.tek.com
Message-ID: <2ibe9h$6lk@cascade.ens.tek.com>
Source record: 271869

In article <1994Jan27.134222.1@tntvax> ddb@tntvax.ntrs.com (Dan Bowker [x 6587]) writes:
>I posted this on the ...antenna group, but more people read this so...
>
>I'm looking to buy this weekend a ground independent vertical for HF. I have
>a very limited area (can go up as far as I want) and limited funds. 40m and
>80m would be a big + but not a requirement.
>

I have been running a Butternut HF6V for 9 years or so and believe it
is one of the best all band verticals around. Don't know too much about the
others but the R5 is a vertical dipole and as such does not have as much gain
as a quarter wave gound plane or similar antenna. Note the Butternut as well
as any other gound plane style antenna require radials, ground rods, etc.

Terry Burge
KI7M

815. Re: Help - your Vertical Ant. experences.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 16:26:15 UTC
From: m14494@mwvm.mitre.org
Message-ID: <2ibeb7$76d@linus.mitre.org>
Source record: 271873

Dan Bowker writes:
> I'm looking to buy this weekend a ground independent vertical for HF...
> What's your opinion on:
> Cushcraft R5 (R7 too $)
> Butternut HF6V ...

Someone correct me if I'm wrong, but I think the Butternut
is very ground *dependent*. It needs either a very good ground
rod, radials, or both. The R5/R7, on the other hand, works best
when it's up high, away from the ground. A friend has the R7 and
swears by it; says it's the best vert. he's ever used. He runs low
power, and has still worked over 200 countries with it. I've never
heard anything bad about them. A beam is obviously better, but
if you can't hack a beam, an R5/R7 seems like a very good alternative.

Mike, N4PDY

****
* These are my opinions only*
****

816. * SpaceNews 31-Jan-94 *

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 16:35:05 UTC
From: kd2bd@ka2qhd.DE.COM
Message-ID: <9401281635.AA01997@ka2qhd.de.com>
Source record: 271803

```
SB NEWS @ AMSAT $SPC0131
* SpaceNews 31-Jan-94 *

BID: $SPC0131

=========
SpaceNews
=========

MONDAY JANUARY 31, 1994

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is
published every week and is made available for unlimited distribution.

* STS-60 KEPLERIAN DATA *
=========================
The following is pre-launch Keplerian orbital data for Shuttle mission
STS-60 which has an expected launch date of 03-Feb-94 at 12:10 UTC:

STS-60
1 00060U 94034.56756353 .00033600 00000-0 25200-3 0 47
2 00060 57.0033 215.8607 0010675 264.1500 95.8328 15.72291901 26

Satellite: STS-60
Catalog number: 00060
Epoch time: 94034.56756353 (03-FEB-94 13:37:17.49 UTC)
Element set: 004
Inclination: 57.0033 deg
RA of node: 215.8607 deg Space Shuttle Flight STS-60
Eccentricity: .0010675 Prelaunch Element set JSC-004
Arg of perigee: 264.1500 deg Launch: 03-FEB-94 12:10 UTC
Mean anomaly: 95.8328 deg
Mean motion: 15.72291901 rev/day Gil Carman, WA5NOM
Decay rate: 3.3600e-04 rev/day*2 NASA Johnson Space Center
Epoch rev: 2
Checksum: 254

[Info via N6JLS]

* NEWS FROM JAPAN *
===================
The first H-II launch will take place between 7:00 - 9:00 AM (JST=UTC+9h)
on 01-Feb-94.

[Info via Yoshiro Yamada]

* TUBSAT-B AND METEOR-3 LAUNCHED *
==================================
```

TUBSAT-B is the second scientific Microsatellite build by the Technical University of Berlin (TUB), Germany.

It was launched 25-Jan-94 from Plesetsk, Russia at 00:25 UTC together with the new Russian meteorological satellite METEOR-3. TUBSAT-B successfully separated from METEOR-3 at 09:42:50 UTC.

TUBSAT-B Downlink is on 143.075 MHz with FFSK Modulation. The beacon is transmitting a 2 second burst every 2 minutes. The satellite has not yet been heard by it's command station. Although it is not a ham radio satellite, any report is most welcome. Reports can be sent via packet radio to DL4OAD @ DK0MAV.DEU.EU

METEOR-3 Keplerian elements:

Reference Epoch 94 025.23119078
Inclination 82.5637 deg
RAAN 157.1120 deg
Eccentricity 0.0014635
Argument of Perigee 262.7207 deg
Mean Anomaly 97.2234 deg
Mean Motion 13.16729004 rev/day
Decay Rate 5.0e-8 rev/day/day
Revolution Number At Epoch 3

[Info via Peter Guelzow, DB2OS]

* OSCAR-13 NEWS *
==========
Magnetorquing from attitude 246/-3 to 180/0 commenced on Jan 28 [Fri] 00:02 UTC, orbit 4306/224, and will continue for 8 perigees. Estimated interim attitudes are: Orbit Alon/Alat: 4307 236/-5: 4308 227/-7: 4309 217/-10: 4310 209/-13: 4313 200/-10: 4314 192/-8: 4315 184/-5: 4316 178/-3. For command purposes during this 3-day period, the mode-S beacon will be ON from MA 145-150, i.e. mode-B OFF for 13 mins. The new schedule will start orbit 4314 at MA 145 Jan 31 [Mon] 16:03 UTC.

[Info via James, G3RUH]

* KITSAT-OSCAR-25 NEWS *
==========
KO-25 will open its BBS service on 01-Feb-94. Some discussion is going on about KO-25 services. The satellite controllers are thankful for the cooperation and patience of all amateurs worldwide who anxiously await the opening of the KO-25 BBS. KO-25 will operate in normal mode, 9600 bps FSK using the FTL0 communications protocol (same as Pacsats, UO-22, and KO-23).

As the KO-25 on-board experiments are not completed yet, there will be some service interruptions from time to time. SaTReC controllers decided to open the BBS since the experiments remaining will not cause any serious problem with KO-25 service later on.

[Info via Hyungshin Kim, SaTReC KAIST]

* FO-20 OPERATION SCHEDULE *
============================
The FO-20 operation schedule is follows. Analog transponder and digital
transponder will be ON for a week respectively as they were since last
December.

Analog mode:
26-Jan-94 08:20 UTC -to- 02-Feb-94 06:50 UTC
09-Feb-94 07:15 UTC -to- 16-Feb-94 07:40 UTC
23-Feb-94 08:05 UTC -to- 02-Mar-94 06:40 UTC
09-Mar-94 07:05 UTC -to- 16-Mar-94 07:30 UTC
23-Mar-94 07:52 UTC -to- 30-Mar-94 08:15 UTC

Digital mode:
Unless otherwise noted above.

[Info via Kazu Sakamoto, JJ1WTK]

* THANKS! *
===========
Thanks to all those who sent messages of appreciation regarding SpaceNews,
especially:

AB6BR N6EWF Donato DiPietrantonio Steve Smith

* FEEDBACK/INPUT WELCOMED *
===========================
Mail to SpaceNews should be directed to the editor (John, KD2BD) via any
of the following paths:

FAX : 1-908-747-7107
PACKET : KD2BD @ N2KZH.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College
Lincroft, New Jersey 07738
U.S.A.

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
John A. Magliacane, KD2BD * /\/\ * Voice : 1-908-224-2948
Advanced Technology Center |/\/\/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
Brookdale Community College |\/\/\/| Internet: kd2bd@ka2qhd.ocpt.ccur.com
Lincroft, NJ 07738 * \/\/ * Morse : -.- -.. ..--- -... -..

817. Log periodic which covers 6 Meter band?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 16:55:35 UTC
From: drx@chinet.chinet.com
Message-ID: <CKCn0o.L86@chinet.chinet.com>
Source record: 271788
Cross-posted to: rec.ham-radio,rec.radio.amateur.misc

Anyone know of a company which sells a Log periodic antenna which covers
the 6 meter Band??

Thanks,
Scott

--
Scott Whittle (drx) drx@chinet.chi.il.us

818. Re: WWCR 5.810MHZ 8pm 12pm Eastern(CHECK IT OUT!!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 17:01:50 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <Z2KIjGG8ybAR053yn@dorsai.dorsai.org>
Source record: 271786
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner

In article <2i743j$1f1@delphinium.cig.mot.com>, Harry E. Cline wrote:
> In article <5KJHjGG8ynrC053yn@dorsai.dorsai.org>, bigsteve@dorsai.dorsai.org (Steve Coletti) writes:
> |> |> The show is anything but religion, you see WWCR also means World Wide
> |> Conspiricy Radio. Anyone want to take a vote on starting an
> |> alt.radio.conspiricy newsgroup for WWCR listeners? C'mon all you Tom
> |> Valentine and Pastor Pete fans, this is for you.
>
> Don`t forget the Hour of the Time with William Cooper!
> They are usually entertaining and address subjects you won't here elsewhere.
> How about alt.new_world_order?

That's who we were orinally talking about.

< ^^>
< "Big Steve" Coletti >
< Shortwave Listener, Broadcaster, Computer Consultant >
< and all around nice guy >
< Internet: bigsteve@dorsai.dorsai.org ==== S.COLETTI2@genie.geis.com >
< UUCP: Steve_Cole@islenet.com ==== steveny@lopez.marquette.mi.us >
< Fidonet: 1:278/712 US Mail: P.O. Box 396, New York, NY 10002 >
< Voice: +1 212 995-2637 >
~~~~~~
~~~~~~

819. Amateur Radio Service Joint Resolution?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 17:03:49 UTC
From: btbg1194@uxa.cso.uiuc.edu
Message-ID: <2ibghl$eug@vixen.cso.uiuc.edu>
Source record: 271787
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Are your senators and congressman co-sponsors of these bills which are presently going through the house and the senate? If not, then write them a letter! (And if they are, write them a letter to thank them for sponsoring the bill which recognizes the amateur radio service as a national resource.)

Write your letters today! (See Jan & Feb 94 QST for more information... I will try to post some more info soon as well.)

You might be able to get your representative & senators names and addresses from the blue pages of your phone book.

73 de kb8cne, Brad Banko

--
Brad Banko; Univ of Illinois; b-banko@uiuc.edu
====== Ich habe kein Bock mehr zu schreiben. ======================
See one. Do one. Teach one. 73 de kb8cne @ n9lnq.il

820. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 17:17:43 UTC
From: ehare@arrl.org
Message-ID: <1994Jan28.171743.483@arrl.org>
Source record: 271819

Greg Bullough (greg@netcom.com) wrote:

: Steven has hit it on the head. As hams, we have for years said "can't
: afford a commercial rig? Home-brew or build a simple kit." Then
: QST and all the other magazines which bang this drum (which quite
: handily fills up magazine pages with circuits that few ever
: build) reap big advertising dollars from kit companies.

Greg,

For starters, I am not sure that few ever build projects from magazines. Some of the authors that have offered a kit have reported large sales -- to say nothing of those that either homebrew it without a kit, or at least use part of the circuit as they build something else. Go to any hamfest, note the rows upon rows of vendors offering components. Hams are buying them, putting them in bags and taking them home. They must be doing something with the parts.

Even if hams don't actually build very many projects, they sure seem to enjoy reading (or thinking) about building them! All of the ham and electronics magazines offer construction articles. I don't think I would characterize printing articles that our readers like as "banging a drum", but you may have meant something I just didn't understand.

Now, as for the big adverising dollars, I took a look at the February QST issue. I counted two 1/8th-page ads, two 1/12th page ad and a 1/24th-page ad, plus 4 ham ads, for companies offering kits. This is only a small percentage of our total ad space; most of the ads are for some form of ready-made product. Our editorial policy is not influenced by our advertisers; it is determined by our perceptions of what hams want to see. If the big advertisers were able to set our policy, they would want us to run an article titled "Don't Build Your Own Stuff -- Buy from QST Advertisers!" :-)

: As a hobby which has a tradition of mentoring ("elmering"), we are
: doing the Right Thing(TM) when we identify something like a Ramsey
: kit which is apt to blow a new ham's radio budget out the window
: while discouraging him or her, and leaving him without a working
: rig.

Our QST Product Review did indeed point out the problems we found with the Ramsey FX-146. We also pointed out those things we like. This ensures that QST reviews are complete and unbiased. People who read these things are able to decide which things are important and buy accordingly.

- -

821. Re: Power Line Interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 17:19:00 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <CKCo3o.98B@cscsun.rmc.edu>
Source record: 271795

Alan Bloom (alanb@sr.hp.com) wrote:
: Doug Snowden (drs@ccd.harris.com) wrote:
: : For the past 3 years I have been trying to track down some noise that appears
: : to be coming from the power lines. ...

: : The noise has a cyclic period of about 1.5 seconds on and
: : 1.5 seconds off. This part doesn't vary. If I have the noise, it has this
: : period.

: The above raises my suspicions that the noise may not be originating in the
: power pole itself. What other buildings are fed from the same transformer
: that is on that pole? Do any of them have some electrical device with a
: 3-second on/off cycle time?

Sounds like an electric fence charger...
--
David Tiller | Network Administrator | Voice: (804) 752-7373 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
n2kau@wa4ong.va.usa.na | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
+++Arch-Conservative+++ | Ashland, Va 23005 | 77d 31' 32.19" W |

822. Re: FTP site for Keps

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 17:34:52 UTC
From: jeg@ddsdx2.jhuapl.edu
Message-ID: <CKCou5.74q@aplcenmp.apl.jhu.edu>
Source record: 271815

In <199401272136.NAA04990@ucsd.edu> ST1860@SIUCVMB.SIU.EDU (Gary R. Smith AA9JS) writes:

>Hi--

> I know there is an ftp site out there for getting the keplarian elements. I
> use to remember what it was, but I have long since forgotten it. I would appr
>eciate any help.....Thanx & 73's....Gary AA9JS

>internet: st1860@siucvmb.siu.edu
>bitnet: st1860@siucvmb.bitnet
>packet: aa9js@kd9sg.#sil.il.usa

Hello Gary

There are a couple of sites, but the main one is
archive.afit.af.mil I don't remember the exact location, but
the file youre looking for is "tle.new". It si updated once
a day.

John, kd3wy
jeg@aardvark.jhuapl.edu

823. Re: Nobel Prize to 2 Hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 17:36:16 UTC
From: bkehr@garnet.berkeley.edu
Message-ID: <bkehr-280194093521@hil1mac39.cchem.berkeley.edu>
Source record: 271790

In article <17088.jahern@geohub.gcn.uoknor.edu>,
<jahern@geohub.gcn.uoknor.edu> wrote:
>
> The December, 1993, issure of Physics Today, published by the American
> Institute of Physics, has an article about Russell Hulse and Joseph Taylor,
> who recently received the Nobel prize in physics for their discovery of
> the first binary pulsar.

I believe there was also an article about these two in a fall issue of QST.

Bob

824. Re: Nobel Prize to 2 Hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 18:02:26 UTC
From: dts@world.std.com
Message-ID: <CKCq44.D98@world.std.com>
Source record: 271792

In article <17088.jahern@geohub.gcn.uoknor.edu> <jahern@geohub.gcn.uoknor.edu> writes:
>The December, 1993, issure of Physics Today, published by the American
>Institute of Physics, has an article about Russell Hulse and Joseph Taylor,
>who recently received the Nobel prize in physics for their discovery of
>the first binary pulsar. Near the end of the article, Hulse is quoted:
>"I came to ham radio by way of radiotelescopes. In Joe's case it was the
>other way around."
>
>Interesting, too, was the fact that Hulse "is the fifth graduate of the
>Bronx High School of Science to win the Nobel Prize in Physics."

One of the things a graduate of Science can be most proud of... I suspect
I had some of the same teachers.

Dan Senie, N1JEB (Bx Sci. '79)
>
>+---+
>| Jud Ahern KC5RI Internet: jahern@geohub.gcn.uoknor.edu |
>| Geology & Geophysics Bitnet: jahern@uokgcn.bitnet |
>| University of Oklahoma "Opinions expressed here reflect the entire|
>| Norman, OK 73019 University, in one convenient location." |
>+---+

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

825. Re: FCC form 610-V

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 18:07:56 UTC
From: dts@world.std.com
Message-ID: <CKCqDA.EpK@world.std.com>
Source record: 271793

In article <CKCH7t.9ED@ra.nrl.navy.mil> drumhell@claudette.nrl.navy.mil (David Drumheller) writes:
>In article <2i9483$n3c@cronkite.nersc.gov> Greg@epitome.er.doe.gov (Greg
>Chartrand) writes:
>> In the FCC announcement regarding vanity callsigns, they stated that
>> every application for a specific callsign would have to be made on a
>> form 610-V.
>>
>> [the rest deleted]
>
> So what's all this stuff about vanity callsigns? Is it now, or will it
>be possible in the future to choose your own callsign, assuming, of
>course, that someone else doesn't already have it? (I wouldn't mind

Read the February QST!!! Lots of coverage on the subject.

>getting W4DMD.) I've been marginally active for the past four years, so
>I'm not familiar on the latest changes to the rules and regulations.
>
> BTW, in the latest issue of QST I noticed that most of the two by three
>amateur callsigns (technician/general) have be issued. I assume that the
>FCC is now issuing novice callsigns to new tech/tech+/general licensees.
>Is this true? In light of this, is there any serious talk about reissuing
>callsigns from expired licenses?
>
>-Dave
>--
>David M. Drumheller, KA3QBQ phone: (202) 767-3524
>Acoustics Division, Code 7140 fax: (202) 404-7732
>Naval Research Laboratory
>Washington, DC 20375-5350 e-mail: drumhell@claudette.nrl.navy.mil

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

826. Re: Mail order info for multi-system VCR, FAQ

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 18:19:01 UTC
From: gorski@vms.huji.ac.il
Message-ID: <1994Jan28.181901.2938@vms.huji.ac.il>
Source record: 271823
Cross-posted to: rec.video,rec.radio.amateur.misc,sci.electronics

In article <1994Jan25.170711.13361@ctp.com>, nchak@ctp.com (Navaneeth Chakravarti) writes:
>
> I am considering buying a multi-sytem VCR to take to India. It must play
> NTSC and PAL. Is there a list of mail-order places that might stock an
> item such as this?
>
> I tried J&R Music World, they list an AIWA for $380 and another for $500.
> B&H has some professional stuff for $1850 (too much for me).
>
> Also, where is the FAQ for this newsgroup?
>
> Thanks,
>
> Navaneeth
> --
> ---
> Navaneeth Chakravarti, x456 Cambridge Technology Partners
> e-mail: nchak@ctp.com Voice: (517) 372-8400
> chakrava@egr.msu.edu (617) 374-8456

Please remember that the TV you have has to play what the video puts out. That means that you either have to have a multi system TV, the video has to "convert" the output to one of another system that you have on your TV, or it has to put out the video of the country and you obtain a TV set there.

I ASSUME that you know this, but considering how that word breaks down, want to be sure you knew.

I have seen people coming here and making these mistakes,

Shalom from Jerusalem,

Azriel 4X1PI

827. Re: SuperMorse 4.xx

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 18:31:36 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCKCrGp.4r7@netcom.com>
Source record: 271855

In article <mosier.66.0@fagan.uncg.edu> mosier@fagan.uncg.edu (Stephen Mosier) writes:
>Will Turner said that wuarchive.wustl.edu has Supermorse 4.04 in /mirrors/
>msdos/hamradio. But the wuarchives were wiped out last week and that
>directory path no longer exists. Does anyone know of any other source for
>Supermorse 4.xx?
>
>steve
>mosier@fagan.uncg.edu

Anonymously FTP into World: ftp world.std.com
pub/hamradio/pc/theory-and-morse/sm404.zip

73,
Scott, WY1Z

--
```
==============================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|----------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
==============================================================================
```

828. Name of Ham store in VA wanted!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 18:33:34 UTC
From: lee@tosspot.sv.com
Message-ID: <NeLVgc1w165w@tosspot.sv.com>
Source record: 271841

Can anyone hel pme with the name, address and phone number of
a ham store in Virginia?

The name is something like "Skyline Ham Supplies" - he carries a
lot of seconed hand Collins and Dovetron stuff.

(Whoops, need a better poof reading program....)

Thanks,
Lee.

(If Jesus is coming, think he'll QSL? Wonder who his QSL manager'll
be..?)

829. Re: FTP site for Keps

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 18:35:20 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCKCrnD.56J@netcom.com>
Source record: 271864

In article <199401272136.NAA04990@ucsd.edu> ST1860@SIUCVMB.SIU.EDU (Gary R. Smith AA9JS) writes:
>Hi--
>
> I know there is an ftp site out there for getting the keplarian elements. I
> use to remember what it was, but I have long since forgotten it. I would appr
>eciate any help.....Thanx & 73's....Gary AA9JS
>
>internet: st1860@siucvmb.siu.edu
>bitnet: st1860@siucvmb.bitnet
>packet: aa9js@kd9sg.#sil.il.usa
>

I store ALL bulletins on World: ftp world.std.com
cd pub/hamradio/BARC/w1aw-list/Keplarian-Data

Note the case of the subdirectories ^^^^ ^^^^^^^^^^^^^^

73,
Scott, WY1Z

--
```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
================================================================================
```

830. Frequencies for Animal Tracking ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 18:45:40 UTC
From: halvey@home.amigans.gen.nz
Message-ID: <halvey.03gk@home.amigans.gen.nz>
Source record: 271835

--
Does anyone out there happen to have a list of the bands used for tracking animals fitted with radio collars. Preferably in New Zealand, but other locations would also be of interest.

Thanks in advance.

--
Dave Halverson, Wanganui N.Z.
halvey@home.amigans.gen.nz

831. Rtty Dx Notes

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 18:48:39 UTC
From: Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US
Message-ID: <Angelo_Glorioso_Iii.2mmf@agwbbs.new-orleans.LA.US>
Source record: 271903

VK2SG DX NOTES 28 JAN 94

ZCZC Nr 9881 Bulletin I5FLN 0128/0215Z VK2SG RTTY DX NOTES 28 JAN 94

VK2SG RTTY DX NOTES FOR WEEKENDING JAN. 28, 1994 (BID RTDX0128)

It seems that from this week will be the week for DX-Peditions. They will be appearing from some very exotic places, so keep the fingers sharpened up and the screen alive at all times. Our thanks this week go to: ZS5S, W2JGR, WB2CJL, WB9B, 9X5LJ, I5ICY, I5IGQ, DJ3IW and the Central Eu Dx-Cluster node DB0SPC, and NJ0M node of the Twin Cities Dx Packet Cluster.

BANDPASS:
FRIDAY 21
0713-21070 SU1CR ARQ
1559-14090 S57J
1653-14084 SU1AH

SATURDAY 22
0837-21070 SU1CR ARQ
1200-14084 HI8BG
1203-14084 UT5DX
1224-14079 VS6FN Pactor
1318-14086 YU1NR
1422-14090 RA2FB
1427-14085 K5KWG/ZA
1440-21088 VP2EL
1459-21088 7P8SR
1537-21088 ZS9A
1538-21085 9H1ET
1612-21085 TZ6FIC
1622-21088 KG4HG
1824-21084 5R8DS Qsl F6FNU
1994-21094 CU1AC
2008-14070 VQ9WL Pactor
2148-14084 S92ZM
2215-14088 CN8NP

SUNDAY 23
1419-21085 S57U
1425-14086 ER1PE
1449-21070 SU1CR ARQ
1543-14088 5B4VX
1555-14086 TA5C
1559-21089 9H1ET

1612-21083 TZ6QC
1621-21092 CP1FF
1623-14080 TL8GM
1635-21087 VQ9WL
1647-21089 CU1AC
1653-14089 HK0DPA
1813-21082 FG5FI
1816-14089 EA8AKL
1822-21086 5R8DS
1925-21085 CP6RP Qsl I0WDX
1927-14084 TZ6FIC
1928-14086 J28BM
2056-14086 V50CM

MONDAY 24
0705-21070 SU1CR ARQ
1344-14085 RC2CR
1358-21087 YB3AQF
1548-14083 OK1KQJ
1700-21085 ZD7DP Qsl Box 86, St. Helena

TUESDAY 25
0650-14095 UN7FO
2021-14083 V50CM

WEDNESDAY 26
0005-14085 PS8KW
0717-14078 SV2BBJ
1127-21088 UN8PFE
1131-21085 UX0KN
1225-14088 SK4BX
1324-14085 S51GL
1450-14086 EA8/ON8RI
1551-21082 IX0KN
1610-14089 ER3ED
1830-14084 FG5FI

THURSDAY 27

NOTES OF INTEREST: PETER I Is. 3Y0PI. The Dx'Pedition team is proceeding on schedule with an expected landing date on the island of February 1st.

PACIFIC TOUR. Nob, JF2MBF and Yasu, JI1NJC will make a trip which include Tonga (A35JJ) from Feb. 12 to 20, Tuvalu (T23JJ) from Feb. 22 to March 1st, West Kiribati (T30JJ) from March 3 to 8th., Nauru (C21/W3KD) from March 9 to 14. Activity will be on all bands and modes. Qsl direct via JF2MBF or JR2KDN via bureau.

S.M.O.M. 1A0KM. After three years a group of operators will be on from Jan. 26 to 31 on CW/SSB and RTTY on all bands but no 160. Qsl via I0IJ.(No report on the Cluster anyway up to now). MOUNT ATHOS. Monk

Apollo, has been quite active recently on 20, 80 and 40 SSB. Keep fingers crossed for a return also to RTTY.

Send your bandpass and notes for next week to Bob, WB2CJL at W5KSI.#NOLA.LA.USA.NA or ZS5S.ZAF.AF.

GL de (DX2) Luciano, I5FLN AT ZS5S.ZAF.AF
[via HF AMTOR]

/EX

-- Via DLG Pro v1.0

Internet:angelo_glorioso_III@agwbbs.new-orleans.LA.US
Usenet:rex!agwbbs!angelo_glorioso_III
Packet:N5UXT @ N5UXT.#NOLA.LA.USA.NA
Tcp/ip:N5UXT.AMPR.ORG [44.108.2.13]

832. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 19:15:59 UTC
From: me@next45.wsi.physik.tu-muenchen.de
Message-ID: <1994Jan28.191559.18324@news.lrz-muenchen.de>
Source record: 271796

According to the discussion below and previous postings, I want to
supply some calcualtions shown in two pictures in following postings
based on a Fourier analysis of a morse signal of 10 times 'e':
00000101010101010101010100000

For that, I assumed a period of 120 ms for one dot, which needs two time
units of 60 ms: '10'
(50 time units per word, e.g.'paris', 20 wpm -> 60 ms per unit)

The first picture will show the frequency spectrum for that morse pattern.
('morse1.jpg', uuencoded, size: 72833 kB)

The second diagram will show the morse signals after passing filters
with different cut-off frequencies: 25 Hz, 50 Hz, 125 Hz, 250 Hz;
These frequencies apply to one sideband, so the filter bandwidth for
the whole signal is twice the frequency according to two sidebands,
respectively. For the filter, a flat passband and perfect
cutting off is assumed. The calculation is just the Fourier sum of the
peak frequencies obtained from the spectrum in picture 1.
Here you can see one possible reason for the ringing of narrow filters
which cut off the higher frequency components of a signal.
The lower the cut-off frequency, the wavier is the signal.
Modulated with 700 Hz, you'll get your ring ;^)
('morse2.jpg', uuencoded, size: 61701 kB)

Further you can see, how the rise times are affected by the
filter bandwidths. The cut-off frequency determines the
shortest possible rise time for the signal. So, the narrower
your filter is, the mushier are the dits.

Matthias

In article <1994Jan28.094649.14098@ee.surrey.ac.uk> M.Willis@ee.surrey.ac.uk
(Mike Willis) writes:
> In article <CK95Mz.Krt@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom)
writes:
> |> Ignacy Misztal (ignacy@ux2.cso.uiuc.edu) wrote:
> |> : wvanhorn@magnus.acs.ohio-state.edu (William E Van Horne) writes:
> |>
> |> : >Kein{nen Paul wrote:
> |>
> |> : >Can someone with a great deal more technical knowledge than I have
> |> : >state just what is the minimum usable bandwidth for a 10-20 WPM CW
> |> : >signal, and how much audible ringing is truly inescapable?
> |>
...

> |> The highest pulse repetition frequency is when you are sending a
> |> string of dits (for example, the letter H or the number 5.)
> |> My previous example of 48 wpm results in 20 dots per second.
> |> A Morse code signal can be considered to be an AM (ampltidude
> |> modulated) signal that is 100% modulated with a square wave, in
> |> this case a 20 Hz square wave. Since an AM signal has two sidebands,
> |> the bandwidth must be at least 40 Hz.
>
> I suppose that is one way of looking at it. Another is to assume morse is
simply
> made up of dots, followed either by a space or another dot, giving all the
> combinations necessary. The highest frequency signal is the error, 8 dots. At
a
> speed of 12 wpm (UK test value) we have 5 dots per second, requiring a
minimum
> bandwidth of 10 Hz for an am carrier (5 Hz for PSK) when using a brick wall
filter
> and loads of ringing, or about double the bandwidth with a nice ring free
response.
>

--
Matthias Rosenberger, Walter Schottky Institut, TU Muenchen
email: me@next45.wsi.physik.tu-muenchen.de

833. RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 19:34:09 UTC
From: steven.rosenberg@support.com
Message-ID: <9401281134.A4224wk@support.com>
Source record: 271851

greg@netcom.com (Greg Bullough) writes:

>As a hobby which has a tradition of mentoring ("elmering"), we are
>doing the Right Thing(TM) when we identify something like a Ramsey
>kit which is apt to blow a new ham's radio budget out the window
>while discouraging him or her, and leaving him without a working
>rig. I'd much rather see a Novice/Tech find an old but serviceable
>IC-2 (and maybe put the Ramsey 'brick' on it) than have him or
>her get their hopes up on the FX- kits, only to be disappointed.

Yes! The message I am trying to convey is that if a new or VHF-poor ham wants a USEFUL and INEXPENSIVE radio that works and provides the best dollar value, buy a used HT or mobile radio. If you want a second radio just for fun and have $150-200 burning a hole in your pocket, get the Ramsay FX kit.

Converting used commercial gear is another option that is vastly better than the Ramsay kit.

steven.rosenberg@support.com KC6FYL

834. RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 19:34:09 UTC
From: steven.rosenberg@support.com
Message-ID: <9401281134.A4225wk@support.com>
Source record: 271852

jeffl@comix.UUCP (Jeff Liebermann) writes:

>Where I see the Ramsey kits are from builders that want me to
>either "clean it up" or "make it work". Usually the problem is
>creative assembly, sloppy soldering, or mechanical (case) problems.
>I've helped out with 3 vhf kits and know about 2 others.

So you're saying they DO work if assembled correctly...

>There is an interesting difference between the builders and
>what we used to call the "appliance operators". Every once in
>a while, I drag my Cushman CE-6 service monitor to the repeater
>site and call out tx frequency and deviation for everyone checking
>into the local net. I've noticed that the builders tend to
>take my numbers seriously while the others pretend that there
>is no problem. (I have a standing offer to set the mic gain, deviation,
>and tx frequency on anything a club member can drag into the office.)
>An amazing number of operators literally don't care what they sound
>like on the air and expect everyone to tolerate their over-deviation,
>buzz, alternator whine, and distortion. Yech.

You are a prince among hams! This would be a great service for all such capable amateurs and local clubs to offer. It's a great way to ensure that all those FM transmitters are operating properly. Again, I commend you.

steven.rosenberg@support.com

KC6FYL

835. RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 19:34:10 UTC
From: steven.rosenberg@support.com
Message-ID: <9401281134.A4226wk@support.com>
Source record: 271853

myers@sunspot.West.Sun.COM (Dana Myers) writes:

>6. The Ramsey kits are not state of the art, high quality,
>or a fabulous bargain. They are adequate for the purpose intended:
>a kit for those that still believe that radio construction is a
>part of ham radio and that believe they may profit from the
>experience.
>
>Yeah, if people just built them for the experience, that would be
>one thing. But people get the impression they can put those radios
>on the air and use them like a normal radio, too.

Why does a kit over $25 in price exist if it can't be properly and
legally used?

steven.rosenberg@support.com

KC6FYL

836. Re: Ham shop in Burlington, VT??

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 20:30:52 UTC
From: rrossi@vnet.IBM.COM
Message-ID: <199401282034.MAA12115@ucsd.edu>
Source record: 271862

In Info-Hams Digest V94 No. 78 (item 5) emba-news.uvm.edu!wetzel@uunet.uu.net writes:
>Can anyone tell me of a Ham radio shop selling ARRL books or other repeater
>maps and eventually 2M handhelds in the Burlington, VT area.
>I have seen adds in 73 but shipping of $5 for a $6 book seems excessive.
>
>Thanks
>
>Dan Wetzel
>

Subject: HAM Book store...
E-Mail won't make it to you at emba-news.uvm.edu!wetzel@uunet.uu.net so....

Dan,

In the back of the bookstore in the Ethan Allen Shopping Plaza is a
fairly large selection of ARRL publications. What they don't have
they will order and you pay the price marked on the book. I don't
remember the name of the store off hand (North Ave. Books or something
like that). I am a local call for you, so if you have questions call
me.

The Plaza is on North Avenue about 2.0 miles west of Burlington High Scool.

ron

Ron Rossi

/===/
/ IBM Microelectronics Internet: rrossi@vnet.ibm.com /
/ H/P ASIC SRAM Design VNET: RROSSI at BTVLABVM /
/ Dept N93 Bldg 861-2 Voice: 802/769-7477 /
/ 1000 River Road RF: N1PBT /
/ Essex Junction, VT 05452-4299 /
/ /
/ "I work for IBM, I don't represent its views!" /
/ /
/===/

837. X application for code?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 20:33:52 UTC
From: mmollere@triton.uwf.edu
Message-ID: <CKCx4H.D7J@trivia.coginst.uwf.edu>
Source record: 271808

Is there an X Windows application that will generate morse code?
If so, please advise. Thanx.

Mark J. Mollere
mmollere@conch.senod.uwf.edu
U. of West Florida

838. Code tapes, looking for.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 20:36:05 UTC
From: mmollere@triton.uwf.edu
Message-ID: <CKCx86.D9H@trivia.coginst.uwf.edu>
Source record: 271806

Am looking for code tapes in Pensacola, FL. If anyone knows where where I can get same, please advise. Also, is there code on instruction on CD? Thanx.

Mark J. Mollere
mmollere@conch.senod.uwf.edu
U. of West Florida

839. Re: Propagation Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 20:44:00 UTC
From: CSMSCST@MVS.OAC.UCLA.EDU
Message-ID: <19940128204448CSMSCST@MVS.OAC.UCLA.EDU>
Source record: 271785

In article <CJznz9.EGy@rd1.InterLan.COM>,
tavernin@sun1.interlan.com (Victor Tavernini) writes:

>Does anybody have any recommendations for any propagation prediction
>programs that are available!?

I just received my copy of version 2 of W6EL's Miniprop Plus. As far
as I am concerned, this is one super propagation program. An SASE
to Shel's CBA will get you a flyer.

-- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)

840. FTP site for Keps

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 20:44:00 UTC
From: alex.lane@springsboard.org
Message-ID: <9401290147301913@springsboard.org>
Source record: 271798

Gary R. Smith AA9JS posted a note asking about ftp sites for Keplerian elements, and I'd like to go further and ask:

Does anyone know if there is a listserv mailing list one can subscribe to in order to obtain this info? My BBS doesn't have ftp capability.

Thanks in advance.
Cheers...
+---+
Alex Lane (303) 264-2339 | alex.lane@springsboard.org
The SpringsBoard BBS | KD6JJA
Pagosa Springs, Colorado | "You *can* get here from there!"
+---+

841. Re: Callbook Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 20:55:49 UTC
From: doc@webrider.central.sun.com
Message-ID: <2ibu4mINNlfj@cronkite.Central.Sun.COM>
Source record: 271854

I heard on a local repeater about a callsign server (also an ".edu" machne)
that would give you information about a callsign by sending email to it
with the callsign in the subject(?) line. As I wasn't in a position to
jump into the conversation at the time and only caught part of it, does
anyone out there know about this and what the email address would be?

Thanks,

Steve

In article 2hq@bigfoot.wustl.edu, jlw3@cec1.wustl.edu (Jesse L Wei) writes:
> Shawn Conahan (sconahan@ccantares.wcupa.EDU) wrote:
> : Willie Smith writes:
>
> : >...Did the internet call book go away,...
>
> : No, it hasn't vanished, it can still be reached by telnet at
>
> : cc.buffalo.edu 2000
>
> : (notice the word "callsign" is omitted from the address). 73
> : --
> : Shawn T. Conahan, Ph.D.
> : N3CGT
> : sconahan@ccantares.wcupa.edu
>
> Is it just me or does this really not work? I have always used the other
> one, but I tried this out--
> callsign.cs.buffalo.edu 2000 works much better from here (considering that
> cs.buffalo.edu gives me an "unknown host" reply)
>
>

--
-- Steve Bunis, Sun Microsystems ***DoD #0795*** 93-ST1100
-- Itasca, IL ***AMA #682049***
-- ***HRCA #HM125617**
-- *** N9VLP ***

842. Re: Sideband Technology Inc.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 21:09:22 UTC
From: n1gak@netcom.com
Message-ID: <n1gakCKCyrq.M4K@netcom.com>
Source record: 271844

In article <2i9e52INNmf7@newsstand.cit.cornell.edu> F. Kevin Feeney <fkf1@cornell.edu> writes:
>In article <CKAu6K.4Hy@freenet.carleton.ca> Mike Ligeza,
>ab376@FreeNet.Carleton.CA writes:
>>Transceiver. Rig was built by Sideband Technology Inc. of Scottsville
>>N.Y. Model number is the ACSB Pioneer 1000. Appears to be a 4 Channel
>>Xtal controlled with Xtals for 154.450 Mhz. Looks like a straight
>
>
> I believe they are
>Amplitude Compandored SSB rigs for VHF. Supposed to replace NBFM rigs
>with closer channel spacing but still the simple channelised tuning (and
>I think some autotuning with a pilot carrier suppressed -24 db or so)
>
>73 de Kevin, WB2EMS

A local surplus shop, HalTek in Mtn. View, CA has several of these radios, just came in a few days ago. They look very incomplete, but if someone's interested they might be chock full of difficult to get parts. I don't work for them, just a frequent customer.

Scott

843. ARRL DX Bulletin #7 - January 27, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 22:03:43 UTC
From: Jim Reisert AD1C <reisert@wrksys.enet.dec.com>
Message-ID: <$arld.007@ampr.org>
Source record: 271800
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

ZCZC AE05
QST de W1AW
DX Bulletin 7 ARLD007
>From ARRL Headquarters
Newington CT January 27, 1994
To all radio amateurs

SB DX ARL ARLD007
ARLD007 DX news

The items in this week's bulletin are courtesy of Bob, W5KNE; QRZ DX; Karl, PS7KM; Dennis, WB0WAO; Tedd, KB8NW; the Ohio/Penn and Yankee Clipper Contest Club PacketCluster networks. Thanks.

PENGUIN ISLANDS LAST STAND? Ian, ZS9A, reports that Baldur, DJ6SI, is attempting to activate ZS0 around February 24. And there are rumblings that the Republic of South Africa may turn over both Walvis Bay and Penguin Islands to Namibia at the end of February.

NETHERLANDS ANT
PJ2/OH1VR through February 2. Seppo is likely to be active in the CQ WW 160 Meter CW Contest.

BANGLADESH. Eric, S21ZG, is on nearly every day between 3651 and 3653 kHz from 1145 to 1215z and 0000z.

EGYPT. Listen for SU2MT on 3793 kHz at 0500z.

CAYMAN ISLANDS. Vern, W8BLA, and Dick, K2UFT, are active on CW as ZF1CQ. They will be there until January 31 and plan to operate in the 160 Meter Contest. QSL via W8BLA.

SAINT LUCIA. Scott N9JCL, hopes to sign J6/N9JCL from January 28 to February 2. Check 3795 Khz SSB or 3510 kHz CW at 0900z; 7003 kHz CW at 1000z; and 14195 kHz SSB at 1200z.

OGASAWARA ISLANDS. Here's a DX-first. JA1LSY/JD1 will be operating 20 meter SST

FIJI. Shinji, JI3ACL, will sign 3D2CL on 40 through 10 meter CW and SSB February 10 to 16. QSL via JI3ACL.

CQ WW 160 MET
W3HNK. VR2MH will be OH2BH/VR2BH and OH1NYP.

FRENCH POLYNESIA. Walter, DJ0FX, will work CW and SSB as FO0PT through February 19. This will be an all-band effort.

ANTIGUA. John, AA2LW, is here on business, but operates 40 through 10 meter SSB as time allows. His favorite band is 17 meters.

SAINT CHRISTOPHER. Mike, W9NSZ, will sign V47NS on Nevis Island from January 28 to February 2.

ANGUILLA. KK3K, WB6LYI, KC6XC, KI4ZN, W9BVD, KF7IK, AF9A and AI9Q are planning a serious effort for March 5 through 10. They hope to run all band all mode HF, and will be on OSCAR 13 Mode B and S.

TURKS AND CAICOS ISLANDS. K2TD, N2VW and WB2YOF should be active through early February signing /VP5.

MEXICO. Rick, NE8Z, will operate from Puerto Vallarta as XE1/NE8Z February 13 to 20 on all bands. He will be active in the ARRL CW DX Contest. QSL via K8LJG.

ANTARCTICA. Brian, VP8CFM, is Base Commander at the British Antarctic Survey Base. His duty tour is for 14 months and he will be active as either VP8HAL or his own call. QSL via GM4KLO.

SAINT PET
approximately two weeks, starting about February 2. Plans are to operate all HF bands plus OSCARs 10, 13 and 21. Satellite operator tips are 145.890 MHz CW on OSCAR 10 and 145.925 MHz on OSCAR 13. QSL PY0SK via PS7KM. QSL PY0SP via PT7AA.
NNNN

--
James J. Reisert Internet: reisert@wrksys.enet.dec.com
Digital Equipment Corp. UUCP: ...decwrl!wrksys.enet.dec.com!reisert
146 Main Street - MLO3-6/C9 Voice: 508-493-5747
Maynard, MA 01754 FAX: 508-493-0395

844. The Amateur Radio Service Joint Resolution (QST Info)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 22:34:51 UTC
From: btbg1194@uxa.cso.uiuc.edu
Message-ID: <2ic3ub$mc1@vixen.cso.uiuc.edu>
Source record: 271840
Cross-posted to: uiuc.org.synton,rec.radio.amateur.misc,rec.radio.amateur.policy

(excerpted from QST, January 1994. -- kb8cne@uiuc.edu)

Do Amateur Radio (and Yourself) a Favor
Help protect your privileges for the future: Make Amateur Radio National Policy. Here's how !
By Rick Palm, KlCE
Field Services Manager

Make this your New Year' s Resolution Number One: Write a letter NOW to your representative and senators asking them to sign on to a bill that would make Amateur Radio a congressionally recognized, national resource. This measure, if passed, would recognize amateurs' efforts in emergency communications, support us as "national policy" and would call for regulations that "facilitate" Amateur Radio operation as a "public benefit." This is not a "motherhood and apple pie" motion. There is real substance here, with significant, tangible benefits for Amateur Radio. (For the complete text of the joint resolution, see July 1993 QST, page 74, or write to ARRL HQ for a copy.)
There's only one way it will happen: if you make it happen. Here's the story of Senate Joint Resolution 90/House Joint Resolution 199, and how you need to be a part of it.

Q. What's the big deal? Why is it so important?

A. To put it bluntly, the new law as proposed would be a big arrow in our quiver for use in our constant battle against interests that would seek to take our spectrum away, or otherwise limit our operating ability. This measure affects all of usQnot just a single special-interest group within our hobbyQ who need access to the radio frequency spectrum, the protection of which should be our number one priority. You don' t believe there' s a threat? Just look at the loss of 220222 MHz a few years ago. More challenges will follow. The proposed law would also be useful, literally, in our own backyards, when it comes time to put up our towers and operate our stations. Having a copy in hand when defending that new tower before a public hearing in a zoning board of appeals room won't hurt.

COSPONSORS
S J Res 90 and H J Res 199
The Amateur Radio Service Joint Resolution
November 30, 1993
(States with 100% of the delegation represented are marked with a *)

ILLINOIS
Rep. Henry Hyde (R, 6)

Rep. Jerry Costello (D, 12)
Rep. Dennis Hastert (R, 14)
Rep. Thomas Ewing (R, 15)
Rep. Lane Evans (D, 17)
Rep. Glenn Poshard (D, 19)

(remaining state co-sponsors are listed below FYI)

TOTAL 22 senators
124 representatives

Q. Great! What are the particulars?

A. Two identical versions of the bill are presently in Congress: Senate Joint Resolution 90 was introduced in the Senate on May 7, 1993 by Sen Charles Robb (D-VA); the House version is House Joint Resolution 199, presented by Reps Mike Kreidler (D-WA) and Jim Cooper (D-TN) with 13 initial cosponsors. If we don't get enough cosponsors, the bill may die this year.

Q. What does all that gobbledygook mean exactly?

A. It means that these elected representativesQthe same ones who debate NAFTA, the national debt, and foreign policy in war-torn corners of the globeQ felt strongly enough about Amateur Radio to propose to their colleagues a resolution commending amateurs and establishing Amateur Radio as a national resource, much like they do for National Parks!
Each version must pass its own house before the law can be enacted. But it must happen soon.

(...)

Q. How many do we have sofar?

A. We have as cosponsors 124 representatives and 22 senators. Not bad, but we've got a long way to go. Remember, we are aiming for 50 senators, and 218 or more representatives.

Q. What can I do to help get this passed?

A. It's as easy as 1-2-3:

(1) Check the list of senators and representatives in the sidebar.
(2) If your senators and/or representatives are NOT on the list, please send them a letter asking for support as a cosponsor. Explain that Amateur Radio is a noncommercial radio service of volunteers who step in to provide communications to the public in emergencies and contribute to the advancement of technology through our tradition of experimentation. Give some examples from your state, such as that tornado that ripped through your town, or the floods that swamped neighboring farmland. If you can't come up with a local example tell them how much hams helped out in the recent flood in the Midwest (see December 1993 QST, page 21, and quote some of those stirring words from the hams who helped out). If you can't send a letter, send your QSL card, annotated on the back along these lines.
Please do it now so that your letter will be waiting for him/her when he/she

returns to Capitol Hill for resumption of the 103rd session of Congress. (Your senators and representatives are listed in your phone book's "blue pages" under US Government, or use the simplified address:

The Honorable John Doe
Senate Office Building
Washington, DC 20510, or

The Honorable Jane Doe
House Office Building
Washington, DC 20515
).

[(2a) (kb8cne) If your senator or representative is *on* the list, send him/her a letter *thanking* him/her for recognizing the national importance of the amateur radio service.]

And now the easy, but very important step: (3)Pat your self on the back for being a part of the democratic process and helping make your government work for Amateur Radio!

(Feb 94 QST Update)

Have you done it yet? That is, have you written your US senators and your representative regarding the Amateur Radio Service Joint Resolution, S J Res 90/ H J Res 199, and the Amateur Radio Service Volunteer Service Act, H R 2623? You haven't? Go directly to January QST, pages 54 to 56Qdo not pass GO; do not collect DXCC credits! Read and react: we need your help in enacting the Amateur Radio Service Joint Resolution and the Amateur Radio Volunteer Service Act, H R 2623.

New cosponsors of the Amateur Radio Service Joint Resolution who have signed on since the January QST article was published (as of the time of this writing on January 4,1994) include Rep. Glen Browder (D, 13, AL), Rep. Jay Dickey (R, 4 AR), Rep. Vic Fazio (D, 3, CA), Rep. John Lewis (D, 5, GA), Rep. Sherwood Boehlert (R, 23, NY), Rep. Mike Sinar (D, 2, OK), Rep. Bill Brewster (D, 3, OK), Sen. Thomas A. Daschle (D, SD), Rep. Norman Sisisky (D, 4, VA) and Rep. Al Swift (D, 2, WA). Here's something you can do for Amateur Radio and for yourself; don't miss your chance to be a hero!

(remaining state co-sponsors are listed below FYI (November/Jan94 QST))

TOTAL 22 senators
124 representatives

==========

ALABAMA
Sen. Howell Heflin (D)
Sen. Richard Shelby (D)
Rep. Sonny Callahan (R, 1)
Rep. Terry Everett (R, 2)
Rep. Spencer Bachus (R, 6)

ALASKA
None yet

ARIZONA
Sen. Dennis DeConcini (D)
Sen. John McCain (R)
Rep. Bob Stump (R, 3)
Rep. Jon Kyl (R, 4)

ARKANSAS
Rep. Tim Hutchinson (R, 3)

CALIFORNIA
Rep. John Doolittle (R, 4)
Rep. George Miller (D, 7)
Rep. Bill Baker (R, 10)
Rep. Fortney Pete Stark (D, 13)
Rep. Norman Mineta (D 15)
Rep. Don Edwards (D ;6)
Rep. Sam Farr (D, 17j
Rep. Richard Lehman (D, 19)
Rep. Elton Gallegly (R, 23)
Rep. Edward Royce (R, 39)

Rep. Jerry Lewis (R, 40)
Rep. Jay Kim (R, 41)
Rep. Ken Calvert (R, 43)
Rep. Robert Dornan (R, 46)
Rep. Duncan Hunter (R, 52)

COLORADO
Rep. Dan Schaefer (R, 6)

CONNECTICUT
Rep. Sam Gejdenson (D, 2)
Rep. Nancy Johnson (R, 6)

DELA WARE
Sen. William Roth (R)

FLORIDA
Sen. Bob Graham (D)
Rep. Pete Peterson (D, 2)
Rep. Tillie Fowler (R, 4)
Rep. Michael Bilirakis (R, 9)
Rep. Tom Lewis (R, 16)
Rep. Peter Deutsch (D, 20)
Rep. Alcee Hastings (D, 23)

GEORGIA
Rep. Buddy Darden (D, 7)

HAWAII
Sen. Daniel Inouye (D)

Sen Daniel Akaka (D)
Rep. Neil Abercrombie (D, 1)
Rep. Patsy Mink (D, 2)

IDAHO
Sen. Larry E. Craig (R)
Rep. Michael Crapo (R, 2)

INDIANA
Rep. John Myers (R, 7)
Rep. Frank McCloskey (D, 8)

IOWA
Rep. Jim Leach (R, 1)
Rep. Fred Grandy (R, 5)

KANSAS
Rep. Pat Roberts (R, 1)
Rep. Jim Slattery (D, 2)
Rep. Jan Meyers (R, 3)

KENTUCKY
Rep. Romano Mazzoli (D, 3)
ReD. Jim Bunninq (R, 4)

LOUISIANA
Sen John Breaux (D)
Rep Jim McCrery (R, 5)

MAINE
None yet

MARYLAND
None yet

MASSACHUSETTS
None yet

MICHIGAN
Sen Carl Levin (D)
Rep Bart Stupak (D, 1)
Rep. Dave Camp (R, 4)
Rep. James Barcia (D, 5)
Rep. David Bonior (D, 10)
Rep. Joseph Knollenberg (R, 11
Rep. Sander Levin (D, 12)

MINNESOTA
Rep. Jim Ramstad (R, 3)
Rep. Martin Sabo (D, 5)
Rep. Collin Peterson (D, 7)
Rep. James Oberstar (D, 8)

MISSISSIPPI
None yet

MISSOURI
Rep. Ike Skelton (D, 4)

MONTANA
Rep. Pat Williams (D, at large)

NEBPASKA
Sen. J. James Exon (D)

NEVADA
None yet

NEW HAMPSHIRE~
Sen. Judd Gregg (R)
Sen. Robert C. Smith (R)
Rep. Bill Zeliff (R, 1)
Rep. Dick Swett (D, 2)

NEW JEPSEY
Rep. Robert Andrews (D, 1)
Rep. Jim Saxton (R, 3)
Rep. Herbert Klein (D, 8)
Rep. Dean Gallo (R, 11)

NEW MEXICO
Ssn. Pete V. Domenici (R)
Rsp. Steven Schiff (R, 1)

NEW YOPK
Rep. Geo. Hochbrueckner (D, 1)
Rep. Rick Lazio (R, 2)
Rep. Gary Ackerman (D, 5)
Rep. Carolyn Maloney (D, 14)
Rep. Hamilton Fish, Jr. (R, 19)
Rep. Michael McNulty (D, 21)
Rep. Maurice Hinchey (D, 26)

Rep. Louise Slaughter (D, 28)
Rep. John LaFalce (D, 29)

NORTH CAROLINA
Rep. Howard Coble (R, 6)
Rep. Bill Hefner (D, 8)
Rep. Alex McMillan (R, 9)

NOPTH DAKOTA
Sen. Kent Conrad (D)

OH10
Rep. Paul Gillmor (R, 5)
Rep. Marcy Kaptor (D g)
Rep. John Kasich (R,; 2)

Rep. James Traficant (D, 17)

OKLAHOMA
None yet

OPEGON
Rep. Elizabeth Furse (D, 1)
Rep. Robert Smith (R, 2)
Rep. Mike Kopetski (D, 5)

PENNS YL VANIA
Rep. Tim Holden (D, 6)
Rep. Curt Weldon (R, 7)
Rep. John Murtha (D, 12)

RHODE ISLAND
Sen. John H. Chafee (R)
Rep. Ronald Machtley (R, 1)
Rep. Jack Reed (D, 2)

SOUTH CAROLINA
ReD. Arthur Ravenel (R. 1)

Rep. Floyd Spence (R, 2)
Rep. John Spratt (D, 5)

SOUTH DAKOTA
Sen. Larry Pressler (R)

TENNESSEE
Sen. Harlan Mathews (D)
Rep. James Quillen (R, 1)
Rep. Jim Cooper (D, 4)
Rep. Bob Clement (D, 5)
Rep. Bart Gordon (D, 6)

TEXAS
Rep. Charles Wilson (D, 2)
Rep. John Bryant (D, 5)
Rep. Joe Barton (R, 6)
Rep. Jack Fields (R, 8)
Rep. Bill Sarpalius (D, 13)
Rep. Ronald Coleman (D, 16)
Rep. Larry Combest (R, 19)
Rep. Martin Frost (D, 24)

UTAH
Rep. James Hansen (R, 1)

VERMONT
Sen. James M. Jeffords (R)

VIRGINIA
Sen. John Warner (R)

Sen. Charles Robb (D)
Rep. Owen Pickett (D, 2)
Rep. Lewis Payne (D, 5)
Rep. James Moran (D, 8)
Rep. Leslie Byrne (D, 11)

WASHINGTON
Sen. Slade Gorton (R)
Rep. Jolene Unsoeld (D, 3)
Rep. James McDermott (D, 7)
Rep. Jennifer Dunn (R, 8)
Rep. Mike Kreidler (D, 9)

WEST VIRGINIA
Rep. Robert Wise (D, 2)
Rep. Nick Joe Rahall (D, 3)

WISCONSIN
Rep. Steve Gunderson (R, 3)
Rep. Tom Petri (R, 6)
Rep. Toby Roth (R, 8)

WYOMING
Rep. Craig Thomas
(R, at large)

AMERICAN SAMOA'
Del. Eni Faleomavaega (D)

DISTRICT OF COLUMBIA
None yet

GUAM
None yet

PUERTO RICO
None yet

VIRGIN ISLANDS'
Del. Ron de Lugo (D)

TOTAL 22 senators
124 representatives

--
Brad Banko; Univ of Illinois; b-banko@uiuc.edu
====== Ich habe kein Bock mehr zu schreiben. ======================
See one. Do one. Teach one. 73 de kb8cne @ n9lnq.il

845. Congress "Yellow Book" FAX numbers (from gopher)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 23:13:13 UTC
From: btbg1194@uxa.cso.uiuc.edu
Message-ID: <2ic669$q67@vixen.cso.uiuc.edu>
Source record: 271856
Cross-posted to: uiuc.org.synton,rec.radio.amateur.misc

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US Senate, 103rd Congress phone and fax numbers
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Information from US Congress Yellow Book, January 1993

p st name phone fax
= == ======================== ============== ==============
R AK Murkowski, Frank H. 1-202-224-6665 1-202-224-5301
R AK Stevens, Ted 1-202-224-3004 1-202-224-1044
D AL Heflin, Howell T. 1-202-224-4124 1-202-224-3149
D AL Shelby, Richard C. 1-202-224-5744 1-202-224-3416
D AR Bumpers, Dale 1-202-224-4843 1-202-224-6435
D AR Pryor, David 1-202-224-2353 na
D AZ DeConcini, Dennis 1-202-224-4521 1-202-224-2302
R AZ McCain, John 1-202-224-2235 na
D CA Boxer, Barbara 1-202-225-5161 na
D CA Feinstein, Diane 1-202-224-3841 na
D CO Campbell, Ben N. 1-202-225-4761 1-202-225-0228
R CO Brown, Henry 1-202-224-5941 na
D CT Dodd, Christopher J. 1-202-224-2823 na
D CT Lieberman, Joseph I. 1-202-224-4041 1-202-224-9750
D DE Biden Jr., Joseph R. 1-202-224-5042 na
R DE Roth Jr., William V. 1-202-224-2441 1-202-224-2805
D FL Graham, Robert 1-202-224-3041 na
R FL Mack, Connie 1-202-224-5274 1-202-224-8022
D GA Nunn, Samuel 1-202-224-3521 1-202-224-0072
R GA Coverdell, Paul 1-202-224-3643 na
D HI Akaka, Daniel K. 1-202-224-6361 1-202-224-2126
D HI Inouye, Daniel K. 1-202-224-3934 1-202-224-6747
D IA Harkin, Thomas 1-202-224-3254 1-202-224-7431
R IA Grassley, Charles E. 1-202-224-3744 na
R ID Craig, Larry E. 1-202-224-2752 1-202-224-2573
R ID Kempthorne, Dirk 1-202-224-6142 1-202-224-5893
D IL Moseley-Braun, Carol 1-202-224-2854 na
D IL Simon, Paul 1-202-224-2152 1-202-224-0868
R IN Coats, Daniel R. 1-202-224-5623 1-202-224-8964
R IN Lugar, Richard G. 1-202-224-4814 na
R KS Dole, Robert 1-202-224-6521 1-202-224-8952
R KS Kassebaum, Nancy L. 1-202-224-4774 1-202-224-3514
D KY Ford, Wendell H. 1-202-224-4343 na
R KY McConnell, Mitch 1-202-224-2541 1-202-224-2499
D LA Breaux, John B. 1-202-224-4623 na
D LA Johnston, J. Bennett 1-202-224-5824 na
D MA Kennedy, Edward M. 1-202-224-4543 1-202-224-2417
```

D MA Kerry, John F. 1-202-224-2742 na
D MD Mikulski, Barbara A. 1-202-224-4654 1-202-224-8858
D MD Sarbanes, Paul S. 1-202-224-4524 1-202-224-1651
D ME Mitchell, George J. 1-202-224-5344 na
R ME Cohen, William S. 1-202-224-2523 1-202-224-2693
D MI Levin, Carl 1-202-224-6221 na
D MI Riegle Jr., Donald 1-202-224-4822 1-202-224-8834
D MN Wellstone, Paul 1-202-224-5641 1-202-224-8438
R MN Durenberger, David 1-202-224-3244 na
R MO Bond, Christopher S. 1-202-224-5721 1-202-224-8149
R MO Danforth, John C. 1-202-224-6154 na
R MS Cochran, Thad 1-202-224-5054 na
R MS Lott, Trent 1-202-224-6253 1-202-224-2262
D MT Baucus, Max 1-202-224-2651 na
R MT Burns, Conrad R. 1-202-224-2644 1-202-224-8594
R NC Faircloth, D. M. 1-202-224-3154 1-202-224-7406
R NC Helms, Jesse 1-202-224-6342 na
D ND Conrad, Kent 1-202-224-2043 na
D ND Dorgan, Byron L. 1-202-225-2611 1-202-225-9436
D NE Exon, J. J. 1-202-224-4224 na
D NE Kerrey, Joseph R. 1-202-224-6551 1-202-224-7645
R NH Gregg, Judd 1-202-224-3324 na
R NH Smith, Robert 1-202-224-2841 1-202-224-1353
D NJ Bradley, William 1-202-224-3224 1-202-224-8567
D NJ Lautenberg, Frank R. 1-202-224-4744 1-202-224-9707
D NM Bingaman, Jeff 1-202-224-5521 na
R NM Domenici, Pete V. 1-202-224-6621 1-202-224-7371
D NV Bryan, Richard H. 1-202-224-6244 na
D NV Reid, Harry 1-202-224-3542 1-202-224-7327
D NY Moynihan, Daniel P. 1-202-224-4451 1-202-224-9293
R NY D'Amato, Alfonse M. 1-202-224-6542 1-202-224-5871
D OH Glenn, John 1-202-224-3353 na
D OH Metzenbaum, Howard 1-202-224-2315 1-202-224-6519
D OK Boren, David L. 1-202-224-4721 na
R OK Nickles, Donald 1-202-224-5754 1-202-224-6008
R OR Hatfield, Mark O. 1-202-224-3753 na
R OR Packwood, Robert 1-202-224-5244 na
D PA Wofford, Harris 1-202-224-6324 1-202-224-4161
R PA Specter, Arlen 1-202-224-4254 na
D RI Pell, Claiborne 1-202-224-4642 1-202-224-4680
R RI Chafee, John H. 1-202-224-2921 na
D SC Hollings, Ernest F. 1-202-224-6121 na
R SC Thurmond, Strom 1-202-224-5972 1-202-224-1300
D SD Daschle, Thomas A. 1-202-224-2321 1-202-224-2047
R SD Pressler, Larry 1-202-224-5842 1-202-224-1630
D TN Mathews, Harlan 1-202-224-1036 1-202-228-3679
D TN Sasser, James 1-202-224-3344 na
D TX Krueger, Robert 1-202-224-5922 na
R TX Gramm, Phil 1-202-224-2934 na
R UT Bennett, Robert 1-202-224-5444 na

R UT Hatch, Orrin G. 1-202-224-5251 1-202-224-6331
D VA Robb, Charles S. 1-202-224-4024 1-202-224-8689
R VA Warner, John W. 1-202-224-2023 1-202-224-6295
D VT Leahy, Patrick J. 1-202-224-4242 na
R VT Jeffords, James M. 1-202-224-5141 na
D WA Murray, Patty 1-202-224-2621 1-202-224-0238
R WA Gorton, Slade 1-202-224-3441 1-202-224-9393
D WI Feingold, Russell 1-202-224-5323 na
D WI Kohl, Herbert H. 1-202-224-5653 na
D WV Byrd, Robert C. 1-202-224-3954 1-202-224-4025
D WV Rockefeller, John D. 1-202-224-6472 1-202-224-1689
R WY Simpson, Alan K. 1-202-224-3424 1-202-224-1315
R WY Wallop, Malcolm 1-202-224-6441 1-202-224-3230

103rd Congress phone and fax numbers
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The following information is from the US Congress "Yellow Book," Jan. 1993. Four seats were vacant at that time, in CA, MS, OH, and WI. The list below of 436 people includes 5 non-voting members, from Guam (GU), Puerto Rico (PR), Samoa (SA), Virgin Islands (VI), and DC. (some of those abbreviations may be wrong)

Corrections welcome.

p st representative phone fax
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R AK Young, Donald 1-202-225-5765 1-202-225-5765
D AL Bevill, Thomas 1-202-225-4876 1-202-225-0842
D AL Browder, Glen 1-202-225-3261 1-202-225-9020
D AL Cramer Jr, Robert E. 1-202-225-4801 na
D AL Hilliard, Earl F. 1-202-225-2665 na
R AL Bachus, Spencer 1-202-225-4921 na
R AL Callahan, H. L. 1-202-225-4931 1-202-225-0562
R AL Everett, Terry 1-202-225-2901 na
D AR Lambert, Blanche 1-202-225-4076 na
D AR Thornton, Raymond 1-202-225-2506 1-202-225-9273
R AR Dickey, Jay 1-202-225-3772 1-202-225-8646
R AR Hutchinson, Tim 1-202-225-4301 na
D AZ Coppersmith, Sam 1-202-225-2635 1-202-225-2607
D AZ English, Karan 1-202-225-2190 1-202-225-8819
D AZ Pastor, Ed 1-202-225-4065 1-202-225-1655
R AZ Kolbe, James T. 1-202-225-2542 1-202-225-0378
R AZ Kyl, Jon L. 1-202-225-3361 na
R AZ Stump, Robert 1-202-225-4576 1-202-225-6328
D CA Becerra, Xavier 1-202-225-6235 1-202-225-2202
D CA Beilenson, Anthony 1-202-225-5911 na
D CA Berman, Howard L. 1-202-225-4695 na
D CA Brown Jr., George E. 1-202-225-6161 1-202-225-8671
D CA Condit, Gary 1-202-225-6131 1-202-225-0819
D CA Dellums, Ronald V. 1-202-225-2661 1-202-225-9817

D CA Dixon, Julian C. 1-202-225-7084 1-202-225-4091
D CA Dooley, Calvin M. 1-202-225-3341 1-202-225-9308
D CA Edwards, Donald 1-202-225-3072 1-202-225-9460
D CA Eshoo, Anna G. 1-202-225-8104 na
D CA Fazio, Vic 1-202-225-5716 1-202-225-0354
D CA Filner, Bob 1-202-225-8045 na
D CA Hamburg, Dan 1-202-225-3311 na
D CA Harman, Jane 1-202-225-8220 na
D CA Lantos, Thomas 1-202-225-3531 na
D CA Lehman, Richard H. 1-202-225-4540 na
D CA Martinez, Matthew G. 1-202-225-5464 1-202-225-4467
D CA Matsui, Robert T. 1-202-225-7163 1-202-225-0566
D CA McCandless, Alfred 1-202-225-5330 1-202-226-1040
D CA Miller, George 1-202-225-2095 1-202-225-5609
D CA Mineta, Norman Y. 1-202-225-2631 na
D CA Pelosi, Nancy 1-202-225-4965 1-202-225-8259
D CA Roybal-Allard, Lucille 1-202-225-1766 1-202-226-0350
D CA Schenk, Lynn 1-202-225-2040 1-202-225-2042
D CA Stark, Fortney H. 1-202-225-5065 na
D CA Torres, Esteban E. 1-202-225-5256 na
D CA Tucker III, Walter R. 1-202-225-7924 1-202-225-7926
D CA Waters, Maxine 1-202-225-2201 na
D CA Waxman, Henry A. 1-202-225-3976 1-202-225-4099
D CA Woolsey, Lynn 1-202-225-5161 na
R CA Baker, Bill 1-202-225-1880 1-202-225-2150
R CA Calvert, Ken 1-202-225-1986 na
R CA Cox, Christopher 1-202-225-5611 1-202-225-9177
R CA Cunningham, Randy 1-202-225-5452 1-202-225-2558
R CA Doolittle, John T. 1-202-225-2511 1-202-225-5444
R CA Dornan, Robert K. 1-202-225-2965 1-202-225-3694
R CA Dreier, David 1-202-225-2305 1-202-225-4745
R CA Gallegly, Elton 1-202-225-5811 na
R CA Herger, Walter W. 1-202-225-3076 1-202-225-1609
R CA Horn, Steve 1-202-225-6676 na
R CA Huffington, Michael 1-202-225-3601 na
R CA Hunter, Duncan L. 1-202-225-5672 1-202-225-0235
R CA Kim, Jay C. 1-202-225-3201 1-202-226-1485
R CA Lewis, Jerry 1-202-225-5861 1-202-225-6498
R CA McKeon, Howard P. 1-202-225-1956 1-202-226-0683
R CA Moorhead, Carlos J. 1-202-225-4176 1-202-226-1279
R CA Packard, Ronald 1-202-225-3906 1-202-225-0134
R CA Pombo, Richard 1-202-225-1947 1-202-226-0861
R CA Rohrabacher, Dana 1-202-225-2415 1-202-225-7067
R CA Royce, Ed 1-202-225-4111 na
R CA Thomas, Bill 1-202-225-2915 na
D CO Schroeder, Patricia 1-202-225-4431 1-202-225-5842
D CO Skaggs, David E. 1-202-225-2161 na
R CO Allard, Wayne 1-202-225-4676 1-202-225-8630
R CO Hefley, Joel 1-202-225-4422 1-202-225-1942
R CO McInnis, Scott 1-202-225-4761 1-202-226-0622

R CO Schaefer, Daniel 1-202-225-7882 1-202-225-7885
D CT DeLauro, Rosa 1-202-225-3661 1-202-225-4890
D CT Gejdenson, Samuel 1-202-225-2076 1-202-225-4977
D CT Kennelly, Barbara B. 1-202-225-2265 1-202-225-1031
R CT Franks, Gary 1-202-225-3822 1-202-225-5085
R CT Johnson, Nancy L. 1-202-225-4476 1-202-225-4488
R CT Shays, Christopher 1-202-225-5541 1-202-225-9629
D DC Norton, Eleanor Holmes 1-202-225-8050 1-202-225-3002
R DE Castle, Michael N. 1-202-225-4165 1-202-225-2291
D FL Bacchus, James 1-202-225-3671 1-202-225-9039
D FL Brown, Corrine 1-202-225-0123 1-202-225-2256
D FL Deutsch, Peter 1-202-225-7931 1-202-225-8456
D FL Gibbons, Samuel M. 1-202-225-3376 na
D FL Hastings, Alcee L. 1-202-225-1313 1-202-225-0690
D FL Hutto, Earl 1-202-225-4136 1-202-225-5785
D FL Johnston II, Harry 1-202-225-3001 1-202-225-8791
D FL Meek, Carrie 1-202-225-4506 1-202-226-0777
D FL Peterson, Peter 1-202-225-5235 1-202-225-1586
R FL Bilirakis, Michael 1-202-225-5755 1-202-225-4085
R FL Canady, Charles T. 1-202-225-1252 na
R FL Diaz-Balart, Lincoln 1-202-225-4211 1-202-225-8576
R FL Fowler, Tillie 1-202-225-2501 na
R FL Goss, Porter J. 1-202-225-2536 1-202-225-6820
R FL Lewis, Thomas 1-202-225-5792 1-202-225-1860
R FL McCollum, William 1-202-225-2176 na
R FL Mica, John L. 1-202-225-4035 1-202-226-0821
R FL Miller, Dan 1-202-225-5015 1-202-226-0828
R FL Ros-Lehtinen, Ileana 1-202-225-3931 1-202-225-5620
R FL Shaw Jr., E. C. 1-202-225-3026 1-202-225-8398
R FL Stearns, Clifford B. 1-202-225-5744 1-202-225-3973
R FL Thurman, Carol L. 1-202-225-1002 1-202-226-0329
R FL Young, C. W. 1-202-225-5961 1-202-225-9764
D GA Bishop, Sanford 1-202-225-3631 1-202-225-2203
D GA Darden III, George 1-202-225-2931 na
D GA Deal, Nathan 1-202-225-5211 1-202-225-8272
D GA Johnson, Don 1-202-225-4101 1-202-226-1466
D GA Lewis, John 1-202-225-3801 1-202-225-0351
D GA McKinney, Cynthia 1-202-225-1605 1-202-226-0691
D GA Rowland, J. R. 1-202-225-6531 na
R GA Collins, Mac 1-202-225-5901 1-202-225-2515
R GA Gingrich, Newt 1-202-225-4501 1-202-225-4656
R GA Kingston, Jack 1-202-225-5831 1-202-226-2269
R GA Linder, John 1-202-225-4272 na
D GU Underwood, Robert A. 1-202-225-1188 1-202-226-0341
D HI Abercrombie, Neil 1-202-225-2726 na
D HI Mink, Patsy T. 1-202-225-4906 1-202-225-4987
D IA Smith, Neal 1-202-225-4426 na
R IA Grandy, Fred 1-202-225-5476 na
R IA Leach, James 1-202-225-6576 1-202-226-1278
R IA Lightfoot, James R. 1-202-225-3806 1-202-225-6973

R IA Nussle, James Allen 1-202-225-2911 1-202-225-9129
D ID LaRocco, Larry 1-202-225-6611 na
R ID Crapo, Michael D. 1-202-225-5531 na
D IL Collins, Cardiss 1-202-225-5006 1-202-225-8396
D IL Costello, Jerry F. 1-202-225-5661 1-202-225-0285
D IL Durbin, Richard J. 1-202-225-5271 1-202-225-0170
D IL Evans, Lane 1-202-225-5905 1-202-225-5396
D IL Lipinski, William O. 1-202-225-5701 1-202-225-1012
D IL Poshard, Glendal W. 1-202-225-5201 1-202-225-1541
D IL Reynolds, Mel 1-202-225-0773 na
D IL Rostenkowski, Daniel 1-202-225-4061 na
D IL Rush, Bobby L. 1-202-225-4372 1-202-226-0333
D IL Sangmeister, George 1-202-225-3635 1-202-225-4447
D IL Yates, Sidney R. 1-202-225-2111 1-202-225-3493
R IL Crane, Philip M. 1-202-225-3711 na
R IL Ewing, Thomas 1-202-225-2371 1-202-225-8071
R IL Fawell, Harris W. 1-202-225-3515 1-202-225-9420
R IL Gutierrez, Luis V. 1-202-225-8203 1-202-225-7810
R IL Hastert, J. D. 1-202-225-2976 1-202-225-0697
R IL Hyde, Henry J. 1-202-225-4561 1-202-226-1240
R IL Manzullo, Donald 1-202-225-5676 1-202-225-5284
R IL Michel, Robert H. 1-202-225-6201 1-202-225-9461
R IL Porter, John E. 1-202-225-4835 1-202-225-0157
D IN Buyer, Steve 1-202-225-5037 na
D IN Hamilton, Lee H. 1-202-225-5315 1-202-225-1101
D IN Jacobs Jr., Andrew 1-202-225-4011 na
D IN Long, Jill 1-202-225-4436 na
D IN McCloskey, Frank 1-202-225-4636 1-202-225-4688
D IN Roemer, Timothy 1-202-225-3915 1-202-225-6798
D IN Sharp, Philip R. 1-202-225-3021 na
D IN Visclosky, Peter J. 1-202-225-2461 1-202-225-2493
R IN Burton, Daniel 1-202-225-2276 1-202-225-0016
R IN Myers, John T. 1-202-225-5805 na
D KS Glickman, Daniel 1-202-225-6216 na
D KS Slattery, James 1-202-225-6601 1-202-225-1445
R KS Meyers, Jan 1-202-225-2865 1-202-225-0554
R KS Roberts, Pat 1-202-225-2715 1-202-225-5375
D KY Baesler, Scotty 1-202-225-4706 na
D KY Barlow, Tom 1-202-225-3115 1-202-225-2169
D KY Mazzoli, Romano L. 1-202-225-5401 na
D KY Natcher, William H. 1-202-225-3501 na
R KY Bunning, James 1-202-225-3465 1-202-225-0003
R KY Rogers, Harold 1-202-225-4601 1-202-225-0940
D LA Fields, Cleo 1-202-225-8490 1-202-225-8959
D LA Hayes, James A. 1-202-225-2031 1-202-225-1175
D LA Jefferson, William 1-202-225-6636 1-202-225-1988
D LA Tauzin, W. J. 1-202-225-4031 1-202-225-0563
R LA Baker, Richard H. 1-202-225-3901 1-202-225-7313
R LA Livingston, Robert 1-202-225-3015 1-202-225-0739
R LA McCrery, James 1-202-225-2777 1-202-225-8039

D MA Frank, Barney 1-202-225-5931 1-202-225-0182
D MA Kennedy II, Joseph P. 1-202-225-5111 1-202-225-9322
D MA Markey, Edward J. 1-202-225-2836 1-202-225-8689
D MA Meehan, Martin T. 1-202-225-3411 1-202-226-0771
D MA Moakley, John Joseph 1-202-225-8273 1-202-225-7304
D MA Neal, Richard E. 1-202-225-5601 1-202-225-8112
D MA Olver, John W. 1-202-225-5335 1-202-226-1224
D MA Studds, Gerry E. 1-202-225-3111 1-202-225-2212
R MA Blute, Peter I. 1-202-225-6101 1-202-225-2217
R MA Torkildsen, Peter G. 1-202-225-8020 1-202-225-8037
D MD Cardin, Benjamin L. 1-202-225-4016 na
D MD Hoyer, Steny H. 1-202-225-4131 1-202-225-4300
D MD Mfume, Kweisi 1-202-225-4741 1-202-225-3178
D MD Wynn, Albert R. 1-202-225-8699 1-202-225-8714
R MD Bartlett, Roscoe G. 1-202-225-2721 na
R MD Bentley, Helen D. 1-202-225-3061 1-202-225-4251
R MD Gilchrest, Wayne T. 1-202-225-5311 1-202-225-0254
R MD Morella, Constance 1-202-225-5341 1-202-225-1389
D ME Andrews, Thomas H. 1-202-225-6116 1-202-225-9065
R ME Snowe, Olympia J. 1-202-225-6306 na
D MI Barcia, James A. 1-202-225-8171 1-202-225-2168
D MI Bonior, David E. 1-202-225-2106 1-202-226-1169
D MI Carr, Robert 1-202-225-4872 1-202-225-1260
D MI Collins Jr., Barbara 1-202-225-2261 1-202-225-6645
D MI Conyers Jr., John 1-202-225-5126 1-202-225-0072
D MI Dingell, John D. 1-202-225-4071 1-202-225-7426
D MI Ford, William D. 1-202-225-6261 na
D MI Kildee, Dale E. 1-202-225-3611 na
D MI Levin, Sander M. 1-202-225-4961 1-202-226-1033
D MI Stupak, Bart 1-202-225-4735 1-202-225-4744
R MI Camp, David Lee 1-202-225-3561 1-202-225-9679
R MI Henry, Paul B. 1-202-225-3831 na
R MI Hoekstra, Peter 1-202-225-4401 na
R MI Knollenberg, Joe 1-202-225-5802 1-202-226-2356
R MI Smith, Nick 1-202-225-6276 na
R MI Upton, Frederick S. 1-202-225-3761 1-202-225-4986
D MN Minge, David 1-202-225-2331 na
D MN Oberstar, James L. 1-202-225-6211 1-202-225-0699
D MN Penny, Timothy J. 1-202-225-2472 1-202-225-0051
D MN Peterson, Collin C. 1-202-225-2165 1-202-225-1593
D MN Sabo, Martin O. 1-202-225-4755 na
D MN Vento, Bruce F. 1-202-225-6631 na
R MN Grams, Rod 1-202-225-2271 1-202-225-9802
R MN Ramstad, James M. 1-202-225-2871 1-202-225-6351
D MO Clay, William L. 1-202-225-2406 1-202-225-1725
D MO Danner, Pat 1-202-225-7041 na
D MO Gephardt, Richard A. 1-202-225-2671 1-202-225-7452
D MO Skelton, Ike 1-202-225-2876 1-202-225-2695
D MO Volkmer, Harold L. 1-202-225-2956 1-202-225-7834
D MO Wheat, Alan 1-202-225-4535 1-202-225-5990

R MO Emerson, Bill 1-202-225-4404 1-202-225-9621
R MO Hancock, Melton D. 1-202-225-6536 1-202-225-7700
R MO Talent, James M. 1-202-225-2561 1-202-225-2563
D MS Montgomery, G. V. 1-202-225-5031 1-202-225-3375
D MS Parker, Paul M. 1-202-225-5865 1-202-225-5886
D MS Taylor, Gene 1-202-225-5772 1-202-225-7074
D MS Whitten, Jamie L. 1-202-225-4306 1-202-225-4328
D MT Williams, Pat 1-202-225-3211 na
D NC Clayton, Eva 1-202-225-3101 na
D NC Hefner, W. G. 1-202-225-3715 1-202-225-4036
D NC Lancaster, H. M. 1-202-225-3415 1-202-225-0666
D NC Neal, Stephen L. 1-202-225-2071 1-202-225-4060
D NC Price, David E. 1-202-225-1784 1-202-225-6314
D NC Rose, Charles 1-202-225-2731 1-202-225-2470
D NC Valentine, Tim 1-202-225-4531 1-202-225-1539
D NC Watt, Melvin 1-202-225-1510 1-202-225-1512
R NC Ballenger, Thomas C. 1-202-225-2576 1-202-225-0316
R NC Coble, Howard 1-202-225-3065 1-202-225-8611
R NC McMillan, J. A. 1-202-225-1976 na
R NC Taylor, Charles Hart 1-202-225-6401 1-202-251-0794
D ND Pomeroy, Earl 1-202-225-2611 1-202-226-0893
D NE Hoagland, Peter 1-202-225-4155 na
R NE Barrett, William E. 1-202-225-6435 na
R NE Bereuter, Douglas 1-202-225-4806 1-202-226-1148
D NH Swett, Richard N. 1-202-225-5206 na
R NH Zeliff Jr., William 1-202-225-5456 1-202-225-4370
D NJ Andrews, Robert E. 1-202-225-6501 na
D NJ Hughes, William J. 1-202-225-6572 1-202-226-1108
D NJ Klein, Herbert C. 1-202-225-5751 na
D NJ Menendez, Robert 1-202-225-7919 1-202-226-0792
D NJ Pallone Jr., Frank 1-202-225-4671 1-202-225-9665
D NJ Payne, Donald M. 1-202-225-3436 1-202-225-4160
D NJ Torricelli, Robert 1-202-224-5061 1-202-225-0843
R NJ Franks, Bob 1-202-225-5361 1-202-225-9460
R NJ Gallo, Dean A. 1-202-225-5034 1-202-225-0658
R NJ Roukema, Marge 1-202-225-4465 1-202-225-9048
R NJ Saxton, H. J. 1-202-225-4765 1-202-225-0778
R NJ Smith, Christopher 1-202-225-3765 1-202-225-7768
R NJ Zimmer, Richard A. 1-202-225-5801 1-202-225-9181
D NM Richardson, William 1-202-225-6190 na
R NM Schiff, Steven H. 1-202-225-6316 1-202-225-4975
R NM Skeen, Joseph 1-202-225-2365 1-202-225-9599
D NV Bilbray, James H. 1-202-225-5965 1-202-225-8808
R NV Vucanovich, Barbara 1-202-225-6155 1-202-225-2319
D NY Ackerman, Gary L. 1-202-225-2601 na
D NY Engel, Eliot L. 1-202-225-2464 na
D NY Flake, Floyd H. 1-202-225-3461 1-202-226-4169
D NY Hinchey, Maurice D. 1-202-225-6335 na
D NY Hochbrueckner, G. 1-202-225-3826 1-202-225-0776
D NY LaFalce, John J. 1-202-225-3231 na

D NY Lowey, Nita M. 1-202-225-6506 1-202-225-0546
D NY Maloney, Carolyn B. 1-202-225-7944 na
D NY Manton, Thomas J. 1-202-225-3965 na
D NY McNulty, Michael R. 1-202-225-5076 1-202-225-5077
D NY Nadler, Jerrold 1-202-225-5635 1-202-225-6923
D NY Owens, Major R. 1-202-225-6231 1-202-226-0112
D NY Rangel, Charles B. 1-202-225-4365 1-202-225-0816
D NY Schumer, Charles E. 1-202-225-6616 1-202-225-4183
D NY Serrano, Jose E. 1-202-225-4361 1-202-225-6001
D NY Slaughter, Louise M. 1-202-225-3615 1-202-225-7822
D NY Towns, Edolphus 1-202-225-5936 1-202-225-1018
D NY Velazquez, Nydia M. 1-202-225-2361 1-202-226-0327
R NY Boehlert, Sherwood 1-202-225-3665 1-202-225-1891
R NY Fish Jr., Hamilton 1-202-225-5441 1-202-225-0962
R NY Gilman, Benjamin A. 1-202-225-3776 na
R NY Houghton, Amory 1-202-225-3161 1-202-225-5574
R NY King, Peter T. 1-202-225-7896 1-202-226-2279
R NY Lazio, Rick A. 1-202-225-3335 na
R NY Levy, David A. 1-202-225-5516 1-202-225-4672
R NY McHugh, John M. 1-202-225-4611 na
R NY Molinari, Susan 1-202-225-3371 1-202-226-1272
R NY Paxon, L. W. 1-202-225-5265 1-202-225-5910
R NY Quinn, Jack 1-202-225-3306 1-202-226-0347
R NY Solomon, Gerald B. 1-202-225-5614 1-202-225-1168
R NY Walsh, James T. 1-202-225-3701 1-202-225-4042
D OH Applegate, Douglas 1-202-225-6265 na
D OH Brown, Sherrod 1-202-225-3401 na
D OH Fingerhut, Eric D. 1-202-225-5731 na
D OH Hall, Tony P. 1-202-225-6465 na
D OH Kaptur, Marcy 1-202-225-4146 1-202-225-7711
D OH Mann, Davis S. 1-202-225-2216 na
D OH Sawyer, Thomas C. 1-202-225-5231 1-202-225-5278
D OH Stokes, Louis 1-202-225-7032 1-202-225-1339
D OH Strickland, Ted 1-202-225-5705 1-202-226-0331
D OH Traficant Jr., James 1-202-225-5261 1-202-225-3719
R OH Boehner, John Andrew 1-202-225-6205 1-202-225-0704
R OH Gillmor, Paul E. 1-202-225-6405 na
R OH Hobson, David L. 1-202-225-4324 na
R OH Hoke, Martin R. 1-202-225-5871 1-202-226-0994
R OH Kasich, John R. 1-202-225-5355 na
R OH Oxley, Michael G. 1-202-225-2676 na
R OH Pryce, Deborah 1-202-225-2015 1-202-226-0986
R OH Regula, Ralph 1-202-225-3876 1-202-225-3059
D OK Brewster, Billy Kent 1-202-225-4565 na
D OK English, Glenn 1-202-225-5565 1-202-225-8698
D OK McCurdy, David 1-202-225-6165 1-202-225-9746
D OK Synar, Michael 1-202-225-2701 1-202-225-2796
R OK Inhofe, James M. 1-202-225-2211 1-202-225-9187
R OK Istook, Ernest Jim 1-202-225-2132 na
D OR DeFazio, Peter A. 1-202-225-6416 na

D OR Furse, Elizabeth 1-202-225-0855 na
D OR Kopetski, Michael J. 1-202-225-5711 1-202-225-9477
D OR Wyden, Ronald 1-202-225-4811 na
R OR Smith, Robert F. 1-202-225-6730 na
D PA Blackwell, Lucien E. 1-202-225-4001 1-202-225-7362
D PA Borski, Robert A. 1-202-225-8251 1-202-225-4628
D PA Coyne, William J. 1-202-225-2301 na
D PA Foglietta, Thomas M. 1-202-225-4731 1-202-225-0088
D PA Holden, Tim 1-202-225-5546 1-202-226-0996
D PA Kanjorski, Paul E. 1-202-225-6511 1-202-225-9024
D PA Klink, Ron 1-202-225-2565 na
D PA Margolies-Mezvinsky, Marjorie 1-202-225-6111 1-202-226-0798
D PA McHale, Paul 1-202-225-6411 1-202-225-5320
D PA Murphy, Austin J. 1-202-225-4665 1-202-225-4772
D PA Murtha, John P. 1-202-225-2065 1-202-225-5709
R PA Clinger Jr., William 1-202-225-5121 1-202-225-4681
R PA Gekas, George W. 1-202-225-4315 1-202-225-8440
R PA Goodling, William F. 1-202-225-5836 1-202-226-1000
R PA Greenwood, Jim 1-202-225-4276 1-202-225-9511
R PA McDade, Joseph M. 1-202-225-3731 1-202-225-9594
R PA Ridge, Thomas J. 1-202-225-5406 na
R PA Santorum, Richard J. 1-202-225-2135 1-202-225-7747
R PA Shuster, Bud 1-202-225-2431 na
R PA Walker, Robert S. 1-202-225-2411 na
R PA Weldon, Curt 1-202-225-2011 1-202-225-8137
D PR Romero-Barcelo, Carlos 1-202-225-2615 1-202-225-2154
D RI Reed, John F. 1-202-225-2735 1-202-225-9580
R RI Machtley, Ronald K. 1-202-225-4911 1-202-225-4417
D SA Faleomavaega, Eni F.H. 1-202-225-8577 na
D SC Clyburn, James E. 1-202-225-3315 1-202-225-2302
D SC Derrick, Butler 1-202-225-5301 na
D SC Spratt Jr., John M. 1-202-225-5501 1-202-225-0464
R SC Inglis, Bob 1-202-225-6030 na
R SC Ravenel Jr., Arthur 1-202-225-3176 na
R SC Spence, Floyd 1-202-225-2452 1-202-225-2455
D SD Johnson, Timothy P. 1-202-225-2801 1-202-225-2427
D TN Clement, Robert 1-202-225-4311 1-202-226-1035
D TN Cooper, James 1-202-225-6831 1-202-225-4520
D TN Ford, Harold E. 1-202-225-3265 na
D TN Lloyd, Marilyn 1-202-225-3271 1-202-225-6974
D TN Tanner, John S. 1-202-225-4714 1-202-225-1765
R TN Duncan Jr., John J. 1-202-225-5435 1-202-225-6440
R TN Gordon, Bart 1-202-225-4231 1-202-225-6887
R TN Quillen, James H. 1-202-225-6356 1-202-225-7812
R TN Sundquist, Donald 1-202-225-2811 1-202-225-2814
D TX Andrews, Michael A. 1-202-255-7508 na
D TX Brooks, Jack 1-202-225-6565 1-202-225-1584
D TX Bryant, John 1-202-225-2231 na
D TX Chapman, Jim 1-202-225-3035 1-202-225-7265
D TX Coleman, Ronald D. 1-202-225-4831 na

D TX Edwards, Chet 1-202-225-6105 1-202-225-0350
D TX Frost, Martin 1-202-225-3605 1-202-225-4951
D TX Geren, Peter 1-202-225-5071 1-202-225-2786
D TX Gonzalez, Henry B. 1-202-225-3236 1-202-225-1915
D TX Green, Gene 1-202-225-1688 1-202-225-9903
D TX Hall, Ralph M. 1-202-225-6673 1-202-225-3332
D TX Johnson, Eddie Bernice 1-202-225-8885 na
D TX Laughlin, Gregory H. 1-202-225-2831 1-202-225-1108
D TX Ortiz, Solomon P. 1-202-225-7742 1-202-226-1134
D TX Pickle, J. J. 1-202-225-4865 na
D TX Sarpalius, Bill 1-202-225-3706 1-202-225-6142
D TX Stenholm, Charles W. 1-202-225-6605 1-202-225-2234
D TX Tejeda, Frank 1-202-225-1640 na
D TX Washington, Craig A. 1-202-225-3816 na
D TX Wilson, Charles 1-202-225-2401 1-202-225-1764
D TX de la Garza, E 1-202-225-2531 1-202-225-2534
R TX Archer, William 1-202-225-2571 1-202-225-4381
R TX Armey, Richard K. 1-202-225-7772 1-202-225-7614
R TX Barton, Joseph 1-202-225-2002 1-202-225-3052
R TX Bonilla, Henry 1-202-225-4511 na
R TX Combest, Larry 1-202-225-4005 na
R TX DeLay, Thomas 1-202-225-5951 na
R TX Fields, Jack 1-202-225-4901 na
R TX Johnson, Sam 1-202-225-4201 na
R TX Smith, Lamar S. 1-202-225-4236 1-202-225-8628
D UT Orton, William H. 1-202-225-7751 1-202-226-1223
D UT Shepherd, Karen 1-202-225-3011 1-202-226-0354
R UT Hansen, James V. 1-202-225-0453 1-202-225-5857
D VA Boucher, Rick 1-202-225-3861 na
D VA Byrne, Leslie L. 1-202-225-1492 na
D VA Moran Jr., James P. 1-202-225-4376 1-202-225-0017
D VA Payne Jr., Lewis F. 1-202-225-4711 1-202-226-1147
D VA Pickett, Owen B. 1-202-225-4215 1-202-225-4218
D VA Scott, Robert C. 1-202-225-8351 1-202-225-3854
D VA Sisisky, Norman 1-202-225-6365 1-202-226-1170
R VA Bateman, Herbert H. 1-202-225-4261 1-202-225-4382
R VA Bliley Jr., Thomas J. 1-202-225-2815 na
R VA Goodlatte, Robert W. 1-202-225-5431 1-202-225-9681
R VA Wolf, Frank R. 1-202-225-5136 na
D VI de Lugo, Ron 1-202-225-1790 1-202-225-9392
I VT Sanders, Bernard 1-202-225-4115 1-202-225-6790
D WA Cantwell, Maria 1-202-225-6311 1-202-225-2286
D WA Dicks, Norman D. 1-202-225-5916 na
D WA Foley, Thomas S. 1-202-225-2006 na
D WA Inslee, Jay 1-202-225-5816 1-202-226-1137
D WA Kreidler, Mike 1-202-225-8901 1-202-226-2361
D WA McDermott, James A. 1-202-225-3106 1-202-225-9212
D WA Swift, Al 1-202-225-2605 1-202-225-2608
D WA Unsoeld, Jolene 1-202-225-3536 1-202-225-9095
R WA Dunn, Jennifer 1-202-225-7761 na

D WI Barrett, Thomas M. 1-202-225-3571 na
D WI Gunderson, Steve 1-202-225-5506 1-202-225-6195
D WI Kleczka, Gerald D. 1-202-225-4572 na
D WI Obey, David R. 1-202-225-3365 na
R WI Klug, Scott 1-202-225-2906 na
R WI Petri, Thomas E. 1-202-225-2476 1-202-225-2356
R WI Roth, Toby 1-202-225-5665 1-202-225-0087
R WI Sensenbrenner, F. J. 1-202-225-5101 1-202-225-3190
D WV Mollohan, Alan B. 1-202-225-4172 1-202-225-7564
D WV Rahall II, Nick Joe 1-202-225-3452 1-202-225-9061
D WV Wise Jr., Robert E. 1-202-225-2711 1-202-225-7856
R WY Thomas, Craig 1-202-225-2311 1-202-225-0726

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RON BUCKMIRE, 11 Colvin Circle, Troy, NY 12180-3735. ``D.C., April 25 1993''
vox:(518)-276-8910 fax:(518)-276-6920 buckmr@rpi.edu buckmr@rpitsmts.bitnet
The First Amendment: not just a good idea, it's the law.-murphy@omega.npri.com

--
Brad Banko; Univ of Illinois; b-banko@uiuc.edu
====== Ich habe kein Bock mehr zu schreiben. ======================
See one. Do one. Teach one. 73 de kb8cne @ n9lnq.il

846. Re: CW filters and DSP-9

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-28 23:13:47 UTC
From: alanb@sr.hp.com
Message-ID: <CKD4J0.5x1@srgenprp.sr.hp.com>
Source record: 271857

Mike Willis (M.Willis@ee.surrey.ac.uk) wrote:
: I would expect the limit on receiver bandwidth with DSP filters
: is more to do with the received signal characteristics than ringing.

I agree. In other words, it should be easy to design a CW filter with
the narrowest usable bandwidth that has negligible ringing.

AL N1AL

847. 1/94 ARRL Directors Mtg Minutes (Long)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 00:49:05 UTC
From: marcbg@netcom.com
Message-ID: <$arlm194.1994@ampr.org>
Source record: 271807
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

1994 Annual Meeting,
Board of Directors
The American Radio Relay League
January 21-22, 1994
Summary Agenda

1. Roll Call
2. Moment of Silence
3. Consideration of the Agenda for the meeting
4. Approval of the Minutes of the 1993 Second Meeting
5. Reports by the Officers
6. Election of Officers
7. Election of the Executive Committee
8. Election of ARRL Foundation Directors
9. Receive reports and consider recommendations of the committees
10. Report of the Host Director, 1994 ARRL National Convention
11. Appointment of Committees
12. Directors' motions
13. Authorizations for certain administrative expenses

1. Pursuant to due notice, the Board of Directors of the American Radio Relay League, Inc., met in annual session at the Hartford Marriott Hotel, Rocky Hill, CT on Friday, January 21, 1994. The meeting was called to order at 8:30 AM EST with President George S. Wilson III, W4OYI, in the Chair and the following directors present:

* Kay C. Craigie, WT3P, Atlantic Division
Edmond A. Metzger, W9PRN, Central Division
Tod Olson, K0TO, Dakota Division
Joel M. Harrison, WB5IGF, Delta Division
Allan L. Severson, AB8P, Great Lakes Division
Stephen A. Mendelsohn, WA2DHF, Hudson Division
Lew Gordon, K4VX, Midwest Division
William Burden, WB1BRE, New England Division
Mary Lewis, W7QGP, Northwestern Division
Brad Wyatt, K6WR, Pacific Division
John C. Kanode, N4MM, Roanoke Division
Marshall Quiat, AG0X, Rocky Mountain Division
Frank M. Butler, W4RH, Southeastern Division
Fried Heyn, WA6WZO, Southwestern Division
Tom Comstock, N5TC, West Gulf Division

*Vice Director, in the seat for Hugh A. Turnbull, W3ABC, Director.

Also present as members of the Board without vote were Rodney J. Stafford, KB6ZV, First Vice President; Jay A. Holladay, W6EJJ, Vice President; Tom Frenaye, K1KI, Vice President; Larry E. Price, W4RA, International Affairs Vice President; Treasurer James McCobb, Jr., K1LLU; and David Sumner, K1ZZ, Executive Vice President. Chief Financial Officer Barry J. Shelley was present in his capacity as an officer of the corporation.
Also in attendance at the invitation of the Board as observers were the following Vice Directors: Howard Huntington, K9KM, Central Division; Hans Brakob, K0HB, Dakota Division; Rick Roderick, K5UR, Delta Division; George E. Race, WB8BGY, Great Lakes Division; Paul Vydareny, WB2VUK, Hudson Division; Bruce Frahm, K0BJ, Midwest Division; Warren Rothberg, WB1HBB, New England Division; Mary Lou Brown, NM7N, Northwestern Division; Jim Maxwell, W6CF, Pacific Division; C. Dennis Bodson, W4PWF, Roanoke Division; Bob Scupp, WB5YYX, Rocky Mountain Division; Evelyn Gauzens, W4WYR, Southeastern Division; and Art Goddard W6XD, Southwestern Division. There were also present General Counsel Christopher D. Imlay, N3AKD; Past Director Howard Mark, W0OZC; Publications Manager Mark J. Wilson, AA2Z; Membership Services Manager Charles L. Hutchinson, K8CH; Field Services Manager Richard K. Palm, K1CE; Technical Relations Manager Paul Rinaldo, W4RI; Public Information Manager Steve Mansfield, N1MZA; and Perry Williams, W1UED, Washington Area Coordinator.

2. The assembly observed a moment of silence in recollection of Radio Amateurs who have passed away since the previous Board meeting, especially John A. Anastas, KJ4EK, Vern Chambers, W1JEQ, Creed Chorpening, W4TZ, Lloyd Colvin, W6KG, Bill Harvey, WA6RXI, Irv Emig, W6GC, Clifford L. Kitts, KD4TZ, Glenn Koropp, W6YFW, Ted Heithecker, W5EJ, Donald Johnson, W6QIE, Sidney T. Kitrell, W0LYM, Tom McMullen, W1SL, Art Milne, G2MI, Jane W. Rhodes, N4PNL, and Jack Ryder, K4IHX.

3. The Chair introduced Past Vice President and Dakota Director Tod Olson, K0TO, returning to the Board after an absence; Mr. Olson introduced his new Vice Director, Hans Brakob, K0HB. The Chair introduced new Midwest Director Lew Gordon, K4VX; Mr. Gordon introduced his new Vice Direcor Bruce Frahm, K0BJ. The Chair introduced Pacific Director Brad Wyatt, K6WR, moving up from the Vice Director seat; Mr. Wyatt introduced his new Vice Director, Jim Maxwell, W6CF. Apologies for absence were offered for Atlantic Director Hugh Turnbull, W3ABC and West Gulf Division Vice Director Sam Sitton, KV5X, for each because of illness in the family.

4. On motion of Mr. Mendelsohn, seconded by Mr. Kanode, the agenda was ADOPTED as presented.

5. On motion of Mr. Harrison, seconded by Mr. Butler, the minutes of the 1993 Second Meeting were ADOPTED as presented.

6. At this point the Officers presented their annual reports and commented briefly on their recent activities. President Wilson's comprehensive report covered, inter alia, ARRL readiness for electronic filing of license data as soon as the FCC is ready; the League's aid to AMSAT for Phase 3D fundraising; the amateur-radio enforcement activities of FCC in 1993, usually with assistance of the Amateur Auxiliary; the negotiated amendment of FCC Rule 97.113, putting common sense into communications for public events; another rules-change bringing Novice exams into the VE system (without charge so far as the ARRL-VEC is concerned); FCC preemption of local ordinances inhibiting ham use of transceivers that could incidentally receive public service frequencies; much effort, behind the scenes and publicly, to restore club station licensing and provide for choice of call signs by amateurs; ARRL opposition to a "Quiet Zone" for all of Puerto Rico; the League's proposal for additional callsign blocks in Puerto Rico, Hawaii and Alaska; continued efforts to reach compromise rulemaking for autoforwarding of digital messages on HF; the rulemaking docket clarifying responsibility for automatic transmission of data messages as "Originator and First Forwarder"; efforts to assure that Government plans for wind profilers at 449 MHz would accommodate continued amateur use of the band; ARRL defense of the 902-928 MHz band as against an FCC rulemaking to expand the "Automatic Vehicle Monitoring" service there; the current rulemaking to provide amateurs with a secondary allocation from 219-220 MHz under certain restrictions; the FCC idea of "instant licenses" with self-assigned call signs for first-time licensees and ARRL's counter proposal that electronic filing is better; and finally, ARRL's legislative success in staving off administrative fees for amateurs, providing the basis for vanity call signs, adding protective phrases to the frequency give-back and auction bills and introduction of S.J.Res.90, H.J.Res.199 and H.R.2623.

7. In his report, First Vice President Stafford focused strongly on the growth of the Amateur Radio Service, particularly in Technician Class licensees, and the need for ARRL activities to attract this group. Mr. Stafford also reported on his service on the Long Range Planning Committee (LRPC), of which he is chairman, the Industry Advisory Council and the Administration and Finance Committee; and his attendance at the Region 1 Conference of the International Amateur Radio Union (IARU) in Belgium. Vice President Holladay covered his work with the LRPC effort including his support for the concept of a retreat where the League leadership can consider the issues raised by the LRPC; as a member of the Volunteer Resources Committee (VRC); his interest in local antenna cases, focused on obtaining a more reasonable set of regulations from the County of Los Angeles; and as Board liaison to the Shuttle Amateur Radio Experiment (SAREX)

Working Group. The tenth year of Amateur Radio operation from the Space Shuttle was highlighted by four SAREX missions and a great deal of favorable publicity for Amateur Radio. Next, Vice President Frenaye marked his membership on the Membership Services and Computer Committees, the ARRL Foundation Board, and the LRPC, especially focussing on the latter group's studies of delivering services to both HF and VHF communities. He remarked on the generosity of the League over the years in providing services to members and non-members alike; it may be time for review of our services to define which should continue open and which should be restricted to members. International Affairs Vice President Price summarized his travel as IARU Secretary to the International Red Cross, Geneva; IARU Region 2 Executive Committee meeting, Guayaquil, and government offices in Quito, both Ecuador; IARU Region 1 meeting, DeHaan and IARU Administrative Council meeting, Brussels, both Belgium; and the Radiocommunication Assembly of the International Telecommunication Union (ITU) and the ITU's first World Radiocommunication Conference (WRC-93) replacing the old WARCs, both Geneva. Travel under ARRL's banner included the last meeting of the Canadian Radio Relay League and the first of the Radio Amateurs of/du Canada in Toronto; and hamfests/conventions at Friedrichshafen, Germany, Miami, Orlando, Little Rock, Dayton, Manchester NH, and Memphis, and the ARRL National Convention in Huntsville, AL. He also participated in meetings of the Ad Hoc Committee on ARRL National Conventions, the Executive Committee, and the LRPC. Treasurer McCobb's report analyzed the performance of the League's investment portfolio and the market in general. The $8.5 million (market value, $9.1 million, an excess of 7% over book value) portfolio is invested 39% in stocks, 61% in bonds, yielding annualized dividends and interest of $509,500 in the aggregate. Sales from the portfolio were limited, and brought in a realized net gain of $72,000. In the marketplace as a whole, bond rates fell during the year, and remain low but somewhat volatile. The stock market rose during 1993, with the Dow Jones Industrial index at 3754, up 453 points or 14% over the end of 1992.

8. Executive Vice President Sumner's report opened with a nutshell characterization of the year: relative calm, moderate membership growth, modest success in new ventures, and a gradually emerging picture of what Amateur Radio will be like around the turn of the century and what kind of ARRL will be needed to serve it. An important tool in that process is the Readex survey of 1992. The staff Survey Task Force focused sharply on two areas: studies of ten potential projects aimed at recruiting and retaining members especially from the ranks of new hams, and response to two trends having significant implications for the ARRL -- (1) a growing majority of radio amateurs whose interest in Amateur Radio is locally focused, and (2) a growing

diversity of interest groups, each competing for scarce resources from the ARRL. The LRPC has recommended that the Board hold a planning retreat later this spring to discuss such issues without the harness of a business-driven agenda. Turning to Washington Office activities, Paul Rinaldo chaired a meeting of an ITU Task Group in Geneva, on wind profiler radars; Director Butler also attended the meeting, on behalf of the IARU. The Geneva meeting produced a report to WRC-97, the World Radiocommunication Conference at which wind profiler radar allocations will be considered. Rinaldo also chaired monthly US preparatory meetings, primarily of government agencies having an interest in wind profiler radars, and other monthly meetings with the National Telecommunications and Information Administration (NTIA) on coordination of wind profiler radar sites with the ARRL to avoid interference problems with repeaters at 448-450 MHz. Rinaldo also participated in US preparatory meetings for the ITU Voluntary Group of Experts charged with simplifying the Radio Regulations. International meetings of the VGE in Geneva are covered by Wojciech Nietyksza, SP5FM, on behalf of IARU. The final VGE meeting will be held in late February/early March 1994. Thus far, we have been able to head off any recommendations that could adversely affect the amateur services. International Affairs Vice President Price and Rinaldo attended WRC-93 as members of the IARU and US delegations respectively. The sole purpose of this WRC was to set the agendas for WRCs 95 and 97. Rinaldo and two IARU Region 2 officials also attended meetings of the Interamerican Telecommunication Council (CITEL), the regional telecommunications organization for Region 2. The CITEL approved a resolution concerning the creation of an International Amateur Radio Permit (IARP). The next step is to design a permit and necessary procedures, and to present it at the next CITEL committee meeting in 1994. Meanwhile, some progress, albeit slow, is being made toward the US becoming a signatory to the common license agreement adopted by the European Conference of Postal and Telecommunications Administrations (CEPT) which would permit US amateurs to operate in CEPT countries (and vice versa) without the need for issuance of a temporary license. Turning now to US matteclosed. Whereupon, the Chair declared Mr. Sumner elected as Secretary. (Applause)

20. The Chair opened nominations for the office of Treasurer. Mr. Severson nominated Mr. McCobb. On motion of Mr. Quiat, seconded by Mr. Harrison, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. McCobb elected as Treasurer. (Applause)

21. The Chair opened nominations for the office of Executive Vice President. Mr. Butler nominated Mr. Sumner. On motion of Mr.Harrison, seconded by Mr. Severson, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. Sumner elected as Executive Vice President. (Applause)

22. The Chair opened nominations for the office of Chief Financial Officer. Mr. Severson nominated Mr. Shelley. On motion of Mr. Kanode, seconded by Mr. Metzger, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. Shelley elected as Cheif Financial Officer. (Applause)

23. The Chair opened nominations for Director members of the Executive Committee for one-year terms. Mr. Kanode nominated Mr. Severson. Mr. Quiat nominated Mr. Butler. Mr. Butler nominated Mr. Quiat. Mr. Harrison nominated Mr. Mendelsohn. Mr. Mendelsohn nominated Mr. Harrison. On motion of Mr. Olson, seconded by Mr. Burden, it was VOTED that nominations are closed. The Tellers found that Messrs. Harrison, Mendelsohn. and Quiat were elected on the first ballot, and Mr. Severson on the second ballot. (Applause)

24. The Chair opened nominations for Directors of the ARRL Foundation. Mr. Metzger nominated the slate of Mr. Frenaye, Roger W. Franke, K9AYK and Mr. Comstock for three year terms, and Mr. Quiat for a two year term. On motion of Mr. Mendelsohn, seconded by Mrs. Lewis, it was VOTED that nominations are closed. Whereupon, the Chair declared Messrs. Frenaye, Franke, Comstock and Quiat elected as Directors of the ARRL Foundation. (Applause.) During the course of the above elections, Mr. McCobb left the meeting because of a business commitment.

25. Mr. Severson, as Chairman, presented the report of the Administration and Finance Committee. The Committee held three meetings since the Second Meeting of the Board in July as detailed in Minutes which have been distributed. Much time was devoted to the report of the Computer Committee on information services at HQ, and to the 1994-1995 plan which will be presented to the Board for adoption later in the meeting. On his motion, seconded by Mr. Burden, it was VOTED that the 1993 budget for the Midwest Division be amended to $8,888; an increase of $1,888. On his further motion, seconded by Mr. Comstock, it was VOTED that the 1993 budget for the Delta Division be amended to $13,053; an increase of $3,553.

26. Mr. Kanode, as Chairman, presented the report of the Membership Services Committee. This Committee also had three meetings since the July Board meeting. Mr. Kanode called attention to three items. The success of the new Official Family Operating Event will depend on the "Official Family" and the Field Organization getting on the air to operate in the event, and on QSLing with the Official Family cards. A new DXCC fee schedule appeared in the December issue of QST. Further expansion of the DXCC Field Checking program should wait until the new DXCC computer system is in place. Similarly, additional forms of DXCC should also wait until the computer upgrades are on line.

27. Mr. Butler, as vice chairman, presented the report of the Volunteer Resources Committee. VRC held two meetings in the period, and Minutes have been issued. Chairman McConnell highlighted several items in the report. National Exam Day for 1993 was regarded as a success, and the Committee recommended a continuation. Accordingly, two such days have been scheduled for 1994, in May and October. The task of recruiting additional volunteer examiners for Alaska continues. Terms of reference for the ARRL education awards have been revised with three awards for 1994: the Herb S. Brier Instructor of the Year, the ARRL Professional Instructor of the Year, and the ARRL Professional Educator of the Year. A list of materials available to members has been compileommended.

Because the plan for this band is use for inter-city links which can be assembled into a nationwide high-speed digital network, allocation of channels to point-to-point pairs running less than 56 Kilobits duplex should be discouraged. No matter what the bandwidth of the transmissions coordinated into a channel, they should be centered in the channel. The long term objective for digital transmission on these channels is 100 KHz bandwidth. Local Coordinating Bodies should seek to avoid decisions which will limit the nationwide network.

35. Mr. Mendelsohn, as Chairman, presented the interim report of the Ad Hoc Committee on Vanity Call Signs, formed in response to the FCC Notice of Proposed Rulemaking in PR Docket 93-305. The Committee's charge is to recommend a position on vanity call signs to the Board of Directors by mid-February. As much membership input as possible is to be sought. Based on input so far, the Committee suggests the vanity call sign system should be phased in with a series of four three-month windows before opening the system to all. Previously held call signs regardless of license class, format or call district should be available first. The second, third and fourth windows would be by license class to Extra Class, then Advanced, and then General. At the end of one year, any licensed amateur would be eligible for any call within his call area and license class blocks, or a lower class block. The fee should be a one-time occurrence, and should be refunded if none of the call signs on the application are available. Calls should be held for two years after expiration or trade-in, and should not be transferable; these measures should help preclude "trafficking" in call signs. If necessary, an in-person meeting of committee members will take place February 12 in the Dallas-Fort Worth area.

36. At this point, 2:45 PM, Mr. Wilson returned to the Chair. Mr. Price, as
Liaison, reported for the Biological Effects Committee; no formal report had been received from the chairman. The Board was in recess from 3:18 to 3:44 PM; Mr. Scupp took the seat for Mr. Quiat.

37. On motion of Mr. Severson, seconded by Mr. Burden, it was VOTED that the 1994-1995 Plan and Budget is adopted as presented to the Board by the Administration and Finance Committee.

38. Mr. Scupp, as Liaison, presented the report of the Public Relations Committee. Highlights: Tech Image replaced Selz Seabolt as the ARRL's PR firm, though many of the personnel involved are the same. ARRL's publicity efforts scored more than 100 major media hits and more than 25 major market television placements including an NBC story on SAREX and "Santa Ham" on CNN. The Associated Press picked up five stories, USA Today picked up two, and there were placements in at least 25 major metropolitan dailies. ARRL produced and began duplication of two public service announcements as reported by the Executive Vice President. With Steve Mansfield taking over the legislative function there will be a need for an additional PR person at HQ, to work under Steve's supervision. On motion of Mr. Severson, seconded by Mr. Scupp, it was VOTED that the Public Relations Committee Report is accepted. At this point, 3:49 PM, Mr. Quiat returned to his seat.

39. Mr. Stafford, as Chairman, presented the extensive report of the Long Range Planning Committee. The report summarized previous recommendations of the LRPC and actions taken by the ARRL as a result. The report set forth the assumptions made by the Committee, covered demographics, summarized interests of amateurs within the avocation, noted technologies which are emerging, touched on international and spectrum issues, predicted "The Regulatory Scene in the Year 2000" and closed with a vision of Amateur Radio and a summary of ARRL objectives. The LRPC recommends that a planning retreat be scheduled for the Board in the spring of 1994 to mull over these issues, without having to meetLeague, in Annual Meeting assembled, on this day, January 22, 1994, that the
Board does hereby express its deepest appreciation and gratitude to Perry F. Williams, W1UED, for his many contributions to Amateur Radio and the League; and

BE IT FURTHER RESOLVED that the Board extends its warmest personal wishes for a long, enjoyable, and productive retirement. (Applause and standing ovation)

76. On motion of Mr. Mendelsohn, again seconded by the entire group, it was unanimously VOTED that the Board assembled in Annual Meeting at Rocky Hill, Connecticut on this 22nd day of January, 1994, thanks Lisa DeLude, Perry Williams, Rick Palm, Chuck Hutchinson, Steve Mansfield and Mark Wilson for their key support in making this Board Meeting a great success. (Applause).

77. At this point, an opportunity was given for every member of the assembly to offer comments. There being no further business, the Board adjourned sine die at 12:45 PM. (Time in session as a Board 9 hours and 28 minutes: as a Committee of the Whole: 1 hour and 6 minutes; total direct authorizations: $293,441.)

--
Marc B. Grant fax 214-231-3998
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

848. HY-GAIN TELEPHONE NO.?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 00:52:55 UTC
From: lawrence.goodwin@support.com
Message-ID: <9401281652.A1857wk@support.com>
Source record: 271805

N> From: Bob.Albert@f943.n102.z1.fidonet.org (Bob Albert)
N> Newsgroups: rec.radio.amateur.misc
N> Subject: Hy-Gain telephone no.?
N> Date: Tue, 25 Jan 1994 19:39:18 -0800

N> Does anyone have an 800 number for Telex/Hy-Gain? My tribander driven
N> element broke in the earthquake and I want to see if they can supply
N> parts for it.. 73 DE K6DDX

Hiya Bob. I can't find an 800 number, but the customer service number
for antenna parts is (402) 465-7022.

Sorry to hear about the damage. You're not the only one though...one of
my Kenwood 631As bounced around my living room, and took a real beating.
Fortunately, that was the extent of radio related damage here.

73 de Larry, KC6WOG@N6YN.#SOCA.CA.USA.NA
kc6wog@kc6wog.ampr.org
lawrence.goodwin@support.com

849. Re: SuperMorse 4.xx

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 02:06:35 UTC
From: n9ljx@en.ecn.purdue.edu
Message-ID: <CKDCJ0.CBJ@noose.ecn.purdue.edu>
Source record: 271868

In article <mosier.66.0@fagan.uncg.edu> mosier@fagan.uncg.edu (Stephen Mosier) writes:
>Will Turner said that wuarchive.wustl.edu has Supermorse 4.04 in /mirrors/
>msdos/hamradio. But the wuarchives were wiped out last week and that
>directory path no longer exists. Does anyone know of any other source for
>Supermorse 4.xx?
>
>steve
>mosier@fagan.uncg.edu

Try oak.oakland.edu:/pub/msdos/hamradio

BTW - what happened to wuarchive?

--sas

--
Scott Stembaugh - N9LJX internet: n9ljx@ecn.purdue.edu
Operations Supervisor, ADPC phone: 317 494 7946
Purdue University
West Lafayette, IN 47907-1061

850. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 03:10:19 UTC
From: stoll@OCF.Berkeley.EDU
Message-ID: <2ick2r$cof@agate.berkeley.edu>
Source record: 271872

Hi Gang,

When you hear me on 2 Meters, it's on a Ramsey FXT-146.
Assembled by yours truly. Works peachy.

Why? I love to learn about rf and electronics. Can't get
enough of it. I want to smell the solder, touch the
resistors, and bolt down the cabinet. And, oh, the feeling
when you turn it on and it works... aaah.

OK, so maybe I've got lead poisoning, squinty eyes, and
wrenched fingers. Still, I know where the rf is coming from,
how the circuits work, and why that phase lock loop stays put.
Hot ziggity!

I've met John Ramsey -- you might think he's in business to
make money. I know better ... he's in it (like most hams)
for the fun. At a hamfest, I saw his wife give a kit to a
beaming 12 year old kid who asked if he was able to build it.
At his outlet, I watched John gave a half dozen free LEDs to
a guy, saying "Here, figure out something to use these for."
This weekend, I'm building his traffic radar kit; he tells
you how to solder two coffee cans together. "...If you don't
clean the surface, the solder will just roll up into little
balls and laugh at you...".

By Sunday, I'll be measuring the speed of cars zipping in
front of my house. Sure, I could buy a radar set (though I
don't know where), but thanks to Ramsey, I know how the
doppler shift gets mixed down and sent into a frequency
counter. Hell, I soldered that hot carrier diode.

Yes, if you want the highest performance, buy a Japanese
transceiver. You can't go wrong there. And for a bargain,
hunt down some used gear. No complaints from me

But to get a feel for the circuits -- for rf with love -- for
happy electrons ... well, ask me what I'm using when you next
hear me on the air.

73's
Cliff Stoll K7TA

851. Re: CW filters and DSP-9 - morse1.jpg

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 03:19:52 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <CKDFx7.M0u@ve6mgs.ampr.ab.ca>
Source record: 271799

me@next45.wsi.physik.tu-muenchen.de (Matthias Rosenberger) writes:

>According to the CW fiter discussion, I want to
>supply some calcualtions shown in two pictures in following postings
>based on a Fourier analysis of a morse signal of 10 times 'e':
>00000101010101010101010100000

Back to the drawing board, Matthias, 10 `e's is:

000100010001000100010001000100010001000100010001000

Enjoy, Ciao -- Mark

852. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 03:40:55 UTC
From: Ed Ellers <edellers@delphi.com>
Message-ID: <19940128.22405579.edellers@delphi.com>
Source record: 271877

<schmidt@auvax1.adelphi.edu> writes:

>Most every little two-bit local station now has frame synchronizers these days,
>I think the least expensive ones are only a few thousand dollars now. If so,
>their colorburst frequency is set by their local reference, and not the
>network. Also some cable systems use processing which destroys the burst
>integrity. therefore, don't count on this way of calibrating your frequency
>counter....

Dunno about the others, but NBC provides its OWN frame synchronizers to each affiliate as part of their KU-band downlink package. So that's one item down right there.

(P.S. A cable system near Louisville accidentally carried a scrambled ABC net feed on a spare channel one day; I was visiting a friend in that town who has a new TV with a caption decoder, and it turned out that line 21 is *not* affected by the encryption. I was able to get perfectly good captions over a scrambled picture!)

-- Ed Ellers, KD4AWQ

853. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 03:42:43 UTC
From: Ed Ellers <edellers@delphi.com>
Message-ID: <19940128.22424315.edellers@delphi.com>
Source record: 271778

Les Reeves <lreeves@crl.com> writes:

>In other words, what sort of digitization of video is going on in these
>frame synch boxes? As good as D2? Almost D1?

The sampling rate is almost always 14.31818... MHz, or four times subcarrier;
older units used eight bits (same as D-2 and D-3), but newer ones use ten-bit
processing.

-- Ed Ellers, KD4AWQ

854. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 04:43:35 UTC
From: jbiehn@i-link.com
Message-ID: <2icphn$b8g@ilink1.i-link.com>
Source record: 271791
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Jerry Sy (ah301@yfn.ysu.edu) wrote:
: I have pretty much narrowed down my choice to these two 2m ht's.

: I'd like to get comments and opinions from people in the net who
: have actually used both.

: currently, I am leaning towards the dj-162 because of its wide
: receive.

: please email responses if possible.
: thanks in advance.

: jerry
Jerry, I myself have used both and found the DJ-162 all around better in its operations as well as its structure. The HTX-202 has no Mod info and is virtually an unknown radio internally. Maybe time will change that, but meantime technology moves on.

855. Contacts for arranging formal sked with SAREX?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 04:48:51 UTC
From: rcamama@dewey.cc.utexas.edu
Message-ID: <2icprj$2l4@dewey.cc.utexas.edu>
Source record: 271789
Cross-posted to: rec.radio.amateur.misc,sci.space

As the header reads, is there any way I can contact the SAREX (Shuttle Amateur Radio eXperiment) coordinator or anyone else in a significant position within the SAREX program? I am with the UT Amateur Radio Club, and we need to arrange a formal communications schedule [if possible] between ourselves and the astronaut-hams aboard two of the SAREX carrying missions set for this year (one for April [which we are hoping for the most], one for November).

FYI: we are hoping to do this partly out of personal interest, and partly as PR within Austin and central Texas [or as far as the news will reach] for our club and for space exploration and amateur radio as a whole.

Thanx and 73's,

Robert Camama
KB2CLL

856. Re: Ham Radio and More talkshow

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 05:23:48 UTC
From: john@anasazi.com
Message-ID: <1994Jan29.052348.1708@anasazi.com>
Source record: 271922

ginsburg@wellfleet.COM (Scott Ginsburg) writes:

>My local Talk America Radio Network affiliate (1510 in the Boston area) didn't
>run "Ham Radio and More" this past Sunday evening. Did anyone in a different
>part of the country hear the show, or was it QRT nationally?

It was QRT for the first 30 minutes. We had a %^$&*#(engineering screwup
in the studio and were unable to feed audio from Phoenix to the network
uplink and phone board in Boston. We should be on Sunday as usual with
Joe Moel (Mr. T-Hunt) as a guest. Unfortunately we start at 6PM EST
which I think is the same time the Superbowl starts.

John Moore NJ7E
Co-Host of Ham Radio and More
--
John Moore Scottsdale, AZ 85253 USA (602-951-9326) Std Disclaimer Applies!
john@anasazi.com Amateur call:NJ7E Civil Air Patrol:Thunderbird 381
Liberal Press Lexicon Excerpts: [from Wall Street Journal, Jan 21, 1994]
#5 Christian Right: Contemptible people who always try to impose their values
on other Americans. #6 Liberal: Idealistic people who never try to impose
their values on other Americans.

857. FCC Call sign question...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 05:54:30 UTC
From: wolfman@p-cove.UUCP
Message-ID: <JXgwgc1w165w@p-cove.UUCP>
Source record: 271923

I would like to know something.. What does the fcc do when they issue
all the call signs for a certain area?? Do they start over with call
signs that have not been used for a while, or do they just start issue
from another group?

73 de Aaron
KB8PFZ

---

wolfman@p-cove.uucp (Aaron Smith)
Amateur radio station KB8PFZ

858. Question Regarding ITR

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 06:12:40 UTC
From: jade@nwg.nectec.or.TH
Message-ID: <Pine.3.85.9401291340.A26461-0100000@nwg.nectec.or.th>
Source record: 271794

Having heard from one of my friend about the ITR, Internet Talk Radio.
Wonder what they were? Can anyone give me a light on this?

```
+--------+-----------------------------+-----------------------+
| HS1ZEB | EMail:jade@nwg.nectec.or.th | > Jade V. Thaveekij < |
| N3JTV | u3611506@abac.au.ac.th| > CQ Magazine, Staff < |
+--------+-----------------------------+-----------------------+
```

859. Traffic to Vladivostok

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 06:12:49 UTC
From: William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM
Message-ID: <9400287598.AA759823969@smtpgty.anatcp.rockwell.com>
Source record: 271797

I'm re-posting this as it appears my first attempt did not make it.

I have a message from an exchange student who would like to get it sent on to his parents at the Far Eastern State Technical University or Far Eastern State Technological Institute in Vladivostok. Does anyone know either an E-mail or radio path to get me there (I don't know the current state of third party traffic into Russia, is it allowed?) Anyone who could help please reply by E-mail.

Thanks and 73

_____
Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI
(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com
---
Who are you? * I am number 2. * Who is number 1? * You are number 6.
---

860. Weekly Solar Terrestrial Forecast & Review for 28 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 06:26:08 UTC
From: oler@rho.uleth.ca
Message-ID: <9401290626.AA16647@rho.uleth.ca>
Source record: 271811
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

```
--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
January 28 to February 06, 1994

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

---------

SOLAR AND GEOPHYSICAL ACT
-----------------------------------------------------

|10.7 cm|HF Propagation +/- CON|SID AU.BKSR DX| Mag| Aurora |
|SolrFlx|LO MI HI PO SWF %MUF %|ENH LO MI HI LO MI HI %|K Ap|LO MI HI|
--|-------|----------------------|-------------------------|----|--------|
28| 120 | G G P F 30 -10 70| 30 NA NA NA 02 10 25 30|4 18|NV LO MO|
29| 115 | G G F F 30 -05 70| 30 NA NA NA 01 10 20 35|3 12|NV NV MO|
30| 110 | G G P F 30 -10 65| 30 NA NA NA 02 15 25 30|4 15|NV LO MO|
31| 110 | G G F F 30 -05 70| 30 NA NA NA 01 10 20 35|3 12|NV NV MO|
01| 105 |VG G F F 30 00 70| 30 NA NA NA 01 10 15 35|3 12|NV NV LO|
02| 105 |VG G F F 30 00 70| 30 NA NA NA 01 05 10 40|2 10|NV NV LO|
03| 105 |VG G F F 30 +05 65| 30 NA NA NA 02 05 10 40|2 10|NV NV LO|
04| 100 |VG G F F 30 +10 65| 30 NA NA NA 02 05 10 40|2 10|NV NV LO|
05| 100 |VG G F F 30 +10 65| 30 NA NA NA 02 05 10 40|2 10|NV NV LO|
06| 100 |VG G P F 30 +05 65| 30 NA NA NA 02 10 15 40|2 12|NV NV MO|

PEAK PLANETARY 10-DAY GEOMAGNETIC ACT

_____________________________________________________________________________
| EXT
| VERY SEVERE STORM | | | | | | | | | HIGH |
| SEVERE STORM | | | | | | | | | MODERATE |
| MAJOR STORM | | | | | | | | | LOW - MOD. |
| MINOR STORM | | | | | | | | | LOW |
| VERY ACT
| ACT
| UNSETTLED |***|***|***|***|***|** |** |** |** |***| NONE |
| QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
| VERY QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
|-------------------|---|---|---|---|---|---|---|---|---|---|------------|
| Geomagnetic Field |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| Anomaly |
| Conditions | Given in 8-hour UT intervals | Intensity |
|_____________________________________________________________________________|

CONFIDENCE LEVEL: 65%
```

NOTES:
Predicted geomagnetic activity is based heavily on recurrent
phenomena. Transient energetic solar events cannot be predicted reliably over
periods in excess of several days. Hence, there may be some deviations from
the predictions due to the unpredictable transient solar component.

60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACT

```
------------------------------------------------------------
51 | J |
48 | J |
46 | J |
43 | J |
41 | J |
38 | M J |
36 | MM J |
33 | MM J |
31 | MM J |
28 | MM J |
26 | MM J |
23 | MM J A |
20 | AMM J A A AA |
18 | AMM J A AAA AAA AAA AA|
15 | AMM AJ AA AAAA AAAAA AAA AA|
13 | AMM AJ AAU U AAAA AAAAAUAAA AA|
10 | AMM AJ AAU U AAAAU U AAAAAUAAAU AA|
8 | AMMUU AJ U UAAUUUUUUU AAAAU U U AAAAAUAAAU AA|
5 | AMMUUQAJQUUU UAAUUUUUUUUU AAAAUQ UQU AAAAAUAAAUU AA|
3 |QAMMUUQAJQUUUQQUAAUUUUUUUUUQQQQAAAAUQQUQUQQAAAAAUAAAUUUQQQAA|
0 |QAMMUUQAJQUUUQQUAAUUUUUUUUUQQQQAAAAUQQUQUQQAAAAAUAAAUUUQQQAA|
------------------------------------------------------------
```

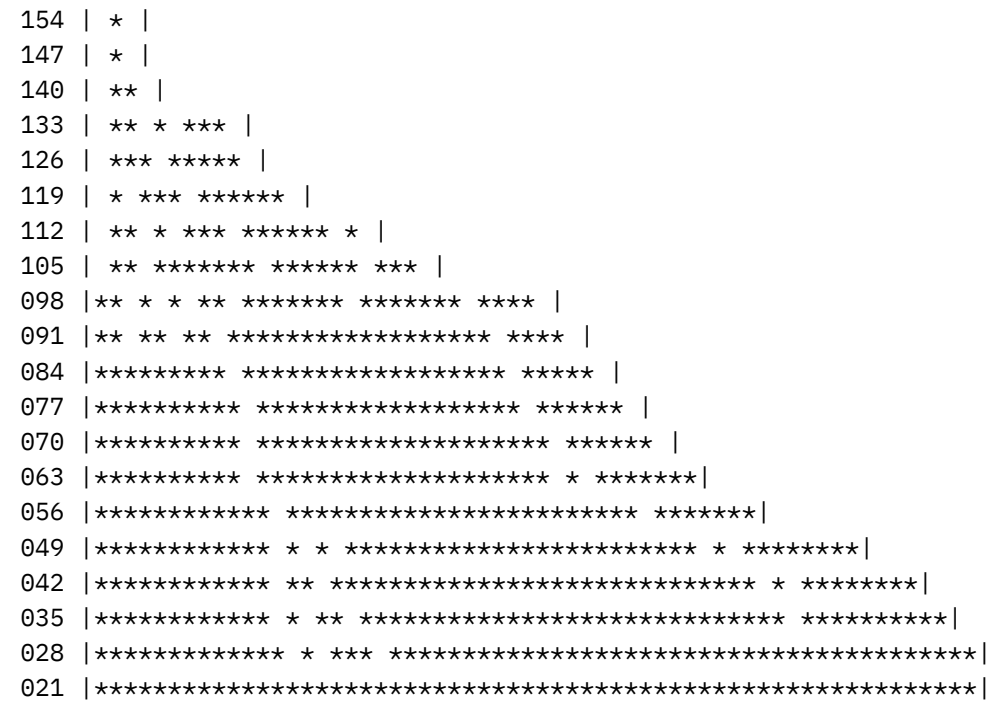
Chart Start Date: Day #334

NOTES:
This graph is determined by plotting the greater of either the planetary
A-index or the Boulder A-index. Graph lines are labelled according
to the severity of the activity which occurred on each day. The left-
hand column represents the associated A-Index for that day.
Q = Quiet, U = Unsettled, A = Active, M = Minor Storm,
J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

```
------------------------------------------------------------
151 | |
148 | * |
145 | ** |
142 | * ** |
139 | * ***** |
136 | * ***** * |
133 | ** ****** * |
130 | ** ****** ** * |
```

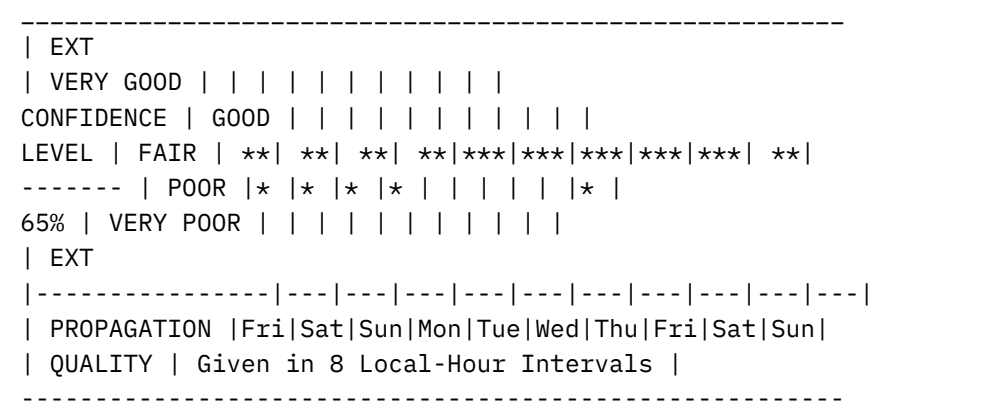
```
127 | ************ *** |
124 | ************** *** |
121 | *************** *** |
118 | ***************** *****|
115 | ****************** *****|
112 | ****************** ******|
109 | * ******************* *******|
106 | * * * ******************* *******|
103 |***** *** ********************* * *********|
100 |********* ********************** ************|
097 |********** *********************** ************|
094 |*********** ************************ *************|
091 |************* ************************** *************|
088 |*************** ****************************************|
085 |****************** ****************************************|
082 |************************************************************|
------------------------------------------------------------
Chart Start: Day #334

GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX
-----------------------------------------------

------------------------------------------------------------
106 | |
105 | **|
104 | ****|
103 | ********|
102 | ********************|
101 | *************************|
100 | *******************************|
099 | ***********************************|
098 | ***********************************************|
097 | ******************************************************|
096 | ********************************************************|
095 |************************************************************|
094 |************************************************************|
------------------------------------------------------------
Chart Start: Day #334

NOTES:
The 10.7 cm solar radio flux is plotted from data reported
by the Penticton Radio Observatory (formerly the ARO from
Ottawa). High solar flux levels denote higher levels of
activity and a greater number of sunspot groups on the Sun.
The 90-day mean solar flux graph is charted from the 90-day
mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS
---------------------------------------------

------------------------------------------------------------
161 | |
```



NOTES:
The graphical chart of sunspot numbers is created from the
daily sunspot number counts as reported by the SESC.

HF RADIO SIGNAL PROPAGATION PREDICTIONS (28 JAN - 06 FEB)

High Latitude Paths


____
| EXT
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD | | | | | | | | | |
LEVEL | FAIR | **| **| **| **|***|***|***|***|***| **|
------- | POOR |* |* |* |* | | | | | |* |
65% | VERY POOR | | | | | | | | | |
| EXT
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |

Middle Latitude Paths

```
| EXT
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------------

Low Latitude Paths

_____________________________________________________
| EXT
| VERY GOOD | | * | | | * | * | * | * | * | * |
CONFIDENCE | GOOD |***|* *|***|***|* *|* *|* *|* *|* *|* *|* *|
LEVEL | FAIR | | | | | | | | | |
------- | POOR | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
| EXT
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------------
NOTES:
NORTHERN HEMISPHERE SOUTHERN HEMISPHERE
High latitudes >= 55 deg. N. | High latitudes >= 55 deg. S.
Middle latitudes >= 40 < 55 deg. N. | Middle latitudes >= 30 < 55 deg. S.
Low latitudes < 40 deg. N. | Low latitudes < 30 deg. S.

POTENTIAL VHF DX PROPAGATION PREDICTIONS (28 JAN - 06 FEB)
INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

HIGH LAT

_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% | * | * | * | * | * | * | * | * | * | * | 60%| | | | | | | | | |
| 80% | | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |-------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | | |
| 80% | | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | | | | | | | 60%| | | | | | | | | |
| 40% | * | * | * | * | * | **| **| **| **| * | 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*| | | | | |*|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

MIDDLE LAT

FORECAST	Given in 8 hour local time intervals										SWF/SID ENHANCEMENT								
CONFIDENCE	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*
20%	***	***	***	***	***	***	***	***	***	***	20%	*	*	*	*	*	*	*	*	*
40%	***	***	***	***	***	***	***	***	***	***	40%	*	*	*	*	*	*	*	*	*
60%	***	***	***	***	***	***	***	***	***	***	60%									
80%											80%									
100%											100%									
100%											100%									
80%											80%									
60%				*	*	*	*	*			60%									
40%	***	***	***	***	***	***	***	***	***	***	40%									
20%	***	***	***	***	***	***	***	***	***	***	20%	*		*						
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*
CHANCE OF VHF DX	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S
VHF DX	Given in 8 hour local time intervals										AURORAL BACKSCATTER									

LOW LAT

FORECAST	Given in 8 hour local time intervals										SWF/SID ENHANCEMENT								
CONFIDENCE	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*
20%	***	***	***	***	***	***	***	***	***	***	20%	*	*	*	*	*	*	*	*	*
40%	***	***	***	***	***	***	***	***	***	***	40%	*	*	*	*	*	*	*	*	*
60%	***	***	***	***	***	***	***	***	***	***	60%									
80%											80%									
100%											100%									
100%											100%									
80%											80%									
60%	*	*	*	*	**	**	**	**	**	**	60%									
40%	***	***	***	***	***	***	***	***	***	***	40%									
20%	***	***	***	***	***	***	***	***	***	***	20%									
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*
CHANCE OF VHF DX	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S
VHF DX	Given in 8 hour local time intervals										AURORAL BACKSCATTER									

NOTES:
These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACT

High Latitude Locations

```
_____________________________________________________
| EXT
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | * | * | * | * | | | | | |
70% | LOW |***|***|***|***|***|***| **| **| **|***|
| NOT
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INT
-----------------------------------------------------
```

Middle Latitude Locations

```
_____________________________________________________
| EXT
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | |
70% | LOW | * | * | * | | | | | | |
| NOT
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INT
-----------------------------------------------------
```

Low Latitude Locations

```
_____________________________________________________
| EXT
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | |
85% | LOW | | | | | | | | | |
| NOT
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INT
-----------------------------------------------------
```

NOTE:
Version 2.00b of our Professional Dynamic Auroral Oval Simulation Software Package is now available. This professional software is particularly valuable to radio communicators, aurora photographers, educators, and astronomers. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "COler@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

** End of Report **

861. Coaxial cable

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 12:08:42 UTC
From: ykchoy@ee.cuhk.hk
Message-ID: <CKE4EJ.3Fr@eng_ser1.ie.cuhk.hk>
Source record: 271842

Hello,

I'd like to have some good quality coaxial cable. Can you give
me any suggestions if you know?

I am making a project on global position system. Previously, I used
a coaxial cable of 10 M to connect the antenna and the GPS together.
It worked normally. However, when I change the cable to be 80 M in
length, I can't get any signals. I suspect that the signal loss in
such a long cable is very great. So I want to buy a cable of
better quality to reduce the loss.

Now, I am using a 50 ohm cable, RG-58 A/U!

Thanks!

--
Frankie Choy

Pager: 1103301 A/C 1681

862. call book typo... sorry

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 12:12:05 UTC
From: sconahan@ccantares.wcupa.EDU
Message-ID: <Pine.3.07.9401290705.A16225-8100000@ccantares.wcupa.edu>
Source record: 271810

I made a mistake on my end here, BAD typo! The correct address should be:

cs.buffalo.edu 2000 or 128.205.32.2

again, the word 'callsign' was not needed here. sorry for the trouble.

73 to all - shawn
N3CGT

863. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 14:30:04 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Jan29.143004.21572@ke4zv.atl.ga.us>
Source record: 271813

In article <19940128.22405579.edellers@delphi.com> Ed Ellers <edellers@delphi.com> writes:
><schmidt@auvax1.adelphi.edu> writes:
>
>>Most every little two-bit local station now has frame synchronizers these days
>>I think the least expensive ones are only a few thousand dollars now. If so,
>>their colorburst frequency is set by their local reference, and not the
>>network. Also some cable systems use processing which destroys the burst
>>integrity. therefore, don't count on this way of calibrating your frequency
>>counter....
>
>Dunno about the others, but NBC provides its OWN frame synchronizers to each
>affiliate as part of their KU-band downlink package. So that's one item down
>right there.

If this wasn't clear, the NBC provided frame sync uses the local station's generator as it's reference. However, there is one NBC provided frame sync and 4 NBC provided receivers, so only one of the downlinks can be using the frame sync at a time. The local station engineers have control of that via their Fluke touchscreen terminal. At times they may wish to use the frame sync for their own purposes while airing network "raw", or through one of their other in house frame syncs, or from one of the other receiver channels. For example WXIA-TV delay broadcasts _Friday Night_ an hour later than the East coast feed on K2-1. So they use the 2E receiver to pick up the Mountain feed on K2-9 and air that through one of their own in house frame syncs while leaving the NBC frame sync on the 1R receiver from which they are taping another program for a different delayed broadcast.

Worse, some stations use a frame sync on their output line as a final TBC and proc amp. So everything transmitted is referenced to whatever timing source drives that frame sync's reference input. This is sometimes done at the transmitter site using a local sync generator. A good reason to do this is to protect the transmitter from ever being fed a signal with no sync. (That makes transmitters very unhappy since it sets their duty cycle to 100% CW. A frame sync always outputs sync, even if it has no input signal.) A Grass Valley 900 proc amp can do the same thing, but as has been noted, frame syncs are so cheap now that proc amps are obsolete.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

864. Re: CW filters and DSP-9 - morse1.jpg

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 15:00:48 UTC
From: me@next45.wsi.physik.tu-muenchen.de
Message-ID: <1994Jan29.150048.6632@news.lrz-muenchen.de>
Source record: 271812

In article <CKDFx7.M0u@ve6mgs.ampr.ab.ca> mark@ve6mgs.ampr.ab.ca (Mark Gregory Salyzyn) writes:
> me@next45.wsi.physik.tu-muenchen.de (Matthias Rosenberger) writes:
>
> >According to the CW fiter discussion, I want to
> >supply some calcualtions shown in two pictures in following postings
> >based on a Fourier analysis of a morse signal of 10 times 'e':
> >00000101010101010101010100000
>
> Back to the drawing board, Matthias, 10 `e's is:
>
> 00010001000100010001000100010001000100010001000

Ooops! You're right - I was wrong, but perhaps there will remain some information of interest, however :^)

Matthias
--
Matthias Rosenberger, Walter Schottky Institut, TU Muenchen
email: mrosen@next45.wsi.physik.tu-muenchen.de (NeXTmail wellcome)

865. Re: Code tapes, looking for.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 15:08:53 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.759856133@BIX.com>
Source record: 271814

mmollere@triton.uwf.edu (Sluggo) writes:

>Am looking for code tapes in Pensacola, FL. If anyone knows where
>where I can get same, please advise. Also, is there code on
>instruction on CD? Thanx.

I heartily recommend the ARRL tapes. They really work. They have tapes for anyone from the rankest beginner (like I was!) to those working on their Extra licenses. Each tape progresses slowly, adding a new character at a time (on the "Your Introduction to Morse Code" tape) or gradually increasing the speed on the other tapes. Except for one tape offered with standard timing, everything is done with Farnsworth timing, meaning the characters are sent at 18 wpm but spaced to give an overall lower speed.

I started working with them around the end of December, spending a few minutes here and few minutes there. Not what you'd call a rigorous schedule. My starting point was knowing almost nothing. Already, just a month later, I'm finding I can copy quite solidly up to around 8 wpm or so (I'm amazed to be able to say 5 wpm actually sounds SLOW now!) and do pretty well (say 80% or so) copying up to around 10 to 13 wpm. And because the tapes have drilled me to recognize 18 wpm character timings, I find I can even listen to the W1AW code bulletins (at 18 wpm) and even recognize the characters as they go by (though I can't think fast enough to translate that to writing them down or recognizing what the words are at that rate.)

I'll be taking my Novice & Technician exams on the 7th; I'm now _totally_ comfortable knowing I can walk in and do it.

I really didn't expect to make anything like this sort of progress and I do attribute it to the ARRL tapes. I should mention I did also buy the AMECO tapes (to try them also) and they were useless IMHO. So there really is a difference.

You can get the ARRL tapes direct from ARRL (look in QST) or from most ham stores like Ham Radio Outlet.

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715

866. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 17:03:15 UTC
From: clifto@indep1.chi.il.us
Message-ID: <2682@indep1.chi.il.us>
Source record: 271817

In article <19940128.22424315.edellers@delphi.com> edellers@delphi.com (Ed Ellers) writes:
>The sampling rate is almost always 14.31818... MHz, or four times subcarrier;
>older units used eight bits (same as D-2 and D-3), but newer ones use ten-bit
>processing.

While we're on the subject, it's worthy of note that (apparently by FCC
fiat):

* the color subcarrier is 3,579,545 Hz +- 10 Hz
* the horizontal scan frequency is 2/455 times the chroma subcarrier freq.
* the vertical scan freq. is 2/525 times the horizontal scan freq.

So, 14,318,180 Hz makes a fine frequency reference for generating sync
as well as a neat sampling rate for frame stores.

Don't know if this has been said before, but I haven't seen it (recent
news troubles here... meeee, screw up the permissions? Nawwww).

--
+---+
| Cliff Sharp | clifto@indep1.chi.il.us |
| WA9PDM | |
+---+

867. 1/94 ARRL Board Minutes (Repost, Corrected - Long)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 17:43:09 UTC
From: marcbg@netcom.com
Message-ID: <$arlm194a.1994@ampr.org>
Source record: 271714
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

[Note: Previous posting was missing items 27-39]

1994 Annual Meeting,
Board of Directors
The American Radio Relay League
January 21-22, 1994
Summary Agenda

1. Roll Call
2. Moment of Silence
3. Consideration of the Agenda for the meeting
4. Approval of the Minutes of the 1993 Second Meeting
5. Reports by the Officers
6. Election of Officers
7. Election of the Executive Committee
8. Election of ARRL Foundation Directors
9. Receive reports and consider recommendations of the committees
10. Report of the Host Director, 1994 ARRL National Convention
11. Appointment of Committees
12. Directors' motions
13. Authorizations for certain administrative expenses

1. Pursuant to due notice, the Board of Directors of the American Radio Relay League, Inc., met in annual session at the Hartford Marriott Hotel, Rocky Hill, CT on Friday, January 21, 1994. The meeting was called to order at 8:30 AM EST with President George S. Wilson III, W4OYI, in the Chair and the following directors present:

* Kay C. Craigie, WT3P, Atlantic Division
Edmond A. Metzger, W9PRN, Central Division
Tod Olson, K0TO, Dakota Division
Joel M. Harrison, WB5IGF, Delta Division
Allan L. Severson, AB8P, Great Lakes Division
Stephen A. Mendelsohn, WA2DHF, Hudson Division
Lew Gordon, K4VX, Midwest Division
William Burden, WB1BRE, New England Division
Mary Lewis, W7QGP, Northwestern Division
Brad Wyatt, K6WR, Pacific Division
John C. Kanode, N4MM, Roanoke Division
Marshall Quiat, AG0X, Rocky Mountain Division
Frank M. Butler, W4RH, Southeastern Division
Fried Heyn, WA6WZO, Southwestern Division

Tom Comstock, N5TC, West Gulf Division

*Vice Director, in the seat for Hugh A. Turnbull, W3ABC, Director.

Also present as members of the Board without vote were Rodney J. Stafford, KB6ZV, First Vice President; Jay A. Holladay, W6EJJ, Vice President; Tom Frenaye, K1KI, Vice President; Larry E. Price, W4RA, International Affairs Vice President; Treasurer James McCobb, Jr., K1LLU; and David Sumner, K1ZZ, Executive Vice President. Chief Financial Officer Barry J. Shelley was present in his capacity as an officer of the corporation.
Also in attendance at the invitation of the Board as observers were the following Vice Directors: Howard Huntington, K9KM, Central Division; Hans Brakob, K0HB, Dakota Division; Rick Roderick, K5UR, Delta Division; George E. Race, WB8BGY, Great Lakes Division; Paul Vydareny, WB2VUK, Hudson Division; Bruce Frahm, K0BJ, Midwest Division; Warren Rothberg, WB1HBB, New England Division; Mary Lou Brown, NM7N, Northwestern Division; Jim Maxwell, W6CF, Pacific Division; C. Dennis Bodson, W4PWF, Roanoke Division; Bob Scupp, WB5YYX, Rocky Mountain Division; Evelyn Gauzens, W4WYR, Southeastern Division; and Art Goddard W6XD, Southwestern Division. There were also present General Counsel Christopher D. Imlay, N3AKD; Past Director Howard Mark, W0OZC; Publications Manager Mark J. Wilson, AA2Z; Membership Services Manager Charles L. Hutchinson, K8CH; Field Services Manager Richard K. Palm, K1CE; Technical Relations Manager Paul Rinaldo, W4RI; Public Information Manager Steve Mansfield, N1MZA; and Perry Williams, W1UED, Washington Area Coordinator.

2. The assembly observed a moment of silence in recollection of Radio Amateurs who have passed away since the previous Board meeting, especially John A. Anastas, KJ4EK, Vern Chambers, W1JEQ, Creed Chorpening, W4TZ, Lloyd Colvin, W6KG, Bill Harvey, WA6RXI, Irv Emig, W6GC, Clifford L. Kitts, KD4TZ, Glenn Koropp, W6YFW, Ted Heithecker, W5EJ, Donald Johnson, W6QIE, Sidney T. Kitrell, W0LYM, Tom McMullen, W1SL, Art Milne, G2MI, Jane W. Rhodes, N4PNL, and Jack Ryder, K4IHX.

3. The Chair introduced Past Vice President and Dakota Director Tod Olson, K0TO, returning to the Board after an absence; Mr. Olson introduced his new Vice Director, Hans Brakob, K0HB. The Chair introduced new Midwest Director Lew Gordon, K4VX; Mr. Gordon introduced his new Vice Direcor Bruce Frahm, K0BJ. The Chair introduced Pacific Director Brad Wyatt, K6WR, moving up from the Vice Director seat; Mr. Wyatt introduced his new Vice Director, Jim Maxwell, W6CF. Apologies for absence were offered for Atlantic Director Hugh Turnbull, W3ABC and West Gulf Division Vice Director Sam Sitton, KV5X, for each because of illness in the family.

4. On motion of Mr. Mendelsohn, seconded by Mr. Kanode, the agenda was ADOPTED as presented.

5. On motion of Mr. Harrison, seconded by Mr. Butler, the minutes of the 1993 Second Meeting were ADOPTED as presented.

6. At this point the Officers presented their annual reports and commented briefly on their recent activities. President Wilson's comprehensive report covered, inter alia, ARRL readiness for electronic filing of license data as soon as the FCC is ready; the League's aid to AMSAT for Phase 3D fundraising; the amateur- radio enforcement activities of FCC in 1993, usually with assistance of the Amateur Auxiliary; the negotiated amendment of FCC Rule 97.113, putting common sense into communications for public events; another rules-change bringing Novice exams into the VE system (without charge so far as the ARRL-VEC is concerned); FCC preemption of local ordinances inhibiting ham use of transceivers that could incidentally receive public service frequencies; much effort, behind the scenes and publicly, to restore club station licensing and provide for choice of call signs by amateurs; ARRL opposition to a "Quiet Zone" for all of Puerto Rico; the League's proposal for additional callsign blocks in Puerto Rico, Hawaii and Alaska; continued efforts to reach compromise rulemaking for autoforwarding of digital messages on HF; the rulemaking docket clarifying responsibility for automatic transmission of data messages as "Originator and First Forwarder"; efforts to assure that Government plans for wind profilers at 449 MHz would accommodate continued amateur use of the band; ARRL defense of the 902-928 MHz band as against an FCC rulemaking to expand the "Automatic Vehicle Monitoring" service there; the current rulemaking to provide amateurs with a secondary allocation from 219-220 MHz under certain restrictions; the FCC idea of "instant licenses" with self-assigned call signs for first-time licensees and ARRL's counter proposal that electronic filing is better; and finally, ARRL's legislative success in staving off administrative fees for amateurs, providing the basis for vanity call signs, adding protective phrases to the frequency give-back and auction bills and introduction of S.J.Res.90, H.J.Res.199 and H.R.2623.

7. In his report, First Vice President Stafford focused strongly on the growth of the Amateur Radio Service, particularly in Technician Class licensees, and the need for ARRL activities to attract this group. Mr. Stafford also reported on his service on the Long Range Planning Committee (LRPC), of which he is chairman, the Industry Advisory Council and the Administration and Finance Committee; and his attendance at the Region 1 Conference of the International Amateur Radio Union (IARU) in Belgium. Vice President Holladay covered his work with the LRPC effort including his support for the concept of a retreat where the League leadership can consider the issues raised by the LRPC; as a member of the Volunteer Resources Committee (VRC); his interest in local antenna cases, focused on obtaining a more reasonable set of regulations from the County of Los Angeles; and as Board liaison to the Shuttle Amateur Radio Experiment (SAREX) Working Group. The tenth year of Amateur Radio operation from the Space Shuttle was highlighted by four SAREX missions and a great deal of favorable publicity for Amateur Radio. Next, Vice President Frenaye marked his membership on the Membership Services and Computer Committees, the ARRL Foundation Board, and the LRPC, especially focussing on the latter group's studies of delivering services to both HF and VHF communities. He remarked on the generosity of the League over the years

in providing services to members and non-members alike; it may be time for review of our services to define which should continue open and which should be restricted to members. International Affairs Vice President Price summarized his travel as IARU Secretary to the International Red Cross, Geneva; IARU Region 2 Executive Committee meeting, Guayaquil, and government offices in Quito, both Ecuador; IARU Region 1 meeting, DeHaan and IARU Administrative Council meeting, Brussels, both Belgium; and the Radiocommunication Assembly of the International Telecommunication Union (ITU) and the ITU's first World Radiocommunication Conference (WRC-93) replacing the old WARCs, both Geneva. Travel under ARRL's banner included the last meeting of the Canadian Radio Relay League and the first of the Radio Amateurs of/du Canada in Toronto; and hamfests/conventions at Friedrichshafen, Germany, Miami, Orlando, Little Rock, Dayton, Manchester NH, and Memphis, and the ARRL National Convention in Huntsville, AL. He also participated in meetings of the Ad Hoc Committee on ARRL National Conventions, the Executive Committee, and the LRPC. Treasurer McCobb's report analyzed the performance of the League's investment portfolio and the market in general. The $8.5 million (market value, $9.1 million, an excess of 7% over book value) portfolio is invested 39% in stocks, 61% in bonds, yielding annualized dividends and interest of $509,500 in the aggregate. Sales from the portfolio were limited, and brought in a realized net gain of $72,000. In the marketplace as a whole, bond rates fell during the year, and remain low but somewhat volatile. The stock market rose during 1993, with the Dow Jones Industrial index at 3754, up 453 points or 14% over the end of 1992.

8. Executive Vice President Sumner's report opened with a nutshell characterization of the year: relative calm, moderate membership growth, modest success in new ventures, and a gradually emerging picture of what Amateur Radio will be like around the turn of the century and what kind of ARRL will be needed to serve it. An important tool in that process is the Readex survey of 1992. The staff Survey Task Force focused sharply on two areas: studies of ten potential projects aimed at recruiting and retaining members especially from the ranks of new hams, and response to two trends having significant implications for the ARRL -- (1) a growing majority of radio amateurs whose interest in Amateur Radio is locally focused, and (2) a growing diversity of interest groups, each competing for scarce resources from the ARRL. The LRPC has recommended that the Board hold a planning retreat later this spring to discuss such issues without the harness of a business-driven agenda. Turning to Washington Office activities, Paul Rinaldo chaired a meeting of an ITU Task Group in Geneva, on wind profiler radars; Director Butler also attended the meeting, on behalf of the IARU. The Geneva meeting produced a report to WRC-97, the World Radiocommunication Conference at which wind profiler radar allocations will be considered. Rinaldo also chaired monthly US preparatory meetings, primarily of government agencies having an interest in wind profiler radars, and other monthly meetings with the National Telecommunications and Information Administration (NTIA) on coordination of wind profiler radar sites with the ARRL to avoid interference problems with repeaters at 448-450 MHz. Rinaldo also participated in US

preparatory meetings for the ITU Voluntary Group of Experts charged with simplifying the Radio Regulations. International meetings of the VGE in Geneva are covered by Wojciech Nietyksza, SP5FM, on behalf of IARU. The final VGE meeting will be held in late February/early March 1994. Thus far, we have been able to head off any recommendations that could adversely affect the amateur services. International Affairs Vice President Price and Rinaldo attended WRC-93 as members of the IARU and US delegations respectively. The sole purpose of this WRC was to set the agendas for WRCs 95 and 97. Rinaldo and two IARU Region 2 officials also attended meetings of the Interamerican Telecommunication Council (CITEL), the regional telecommunications organization for Region 2. The CITEL approved a resolution concerning the creation of an International Amateur Radio Permit (IARP). The next step is to design a permit and necessary procedures, and to present it at the next CITEL committee meeting in 1994. Meanwhile, some progress, albeit slow, is being made toward the US becoming a signatory to the common license agreement adopted by the European Conference of Postal and Telecommunications Administrations (CEPT) which would permit US amateurs to operate in CEPT countries (and vice versa) without the need for issuance of a temporary license. Turning now to US matters, the ARRL documented amateur UHF band usage and other technical information as part of NTIA's study of frequency bands the government might "give back" to the private sector. An ARRL paper on progress in amateur packet radio was presented at a Federal Emergency Management Administration (FEMA) conference in August. In other matters related to HF digital codes, a draft protocol specification on Pactor has been received from the German amateur radio society. The president of HAL Communications was also requested to provide a protocol specification for CLOVER. Published specifications of Pactor and CLOVER could be incorporated by reference in Part 97 as technical amendments without the need for rulemaking. Moving on to public relations in Amateur Radio, 1993 was another successful year. Best news media coverage was for SAREX aboard October's STS-58 shuttle mission. Other big Amateur Radio stories included the "Blizzard of 93," Amateur Radio communication out of Bosnia, the so-called "Death of CW" stories originating from the Coast Guard's decision to drop CW on medium wave, and the Indian earthquake. The Los Angeles fires generated less coverage than expected. The Atlanta Constitution ran a series on getting involved in Amateur Radio. Two video public service announcements were completed in 1993 featuring astronaut Linda Godwin, N5RAX and Nobel Prize winning Physicist Joe Taylor, K1JT. The spots will be distributed nationally early in 1994; radio spots will be made from the sound tracks. Moving to the ARRL Publications Group, the Educational Activities Department handles an average 1,182 calls per month from prospects and new hams on its 1-800 line. The calls not only are helpful to the new and prospective hams, they also provide a sales opportunity for educational publications and videos, with average volume about $15,000 per month. The department supported a record four successful Shuttle Amateur Radio Experiment (SAREX) missions. Highlights include: an exchange between orbiting STS-57 astronauts and President Clinton about SAREX; a very high number of QSOs on STS-58 (over 500 QSLs received); and lesson plans enhanced by NASA lithographs sent to over 450

schools or volunteers. The EAD supported the Boy Scout National Jamboree, and the Jamboree-on-the-Air. Our ad in Boys Life magazine culled 400 young callers who were sent information. The EAD sponsored a booth at the Girl Scout Council National Convention, and produced a national Girl Scout brochure. New Prospect mailings averaged 1000 per month. The growth of licensed youth under age 21 continues, partly due to EAD activities. The EAD recently surveyed its registered instructors: about 25% (508) responded. They teach 864 classes per year, with 7,400 students in their last classes. In 1993, 6,891 students passed their Amateur Radio exams. A similar survey of educators who use ham radio in the classroom got 213 responses reporting 1,629 students in their licensing classes. Some 580 students passed Amateur Radio exams in 1993. Through SAREX and other demonstrations, 11,863 students were exposed to Amateur Radio in 1993. Average requests the EAD has fulfilled per month: 60 instructor packages, 40 school teacher packages, 50 sets of material for mall or fair displays and 30 sets of materials for school, Scout or youth-group demonstrations. At ham conventions in the last half of 1993, EAD sponsored six educator forums and workshops, and two youth forums, and supported five educational forums put on by volunteers. Articles describing these programs were printed in the 1993 edition of Proceedings of the ARRL National Educational Workshop. The EAD sponsored another all-day DSP workshop (taught by Jon Bloom, KE3Z) at the Southwestern Division Convention. Turning to the QST Editorial Branch, Al Brogdon, K3KMO, in October joined the staff as Managing Editor. "New Ham Companion" continues to draw praise from new hams and long-time members alike. Strong advertising revenues--and thus, hefty issues--continue, and we've been able to fill the editorial pages with a variety of interesting and useful material. We have made changes and improvements to QEX, now 32 pages per issue, and we are finalizing plans to upgrade the mailing to Second Class to improve service. Trey Garlough, WN4KKN, took the helm as National Contest Journal (NCJ) editor with the August/September issue. "Hampass" exam review software for the Novice/Technician class exams will be offered for sale in DOS and Windows versions. The Technician Class Exam Video Course, produced in conjunction with King Schools, sold more than 1000 copies through December. Customer feedback continues to be overwhelmingly positive. The Laboratory has improved the Technical Information Service (TIS), using new information packages to efficiently answer common technical questions. During 1993, the Lab staff received about 5000 TIS questions by phone, mail and electronic mail. The ARRL Automated Electronic Mail server also filled 38,000 requests electronically. Product Review testing continues to increase. During the second half of the year 16 transceivers (HF and VHF), 2 receivers and 9 miscellaneous items were tested. In the area of Membership Services, the DXCC backlog went away in mid-June; DXCC staff has been returning applications in less than three weeks, though DXCC 1993 work load was up 14% over 1992. Reaction to the new ARRL Friendship Award has been universally favorable. Start date for this award was November 1. By mid-December, we had received 200 applications at HQ and served 450 other applicants through 36 different clubs. The flow of members' cards into the QSL service continues to decline, 18% below the number shipped in 1993, a clear

indication of the continuing downward trend in operating conditions. Membership satisfaction remains high, and we continue to turn cards around in one week. W1AW is now using phased Yagis for 20-meter bulletins and code practice. Turning to the Field Services Department, the first "New Section Manager Training and Motivational Workshop" was held August 6-8, in Denver. The workshop introduced the new Section Managers to the League's organizational structure and functions, management techniques, and, especially, an understanding of the importance of the SM's role in the organization and in Amateur Radio at large. The final section of the report dealt with the volunteer examining program. The ARRL/VEC share of the exam load for the first nine months of 1993 is 55.5%. Examination activity YTD in the period lags 1992 activity by 4.3% (93,322 elements in YTD '93 versus 97,549 for YTD '92). ARRL VE ranks continue to grow, with 20,030 examiners compared to 17,045 as of November 26, 1992). Of ARRL VEs, 15,786 hold the Extra class; 3,932 hold the Advanced class; and 312 hold General class license VE credentials. Examination irregularities in the Los Angeles area have been an area of extra focus for the VEC Department for the past several months with suspension of accreditations for 17 ARRL VEs. Four tests (with 69 applicants who earned element credit toward a new license or upgrade) have been invalidated. Examination records are in the FCC's hands at their request. The VEC Department is prepared to go "on line" as soon as the FCC implements electronic filing of Form 610 license applications, some time in 1994. The FCC plans to put a new 610 form into use in 1994 when the FCC's new computer software (with its new data entry screens) goes on line for the amateur service. A solicitation was made to nearly 1500 Alaskan licensees in September. To date, 52 persons have responded expressing interest in becoming VEs. A new General class question pool was released on November 29, 1993 for July 1, 1994 implementation into exams.

9. Mr. Shelley presented his report as Chief Financial Officer. The past twelve months have been busy with much accomplished in the past year in the Business Services Group as we began to adapt our processes to new technology and changing market circumstances. Financial results for 1993, from all indications, will exceed our projections for excess of revenues over expenses by a significant margin. This result was achieved primarily through better than expected results in the areas of dues and sales of advertising, despite the fact that publication sales will be below our original projections for the year across all our major book categories. Membership remained strong and again grew slightly. The New Ham Companion promotional piece debuted early in the year and proved successful almost immediately. This piece was also a hit with advertisers and we were able to defray a significant portion of the costs of the promotion through the revenues received. Advertising revenues also grew in 1993 over the prior year despite a rate increase on QST advertising. The New Ham Companion promotional piece mentioned above provided a new source of revenues which also added to the total. Generally, expenses look to be at the level we had planned when we laid out the 1993 budgets. Postage costs were slightly higher than anticipated across the board as the USPS and Congress are targeting non-profit mailers for new rate increases. This will be a

continuing source of concern in 1994 and beyond. The Information Services Department centered on improving the technology we use at HQ, such as helping the DXCC Branch resolve the processing backlog. Enhancements to the original DXCC software were developed that aided in streamlining the actual processing steps. A second item in the area of technology was the staff work done to support the newly created Ad Hoc Computer Advisory Committee. A significant amount of time was spent detailing the uses of the computer at HQ and providing the Committee with information on our existing configurations. The League's presence at the Dayton Hamvention was expanded; our newly designed and larger booth space drew favorable comments. The report concluded with appreciation for the work done by the whole HQ staff in meeting ARRL goals.

10. Mr. Imlay presented the report of the General Counsel, covering spectrum allocation matters, FCC regulatory proceedings, pending petitions at FCC, antenna and radio frequency interference litigation, and other legal matters.

11. Mr. Metzger, as President, presented the report of the ARRL Foundation, Inc. Contributions during 1993 increased our assets to a total of $607,907. Scholarships and grants of $25,672 were dispensed during 1993. Two new scholarship funds were established, the Fred R. McDaniel Memorial Scholarship by Dr. Herman R. Muns, W5UKM and his wife Sandra Muns, KB5WHK, and the Six Meter Club of Chicago, a perpetual scholarship to benefit Illinois and other Central Division students. The Foundation has received many requests for the Simple Will Kit; these can be received from Foundation Secretary Mary E. Carcia, N7IAL at ARRL HQ. This year, the Foundation is celebrating its 20th anniversary. Its officers and directors for 1993 were: Edmond A. Metzger, W9PRN, President; Tom Frenaye, K1KI, Vice President; Roger W. Franke, K9AYK, Treasurer; Directors John C. Kanode, N4MM; Eugene Hastings, W1VRK; Dick Eilers, W0YZV; Frank M. Butler, Jr., W4RH; Bill McGrannahan, K0ORB; and Tom Comstock, N5TC. Other officers were President Emeritus Robert York Chapman W1QV and Secretary Mary E. Carcia, N7IAL.

12. The Chair noted the absence of Radio Amateurs of Canada President J. Farrell Hopwood, VE7RD, who had advised that he would be unable to attend.

13. At this point, the Chair opened nominations for the office of President. Mr. Comstock nominated Mr. Wilson. On motion of Mr. Mendelsohn, seconded by Mr. Quiat, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. Wilson elected as President. (Applause)

14. The Chair opened nominations for the office of First Vice President. Mr. Quiat nominated Mr. Stafford. On motion of Mr. Mendelsohn, seconded by Mrs. Lewis, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. Stafford elected as First Vice President. (Applause)

15. The Chair opened nominations for the office of an additional vice president. Mr. Comstock nominated Mr. Holladay. Mr. Olson nominated Mr. Mark. Mr. Kanode nominated Mr. Turnbull. On motion of Mr. Mendelsohn,

seconded by Mr. Harrison, it was VOTED that nominations are closed. The Chair appointed Mrs. Brown, Mr. Vydareny, and Mr. Race as Tellers. The Tellers found 9 votes for Mr. Holladay, 5 votes for Mr. Mark and 1 vote for Mr. Turnbull. Whereupon, the Chair declared Mr. Holladay elected as a vice president. (Applause)

16. The Chair opened nominations for the office of an additional vice president. Mr. Kanode nominated Mr. Turnbull. Mr. Harrison nominated Mr. Frenaye. On motion of Mr. Comstock, seconded by Mr. Quiat, it was VOTED that nominations are closed. The Tellers found 13 votes for Mr. Frenaye, and 2 votes for Mr. Turnbull. Whereupon, the Chair declared Mr. Frenaye elected as a vice president. (Applause)

17. The Board was in recess from 10:06 to 10:30 AM.

18. The Chair opened nominations for the office of International Affairs Vice President. Mr. Olson nominated Mr. Price. On motion of Mr. Burden, seconded by Mr. Kanode, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. Price elected as International Affairs Vice President. (Applause.)

19. The Chair opened nominations for the office of Secretary. Mr. Kanode nominated Mr. Sumner. On motion of Mr. Severson, seconded by Mr. Mendelsohn, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. Sumner elected as Secretary. (Applause)

20. The Chair opened nominations for the office of Treasurer. Mr. Severson nominated Mr. McCobb. On motion of Mr. Quiat, seconded by Mr. Harrison, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. McCobb elected as Treasurer. (Applause)

21. The Chair opened nominations for the office of Executive Vice President. Mr. Butler nominated Mr. Sumner. On motion of Mr.Harrison, seconded by Mr. Severson, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. Sumner elected as Executive Vice President. (Applause)

22. The Chair opened nominations for the office of Chief Financial Officer. Mr. Severson nominated Mr. Shelley. On motion of Mr. Kanode, seconded by Mr. Metzger, it was VOTED that nominations are closed. Whereupon, the Chair declared Mr. Shelley elected as Cheif Financial Officer. (Applause)

23. The Chair opened nominations for Director members of the Executive Committee for one-year terms. Mr. Kanode nominated Mr. Severson. Mr. Quiat nominated Mr. Butler. Mr. Butler nominated Mr. Quiat. Mr. Harrison nominated Mr. Mendelsohn. Mr. Mendelsohn nominated Mr. Harrison. On motion of Mr. Olson, seconded by Mr. Burden, it was VOTED that nominations are closed. The Tellers found that Messrs. Harrison, Mendelsohn. and Quiat were elected on the first ballot, and Mr. Severson on the second ballot. (Applause)

24. The Chair opened nominations for Directors of the ARRL Foundation. Mr. Metzger nominated the slate of Mr. Frenaye, Roger W. Franke, K9AYK and Mr. Comstock for three year terms, and Mr. Quiat for a two year term. On motion of Mr. Mendelsohn, seconded by Mrs. Lewis, it was VOTED that nominations are closed. Whereupon, the Chair declared Messrs. Frenaye, Franke, Comstock and Quiat elected as Directors of the ARRL Foundation. (Applause.) During the course of the above elections, Mr. McCobb left the meeting because of a business commitment.

25. Mr. Severson, as Chairman, presented the report of the Administration and Finance Committee. The Committee held three meetings since the Second Meeting of the Board in July as detailed in Minutes which have been distributed. Much time was devoted to the report of the Computer Committee on information services at HQ, and to the 1994-1995 plan which will be presented to the Board for adoption later in the meeting. On his motion, seconded by Mr. Burden, it was VOTED that the 1993 budget for the Midwest Division be amended to $8,888; an increase of $1,888. On his further motion, seconded by Mr. Comstock, it was VOTED that the 1993 budget for the Delta Division be amended to $13,053; an increase of $3,553.

26. Mr. Kanode, as Chairman, presented the report of the Membership Services Committee. This Committee also had three meetings since the July Board meeting. Mr. Kanode called attention to three items. The success of the new Official Family Operating Event will depend on the "Official Family" and the Field Organization getting on the air to operate in the event, and on QSLing with the Official Family cards. A new DXCC fee schedule appeared in the December issue of QST. Further expansion of the DXCC Field Checking program should wait until the new DXCC computer system is in place. Similarly, additional forms of DXCC should also wait until the computer upgrades are on line.

27. Mr. Butler, as vice chairman, presented the report of the Volunteer Resources Committee. VRC held two meetings in the period, and Minutes have been issued. Chairman McConnell highlighted several items in the report. National Exam Day for 1993 was regarded as a success, and the Committee recommended a continuation. Accordingly, two such days have been scheduled for 1994, in May and October. The task of recruiting additional volunteer examiners for Alaska continues. Terms of reference for the ARRL education awards have been revised with three awards for 1994: the Herb S. Brier Instructor of the Year, the ARRL Professional Instructor of the Year, and the ARRL Professional Educator of the Year. A list of materials available to members has been compiled. The first Section Manager Motivation and Training seminar was well received; the Committee recommended its continuation. The Committee will offer two motions later in the meeting.

28. Mr. Metzger, as Chairman, presented the report of the Election Committee. Ballots stored at the auditing firm of KPMG Peat Marwick were delivered by van on Election Day November 19, 1993 accompanied by a member of the Committee and of KPMG Peat Marwick staff. Authorized personnel counted the ballots for the various divisions. The procedures followed,

personnel utilized and results are detailed in papers attached to the report. During the course of the above, at 11:31 AM, Mr. Stafford took the Chair for Mr. Wilson until 11:40.

29. Mr. Holladay, as Liaison, presented the report of the SAREX Working Group. Highlights: SAREX flies more missions and gets higher priority with NASA than any other secondary payload in the Shuttle program. Four crews took Amateur Radio equipment into orbit in 1993. On STS-57 in June, there was a dialog between President Clinton and astronauts Brian Duffy, N5WQW and Janice Voss in which the President expressed appreciation for the educational aspects (i.e., SAREX) of the mission. In April, there was ship-to-ship contact with the Russian Space Station, with Mike Foale, KB5UAC at the microphone. Also in April, antenna tests were run comparing the usual window antenna with the German SAFEX antenna in the open cargo bay; the latter was 10 to 12 dB better. The STS-58 mission was the most successful in terms of number of people reached, including 10,000 students in Pau, France observing a single horizon-to-horizon pass. The Working Group has drawn up guidelines to aid in school selection and to define SAREX priorities and requirements.

30. On motion of Mr. Severson, seconded by Mr. Mendelsohn, it was VOTED at 11:45 AM that the Board sit as a Committee of the Whole for the consideration of personnel matters. The Executive Vice President, the Chief Financial Officer and members of the assembly other than ARRL elected officials were invited to retire from the meeting. The Committee was in recess for luncheon from 12:05 to 1:45 PM. The Committee of the Whole arose and reported at 2:14 PM, and the excused members of the assembly returned to the meeting. On motion of Mr. Harrison, seconded by Mr. Mendelsohn, it was VOTED to accept the report of the Committee of the Whole. During the course of the above, Mr. Mark departed from the meeting. Mr. Stafford again took the Chair at 2:25 PM.

31. Mr. Quiat reported briefly for the Amateur Auxiliary Ad Hoc Committee in the absence of Chairman Turnbull. A new Amateur Auxiliary agreement with the FCC awaits the agency's final approval.

32. Mr. Frenaye, as Chairman, presented the report of the Ad Hoc Computer Committee. Its tasks were to analyze current computer usage at HQ, analyze current requirements, and make a preliminary report at the 1993 Second Meeting. Following that, the Committee in cooperation with the A & F Committee and the HQ staff, proposed capital budget items to replace older PCs with 80486- based PCs, to upgrade building wiring, and establish a reliable PC local area network. After this step is finished, several major software applications will have to be moved from the System 38 both because of its obsolescence and because it does not provide quick easy access to multiple users. A timetable was included in the report.

33. Mr. Olson, as Chairman, presented the interim report of the Ad Hoc 219 MHz Committee, established to outline a plan for orderly and efficient initiation of amateur operations in the 219-220 MHz band. The Committee anticipates that the band will be made available to amateurs on a secondary basis by FCC action sometime in the first half of 1994. On

motion of Mr. Olson, seconded by Mr. Heyn, it was VOTED that the Interim report of the ARRL Ad Hoc 219 MHz Committee is ADOPTED. The Committee members are thanked for their contribution to planning the future use of this very important addition to amateur spectrum allocations and they are asked to continue their work leading to a final report by July 1, 1994, or 45 days after the FCC issues a Report and Order for 219 MHz, whichever occurs first.

34. On further motion of Mr. Olson, seconded by Mr. Mendelsohn, it was VOTED that the 219-220 MHz band plan proposed by the Ad Hoc 219 MHz Committee is ADOPTED as an interim band plan as follows:

219-220 MHz Band Plan

Local Coordinating Bodies should coordinate this band such that ten 100-KHz Primary channels are created centered on the following frequencies:

Channel A 219.050
Channel B 219.150
Channel C 219.250
Channel D 219.350
Channel E 219.450
Channel F 219.550
Channel G 219.650
Channel H 219.750
Channel I 219.850
Channel J 219.950

Use of two of these channels in combination to achieve a full duplex environment is desirable.

Since the use of the band is for point-to-point fixed operation with a maximum of 50 watts PEP, and non-interference with Primary Users of the band is mandatory, highly directional antennas with horizontal polarization are recommended.

Because the plan for this band is use for inter-city links which can be assembled into a nationwide high-speed digital network, allocation of channels to point-to-point pairs running less than 56 Kilobits duplex should be discouraged. No matter what the bandwidth of the transmissions coordinated into a channel, they should be centered in the channel. The long term objective for digital transmission on these channels is 100 KHz bandwidth. Local Coordinating Bodies should seek to avoid decisions which will limit the nationwide network.

35. Mr. Mendelsohn, as Chairman, presented the interim report of the Ad Hoc Committee on Vanity Call Signs, formed in response to the FCC Notice of Proposed Rulemaking in PR Docket 93-305. The Committee's charge is to recommend a position on vanity call signs to the Board of Directors by mid- February. As much membership input as possible is to be sought. Based on input so far, the Committee suggests the vanity call sign system should be phased in with a series of four three-month windows before

opening the system to all. Previously held call signs regardless of license class, format or call district should be available first. The second, third and fourth windows would be by license class to Extra Class, then Advanced, and then General. At the end of one year, any licensed amateur would be eligible for any call within his call area and license class blocks, or a lower class block. The fee should be a one-time occurrence, and should be refunded if none of the call signs on the application are available. Calls should be held for two years after expiration or trade-in, and should not be transferable; these measures should help preclude "trafficking" in call signs. If necessary, an in-person meeting of committee members will take place February 12 in the Dallas-Fort Worth area.

36. At this point, 2:45 PM, Mr. Wilson returned to the Chair. Mr. Price, as Liaison, reported for the Biological Effects Committee; no formal report had been received from the chairman. The Board was in recess from 3:18 to 3:44 PM; Mr. Scupp took the seat for Mr. Quiat.

37. On motion of Mr. Severson, seconded by Mr. Burden, it was VOTED that the 1994-1995 Plan and Budget is adopted as presented to the Board by the Administration and Finance Committee.

38. Mr. Scupp, as Liaison, presented the report of the Public Relations Committee. Highlights: Tech Image replaced Selz Seabolt as the ARRL's PR firm, though many of the personnel involved are the same. ARRL's publicity efforts scored more than 100 major media hits and more than 25 major market television placements including an NBC story on SAREX and "Santa Ham" on CNN. The Associated Press picked up five stories, USA Today picked up two, and there were placements in at least 25 major metropolitan dailies. ARRL produced and began duplication of two public service announcements as reported by the Executive Vice President. With Steve Mansfield taking over the legislative function there will be a need for an additional PR person at HQ, to work under Steve's supervision. On motion of Mr. Severson, seconded by Mr. Scupp, it was VOTED that the Public Relations Committee Report is accepted. At this point, 3:49 PM, Mr. Quiat returned to his seat.

39. Mr. Stafford, as Chairman, presented the extensive report of the Long Range Planning Committee. The report summarized previous recommendations of the LRPC and actions taken by the ARRL as a result. The report set forth the assumptions made by the Committee, covered demographics, summarized interests of amateurs within the avocation, noted technologies which are emerging, touched on international and spectrum issues, predicted "The Regulatory Scene in the Year 2000" and closed with a vision of Amateur Radio and a summary of ARRL objectives. The LRPC recommends that a planning retreat be scheduled for the Board in the spring of 1994 to mull over these issues, without having to meet organizational constraints imposed by a formal Board Meeting.

40. Mrs. Brown, as Liaison, reported briefly on the work of the Digital Committee. The Committee is researching audio interface guidelines, and is preparing a proposed manual for HF Mailbox system operators, and

specifications for Amateur Radio BBS software, message routing, and signal level standards. At this point, 4:31 PM, Mr. Bodson took the seat for Mr. Kanode.

41. Mr. Bodson, as Liaison, presented the report of the Future Systems Committee. The Committee met in December and revised several earlier drafts. A paper on Technology Assumptions is Appendix A to the Report; Technology Assessments on imagery, advanced packet, digital signal processing, and digital voice communication comprise Appendices B through E. A final paper is entitled, "Getting There from Here." The Committee reviewed technology sections of the LRPC. Major changes in the industry including Internet, the Personal Communications Service and the National Information Infrastructure, are bound to have effects on future systems in Amateur Radio. The FSC also studied a report from a West Coast group conducting spread spectrum experiments under a Special Temporary Authorization. On motion of Mr. Bodson, seconded by Mr. Mendelsohn, it was VOTED that whereas, the FSC report suggests the development of a series of high profile awards for technical achievement, and

Whereas, the Long Range Planning Committee Report suggests the development of a system of awards for technical achievement,

Now, THEREFORE, an appropriate body such as the Volunteer Resources Committee is requested to study the feasibility of a system of technical awards ranging from home-brew/ design/construction projects to the creation of innovative communication systems, and develop appropriate criteria.

42. It was further moved by Mr. Bodson, seconded by Mr. Olson, that WHEREAS, the FCC granted Special Temporary Authority in April of 1992 for experimentation with certain spread spectrum communications, which STA was extended once, in May of 1993, for an additional one-year period; and

WHEREAS, the results of experiments undertaken pursuant to that STA have been positive, and have revealed that spread spectrum operation at VHF, properly done, is possible without interference to repeater inputs or other co-channel amateur operation; and

WHEREAS, Sections 97.305(c) and 97.311(c) and (d) of the amateur rules currently contain overly restrictive provisions regarding the use of spread spectrum techniques, which can be relaxed without interference to ongoing amateur operations at VHF and UHF frequencies;

NOW, THEREFORE, the Executive Vice President and General Counsel are directed to prepare and, after consultation with the Future Systems Committee, file a Petition for Rule Making, at the earliest opportunity, to amend Sections 97.305(c) and 97.311(c) and (d) of the amateur rules, to permit
spread spectrum operation on all amateur frequencies above 50 MHz, except those reserved for weak-signal operation in each amateur VHF and UHF band; and to eliminate the restrictions on spread spectrum emission types and the spreading sequence and tap setting restrictions currently

contained in Sections 97.311(c) and (d) of the rules. It was moved by Mr. Heyn, seconded by Mr. Severson, that the matter be postponed until the morrow, but the motion to postpone was LOST. The question then being on the main motion, the same was ADOPTED. Mr. Gordon requested to be recorded as voting nay. The Board was in recess from 5:17 PM to 8:30 PM, reconvening with all persons hereinbefore mentioned except Messrs. McCobb and Mark. At this point, Mr. Kanode returned to his seat.

43. Mr. Burden, as Chairman, presented the report of the Industry Advisory Council. The HQ staff prepared an interface specification for transverters which was reviewed by the IAC and released to the industry, receiving favorable response. The Council is working jointly with the Digital Committee on interface specifications for packet radio equipment. A comprehensive report on current League activities and programs for young people and schools was prepared by the Educational Activities Department of ARRL and released to the Council and answers concerns the industry has in this area. A proposal of the IAC for lifetime operator licenses has been adopted by the Board, and a Request for Rulemaking accordingly has been filed by General Counsel Imlay with the FCC.

44. Mr. Wyatt, as Liaison, presented the report of the Contest Advisory Committee. There have been two straw votes and two formal votes of the CAC since February, addressing some 50 items. One, adding a low-power category in the ARRL DX Test has been approved by the ARRL Awards Committee. The CAC is currently voting on bonus points for Class E stations in the ARRL Field Day, and is studying the VHF contest "rover" rules. The Committee is working on a five-year outlook for the ARRL contest program, as earlier requested by the Board. An outline is presented in the report and it is anticipated that the completed document will be ready for the 1994 Second Meeting of the Board.

45. Mr. Roderick, as Liaison, presented the report of the DX Advisory Committee. Since its last report, DXAC has recommended reinstatement of Eritrea to the DXCC Countries List; the recommendation has been accepted by the Awards Committee. Deletion of Mount Athos and addition of Pratas Island and the Turkish Republic of Northern Cyprus are under consideration. Proposals for DXCC rules changes rejected by DXAC include band- or mode-specific DXCC Honor Roll recognition, Rule 2 revision, and revision of the CW DXCC starting date. Additional DXCC awards and a Ten-Meter Honor Roll are under consideration. The DXAC recommended an RTTY DXCC Honor Roll, which has been accepted by the Awards Committee. The Committee is working on QSLing guidelines and studying call area calling by DX stations. Its projection of the DX world into the next 15 to 20 years is completed.

46. Mr. Goddard, as Liaison, presented the report of the Public Service Advisory Committee. The PSAC continues to study the matter of outgoing health and welfare traffic from disaster areas. It is also working on a new Public Service Communications Manual. The Committee will also review a National Disaster Medical System (NDMS) document and make recommendations about a possible Memorandum of Understanding between NDMS and ARRL.

47. Mr. Comstock, as Host Director, reported for the 1994 ARRL National Convention committee. The Convention will be held June 10 to 12, in Arlington, Texas.

48. At this point, the Chair announced committee appointments as follows: Administration and Finance: Directors Burden, Chairman; Comstock, Heyn, Metzger, and Olson, Vice President Price, Vice Director Roderick, and Treasurer McCobb. Membership Services: Directors Kanode, Chairman; Gordon, Mendelsohn, Quiat, and Severson, Vice President Stafford and Vice Director Brown. Volunteer Resources: Directors Turnbull, Chairman; Butler, Harrison, Lewis, and Wyatt, Vice President Frenaye and Vice Director Frahm. Election: Directors Turnbull, Chairman; Harrison and Gordon. Amateur Auxiliary Oversight: Directors Turnbull, Chairman; Quiat and Sitton. Ad Hoc Computer Committee: Vice President Frenaye, Chairman; Directors Olson and Mendelsohn, Vice Directors Rothberg and Race.

There were also changes in Chairmen and Liaisons to the following Committees: SAREX - Vice Director Goddard (liaison); Bioeffects - Vice Director Maxwell (liaison); Public Relations - Vice Director Gauzens (liaison); Long Range Planning - Vice President Holladay (chairman), Director Harrison (Board Rep); Digital - Vice Director Craigie (liaison); Future Systems - Vice Director Brakob (liaison), Vice Director Bodson (member); RFI Task Group - Vice Director Bodson (liaison); Spectrum - Vice Director Race (liaison); Contest Advisory - Mark Beckwith, WA6OTU (chairman), Vice Director Vydareny (liaison); DX Advisory - Vice Director Rothberg (liaison) and Public Service - Vice Director Huntington (liaison).

49. The Board was in recess from 9:02 PM until 8:30 AM on January 22, reconvening with all persons hereinbefore mentioned except Messrs. McCobb and Mark.

50. At this point the assembly reached Agenda Item 12, Directors' Motions.
On motion of Mr. Kanode, seconded by Mr.Harrison, it was VOTED that the West Virginia State ARRL Convention be held at Jackson's Mill, WV on July 2-3, 1994.

51. On motion of Mr. Harrison, seconded by Mr. Mendelsohn, it was VOTED that the Membership Services Committee is directed to review the United States 40 meter band plan for the purpose of proposing a possible relocation of the Novice segment to a lower portion of the band. This review shall take into consideration the effects on IARU band planning as well as the recent report and continuing study of the IARU Ad-Hoc Committee on 7 MHz. A report is to be made at the 1994 Second Meeting of the Board.

52. On motion of Mr. Mendelsohn, seconded by Mr. Butler, it was VOTED that the President, on behalf of ARRL, sign the revised statement of understanding with the American Red Cross.

53. On motion of Mr. Burden, seconded by Mr. Harrison, it was VOTED that the Business Manager is hereby authorized to reimburse division directors for actual expenses incurred by them during the year 1994 in the proper administration of ARRL affairs in their respective divisions and in

accordance with board policy up to the amounts as follows: Atlantic Division, $16,000; Central Division, $7,500; Dakota Division, $5,000; Delta Division, $11,500; Great Lakes Division, $13,500; Hudson Division, $10,000; Midwest Division, $10,000; New England Division, $10,500; Northwestern Division, $16,500; Pacific Division, $16,000; Roanoke Division, $11,500; Rocky
Mountain Division, $9,000; Southeastern Division, $13,500; Southwestern Division, $16,000; and West Gulf Division, $10,000.

54. On motion of Mrs. Lewis, seconded by Mr. Heyn, it was VOTED, at 8:43 AM, that the Board sit as a Committee of the Whole for the further consideration of personnel matters. The Committee of the Whole arose and reported at 9:00 AM. On motion of Mr. Quiat, seconded by Mr. Mendelsohn, it was VOTED to accept the report of the Committee of the Whole.

55. On motion of Mr. Severson, seconded by Mr. Mendelsohn, it was VOTED that the League Headquarters, as soon as practical, begin notifying members prior to license expiration, including an appropriate FCC renewal form.

56. It was moved by Mr. Mendelsohn, seconded by Mr. Heyn, that, the following resolution be adopted:

WHEREAS: Many ARRL members find themselves unable to finance the costs of defending themselves against nuisance lawsuits relating to Electronic interference and;

WHEREAS: The cost involved with defending antenna cases can easily exceed the ability of an individual to bear such burden, now therefore it is

RESOLVED: that the Administration and Finance Committee shall study the feasibility of offering group legal defense insurance to ARRL members to cover legal costs in antenna cases and RFI law suits.

On motion of Mr.Quiat, seconded by Mr. Kanode, it was VOTED to amend the motion by adding the phrase "including self-insurance" following "legal defense insurance." Whereupon, the question being on the motion as amended, the same was ADOPTED.

57. On motion of Mrs. Lewis, seconded by Mr. Butler, it was VOTED that newsletter editors of Affiliated Clubs be offered the opportunity to receive the ARRL Letter for one year at no cost.

58. The Board was in recess from 9:30 to 10:00. At this point, Mr. Frahm departed from the meeting.

59. It was moved by Mr. Wyatt, seconded by Mr.Burden, that the following resolution be adopted:
WHEREAS, at the 1992 Annual Meeting the Board requested all Advisory Committees provide on a timely basis a report forecasting the future of their respective functional areas, and

WHEREAS, to date, DXAC has provided its report and CAC has indicated that its report is in progress, now therefore

BE IT RESOLVED, 1) that DXAC be commended for its report; 2) that CAC be encouraged to continue its efforts; and 3) that all other committees be reminded of the requirement to provide their reports.

On motion of Mr.Severson, seconded by Mr. Harrison, it was VOTED that consideration of this matter is postponed until later in the meeting.

60. It was moved by Mr. Quiat, seconded by Mr. Butler, that the EC study and report by the Second 1994 Board Meeting concerning reducing to one per year the Meetings of the ARRL Board of Directors. But the motion was LOST.

61. On motion of Mr. Mendelsohn, seconded by Mr. Kanode, it was VOTED that the Secretary is instructed to cast an affirmative vote on IARU proposal No. 213 for the admission to membership in the IARU of the Ukrainian Amateur Radio League.

62. It was moved by Mr. Mendelsohn, seconded by Mr. Gordon, that the following resolution be adopted:

WHEREAS: ARRL is a leading publisher of Amateur Radio books and;

WHEREAS: The publishing business is undergoing a revolution as it moves from typesetting to desktop publishing, now therefore

BE IT RESOLVED that Headquarters staff move to investigate a multi-media production capability to keep pace with the changing technology in today's personal computing revolution.

On motion of Mr. Butler, seconded by Mr. Heyn, it was VOTED that the matter is referred to the Administration and Finance Committee.

63. On motion of Mr. Olson, seconded by Mr. Price, it was VOTED that the Secretary is instructed to cast affirmative votes on IARU proposals 214 and 215 for the re-election of the present IARU officers, President Richard L. Baldwin, W1RU, and Vice President Michael J. Owen, VK3KI.

64. At this point, 10:45 AM, Mr. Race took the seat for Mr. Severson and Mr. Goddard took the seat for Mr. Heyn.

65. On motion of Mr. Mendelsohn, seconded by Mr. Gordon, it was VOTED that the president shall appoint an Ad-Hoc committee to develop technical specifications for spread spectrum communications. Such specifications will minimize or preclude the potential for interference to narrowband users of the same VHF and UHF frequencies. These technical specifications shall include, but not be limited to, processing gain and the randomness of spreading codes. The Chair appointed Messrs. Bodson, Goddard and Rinaldo to this Ad Hoc committee.

66. It was moved by Mr. Mendelsohn, seconded by Mr. Olson, that lists of members, clubs and such information currently available as printed labels shall also be made available in standard data electronic format, on disk, to Directors, Vice-Directors and Section Managers as may be appropriate. Such list information shall conform to the rules set forth in the Articles of Association and By-laws.

It was moved by Mr. Severson, seconded by Mr. Butler, that the matter be referred to the Membership Services Committee. But the motion to refer was LOST. Whereupon, the question being on the motion as amended, the same was ADOPTED. During the course of the above, Messrs Heyn and Severson returned to their seats, and Mr. Rothberg took the seat for Mr. Burden.

67. On motion of Mr. Mendelsohn, seconded by Mr. Rothberg, it was VOTED that the VRC and FSD staff implement a program for electronic submission of Field Services appointments, cancellations and other Field Organization changes.

68. At this point, 11:17 AM, Mr. Burden returned to his seat.

69. On motion of Mr. Butler, seconded by Mr. Harrison, it was VOTED that the president is authorized and directed to investigate a site for the 1995 Annual Meeting of the Board of Directors. Said meeting to begin on the 3rd Friday of January, 1995. The Executive Committee, if it approves the proposed site, shall initiate a mail vote of the proposed meeting site. Approval of the site shall require an affirmative vote by a majority of the Directors. The mail vote shall be concluded not later than 60 days prior to the 1995 Annual Meeting.

70. At this point, Mr. Wyatt called for consideration of his postponed motion. On his motion, seconded by Mr. Mendelsohn, it was VOTED to amend the earlier motion to strike the text and substitute therefor the following:

WHEREAS, At the 1992 Annual Meeting the Board requested all Advisory Committees provide a report forecasting the future of their respective functional areas, and

WHEREAS, DXAC has provided an excellent report and CAC has indicated that its report is in progress, now therefore

BE IT RESOLVED, 1) that DXAC be commended for its report, and 2) that CAC be encouraged to continue its efforts.

Whereupon, the question being on the motion as amended, the same was ADOPTED.

71. On motion of Mr. Mendelsohn, seconded by Mr. Harrison, it was VOTED that the Business Manager is hereby authorized to reimburse the following committees and task groups created by the Board for expenses incurred by them during the year 1993 in the proper execution of their duties and in accordance with Board policy, as follows: Administration and Finance $10,000; Membership Services $10,000; Volunteer Resources $10,000; RFI Task Group $2,500; Bioeffects $2,000; Digital $6,000; Election $3,500; Public Relations $3,000; SAREX Working Group $6,000; Long Range Planning $10,000; Future Systems $4,500; Ad Hoc Amateur Auxiliary $6,000; Spectrum $3,000; Industry Advisory Council $5,000; Ad Hoc Committee on 219 MHz, $5,000 and the Ad Hoc Committee on Vanity Call Signs, $5,000.

72. On motion of Mr. Kanode, seconded by Mr. Butler, it was VOTED that, to continue the Board's policy of reimbursing QSL Bureau Managers of the League for certain travel in furthering ARRL organizational objectives, the Business Manager is hereby authorized to pay during the year 1993 a total amount not to exceed $4,000 under terms prescribed by the general pattern established by the Board.

73. On motion of Mr. Mendelsohn, seconded by Mr. Quiat, it was VOTED that, to continue the Board's policy of reimbursing National Traffic System officials above the Section level for certain approved expenses in furthering ARRL organizational objectives, the Business Manager is hereby authorized to pay during the year 1993 a total amount not to exceed $4,000 under terms prescribed by the Field Services Manager following the general pattern established by the Board.

74. On motion of Mr. Metzger, seconded by Mr. Kanode, it was VOTED that, to
continue the policy of the Board to assume the administrative expenses of the ARRL Foundation, the Business Manager is hereby authorized to pay during the year 1993 a total amount not to exceed $2,000 in accordance with ARRL standing policies with respect to travel, accounting procedures and auditing.

75. At this point, Mr. Stafford took the Chair for Mr. Wilson. On motion of
Mr. Wilson, seconded by the entire assembly:
WHEREAS on April 12, 1954, 25-year-old Perry F. Williams reported for work as an Assistant Secretary at the headquarters of The American Radio Relay League in West Hartford, Connecticut, and

WHEREAS his subsequent career on the ARRL professional staff has spanned 40 years, and

WHEREAS during that entire time Perry has served the members of the ARRL with devotion, and

WHEREAS his distinguished career included service as corporate Secretary, and

WHEREAS since 1980 he has been the League's most visible "man in Washington," representing the League with the integrity and dedication that has always been his personal trademark, and

WHEREAS Perry has announced his intention to retire from the ARRL staff in April 1994, and

WHEREAS he is the longest serving member of the ARRL staff presently in the League's employ, now therefore

BE IT RESOLVED by the Board of Directors of the American Radio Relay League, in Annual Meeting assembled, on this day, January 22, 1994, that the Board does hereby express its deepest appreciation and gratitude to Perry F. Williams, W1UED, for his many contributions to Amateur Radio and the League; and

BE IT FURTHER RESOLVED that the Board extends its warmest personal wishes for a long, enjoyable, and productive retirement. (Applause and standing ovation)

76. On motion of Mr. Mendelsohn, again seconded by the entire group, it was unanimously VOTED that the Board assembled in Annual Meeting at Rocky Hill, Connecticut on this 22nd day of January, 1994, thanks Lisa DeLude, Perry Williams, Rick Palm, Chuck Hutchinson, Steve Mansfield and Mark Wilson for their key support in making this Board Meeting a great success. (Applause).

77. At this point, an opportunity was given for every member of the assembly to offer comments. There being no further business, the Board adjourned sine die at 12:45 PM. (Time in session as a Board 9 hours and 28 minutes: as a Committee of the Whole: 1 hour and 6 minutes; total direct authorizations: $293,441.)

--
Marc B. Grant fax 214-231-3998 voice 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

868. Your experiences on 40 meter CW QRP

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 18:07:14 UTC
From: andy@clark.net
Message-ID: <2ie8ki$2ih@clarknet.clark.net>
Source record: 271816

If you work 40 meter CW, with 5 watts or less, and use less than ideal antennas (no beams, dipoles or rhombics, etc), I would like to hear about your experiences. No...I'm not writing a book; I just want to know what I can expect before investing in a QRP station!

Many thanks & 73,
Andy, K4ADL
andy@clark.net

869. Re: Computing antenna coverage

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 20:19:12 UTC
From: zlau@arrl.org
Message-ID: <1994Jan29.201912.12528@arrl.org>
Source record: 271863
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Pages 23-8 to 23-10 of the ARRL Antenna Book discuss this
for VHF. The RSGB Microwave Handbook volume I and the
VHF/UHF DX book also have useful information on coverage.

Actually, coverage area for an antenna is misleading--it
ignores the capability of the equipment and the effect
atmospheric conditions have on propagation.

For example, there are long line of sight paths that
might be too long for the free space range of simple
wide bandwidth microwave gear. On the other hand,
the coverage with 1500 watt transmitters and narrow
bandwidth sensitive receivers can be considerably
in excess of line of sight.

Matthew B Cravit (cravit@world.std.com) wrote:
: A friend of mine asked me this question, and I do not know the answer.
: If one has an antenna (say a vertical or something, as opposed to a
: beam) that is x feet above ground level, how does one compute the
: approximate coverage area of that antenna (in square miles)? For
: example, see the following diagram
: _
: | |
: | |
: | |
: | _|_
: |x | |
: | | |
: | | | Tower
: | | |
: | | |
: | | |
: --Ground---------

: If we assume that the distance x is, say, 200 feet and that the ground
: around the antenna is relatively flat, is there a way to estimate the
: area of coverage for that antenna?

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

870. Re: Your experiences on 40 meter CW QRP

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 20:57:15 UTC
From: turner@safety.ics.uci.edu
Message-ID: <2ieijb$mm2@safety.ics.uci.edu>
Source record: 271822

In <2ie8ki$2ih@clarknet.clark.net> andy@clark.net (Andrew M. Cohn) writes:

>If you work 40 meter CW, with 5 watts or less, and use less than ideal
>antennas (no beams, dipoles or rhombics, etc), I would like to hear about
>your experiences. No...I'm not writing a book; I just want to know what
>I can expect before investing in a QRP station!

Hello Andy:

I am not sure what you mean by "less than ideal antenna" if you exclude
dipole. The dipole is the basic antenna for me, and I use QRP, mainly
SSB, sometimes CW, and almost always on 40 meters. Do you intend to
use a quarter wave vertical? A mobile whip?

It is really hard to predict what sort of experience you will have with
QRP from your QTH. Really hard. I have had a lot of luck, even with
a mobile whip on the car using QRP. You muse realistic, but also
know that things can happen with QRP that others just won't beleve.
I have worked a LOT of DX on 40 SSB with 5 watts and a dipole. A LOT.
But this is by patient working and late late nights and stalking guys
and things like that. Other times it has actually been easy. There are
even a few hams locally who run 100 watts with other dipoles and verticals
and on occasion, I get as good a signal report as they do, even when I
ask for a real one.

40 CW is really interesting. The antenna is the key, not really the power.
5 watts is plenty for most contacts under a lot of circumstances. My only
advice to you is to very carefully consider the sort of antenna you will
use. A good dipole, even shortened, up 20 feet or more should be fin.
A 50 foot long wire made of invisibly thin wire thrown into a tree or over
a roof will work fine also. Good luck.

Clark
WA3JPG

871. Re: Contacts for arranging formal sked with SAREX?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 21:43:18 UTC
From: arrl@BIX.com
Message-ID: <arrl.759879798@BIX.com>
Source record: 271718
Cross-posted to: rec.radio.amateur.misc,sci.space

rcamama@dewey.cc.utexas.edu (Robert Camama) writes:

>As the header reads, is there any way I can contact the SAREX (Shuttle
>Amateur Radio eXperiment) coordinator or anyone else in a significant position
>within the SAREX program? I am with the UT Amateur Radio Club, and we
>need to arrange a formal communications schedule [if possible] between
>ourselves and the astronaut-hams aboard two of the SAREX carrying missions
>set for this year (one for April [which we are hoping for the most], one for
>November).

>FYI: we are hoping to do this partly out of personal
>interest, and partly as PR within Austin and central Texas [or as far as
>the news will reach] for our club and for space exploration and amateur radio
>as a whole.

>Thanx and 73's,

>Robert Camama
>KB2CLL

Bob - most often it's the ARRL's Educational Activities
Department which coordinates the efforts of clubs and individuals
wishing to QSO with SAREX missions.

If you'd like, I'd be happy to forward any formal inquiry youy
(you) have to ARRL HQ's Educational Activities Department.

73 de KY1T (LHURDER@ARRL.ORG)

872. Re: Sideband Technology Inc.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 22:48:14 UTC
From: mikewood@rock.concert.net
Message-ID: <2iep3e$p09@inxs.concert.net>
Source record: 271820

In article <n1gakCKCyrq.M4K@netcom.com>,
Scott Statton <n1gak@netcom.com> wrote:
>In article <2i9e52INNmf7@newsstand.cit.cornell.edu> F. Kevin Feeney <fkf1@cornell.edu>
writes:
>>In article <CKAu6K.4Hy@freenet.carleton.ca> Mike Ligeza,
>>ab376@FreeNet.Carleton.CA writes:
>>>Transceiver. Rig was built by Sideband Technology Inc. of Scottsville
>>>N.Y. Model number is the ACSB Pioneer 1000. Appears to be a 4 Channel
>>>Xtal controlled with Xtals for 154.450 Mhz. Looks like a straight
>
This company was purchased by Aerotron , Inc a land mobile radio
manufacturer, around 1985. Aerotron is in Raleigh, NC and
continued to manufacture the units until a year or so ago.
Aerotron is in Bankruptcy and recently held an auction of
the remaining ACSB and land mobile stuff. The remnants of
Aerotron has been moved to Orlando, Florida to share facilities
with another near death company (Repco) owned by the same
Greek investor.

The radios have some very nice 9 Mhz xtal filters in them.

Mike Wood Internet: mikewood@rock.concert.net
The Signal Group
P.O. Box 1979 ***Avoid company disclaimers by owning the company ***
Wake Forest, NC 27588

Phone: 919-556-8477 Fax: 919-556-0115

>
>

873. FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 23:05:14 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199401292317.PAA29777@ucsd.edu>
Source record: 271818

>My god, ive been paitently waiting for my call sign to come in... it's been
>well over 9 weeks now, and it still hasn't arrived.... Does anyone know
>--
>Larry.....
>haga@zach.fit.edu
^^^^^^^^^^^^ *!*

what the..?! did you take your test on-campus, larry, or some place else?
when i get home (only 2 blocks from the FIT campus), i'll dig through stuff
and see what i know...the FCC tape recording is saying 12 weeks at the
outside.

if you did take the test there at fit (November 20), call me -- 724-6183.
with a 10 week cycle it could be next week to almost the end of February (and
hamdom begins to sound like a Cap'n Crunch at the Campgrounds commercial
again).

SCATG needs some new contacts there on campus with the radio club now that
eric was graduated and brian apparently didn't come back (and that means we
need to change the sign in the window of WB4ABK again...)...and i see R. H.
infrequently at best. KI4TG and KB4KQF are both out of the FIT loop as well.

73,

bill wb9ivr

874. Calling South Georgia Hams...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-29 23:54:04 UTC
From: chdaley@delphi.com
Message-ID: <9401291853591.chdaley.DLITE@delphi.com>
Source record: 271826

The 1994 Bike Ride Across Georgia, also known as B.R.A.G., is coming to South Georgia the week of June 11 through the 18th.

The ride starts in Bainbridge* and ends at St. Simons Island. It will pass through, Cairo, Thomasville*, Quitman, Valdosta*, Adel, Tifton*, Irwinville, Fitzgerald, Douglas*, Alma, Waycross, and Jesup*. The counties involved are Decatur, Grady, Brooks, Lowndes, Cook, Tift, Irwin, Ben Hill, Coffee, Bacon, Ware, Pierce, Wayne, and Glynn.

We are starting the planning and recruiting process for providing Amateur Radio communications for this event. Consequently, we need to make contact with various radio clubs, repeater operators, and individual operators in the area that would like to help support this event.

Interested parties can contact me by any of the following means:

Chuck Daley, KD4LXQ
10565 Willow Meadow Cir.
Alpharetta, GA 30202

(404)-475-8140
Compuserve: 73457,3114
Internet: chdaley@delphi.com

Please feel free to gateway this message to other networks.

I look forward to hearing from you....

Thanks,

Chuck

(* Overnight stops...)

875. Re: Your experiences on 40 meter CW QRP

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 00:20:57 UTC
From: prvalko@vela.acs.oakland.edu
Message-ID: <2ieuh9$2kd@oak.oakland.edu>
Source record: 271827

Andrew M. Cohn (andy@clark.net) wrote:
: If you work 40 meter CW, with 5 watts or less, and use less than ideal
: antennas (no beams, dipoles or rhombics, etc), I would like to hear about
: your experiences. No...I'm not writing a book; I just want to know what
: I can expect before investing in a QRP station!

Andy,

Why do you want to "invest in a QRP station!" ??? Getting into QRP is
something you generally do AFTER you've become bored with the typical
"fivenineQSLQRZ" contacts.

If you are just studying for a ham ticket, I HIGHLY recommend NOT to get
involved with a QRP radio as a first choice. Others disagree with me
but they are in the minority.

So wazzup???

73 =paul= wb8zjl

*** VANITY CALLS COMING SOON!!! I GOT DIBS ON K8T !!!!! ***

876. Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 09:12:59 UTC
From: "...green spleen..." <trd54583@uxa.cso.uiuc.edu>
Message-ID: <2iftmr$sft@vixen.cso.uiuc.edu>
Source record: 271809
Cross-posted to: can.forsale,rec.radio.amateur.misc

robocop@clark.net (matt roberts) writes:

[FormerDirector-of-somekindGodJudgeJuryCloutCloutClout talk deleted]

>If he was in this country, and the FCC caught him, he would get in very
>serious trouble. If we allow this sort of thing to thing to persist,
>we'll have a service that will be unusable. How do we know this person
>will stay straight, we don't.
> Matt Roberts n3gzm

Right on. We have no clue whether or not this guy will stay straight. Wait
a minute, how do we know you will continue to be a good ham? We don't.
If we allow this kind of uncertainty about operators to exist, we
may end up with an unuseable service. I tell you, we should form a
'committee' to (eventually) question all the hams in this great service o'
ours and make sure they are on the up and up.

/lw
--
LunarWolf - spleen@uiuc.edu - kb9iqx - T.R. Dobrowolsky
Natural Resources & Environmental Science
University of Illinois at Urbana-Champaign

877. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 13:09:45 UTC
From: rich@mulvey.com
Message-ID: <1994Jan30.130945.3072@mulvey.com>
Source record: 271721
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

James Biehn (jbiehn@i-link.com) wrote:
: Jerry Sy (ah301@yfn.ysu.edu) wrote:
: : I have pretty much narrowed down my choice to these two 2m ht's.

: : I'd like to get comments and opinions from people in the net who
: : have actually used both.

: : currently, I am leaning towards the dj-162 because of its wide
: : receive.

: : please email responses if possible.
: : thanks in advance.

: : jerry
: Jerry, I myself have used both and found the DJ-162 all around better in
: its operations as well as its structure. The HTX-202 has no Mod info and
: is virtually an unknown radio internally. Maybe time will change that, but
: meantime technology moves on.

So you're saying that you *LIKE* intermod?

:-)

- Rich

--
Rich Mulvey Amateur Radio: N2VDS Rochester, NY
rich@mulvey.com "Full power on half a watt."

878. ham stuff

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 15:50:18 UTC
From: gliderking@aol.COM
Message-ID: <9401301050.tn27497@aol.com>
Source record: 271733

interested in following your email service. I am a ham of 20 years, (still under 40!!) with variable interests throughtout the mode and frequency spectrum Rick ve6gk.

879. Boring WWV Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 18:05:10 UTC
From: rc@cmr.ncsl.NIst.GOV
Message-ID: <9401301805.AA17277@cmr.ncsl.nist.gov>
Source record: 271686

There have been a number of negative comments expressed here concerning the boring consistency of WWV programming. Perhaps you all would be interested in what I will call the WWV Chant. Some friends and I came up with it way back when before WWV moved to Colorado. Unfortunately I can only remember a few lines ......

The WWV Chant

We're WWV
On standard frequency
We're on all day,
We're on all night.
Don't tell us we're wrong
We're always right.
....

73 de w3otc@amsat.org
****
You can be ABSOLUTELY CERTAIN that this posting in my own, and does not represent any past, present, or future employer.

880. Re: Frequencies for Animal Tracking ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 18:21:44 UTC
From: ab718@FreeNet.Carleton.CA
Message-ID: <CKGGC8.829@freenet.carleton.ca>
Source record: 271688

In a previous article, halvey@home.amigans.gen.nz (Dave Halverson) says:

>--
> Does anyone out there happen to have a list of the bands used for tracking
> animals fitted with radio collars. Preferably in New Zealand, but other
> locations would also be of interest.
>
> Thanks in advance.
>
>--
> Dave Halverson, Wanganui N.Z.
> halvey@home.amigans.gen.nz
>

Hi Dave,

Here in the Great White North (Canada) some of the radio collard are
between 151 to 152 Mhz.

I hope it will help.

Daniel VE3DCL

--

881. FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 18:55:25 UTC
From: daryl@tcomeng.com
Message-ID: <2igvqt$ov2@tcomeng.tcomeng.com>
Source record: 271689
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

We're experimenting with providing free public-access to our Informix database of FCC license information for radio transmitters located in California. The information should be accurate as of 09/30/93. More than 300,000 records are on file. Microwave, satellite, broadcast, and cellular records are included as well as business and public safety.

Telnet to: tcomeng.com
Login: fcc (no password)

VT-100 terminal terminal emulation is required. If there is enough interest, we will enhance the query interface and support other terminal types. You will need to carefully read the introduction in order to successfully use the database.

This service is provided in the public interest by Telecommunications Engineering Associates of South San Francisco, California. Send comments to fcc@tcomeng.com.
--
Daryl Jones daryl@tcomeng.com
Telecommunications Engineering Associates {decwrl}!tcomeng!daryl
South San Francisco, California Phone: (415) 871-4200

882. ANS-029 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 19:10:57 UTC
From: cowdin@pogo.DEn.mmc.COM
Message-ID: <199401301913.LAA10040@AMSAT.Org>
Source record: 271691

SB SAT @ AMSAT $ANS-028.01
DOVE WATCHERS TO BE RECOGNIZED

HR AMSAT NEWS SERVICE BULLETIN 028.01 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 29, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-028.01

DOVE (DO-17) Telemetry Watchers Will Be Recognized

This weekend the DOVE (DO-17) Command Team will begin using the DOVE text message frame to transmit the callsigns of everyone who has sent a DOVE reception report to Dr. Junior Torres De Castro (PY2BJO) of the Brazilian AMSAT Group, BRAMSAT, the owner of DOVE. Because of the limited length of that frame, about 15 calls will be sent at a time and the message will be changed about every 3 or 4 days. This is the DOVE Ground Command Team's way of thanking everyone who has sent in reports (several hundred at present). Special DOVE QSL cards will also be mailed to those who have reported DOVE reception to PY2BJO. We are particularly interested in hearing about the equipment used and the quality of the signals. We would also like to hear about the use of DOVE signals or data in education. Actual telemetry is not needed at this time.

Please send reports to:

Dr. Junior Torres De Castro (PY2BJO)
119 Macaubal
Sao Palo
Brazil 01254

[The AMSAT News Service would like to thank Jim White (WD0E) and the DOVE Command Team for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-028.02
ANTENNA PORLARIZATION REVISITED

HR AMSAT NEWS SERVICE BULLETIN 028.02 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 29, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-028.02

Antenna Polarization Sense Revisited By WD0E

There have been many discussions occurring on Compuserve's HAMNET forum and in various corners of the amateur radio community about the need for antenna polarity switching while using the OSCAR satellites. DOVE Command

Team member Jim White (WD0E) wants to add some futher comments about this important issue based on his years of experience working with the MICROSATs.

Case For Polarization Switching

"The following is based on design data, direct measurements and experimentation, surveys, and anecdotal evidence from discussion threads on the digital birds and Compuserve. I believe the empirical data is correct, but an error or two could certainly have crept in. I submit it for discussion and comment. The sense (right or left) of the circular polarization of the four original MICROSATs changes depending on the transmitter in use. There was no attempt to make a particular transmitter any sense. The way they came out was based on how the semi-rigid cable and components could be designed into the transmitter module. Here is a list of the sense of each one:

AO-16 RC 437.050 RHCP
AO-16 PSK 437.025 LHCP
DO-17 XMTR A 145.825 LHCP
DO-17 XMTR B 145.825 RHCP
WO-18 RC 437.100 RHCP
WO-18 PSK 437.075
LO-19 RC (&CW) 437.125 RHCP
LO-19 PSK 437.050 LHCP

The AO-16 PSK XMTR and the WO-18 PSK XMTR have problems and are not presently in use (although the AO-16 PSK transmitter - with LHCP - was used for about three years). We normally run XMTR B on DOVE because it is slightly more efficient. Last time I checked LO-19 was being switched occasionally between it's two. So it is strictly coincidence that three of these are RHCP virtually all the time. LO-19 changes. Problems with any of the xmtrs presently in use could result in a switch, which would change their downlinks to LHCP.

As long as you are receiving strong signals from these satellites, a miss-matched sense will not reduce the margin enough to cause missed data. However, if the signal is weak, because of a marginal receive arrangement or low power from the satellite, a miss-matched sense will cause significant loss of data. Uplinks are not a problem because they use monopoles and the receivers are very sensitive.

FO-20 is circular and has a fixed sense both up and down, but because of it's orbit geometry and motion, continuously good signals through it for an entire pass can only maintained if sense is switched, usually several times and on both uplink and downlink. This is particularly noticeable in the analog mode.

On AO-21, the 435 MHz receiving antenna, which is shared by the analog and digital modes, is a Helix with up to +3 db gain using Right Hand Circular Polarization. The 145 MHz transmitting antenna is a half-wave dipole. These antennas are always earth-pointing due to the satellite's gravity gradient attitude stabilization system. It is clear from a little exper-

imentation and from listening to the DSP FM repeat mode, that changing sense makes a significant difference in the overall link. At times, it is the difference between being heard and not. It changes during a pass. The UOSAT series use monopole antennas. I have never noticed a difference in link efficiency when sense is switched.

I have no data on which AO-26 transmitter has which sense. But this is a MICROSAT design, so changing transmitters will change sense. In it's first weeks of store and forward operation it was running very low power and incorrect sense made a large difference in received strength during most parts of most passes. If it continues to be necessary to run low power from this satellite, or if the LHCP transmitter is used, left hand sense will be necessary, and switching during a pass may be essential for efficient operation.

AO-27 (EYESAT) uses a monopole for the downlink so sense makes little difference when the amateur transmitter is on high power. However, when receiving very weak signals from it (exciter only), switching sense is necessary to be able to even detect the signal at times. It remains to be seen how much power this bird will be able to sustain on it's amateur (secondary) transmitter, so downlink sense could be an issue. Uplink is not an issue, as a monopole is used with very sensitive receivers.

UNAMSAT is built on a MICROSAT design. It's downlink sense may be left or right depending on which transmitter is used. Downlink power and sense will not be known until this bird is in orbit and becomes operational. During checkout it is likely both transmitters will be used at times, requiring sense switching. Tumbling during the first few days in orbit will almost certainly require switching. Downlink power *could* be somewhat lower than AO-16 and LO-19 because of the power necessary to run the meteor experiment transmitter. This situation would be similar to WO-18, which routinely runs at about half of the power of AO-16 and LO-19 because of the need to support the experiments.

VOXSAT will use monopole antennas, so the link polarization and sense needs may be similar to AO-21.

AO-13: Gain antennas are RHCP. When the satellite is at or near apogee and/or pointing angles are good, RHCP is always best. However, when there is significant off pointing or the omni's are in use, LHCP can often result in better uplink and downlink signals. LHCP can be better both in terms of more strength and reduced depth of spin modulation fade.

Stan Wood (WA4NFY) informs me that Phase-3D will use all RHCP for its circular antennas. Since it will be nadir pointing at all times, sense switching should not be necessary. This assumes all goes as planned, and we certainly hope it does!

I may have left out a bird or two, and have not hit all those being planned. Nor have I attempted to exhaustively document all situations or those of interest only to command stations. However, there are numerous situations in the foregoing where LHCP is necessary or favored.

Using the wrong sense will reduce efficiency and/or enjoyment. In a few cases it may make operation impossible. There is certainly much enjoyment available to a satellite enthusiast with fixed RHCP antennas (or even linear). But I hope I have shown that full utilization of our satellite resources requires switchable antenna circularity."

[The AMSAT News Service (ANS) would like to thank Jim White (WD0E) for this bulletin. If you would like to respond to Jim's thoughts on antenna polarization, he can be reached at his INTERNET address of: wd0e@amsat.org. Also, the ANS would like to thank DB2OS for the information about the AO-21 antennas.]

/EX
SB SAT @ AMSAT $ANS-028.03
PHASE 3-D STATUS REPORT!

HR AMSAT NEWS SERVICE BULLETIN 028.03 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 29, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-028.03

AMSAT-NA PHASE 3-D TEAM JOINS WITH FLORIDA-BASED ENGINEERING GROUP FOR SPACECRAFT INTEGRATION

About a half dozen members of the North American Phase 3-D Development team met recently to assess overall progress on the program and to begin planning for the spacecraft's final assembly in preparation for its April, 1996 launch from Korou, French Guyana.

Dick Jansson (WD4FAB), AMSAT VP for Engineering, hosted the North American Phase 3-D progress meeting near Orlando, Florida on 7-9 January, 1994, where a number of critical Phase 3-D issues were discussed. While several open items still must be resolved, AMSAT-NA's overall technical contributions to the Phase 3-D project remain on track.

"We're still on schedule for the 1996 launch," said Bill Tynan (W3XO), AMSAT-NA President. "I am really proud of the way everyone on the North American team is pulling together to insure our responsibilites to the international project are met", he said.

The high point of the meeting came when several officers of a Florida-based volunteer group, called Space Frontier Operations (SFO), presented their proposal to manage the overall integration effort for the Phase 3-D spacecraft. After extensive discussions concerning their capabilities and proposed integration approach, SFO's offer was greatfully accepted by Bill Tynan, Dick Jansson, and the rest of AMSAT-NA Phase 3-D team members present.

Space Frontier Operations is a relatively new group based in the Orlando/Cape Canaveral, Florida area. Presently, their membership stands at about one hundred. They are, however, a rapidly growing, not-for-profit, Florida corporation dedicated to the private, non-commercial, use of space. Their first project was a "Get-Away Special" (GAS Can)

experiment which will fly on an upcoming NASA Space Shuttle mission. Most SFO members are also connected professionally to NASA or other space agencies at the Cape. Together, they bring several decades of "hands on" experience designing and building a wide variety of government and commercial space hardware to the Phase 3-D integration effort.

"We are very honored to be associated with such a prestigious group as AMSAT", said Andy Clark, SFO's Chief Executive Officer at the recent Orlando meeting. He went on to note, "We believe our professional aerospace experience will bring another, very positive dimension to an already outstanding international Phase 3-D team." These same feelings were echoed by Mike Peacock (KR4GA), SFO's Director of Engineering, who stated that because SFO and AMSAT share many of the same goals, the partnership should prove mutually benefical.

Also on hand for the meeting were Keith Baker (KB1SF), AMSAT VP, Strategic Planning, who discussed the overall Phase 3-D Master Schedule. In addition, Stan Wood (WA4NFY), udpated the team on Phase 3-D's various antenna designs. Dick Daniels (W4PUJ), AMSAT's North American P3-D Team Director along with Dr. Tom Clark (W3IWI), P-3D GPS experiment Team Leader, joined the group by telephone. Longtime AMSAT satellite builder Jan King, W3GEY, and Lyle Johnson (WA7GXD), from TAPR, were also present and served as technical advisors to both teams during the discussions.

Final designs for solar cells, solar panels, batteries, as well as the progress now being made on the spacecraft's overall structure were also discussed. In addition, possible integration sites in the Orlando/Cape Canaveral area were evaluated and several team members toured a candidate facility at the Orlando International Airport. A final selection regarding the most cost-effective location for Phase 3-D integration will be made once firm rental price proposals are received and evaluated by the now AMSAT-NA/SFO combined Phase 3-D integration team.

[The AMSAT News Service would like to thank Keith Baker (KB1SF) for this bulletin item. Keith can be reached at his Compuserve address of 75070,331.]

/EX
SB SAT @ AMSAT $ANS-028.05
AO-13 OPERATIONS NET SCHEDS

HR AMSAT NEWS SERVICE BULLETIN 028.05 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 29, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-028.05

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date UTC Mode Phs NCS Alt NCS

06-Feb-94 0530 B 057 W5IU WA5ZIB
12-Feb-94 2200 B 063 W9ODI VE2LVC
20-Feb-94 0200 B 070 WA5ZIB W5IU
28-Feb-94 0430 B 068 WB6LLO W9ODI

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. If neither of the Net Control Stations show up, any participant is invited to act as the NCS.

/EX
SB SAT @ AMSAT $ANS-028.06
KO-25 BBS SERVICE BEGINS

HR AMSAT NEWS SERVICE BULLETIN 028.06 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 29, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-028.06

KITSAT-OSCAR-25 Begins Bulletin Board Operations (BBS) 01-FEB-94

KO-25 will open its BBS service beginning on 01-FEB-94. Many discussions are going on about KO-25 services. Thank you for your cooperation so far by keeping your transmitters silent on the KO-25 uplink frequencies so that we could complete our experiments with KO-25. KO-25 will operate in normal mode, 9600 baud FSK using the usual set-up for any of the 9600 baud OSCARS, e.g., KO-23, UO-22, or PoSAT. You will, therefore, not have to make any changes to your station to use KO-25.

Since not all the on board experiments are not finished yet on KO-25, there will be, at times some interruptions of service. But, SaTReC has decided to open the service because the remaining experiments will not cause any serious problems with the KO-25 BBS service.

"We hope you enjoy our new star in space," says Hyungshin Kim of the Korean Institute of Advanced Space Technology.

/EX
SB SAT @ AMSAT $ANS-028.07
AO-13 ZRO TEST SCHEDULES!

HR AMSAT NEWS SERVICE BULLETIN 028.07 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 29, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-028.07

AO-13 ZRO Tests Begin For '94

AMSAT-OSCAR-13

ZRO TEST SCHEDULE

FEBRUARY-MARCH 1994

The ZRO Memorial Technical Achievement Award Program, or just "ZRO Test" has a new schedule for February and March, 1994, via AMSAT-OSCAR-13. This activity is a test of operating skill and equipment performance.

During a typical ZRO run, a control station will send numeric code groups using CW at 10 words-per-minute. At the beginning of the run, uplink power from the control station is set to match the general beacon downlink strength. This is level "zero". The control operator will send and repeat a random five-digit number, then lower his uplink power by 3 dB (half power) and repeat the procedure with a new random number (level "1"). This will continue to a level 30 dB below the beacon (level "A").

A participating listener monitors the downlink signals until he or she can no longer copy the numbers. Those who can hear the beacon will qualify for the basic award by copying the code group heard at level "zero". The challenge is to improve home-station performance to a point where the lower-level downlink signals can be copied (levels 6 through A). To date, only one station, Darrel Emerson (AA7FV), has successfully copied level "A".

The following schedule of Mode "B" tests were chosen for convenient operating times and favorable squint angles. The tests can be heard on 145.840 MHz. Andy WA5ZIB will conduct all the tests. Mode "JL" tests will no longer occur due to the failure of AO-13's 70-cm transmitter.

Day Date (UTC) Time Areas covered

Saturday Feb. 12, 1994 2345 UTC NA, SA, Europe, W. Africa
Sunday Feb. 20, 1994 0330 UTC NA, NW SA, Japan, Pacific
Saturday Feb. 26, 1994 1930 UTC NA, SA, Europe, Africa, ME
Saturday Mar. 19, 1994 1930 UTC NA, SA, Europe, Africa
Saturday Mar. 26, 1994 2315 UTC NA, SA

Note that the dates and days are shown in "UTC", thus the second test occurs at 9:30 PM CST Saturday night (the 19th). Any changes will be announced as soon as possible via the AMSAT HF and AO-13 Operations Nets.

All listener reports with date of test and numbers copied should be sent to Andy MacAllister WA5ZIB, AMSAT V.P. User Operations, 14714 Knights Way Drive, Houston, TX 77083-5640. A report will be returned verifying the level of accurate reception. An S.A.S.E. is appreciated but not required.

Information about the AMSAT Awards Program can be found on page 197 of the "Proceedings of the AMSAT-NA Tenth Space Symposium" (1992). This paper, covering all the AMSAT-NA awards including specifics on the ZRO Test, was reprinted on page 10 in the March/April 1993 issue of "The AMSAT Journal". The ZRO Test information provided in the article covers test procedures, means for obtaining certificates and gives some historical background about the program. Reprints of the article can be obtained for an S.A.S.E. to WA5ZIB at the address above.

/EX
SB SAT @ AMSAT $ANS-028.08

AO-21 HAS 3RD BIRTHDAY

HR AMSAT NEWS SERVICE BULLETIN 028.08 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 29, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-028.08

Happy Birthday AMSAT-OSCAR-21!

On 29-JAN-91 the first international Orbiting Satellite Carrying Amateur Radio (OSCAR) in which radio amateurs from the former Soviet Union (CIS) worked together with radio amateurs from Germany was successfully launched.

The official name of the project was RM1, which stands for "RADIO M-1". The digital transponder RUDAK-2 is part of RM1.

After the launch from the Northern Cosmodrome in Plesetsk, Russia, the satellite was named as AMSAT-OSCAR-21, to emphasize that the spacecraft was built by, and for, Radio Amateurs around the world.

AMSAT OSCAR-21 was attached as a secondary payload (Piggy-back) aboard the CIS geological research satellite "INFORMATOR-1".

AMSAT-OSCAR-21 (also known as RS-14) is a joint project between AMSAT-U in Russia and AMSAT-DL in Germany.

[The AMSAT News Service (ANS) would like to thank DB2OS for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-028.09
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 028.09 FROM AMSAT HQ
SILVER SPRING, MD JANUARY 29, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-028.09

Weekly OSCAR Status Reports: 29-JAN-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Jan 31-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 145 |<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 240/0, Apr 04
Poor Sun angle and battery testing need maximum OFF time.
[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current FO-20 operating schedule:
From January '94 thru March '94, the analog mode and the

digital mode will be on alternately for a week at a time.
ANALOG MODE:
09-FEB-94 7:15 -TO- 16-FEB-94 7:40 UTC
23-FEB-94 8:05 -TO- 02-MAR-94 6:40 UTC
09-MAR-94 7:05 -TO- 16-MAR-94 7:30 UTC
23-MAR-94 7:52 -TO- 30-MAR-94 8:15 UTC
DIGITAL MODE: Unless otherwise noted above.
[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

AO-21: ZL3VTV works AO-21 with great success from his QTH in Christchurch, New Zealand. He reguarly works stations in Australia with ease using a a fixed 10 element beam pointed 30 deg above the horizon on the uplink and using a collinear antenna for the downlink. ZL3VTV is looking for to work more ZL's and would entertain schedules. [ZL3VTV @ZL3AC]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

883. Anyone have cct diagram for HP2160A PSU pse ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 20:53:55 UTC
From: I.A.CAmeron@open.ac.UK
Message-ID: <199401302054.MAA15721@ucsd.edu>
Source record: 271693

Hello all,

I have here two HP2160A power supplies, which I would like
to convert for 13.8V use. Unfortunately, there are no pots
in the thing that can be conveniently twiddled ! The PSU
has some sort of interface card on it, although I have no
information on it but it would seem likely that it's for
remote voltage (current ?) control and switching, and the card
also has the regulation circuitry on it as well.
I have two options, either modify the interface card, but I'd
need a circuit diagram, or use the main hardware like the
transformer and smoothing capacitors and build my own
regulation circuit. Although I'd quite like a circuit diagram
to do the second option, as the transformer has multiple
tappings on it, and I'd quite like the data on it.
The only thing I do know about this power supply is that it was
for some sort of medical equipment. I found this out from HP UK,
but they couldn't provide a circuit diagram and told me the
things were obsolete !

Theres some back panel information, as follows:

SER # 817-00434
MODEL # 2160A
OPTION # 15
SYSTEM SERIAL NO. 0986B

Plus, the units were made in the USA !

If anyone could supply me with a circuit diagram for these PSU's
I'd be very grateful.

Cheers for any help and 73 Ian G0TLB

Please reply to: i.a.cameron@open.ac.uk - As I don't subscribe to
info-hams anymore as I can't make the time to read it all !

884. 2m mobile, which one?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 21:59:00 UTC
From: pratt@utkvx.utk.edu
Message-ID: <30JAN199416595896@utkvx.utk.edu>
Source record: 271697

I am looking for a 2m mobile unit, at least 45-50 watts. Any suggestions as to brands and features needed would be appreciated.

Thanks,
Mark
PRATT@utkvx.utk.edu
KE4AXW

885. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 22:46:41 UTC
From: lyndon@unbc.edu
Message-ID: <2ihdch$dbg@unbc.edu>
Source record: 271698

steven.rosenberg@support.com writes:

>I'm curious, Lyndon, what kind of test equipment did you use to check
>out the radios after you assembled them? How did the assembly go?

Well, I'm 90% through the 2m kit (been sidetracked on a couple of other
things). When it's done we'll run it over to one of the local radio shops
and put it on an IFR for final tuneup.

Assembly is quite easy, if tedious. (That diode matrix is a pain in the ... :-)

--lyndon

886. Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 22:56:12 UTC
From: lyndon@unbc.edu
Message-ID: <2ihduc$eri@unbc.edu>
Source record: 271824
Cross-posted to: can.forsale,rec.radio.amateur.misc

jchappel@sanders.lockheed.com (Joel Chappell) writes:

>Mark - Who died and left you the job of being judge and jury? Did you ever
>do anything in your lifetime that you are not regretful of? Are you that
>perfect?

Mark's problem is having had to deal with VE6MAV for too long. The "MAVerick"
has left a legacy with a *very* bitter aftertaste.

Still, it's no reason to pre-judge people.

--lyndon (who dealt with VE6MAV by moving out of the province :-)

887. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 23:16:26 UTC
From: lyndon@unbc.edu
Message-ID: <2ihf4a$i4i@unbc.edu>
Source record: 271702

greg@netcom.com (Greg Bullough) writes:

>They are also required to own a spectrum analyzer, or to know where
>to get access to one.

Then there *is* hope :-)

>And of course, our no-code techs understand clearly that they can't
>trust a manufacturer to produce a design that won't get them in
>trouble.

Trust is not at issue. The reg's *require* that any transmitter you operate meet certain spectral purity requirements. The onus is on *you* as the license holder to ensure that those requirements are met. It doesn't matter *how* you meet the requirements, only that you *meet* the requirements. This applies to all transmitters you operate, regardless of whether they are commercial or homebrew.

>Gee, Lyndon, I'm overwhelmed by your sympathy for a kid who
>sees an inexpensive VHF/UHF rig and puts it on the air.

I'm glad to hear it. Having entered the hobby at a young age, commercial gear was something I simply could not afford. Kits were (and are) a viable alternative to expensive commercial gear. By building the kit that "kid" will come out knowing more about transmitters than the majority of the total ham community. Why is this bad? (Want an example of appliance operators? One of our local "packet experts" was most surprised recently to discover that digipeating a packet meant transmitting it *twice* over the air.)

--lyndon

888. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-30 23:25:31 UTC
From: lyndon@unbc.edu
Message-ID: <2ihflb$jjc@unbc.edu>
Source record: 271703

myers@sunspot.West.Sun.COM (Dana Myers) writes:
> I had the experience of tinkering
>with well-built, high-performance radios. An FX-440, for example,
>is de-sensed by anything transmitting below 440MHz.

I too have a pile of modified commercial gear that I use. I can tell you horror stories about some of *those* rigs, too. As for desense on the FX-440, can't that be solved with an outboard bandpass filter?

>Well, I've pointed out three radios that are far superior to the
>Ramsey FX-146, and I bought all of them for under the cost of one
>Ramsey FX-146 and cabinet.

Yup, me too. Sometimes, though, it's tough to find surplus commercial gear. And some of that gear requires a microscope and tweezers to work on. In both cases, the FX kits are a viable alternative.

>The method to generate useful SS is either by DDS frequency hopping
>or I/Q modulated carrier. PLL approach to SS is doomed to relatively
>few hops/second and/or considerable "bounce" in the desired frequency.

Who said anything about *useful* ? I said I want to *experiment*. Maybe I want to find these things out myself? If I wanted commercial grade SS I'd buy a pair of WaveLAN boards.

>>It's a shame that the Amateur Experimental Service has turned into the
>>Amateur Appliance Service.

>It is a shame amateurs won't take advantage of readily available
>high-quality surplus to use as a platform for experimentation and spend
>considerable effort defending junk radios that don't even come up to the
>performance standards of a Part 15 cordlesst telephone. :-)

Ya, but you just backed up my point - it's not an experimental service any more ...

--lyndon

889. Hams With Pacemakers

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 00:21:43 UTC
From: pauld@fs1.ece.cmu.edu
Message-ID: <2ihiun$aat@fs7.ece.cmu.edu>
Source record: 271712

I would like to get in touch with active hams (HF or VHF) who have
a pacemaker. My father just received an on-demand type pacemaker, and
I am concerned about operating radio gear and the rfi that it might
cause to the pacemaker. I operate 2-meters with 25 watts, and the
HF bands with 100 watts. If you are an active ham and currently wear
a pacemaker, please reply to:

pauld@fs1.ece.cmu.edu (internet)
WA3TLD @ K3OIW.#WPA.PA.USA.NA (packet)

If you would rather discuss it on the phone, please send me your number
and I will call you at your convience.

Thanks for your help

Paul
WA3TLD

890. Voice of America News Now Available on Internet

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 00:24:13 UTC
From: ck@VOA.GOV
Message-ID: <CKGx4E.ILF@VOA.GOV>
Source record: 271692
Cross-posted to: comp.infosystems,comp.infosystems.gopher,rec.radio.amateur.misc,rec.radio.shortwave,rec.video.satellite

The Voice of America's international News and English Broadcasts radio newswire is now available via anonymous FTP and the Internet Gopher, along with a variety of other information from VOA and Worldnet Television.

The News and English Broadcasts wire service includes the texts, in English, of radio reports prepared by VOA staff correspondents, contract news reporters ("stringers"), and feature and documentary writers. The wire provides a comprehensive daily report of news events, worldwide. It is one of the core news products of the Voice of America, and is used as the basis for much of VOA's programming in all languages. The public Internet server is updated within a few minutes of the issuance of each report by the VOA central news department; a seven-day archive of the wire is available on the public server.

In accordance with U.S. law, program materials such as the News and English Broadcasts newswire are provided exclusively for recipients outside the United States.

Selected VOA and Worldnet program schedules, shortwave radio frequency and satellite downlink information, public announcements from the Voice of America and Worldnet, and technical documents on international radio and television broadcasting are also available on the public Internet server.

All the materials on the server are available by anonymous FTP and the Internet Gopher. Schedules and other general information materials may also be requested via electronic mail; the News and English Broadcasts newswire is not available via email because its contents change so rapidly.

The Voice of America and Worldnet are, respectively, the international radio and television networks of the United States Information Agency, and operate out of headquarters in Washington, D.C. VOA has news bureaus in many major world cities.

Anonymous FTP Access
====================

Host: ftp.voa.gov
Logon: anonymous
Password: <your electronic mail address>

Internet Gopher Access
======================

Host, Port: gopher.voa.gov, 70

Link Info:

Type=1+
Name=Voice of America and Worldnet Television
Path=
Host=gopher.voa.gov
Port=70
Admin=VOA Computer Services Division, +1-202-619-2020 <postmaster@VOA.GOV>

Electronic Mail Access
==========

Address: info@voa.gov

To request emailed instructions on how to use the server, send a message with the contents "send help" to the above address.

To request emailed instructions on how to use the server plus an index of available files, send a message with the contents "send index" to the above address.

[Note: We are still in the early stages of transition from a uucp-only site. Some client programs may temporarily have difficulty resolving the IP address of our public server (ftp.voa.gov or gopher.voa.gov) until their local name server receives updated information on the VOA.GOV DNS zone. If you experience difficulty connecting to these symbolic address, the IP address of the server is 152.75.16.1.]

--
Chris Kern ck@voa.gov ...uunet!voa3!ck +1 202-619-2020

891. VK2SG RTTY DX Notes, 28 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 00:24:17 UTC
From: bulletin@n8emr.cmhnet.org
Message-ID: <1994Jan31.002417.6527@n8emr.cmhnet.org>
Source record: 271678
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
============================================================
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
============================================================

SB DX @ WW $RTDX0128
VK2SG RTTY DX Notes, 28 January
VK2SG RTTY DX Notes for week ending 28 January 1994 (BID RTDX0128)

It seems that from this week will be the week for DX-Peditions. They
will be appearing from some very exotic places, so keep the fingers
sharpened up and the screen alive at all times. Our thanks this week
go to ZS5S, W2JGR, WB2CJL, WB9B, 9X5LJ, I5ICY, I5IGQ, DJ3IW and the
Central Eu DX-Cluster node DB0SPC, and NJ0M node of the Twin Cities DX
Packet Cluster.

Bandpass:

Friday 21
0713-21070 SU1CR ARQ
1559-14090 S57J
1653-14084 SU1AH

Saturday 22
0837-21070 SU1CR ARQ
1200-14084 HI8BG
1203-14084 UT5DX
1224-14079 VS6FN Pactor
1318-14086 YU1NR
1422-14090 RA2FB
1427-14085 K5KWG/ZA
1440-21088 VP2EL
1459-21088 7P8SR
1537-21088 ZS9A
1538-21085 9H1ET
1612-21085 TZ6FIC
1622-21088 KG4HG
1824-21084 5R8DS QSL F6FNU
1994-21094 CU1AC
2008-14070 VQ9WL Pactor
2148-14084 S92ZM
2215-14088 CN8NP

Sunday 23
1419-21085 S57U
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1425-14086 ER1PE
1449-21070 SU1CR ARQ
1543-14088 5B4VX
1555-14086 TA5C
1559-21089 9H1ET
1612-21083 TZ6QC
1621-21092 CP1FF
1623-14080 TL8GM
1635-21087 VQ9WL
1647-21089 CU1AC
1653-14089 HK0DPA
1813-21082 FG5FI
1816-14089 EA8AKL
1822-21086 5R8DS
1925-21085 CP6RP QSL I0WDX
1927-14084 TZ6FIC
1928-14086 J28BM
2056-14086 V50CM

Monday 24
0705-21070 SU1CR ARQ
1344-14085 RC2CR
1358-21087 YB3AQF
1548-14083 OK1KQJ
1700-21085 ZD7DP QSL Box 86, St. Helena

Tuesday 25
0650-14095 UN7FO
2021-14083 V50CM

Wednesday 26
0005-14085 PS8KW
0717-14078 SV2BBJ
1127-21088 UN8PFE
1131-21085 UX0KN
1225-14088 SK4BX
1324-14085 S51GL
1450-14086 EA8/ON8RI
1551-21082 IX0KN
1610-14089 ER3ED
1830-14084 FG5FI

Thursday 27

NOTES OF INTEREST
PETER I Is. 3Y0PI. The DX'Pedition team is proceeding on schedule with an expected landing date on the island of February 1st.

PACIFIC TOUR. Nob, JF2MBF and Yasu, JI1NJC will make a trip which includes Tonga (A35JJ) from Feb. 12 to 20, Tuvalu (T23JJ) from Feb. 22 to March 1st, West Kiribati (T30JJ) from March 3 to 8th, Nauru (C21/W3KD) from March 9 to 14. Activity will be on all bands and

modes. QSL direct via JF2MBF or JR2KDN via bureau.

S.M.O.M. 1A0KM. After three years a group of operators will be on from Jan. 26 to 31 on CW/SSB and RTTY on all bands but no 160. QSL via I0IJ. (No report on the Cluster anyway up to now).

MOUNT ATHOS. Monk Apollo has been quite active recently on 20, 80 and 40 SSB. Keep fingers crossed for a return also to RTTY.

Send your bandpass and notes for next week to Bob,
WB2CJL @ W5KSI.#NOLA.LA.USA.NA or WB2CJL @ ZS5S.ZAF.AF.

GL de (DX2) Luciano, I5FLN @ ZS5S.ZAF.AF
/EX
SP KT7H @ N7DUO.WA.USA.NA

892. Semiconductors on internet

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 01:06:26 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CKGz2q.43D@news.Hawaii.Edu>
Source record: 271679

This is probably asking too much, but is there a semiconductor information retrieval system anywhere? FTP? Anyone want to set one up?

Jeff NH6IL

893. Amateur Radio Newsline #859 28 Jan 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 01:23:16 UTC
From: Steve Coletti <bigsteve@dorsai.dorsai.org>
Message-ID: <199401310123.AA02057@dorsai.dorsai.org>
Source record: 271680
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text is transcribed from the audio service by Dale Cary and is first published on Genie.

Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #109 - POSTED 01/29/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NET
CBBS twice monthly. For current information updates, please call

Los Angeles..... (213) 462-0008
Los Angeles (Instant Update Line)..... (805) 296-2407
Seattle..... (206) 368-3969
Seattle..... (206) 281-8455
Tacoma..... (206) 927-7373
Louisville..... (502) 894-8559
Dayton..... (513) 275-9991
Chicago..... (708) 289-0423
New York City..... (718) 353-2801
Melbourne, FL..... (407) 259-4479

For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

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For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

****

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[859]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not for *
* air over amateur radio. Repeat, not for broadcast. This is *
* just a reminder that the address for the Newsline Support *
* Fund is Newsline, in care of Dr. Norm Chalfin, K6PGX, Post *
* Office Box 463, Pasadena, CA 91102. Again, and as always, *
* we thank you. That ends the closed circuit with Newsline *
* report number 859 for release on Friday January 28, 1994. *
* *
* *

The following is a QST

The ARRL files against an instant ham radio ticket and the Red Cross asks hams for help.

*****
ARRL FILES AGAINST INSTANT LICENSE

The ARRL said that it would challenge any move toward the creation of an instant ham radio license and it has now put its words on paper and sent them off to the FCC. This, in comments opposing the commission generated proposal to grant immediate on the air privileges to amateur examinees before a license is issued by the Commission.

The League says that it stands by its previous statement in opposition to a petition for rule making that resulted in the FCC's proposal, in PR Docket 93-267. At that time, the ARRL said in response to a petition by the Western Carolina Amateur Radio Society VEC that such a system was both unlawful and a would be detrimental to enforcement. The League said that the FCC had, as recently as 1987, denied such a concept and that the absence of an up to date database of such temporary call signs would make both self regulation by amateurs themselves and rules enforcement by the Commission more difficult.

The League now says that suggestions in the NPRM that precedents for such a plan exist in other services are incorrect and has reiterated its opinion that such a plan is inconsistent with the international radio regulations. Instead, the ARRL has emphasized that electronic filing of applications with the FCC would accomplish the same goal. This, of reducing the wait to get on the air, while maintaining total FCC oversight of licensing.

As we've reported, AMSAT North America is in full agreement with the ARRL but the rival National Amateur Radio Association, many VEC's and several prominent radio clubs have gone on the record of favoring an instant licensing plan. NARA and a number of radio clubs say that in lieu of self assigned call signs, each VEC should have a previously assigned block of calls that it can issue on the spot. Most of those in favor of instant licensing are however demanding that the FCC include better safeguards against bootlegging than are in the original commission proposal. The reply comment cutoff date for this proposal is February 10th. Look for a decision on this one fairly early.

*****

ARRL BOARD MEETING HELD RECENTLY

A frigid Hartford, Connecticut was the scene for this years first annual meeting of 1994 for the ARRL's Board of Directors. The temperature was below freezing outside, but not so in the meeting hall itself.

Board members spent their meeting covering a variety of topics affecting amateur radio. A League committee will look into the possibility of offering group legal defense insurance to league members involved in lawsuits over antennas and rfi. The league wants to loosen some of the rules governing spread spectrum techniques. In fact the ARRL says it will file a petition for rulemaking seeking to remove overly restrictive rules concerning the use of spread spectrum communications. Board members adopted an interim report and band plan recommendation for amateur use 219 to 220 Mhz. That one mhz slice has been proposed for limited amateur use including packet communications. And the first steps may be starting to change the 40m novice subband. A League committee will consider possibly relocating that band. The committees report is due in July. You will be getting a reminder

from League when your license is about to expire. That new practice will also include sending a 610 form to help encourage amateur radio license renewal.
A lot of what the ARRL board decided last week will definitely affect your day to day ham radio operations for years to come.

*****
LEAGUE AT THE NAT

The ARRL is inviting Broadcast professionals and others to visit its booth at the annual convention of the National Association of Broadcasters, to be held March 21st through the 24th at the Las Vegas Convention Center in Las Vegas, Nevada. The booth, manned by ARRL Public Information Manager Steve Mansfield, N1MZA, has in past years attracted several hundred amateurs and former amateurs. Steve will be on hand to field questions from those in broadcasting who are interested in Amateur Radio. The League will be in Booth number is 2703.

*****
RED CROSS NEEDS HAMS

In the wake of the January 17th Northridge earthquake, the Los Angeles chapter of the Red Cross says that it is in very desperate need of hams to provide help on weekdays and weekday evenings filling shifts in its quake relief shelters. Weekdays pose a real problem for the Red Cross as many of their volunteers have regular jobs. If you are coming to Los Angeles, have a two meter hand-held and have at least six free hours, please call Jim Prince at area code (213) 739-4510. This Red Cross says that this work is vital to those made homeless by the recent quakes, so please consider donating some time.

*****
WESTLINK REPORT NEWSLETTER ISSUE DELAYED

The Northridge earthquake has taken yet another toll. This, in the ability of a popular ham radio newsletter to get its next edition in the mail.
If you are a subscriber to the Westlink Report ham radio newsletter, you may be wondering where edition number 665 is. While it is true that Publisher Burt Hicks, WB6MQV is looking to sell the publication, that's not the reason for the delay in your getting the latest work. Hicks says that last weeks California earthquake is to blame.

"While I was sitting at the keyboard at 4:30 in the morning when the quake hit. It's only by the grace of God that I wasn't killed as things came flying off the tops of bookcases and speaker shelving. The computer was hit and sent flying. It took me a couple of days to find it after unburying it. Yes, the issue will come out. But, it is going to be a couple of weeks.

My apologies to our readers." Burt Hicks, WB6MQV, Editor of Westlink Report.

While we had Burt on the phone we also asked why he has decided to bow out of the ham radio publishing arena after fourteen years.

"It has become quite a burden on us with my work schedule shift at a Hollywood TV station. I work all night five days a week. Then I have four children to keep me awake the rest of the time. It's becoming increasingly difficult, I don't know maybe it is just old age. I still love the newsletter, but at a certain point your body can only handle so much." Burt Hicks, WB6MQV, Editor of the Westlink Report.

Hicks says that he plans to continue publishing the Westlink Report until a suitable buyer comes along. He says that he will only sell out to an individual or group that promises to uphold the same commitment to moral and journalistic integrity started by his predecessor Joe Schroeder, W9JUV, in his HR Report. Hicks adds that the next edition will soon be in the mail.

*****
THIS WEEK IN AMATEUR RADIO UPDATE

A quick correction. A few weeks ago we reported on the return of This Week in Amateur Radio to the satellite bands. Unfortunately we got the transponder wrong. This Week in Amateur Radio can be found on Galaxy 3 Transponder 17 with 5.8 MHz audio, not on Transponder 19 as reported.

*****
NO DAYTON BUSSES

If you are planning to attend the 1994 Dayton Hamvention, better plan to drive your car out to the Hara Arena convention venue. This is because Hamvention planners have announced that they will not be providing free bus service to hotels and motels this year.
The problem is simply one of cost. Dayton first began providing the free bus service after land adjacent to the Hara Arena was made off limits for parking. Over the years, the cost of providing the free bus service has soared until it topped the ninety thousand dollar mark. That's simply more than the Hamvention can afford to pay.
But over the past twelve months, much of the old parking adjacent to the Hara Arena became available once again. Its now privately owned, so there will be a nominal daily charge to be decided by the owner of each lot.
Getting the parking spaces back means that the Hamvention can cut back this expensive transport service, Now it needs to provide shuttles only to outlying parking facilities such as the

Salem Mall. According to Hamvention General Chairman Dave Grubb, KC8CF, this will be a savings of over forty-five thousand dollars. Money that can better be spent on improving other aspects of this yearly event.
Grubb adds that the Hamvention Planning Committee is also working with the Dayton Chamber of Commerce and the city's Convention and Visitors bureau. This, to see if either will help to underwrite the cost of running busses from the various hotels. In lieu of that, the Hamvention is also trying to get the hotels and motels to provide this service for their guests.
The bottom line is that a few out of town visitors who fly to Dayton for the Hamvention may be inconvenienced by this change, but the enhanced on-site parking may make things a lot easier for the vast majority of Hamvention attendees who drive.

*****
TAPR MEETING

Tucson Amateur Packet Radio better known as TAPR has scheduled its annual meeting for March 4th to 6th at the Best Western Inn at the Airport in Tucson. The meeting will feature presentations and papers on several new hardware projects, discussions, and hands-on demonstrations. The afternoon session on Saturday will feature a mini-symposium on future directions in amateur packet radio. For more information contact Program Chairman Keith Justice, KF7TP, at (602) 461-8687, or contact TAPR at 8987-309 East Tanque Verde Road, Unit Number 337, Tucson, Arizona 85749. Their voice mail system number is (817) 383-0000 and the fax line is (817) 566-2544.

*****
QSL STATISTICS

In DX, the ARRL says that its members in 1993 sent about 7 and a quarter tons of QSL cards to the ARRL Outgoing QSL Bureau, and the Bureau shipped them out. This was a total 2,182,000 cards for DX destinations.
The US Incoming QSL Bureau's volunteers sorted just over two million cards in 1993, as well.

*****
QSL ROMEO

Cards for the 9D0RR operation should be sent to Edward Kritsky, Box 715, Brooklyn, New York 11230. The former address of Box 776 belongs to Romeo Stepaneko and is now being used only for his personal business. The change applies only to 9D0RR cards. All other cards for Romeo still go to the Box 766 address.

*****
VIDEO WINNER

Emmy award winning producer Rich Moseson, NW2L has won yet
another honor. The ARRL reports that his video titled Ham
Radio Horizons was a finalist in the New York Festivals
International Non-Broadcast Media competition for 1993. The
awards were presented January 14th in New York City.
The 49-minute program introducing non-hams to Amateur Radio is
part of the CQ Communications video library, which also includes
videos on satellite operation, DXing, contests, and packet radio.
Executive producer Rich Moseson is also ARRL Section Manager for
Northern New Jersey.

*****

For this week, that's all from the Amateur Radio Newsline.
You can write to us at Post Office Box 463, Pasadena, CA 91102.

* * * Newsline Copyright 1994 all rights are reserved. * * *

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< ^^>
< "Big Steve" Coletti >
< Shortwave Listener, Broadcaster, Computer Consultant >
< and all around nice guy >
< Internet: bigsteve@dorsai.dorsai.org ==== S.COLETTI2@genie.geis.com >
< UUCP: Steve_Cole@islenet.com ==== steveny@lopez.marquette.mi.us >
< Fidonet: 1:278/712 US Mail: P.O. Box 396, New York, NY 10002 >
< Voice: +1 212 995-2637 >
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894. Re: Your experiences on 40 meter CW QRP

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 01:44:39 UTC
From: rohrwerk@orac.holonet.net
Message-ID: <CKH0uH.1Hy@iat.holonet.net>
Source record: 271715

turner@safety.ics.uci.edu (Clark Savage Turner) writes:

>In <2ie8ki$2ih@clarknet.clark.net> andy@clark.net (Andrew M. Cohn) writes:

>>If you work 40 meter CW, with 5 watts or less, and use less than ideal
>>antennas (no beams, dipoles or rhombics, etc), I would like to hear about
>>your experiences. No...I'm not writing a book; I just want to know what
>>I can expect before investing in a QRP station!

>Hello Andy:

>It is really hard to predict what sort of experience you will have with
>QRP from your QTH. Really hard. I have had a lot of luck, even with
>a mobile whip on the car using QRP. You muse realistic, but also
>know that things can happen with QRP that others just won't beleve.

[discreet cuts]

>40 CW is really interesting. The antenna is the key, not really the power.
>5 watts is plenty for most contacts under a lot of circumstances. My only
>advice to you is to very carefully consider the sort of antenna you will
>use. A good dipole, even shortened, up 20 feet or more should be fin.

>Clark
>WA3JPG

5 watts really can be a lot of power. I've been building a rig based on
rick Campbell's R2 receiver (jan. 1993 QST). I really wasn't so much
interested in QRP as in the pride of homebrew, but along the way I was
surprised to have lots of nice ragchews where I expected to be fighting
for a decent report. Daytime ragchews with the retired old timers have
been best -- good luck at night also, but folks don't want to ragchew.
I'm feeding a horizontal loop cut for 80 meters -- the more wire the
better, as a general rule!

I will probably still build a 100 watt or so amplifier somewhere along the
way, but it will now be used only when truly needed!

John K0JD

895. Re: Name of Ham store in

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 02:08:00 UTC
From: ron.hauger@select.infi.net
Message-ID: <14.14466.822.0NAC3A95@select.infi.net>
Source record: 271681

On 01-30-94 KENF@CLARK.NET wrote to ALL...

K > : Can anyone hel pme with the name, address and phone number of
K > : a ham store in Virginia?

Ham Radio Outlet...14803 Build America Dr. Woodbridge, Va.
ph...703-643-1063

RON HAUGER**KC4KNA**WATCHER OF THE SKIES
Norfolk,Virginia. USA.
Internet--ron.hauger@select.infi.net

---
* OFFLINE 1.56

896. Online Repeater Database Helper Program

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 02:09:23 UTC
From: au156@yfn.ysu.edu
Message-ID: <2ihp8j$ea9@news.ysu.edu>
Source record: 271717

I have written a program to make it easier to enter data into
the Online Repeater Database devised and managed by Conway Yee
(yee@mipg.upenn.edu). He is looking for volunteers to enter
the information available publicly from several sources.

If you are right now, or were seriously contemplating doing
some of this work, and are interested, you may email me about
the program. I would like to have a few people try it out. If
it seems appropriate, it might be possible to have it available
by ftp somewhere. For the moment, copies will be distributed
by uuencode.

What follows is an excerpt from Conway's last message about the
status of the project. (SInce this message, I've done MA and OR
with 1991 data.) :

This version 0.02 (last updated 19940120) of an online repeater
directory which currently contains over 1800 entries. All previous
versions are obsolete.

There are entries for AK, CT, DC, DE, HI, ID, KY, ME, MT, NC, ND,
NH, NJ, NV, NY, PA, RI, SD, UT, VT, WV, WY. Since the last time
this data base was posted, I have added one state and two
volunteers have added four more.

Thus far, people have volunteered for
1) AZ
2) KY, MS, SC, TN, VI, WV, GA (two states already done
but the current data will be replaced with up to date
information).
If everybody follows through with their intentions, we will
soon have over half the United States accounted for.

This file with all the data is be available for anonymous ftp as
mipg.upenn.edu:/pub/yee/rptr002.Z

Hank Riley, N1LTV
au156@yfn.ysu.edu

897. Re: Name of Ham store in VA wanted!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 02:35:49 UTC
From: kenf@clark.net
Message-ID: <2ihqq5$p7l@clarknet.clark.net>
Source record: 271719

Lee Reynolds (lee@tosspot.sv.com) wrote:

: Can anyone hel pme with the name, address and phone number of
: a ham store in Virginia?

: The name is something like "Skyline Ham Supplies" - he carries a
: lot of seconed hand Collins and Dovetron stuff.

: (Whoops, need a better poof reading program....)

: Thanks,
: Lee.

: (If Jesus is coming, think he'll QSL? Wonder who his QSL manager'll
: be..?)

I believe you are thinking of a store that used to be in Leesburg, VA.
They closed about a year ago. Sold most of their stuff to G and G
Electronics in Gathersburg, MD. (phone 301-258-7373). I heard the owner
of the Leesburg store may still be doing some business from his home.
You might call G&G for more info, or G&G might have what you need, the
store looks like one fine junkbox.

--

==========
Ken Firestone, N3JBU | If you look at things right, its best not to know
kenf@clark.net | who you really are. Because anything that happens
| to anybody who doesn't know who he really is
| actually happens to somebody else. So it makes no
| difference at all. -- Nelson Algren.
==========

898. Re: Is there a faq list for GMRS?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 03:31:08 UTC
From: Thom Forbes <forbest@delphi.com>
Message-ID: <19940130.22310817.forbest@delphi.com>
Source record: 271682

Bob Witte <bobw@col.hp.com> writes:

>Frank J. Reda (reda@gandalf.rutgers.edu) wrote:
>: Does anyone know where I could get more info on GMRS (general mobile
>: radio service).

Frank,
The best source of info re: GMRS, by far, is: Personal Radio Steering Group
they are at: P.O. Box 2851, Ann Arbor Mich 48106, Voice (313)-MOBILE3, and
have a BBS at (313)-995-2100.

P.R.S.G. membership is very reasoanble, and will provide you with more
information on GMRS than you'll ever want or need. Additionally, they will
supply
the necessary application forms from FCC as well as information as to how to
complete them.

When I got my GMRS license, it was $35. Forms are also available
from FCC, General Mobile Radio Service,
PO Box 358230, Pittsburgh, PA 15251-5230
ask for FCC FORM 574.

Hope this helps.

PS. Iv'e not seen a GMRS FAQ on internet.

Good Luck,

Thom Forbes (N2CBV)

899. Welcome to rec.radio.info!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 04:00:05 UTC
From: rec-radio-info@ve6mgs.ampr.ab.ca
Message-ID: <rec.radio.info-welcome_759988805@ve6mgs.ampr.org>
Source record: 271706
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.cb,rec.radio.noncomm,rec.radio.scanner,rec.radio.info,news.answers,rec.answers

```
Archive-name: radio/rec-radio-info/welcome
Last-modified: $Date: 1994/01/02 22:00 $
Version: $Revision: 1.06 $

*** Welcome to rec.radio.info! ***

Welcome to rec.radio.info, a group that aims to provide a noise-free source
of information and news for the entire rec.radio hierarchy.

Two introductory articles about rec.radio.info are posted to the group and
to news.answers every two weeks. You are now reading the first article, which
explains what rec.radio.info is, and answers some Frequently Asked Questions.
The second article is titled "Submission Guidelines", and you only need to
read it if you want to submit an article to rec.radio.info.

You can skip to the next section of this article by searching for the next
" -- " string. The sections available are:
- What is the purpose of rec.radio.info?
- Why are messages almost always cross posted to rec.radio.info?
- What is a 'follow-up', and what does 'moderated' mean?
- OK, so now I know what 'moderated' means. Tell me more.
- What type of material is considered inappropriate?
- I do not have access to news, how can I get the information posted to
rec.radio.info?
- Will the material appearing in rec.radio.info be archived somewhere?
- I have a regular posting with timely information, is there a way to
speed up it's delivery, or automate for more convenience?

-- What is the purpose of rec.radio.info?

The purpose or charter of rec.radio.info is to provide the Usenet community with
a resource for information, news, and facts about any and all things radio.

All the other rec.radio groups are intended for discussions and general chit
chat about radio. Rec.radio.info will contain informational, factual articles
only. Follow-ups are redirected to an appropriate other group, and further
discussion (if any) will not take place in rec.radio.info.

In order to ensure that rec.radio.info contains only appropriate articles, it
was decided to create the group as a moderated newsgroup.

-- Why are messages almost always cross posted to rec.radio.info?

It provides a "tag" for each article to be assembled into a filtered
presentation in rec.radio.info (even with cross-posting, only one message, with
```

a unique Message-ID, is propogated across the net). This tag also facilitates a pre-existing method of dropping or cancelling the articles locally within the discussion groups if you don't want to see them. This accommodates individuals who want to separate the bulletins from the discussions, discussions from the bulletins, as well as those who are adamant about not reading another newsgroup and wanted to see everything all in one basket.

With the total size of Usenet (in number of newsgroups and total traffic) doubling every year or so, this is no insignificant contribution to reducing information noise and chaos. Making the discussion groups a catch-all, and making extra newsgroups filters on that catch-all, is also the most realistic way to implement such a scheme (It's not intuitively obvious what the charter, contents, and general appropriate topics for each and every newsgroup are. Seeing FAQ's and charter/intro postings in the home newsgroup is beneficial for new readers).

By cross-posting one only is adding a few tens of bytes to each bulletin (to specify the extra group on the Newsgroups line), but are adding the capability for very powerful filtering features available on most news servers, listservers and readers. Your local news guru could probably explain these features in more detail.

In rn, for example, according to Leanne Phillips in her rn kill-file FAQ, add a line of the form:
/Newsgroups:.*[,]rec\.radio\.info/h:j
either in ~/News/KILL (if you don't want to see rec.radio.info articles anywhere) or ~/News/rec/radio/amateur/misc/KILL (if you don't want to see them just in rec.radio.amateur.misc). The latter method means your kill file will only be consulted during rec.radio.amateur.misc (and hence runs more efficiently), and will probably work for most people.

In nn, according to Bill Wohler in his nn FAQ, add a line of the form:
rec.radio.info:!s/:^
in ~/.nn/kill (if you don't want to see rec.radio.info articles anywhere), or put the following lines:
sequence
rec.radio.info
rec.radio.
at the end of ~/.nn/init in order to see all the rec.radio.info bulletins first, then read the remaining rec.radio.* without the bulletins.

-- What is a 'follow-up', and what does 'moderated' mean?

If you are new to Usenet and are not familiar with the terminology, you might want to read the general introductory articles found in the newsgroup news.announce.newusers. Doing so will make your life on the net much easier, and will probably save you from making silly beginner's mistakes.

If you think that at this moment you are reading an echo, a conference, or a bulletin board, I'd also strongly suggest a trip over to news.announce.newusers.

For the rest of this article, I will assume you have a basic knowledge of Usenet terminology and mechanics.

A moderated group means that any article that needs to be posted to the group has to be accepted by the moderator of the group. Since we need to ensure that followups to an article (discussion) do not show up in the rec.radio.info newsgroup, the `Followup-To:' header line contains a newsgroup that is appropriate for disussions about the specific article.

-- OK, so now I know what 'moderated' means. Tell me more.

Rec.radio.info is a moderated newsgroup, which means that all articles submitted to the group will have to be approved by the moderator first.

The current moderator of the group is Mark Salyzyn. Submissions to rec.radio.info can be posted, or e-mailed to:

rec-radio-info@ve6mgs.ampr.ab.ca

Comments, criticisms, suggestions or questions about the group can be e-mailed to:
rec-radio-request@ve6mgs.ampr.ab.ca

But before you do so, please be sure to check out the "Submission Guidelines" article.

The influence of the moderator should be minimal and of an administrative nature, consisting chiefly of weeding out obviously inappropriate articles, while making sure correct headers etc. are used for the appropriate ones.

-- What type of material is considered inappropriate?

There are three broad categories of articles which will be rejected by the moderator:

1) Requests for information: rec.radio.info is strictly a one-way street. I receive information in my mailbox; I then post it to rec.radio.info. Requests for specific information belong in the normal discussion newsgroups. If your request gets answered, you might consider passing the answer on to rec.radio.info, though. Especially if you can edit it into a informational, rather than a discussion, format.

2) Obvious discussion articles, or articles that appear unsubstantiated.

3) Commercial stuff: a relatively unbiased test of a radio product would be accepted, but any hint of for-profit might be reason for rejection. For three reasons: This is not the purpose of the list, for-profit is a controversial topic, and this list may be passed onto Amateur Packet Radio (where for-profit is prohibited except under certain provisos).

rec.radio.swap (or possibly comp.newprod) may be more deserving of the posting in any matter.

Similarly, copyrighted material generally cannot be used. If it's TRULY worthwhile to the net, I would recommend obtaining permission from the copyright holder. Please note the source, and if permission was given. I

reserve the right to make the final decision concerning appropriateness in all situations. In most cases, a brief summary of, or pointer to, the copyrighted information may be all I can allow.

-- I do not have access to news, how can I get the information posted to rec.radio.info?

brian@UCSD.EDU (Brian Kantor) has kindly supplied a mail list server for rec.radio.info. Non of the articles will be digested, due to their size, so you will receive individual mailings for every article posted to the group.

Mail sent to radio-info@ucsd.edu will be forwarded to the moderator and thus is an alias to rec-radio-info@ve6mgs.ampr.ab.ca

To subscribe and unsubscribe via the listserver; the format for that is

sub address radio-info
unsub address radio-info

where 'address' is your full mailing address. Send this request to

listserv@ucsd.edu

Note that the server will automatically delete any address that bounces mail. If you leave the address portion blank, it will try to deduce your address from the mail headers. This may not work if you are on bitnet, milnet or some other non-Unix host, so it is recommended to put your return address in any case. For example:

sub mymailbox@myhost.mydomain.mil radio-info
or
sub MEMEME01@DMBHST.bitnet radio-info

or something like that.

-- Will the material appearing in rec.radio.info be archived somewhere?

Yes. Still firming up details at the moment but here is a preliminary list:
- unbc.edu as maintained by Lyndon Nerenberg <lyndon@unbc.edu>
- nic.funet.fi maintained by Risto Kotalampi <rko@cs.tut.fi>
saved to /pub/dx/text/rec.radio.info currently stored as numbered files.

Effectively this means that anything you post to rec.radio.info will be permanently stored, so your work will not be lost.

-- I have a regular posting with timely information, is there a way to speed up it's delivery, or automate for more convenience?

Yes, there is! It may take a bit of chatter with the moderator, but we are willing to take responsible people and provide them the means of posting the articles directly from their site. We will try everything we can as we fully realize that DX (distant signal) and astronomical data can be somewhat transitory. We are also willing to allow regular posters of information the same courtesy, even if the information is not as time critical.

We refer to this as self-moderation, which is partly based on the model for news.answer. This requires co-operation and good will to be beneficial to the community in the rec.radio hierarchy.

I suggest reading the posting guidelines for more information. I am open to suggestions.

I thank the following individuals for their input into this article:
rec.music.info moderator Leo Breebaart rec-music-info@cp.tn.tudelft.nl
rec.radio.broadcasting moderator Bill Pfeiffer wdp@gagme.chi.il.us
Paul W. Schleck, KD3FU pschleck@unomaha.edu
Ian Kluft, KD6EUI ikluft@uts.amdahl.com

--
Mark Salyzyn -- Moderator rec.radio.info
Submissions to: rec-radio-info@ve6mgs.ampr.ab.ca
Administrivia to: rec-radio-request@ve6mgs.ampr.ab.ca
* Requests for information do *not* belong in rec.radio.info *

900. Ham Radio FTP area on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 04:00:07 UTC
From: wy1z@netcom.com
Message-ID: <rec.radio.info-ham.radio.ftp_759988806@ve6mgs.ampr.ab.ca>
Source record: 271732
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info,rec.radio.scanner

This is a periodic reminder that the Boston Amateur Radio Club maintains an FTP area on world.std.com (192.74.137.5) in pub/hamradio.

This area is accessible via: anonymous ftp, gopher, and World Wide Web (and possibly other methods I'm not yet aware of). World is not *fsp*-able yet (I asked them).

Via Gopher, the easiest path to the area is by selecting the following from World's main menu:

18. Membership and Professional Associations

3. Boston Amateur Radio Club

And go from there...

Please feel free to browse through the area.

If anyone has any questions about it, please do not hesitate to e-mail me.

Also, up-to-date copies of the files on the ARRL's information server (info@arrl.org) are available in the directory pub/hamradio/ARRL/Server-files.

All text files are uncompressed, so they are both retrievable and viewable via Gopher and World Wide Web. (If you have any troubles with any text file, please e-mail me).

Source code for programs is always welcome. It can permit people to use those programs on other computers with other operating systems.

Scott

901. Re: Yaesu FT-890AT

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 04:09:06 UTC
From: Thom Forbes <forbest@delphi.com>
Message-ID: <19940130.23090691.forbest@delphi.com>
Source record: 271683

Hi Doug,

I've been using the FT-890 for over a year now, and
love it. Like yourself, I spent considerable time investigating
the price/benefit of the competitors. I purchased my rig
primarily for use while camping. I've used it very sucessfully
with just a long wire up in the trees. The optional antenna
tuner is well worth the investment. CW performance is superb,
and I've work plenty of DX on SSB. The FT-890 is now my
promary rig.

The optional CW and SSB filters make a small improvment,
but frankly I think a good DSP Digital audio filter would be
a much better investment.

On the down side, I've been less than thrilled with RTTY
performance, owing probably to the already narrow passband of the
SSB filter. There is no provision for a RTTY passband IF filter
as found on many other transceivers, and while Yaesu describes
RTTY/PACKET operation in their FT-890 manual, I'ld be a lot happier
to have an IF filter better taylored to the wider shift/bandwidth
of these modes.

helpful.

73s, Thom/N2CBV

902. Re: ANARTS RTTY NEWS BULLETIN 792 16/01/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 06:45:21 UTC
From: steve@fawlty.towers.oz.au
Message-ID: <1994Jan31.064521.3076@fawlty.towers.oz.au>
Source record: 271684
Cross-posted to: aus.radio,rec.radio.amateur.misc

In article <5121@eram.esi.com.au> dave@eram.esi.com.au (Dave Horsfall) writes:
>[ANARTS - Australian National Amateur Radio Teletype Society]
>
>ANARTS NEWS BULLETIN 792 16/01/94
>
[stuff deleted]
>--- Amateur Radio Teletype :
By FRANK VK2FJL.
> --
> Due to the diversity of RTTY equipment in common use
>among Radio Amateurs, it is desirable that a few simple
>guidelines be observed in order to ensure that transmitted
>data is received as it is intended by the variety of
>receiving equipment in use.
>
> For instance - it is known that at least four
>different keyboard layouts using different keys for the upper
>case or upshift characters are in use by Amateur RTTY
>stations. Certain characters are therefore incompatible and
>their use should be avoided. Indeed characters used on some
>machines are not used at all on others. Some examples are the
>exclamation mark, the commercial at, the ampersand, semi-colon
>and quotes.
>
Seems like an awful lot of bother, why not scrap the old metal
monster and run a protocol that supports the ASCII subset, such
as the many packet protocols in use, even PACTOR probably works.

> Also, some RTTY'ers use `hard copy' teleprinter machines
>of various types, the most common being teletype (both
>CCITT and USA keyboard versions) Siemens, Creed and Olivetti.
>Others use `Glass' or computers which run a variety of RTTY
>programs, the main difference here being that computers reset
>almost instantly to the beginning of a new line, whilst the
>mechanical machines require longer time (usually 2-3 charact-
>ers) for the carriage to fly back to the other end, recover,
>and prepare to `do it again'. These machines require a separ-
>ate (CR) and (LF) to be received at the end of each line,
>whereas the computer only needs the (CR). It does not see the
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
That depends on the terminal emulation package you are running,
some need CR, some need LF, some need both CR & LF

>(LF) and automatically inserts one for itself everytime it
>sees a (CR). Line lengths also vary for different equipment :
>e.g 24, 32, 64, 69, 72, 76, and 80 or even more characters
>per line.
>
In this case, make the line length to 24 chars, that way
more paper is used and more trees are chopped down, again,
send the mechanical monsters to the metal wrecker and get
a laptop and run packet.

> These mechanical differences, as well as the need for uni-
>formity of layout, e.g. in broadcast production, necessitate
>the publication of a standard or protocol for the
>preparation of RTTY material.
>
[much more deleted]

steve

--
Steven Blanche, Tower Technology	email : steve@fawlty.towers.oz.au
vk2kfj%vk2kfj@vk2xsb.nsw.aus.oc	wk phone : +612-427-2999
vk2kfj.ampr.org (4800@144.800)	wk fax : +612-427-7072

903. Re: Boring WWV Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 07:06:53 UTC
From: ARMOND@delphi.com
Message-ID: <19940131.02065376.armond@delphi.com>
Source record: 271685

Those WWV people are not nice at all. I was just trying to be helpful
when I called to tell them that my S-38 (which I got at a swapmeet
for $15) inmdicated that WWV was about 10 kilocycles off. That, when
they were not drifting. I suggested they go to crystal control.
I got this really neat Timex watch at a yard sale for $5. It sez that
] WWV is about 30 seconds off. What snotty people work at WWV. They did
not appreciate my helpful call at all.

904. RAC FORUM QUESTIONNAIRE

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 07:33:35 UTC
From: ve6afo%ve6yyc.#cgy.ab.can.noan@bohica.ve6mgs.ampr.org
Message-ID: <$7604_ve6yyc.1994@ampr.org>
Source record: 271699
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Bid: 7604_VE6YYC
From: VE6AFO@VE6YYC.#CGY.AB.CAN.NA
To : RACONV@CANADA

RAC Forum Questionnaire

The First National Convention of Radio Amateurs of Canada will provide an excellent opportunity for amateurs to meet face to face with the directors of RAC and discuss issues that will help to shape the direction of amateur radio in Canada. This questionnaire is designed to help the RAC directors get a feel for the basic issues. The RAC Forum will provide the opportunity for these and other issues from the floor to be addressed as well.

Please check the appropriate line to signify your assessment of RAC's handling of the listed issues. Space is also provided if you wish to make any specific comments. For any additional comments or concerns please use a separate sheet.

Poor Fair Avg Good Don't
Know

The RAC Central Incoming QSL Bureau __ __ __ __ __

The RAC Central Outgoing Bureau __ __ __ __ __

The Provincial Incoming QSL Bureaus __ __ __ __ __
(please state province)

The Canadian Amateur magazine __ __ __ __ __

Regulations and legal issues __ __ __ __ __

Tower issues __ __ __ __ __

Licensing __ __ __ __ __

EMC issues (TRC-86) __ __ __ __ __

Membership __ __ __ __ __

Headquarters and Administration __ __ __ __ __

Spectrum issues and band planning __ __ __ __ __

Services to members __ __ __ __ __

Field Services Organization __ __ __ __ __

RAC Bookstore __ __ __ __ __

Attracting new people
to the ham community __ __ __ __ __

Attracting new members to RAC __ __ __ __ __

Club affiliation with RAC __ __ __ __ __
(your thoughts please)

Are you a member of RAC? YES __ NO __

Please submit either on packet radio to Ken VE6AFO @ VE6YYC or mail
to: Ken Oelke VE6AFO, 7136-Temple Drive N.E., Calgary, Ab., T1Y 4E7

905. Timewave sources?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 08:03:39 UTC
From: wier@merlin.etsu.edu
Message-ID: <wier-310194020339@csci-wiermac.etsu.edu>
Source record: 271687

I'm interested in getting some prices on the Timewave DSP units. In checking the Feb 94 QST I find about $20 discount between the company itself and Texas Towers. With sales tax, it makes 'em basically even (since I'm in Texas). I havn't seen 'em in any of the other ads so far. Anyone know who else carries 'em?

THANKS
& 73 - de WB5KXH

======== insert usual disclaimers here ===========
keeper of the Adobe Photoshop, MC68HC11, ICOM mailing lists
Bob Wier, East Texas State U., Commerce, Texas
wier@merlin.etsu.edu (watch for address change)

906. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 08:42:58 UTC
From: jeffl@comix.UUCP
Message-ID: <752@comix.UUCP>
Source record: 271725

In article <9401281134.A4225wk@support.com> steven.rosenberg@support.com writes:
>
>So you're saying they DO work if assembled correctly...
Sure. There were some synthesizer spurs that were fixed with
judicious grounding. The VHF receiver sensitivity wasn't fabulous
(approx .40uv/12db SINAD). The transmitter would oscillate badly
when mistuned. Two kits arrived dead and left working. I'm
not going to claim that they were fabulous performers. Nor were
they stable over a wide range of temperature or power supply voltages.
However, they do operate. I didn't see anything "illegal"
or dangerous in the operation or design. Again, I do NOT
consider the radio a superior or state of the art product.
If it had a dual gate GAsFET front end, high level mixer,
helical resonators thruout, dual PLL tx/rx local oscillators
for fast TR switching, fewer tx spurs, tracking filter rx
front end, built in PL, RS-232 control, ad nausium..., I would
consider it state of the art. Is there some other kit manufacturer
other than Ramsey that has a superior product?

>>a while, I drag my Cushman CE-6 service monitor to the repeater
>>site and call out tx frequency and deviation for everyone checking
>You are a prince among hams! This would be a great service for all such
>capable amateurs and local clubs to offer. It's a great way to ensure
>that all those FM transmitters are operating properly. Again, I commend
>you.

I've received 4 pieces of email indicating that this would be
a good thing to do. All it would take is making friends with
your friendly local 2way shop. I've noticed a trend over the
last 25 years. The hams and the commercial operators appear
to barely tolerate each other. 25 years ago, every two way tech
was a ham. Now days, the techs with ham licences ask me not
to mention that they work for a commercial shop. One local ham
needed a commercial radio programmed for ham frequencies. This
proved to be a major political challenge.

My pilgrimage to the local repeater site (5 minutes from my office)
is not much of a challenge. I do it whenever I find the excuse.
However, 50 check-ins followed by 20 arguements does not encourge
repetition. What I ask is that they check in normally. If the
deviation is low, I ask them to YELL into the microphone. This
shows if the deviation setting is low or if the tx audio gain is
low. I have to explain the difference between the audio/mic gain
and deviation at least 10 times. The process has lasted as long
as 3 hours. Many hams will check in with every radio they own

causing me to get confused. The same hams check in with the
same screwed up radios every time. Little wonder the commercial
shops don't want to spend the time and effort.

At the last Winterfest in Montery CA, the KM6DZ group used the
latest greatest HP service monitor to check handhelds and mobiles
for anyone interested. Most everything was measured. Next year,
the box will probably be HPIB (IEEE488) computer controlled so that
it can be done automatically. Many of the brand new radios were
miserably adjusted. In spite of the large number of handhelds
in evidence, only about 50 radios were checked. It makes me wonder
if the others even cared.

It's not too difficult to turn your repeater receiver into a piece
of test equipment. Here's some ideas:

1. Instant replay. Install a speech recorder that records the last
10 seconds of a transmission. If someone wants a signal report, they
can hear themselves and judge for themselves.

2. You can measure SINAD remotely. Modulate the rx local oscillator
of the repeater to +/- 3.0Khz deviation at 1.0Khz. Notch out the
1.0 Khz tone at the repeater audio with a commutating synchronous
filter. The ratio of the audio before and after the filter is
proportional to the SINAD. If you want to go high tech DSP, read
the June 1993 issue of QEX for a program to do it with a TI320C25
DSP chip.

3. Measure frequency remotely. Many repeater controllers (RLC-1)
have A/D converters suitable for measuring the discriminator
voltage. Some have remote offset calibration functions for dealing
with adjustments and drift. Have the repeater belch the frequency
error.

4. There are still a bunch of tunable PL encoders in use. Our
repeater K6BJ returns a differnet courtesy tone depending upon
whether the PL decoder hears the correct tone. Just tune till
the tone changes.

You don't need a service monitor to get things right. It helps,
it's nice, but it's not necessary. Your repeater can do the job
adequately with some construction. If it works, turn it into a
kit and sell it.

--
Jeff Liebermann Box 272 1540 Jackson Ave Ben Lomond CA 95005
408.336.2558 voice wb6ssy@ki6eh.#nocal.ca.usa wb6ssy.ampr.org [44.4.18.10]
408.699.0483 digital_pager 73557,2074 cis [don't]
jeffl@comix.santa-cruz.ca.us scruz.ucsc.edu!comix!jeffl

907. Re: FCC Call sign question...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 09:20:25 UTC
From: robocop@clark.net
Message-ID: <2iiigp$564@explorer.clark.net>
Source record: 271690

In article <JXgwgc1w165w@p-cove.uucp>, Aaron Smith <wolfman@p-cove.UUCP> wrote:
> I would like to know something.. What does the fcc do when they issue
>all the call signs for a certain area?? Do they start over with call
>signs that have not been used for a while, or do they just start issue
>from another group?

The FCC issues calls from another group.

Matt Roberts N3GZM

> wolfman@p-cove.uucp (Aaron Smith)
> Amateur radio station KB8PFZ
>

908. Re: X application for code?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 12:07:30 UTC
From: Aaron Wohl <aw0g+@andrew.cmu.edu>
Message-ID: <QhHDG2u00WA10KBIBN@andrew.cmu.edu>
Source record: 271723

I have been using and older version of this package (see below). Let me
know if you find anything else.

ak>archie -s superiormorse

Host world.std.com

Location: /pub/hamradio/unix/morse
FILE -rwxrw-r-- 92208 Apr 29 1993 superiormorse.shar

Host kiawe.soest.hawaii.edu

Location: /pub/joe/morse
FILE -rw-rw-r-- 94994 Feb 18 1993 superiormorse
ak>

909. Yaesu ft-26 mods needed

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 12:29:55 UTC
From: burrus@cmu.unige.ch
Message-ID: <1994Jan31.142955.1@cmu.unige.ch>
Source record: 271728

Hello,
I have purchased a Yaesu ft-26 transceiver (US version).
I need to transmit in frequencies which are blocked.
Does it exist a mod for extended tx frequencies ?
Do you know how open the freq. 150.000 to 170.000 Mhz ?
Is it a solder jumper to remove ?
Does it exist a FTP site where I can find such informations ?
Thank's in advance.
Christophe

910. Re: Your experiences on 40 meter CW QRP

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 13:24:23 UTC
From: gdo@aloft.att.com
Message-ID: <CKHx8q.Ex1@cbnewsm.cb.att.com>
Source record: 271722

In article <2ie8ki$2ih@clarknet.clark.net>, andy@clark.net (Andrew M. Cohn) writes:
|> If you work 40 meter CW, with 5 watts or less, and use less than ideal
|> antennas (no beams, dipoles or rhombics, etc), I would like to hear about
|> your experiences. No...I'm not writing a book; I just want to know what
|> I can expect before investing in a QRP station!

Hi Andy,
I have just gotten into 40m QRP using the MFJ-9040 and a dipole. I have
yet to make a DX contact with it, but I HAVE worked all over the east coast.
The trick for DX is staying up late and hanging out in the low portion of
the band. The Novice sub-band gets horrible at night but below 7.050 or so
there is no broadcasting or voice operation. Canadians and some others in
Region 2 have phone priveleges where we have CW only. A buddy of mine works
40m into Europe on 2.5 watts on a regular basis.
I'm not sure what antenna you have in mind. My dipole was easy to build
and cheap. I have room to stretch it out, but there are things you can do to
shrink it.
By the way, if you're considering the MFJ, count me as a big fan. Also, the
active audio filter is WELL worth the scant few bucks it costs. It is just
a couple of op-amps (on one chip) on a little daughterboard. Aren't op-amps
great!? Turning on the filter really kills the QRM!
73 ES GUD LUK DE N3BDA

--

Glenn D. O'Donnell, N3BDA Internet: gdo@aloft.att.com
AT&T Bell Laboratories Amateur Radio: n3bda@n3dpu.#epa.pa.usa.na
Allentown, PA Home QTH: Palmerton, PA (Grid FN20eu)

911. Re: Yaesu FT-416 MODS wanted!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 13:31:36 UTC
From: mpeter@elektra
Message-ID: <2ij17o$rf0@elna.ethz.ch>
Source record: 271694

Chris Noles (nolesc@netcom.com) wrote:

: Hello everyone,
: I am desperately trying to find the FT-416 MODS. Could somebody
: please post them here or give me an address where I can FTP them? I
: tried World.std.com, but I don't want to pay to use it.
:
: Any help would be appreciated.
: Chris
: KC4VTT Tech +
get the mods for the FT415 from World.std.com. I modified my FT416
according them and it works.

--
Martin Peter, ETH Zuerich e-mail: mpeter@ee.ethz.ch
Computing Support Group tel: 41 1 623 5286
ISG Gloriastrasse 35 fax: 41 1 252 0954
8092 Zurich/ Switzerland

912. Re: The DSP nobody mentioned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 13:31:58 UTC
From: jwa@tellabs.com
Message-ID: <1994Jan31.133158.14597@tellab5.tellabs.com>
Source record: 271695

In article <milewski-250194133201@fp2-st-affairs-11.uoregon.edu>
milewski@oregon.uoregon.edu (Steve Milewski) writes:

>Everyone was impressed, to say the least. Especially when they found that
>the cost was only in the $330 range. Apparently these things sold out at
>Dayton last year and the backlog on orders was phenomenal.
>
>A friend of mine, Steve, AI7W, bought one recently and here's a short
>description from him:
>
> My DSP's model is the DSP-120, it's made by Digital Interactive
>Signal Corp.. It has 8 programable filter memories and connects to
>the parallel interface of a P.C. (386 with VGA or better). It provides
>a real time audio spectrum display and a digital recording feature
>as well as providing a number of ways to custom design filters. Sets
>of 8 filter designs can be stored as files on the P.C. making it
>possible to have an almost unlimited number of filters.

I have one and I'm not that impressed. It's like anyother DSP
it's just a filter. I would like to have a DSP that's more flexible
and provide other features like FFT's, modems, adaptive filters and
signal recognition.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

"I'm a half breed"
"I can only breed through on side of my nose!"

Eddie Kantor

>

913. Re: Power Line Interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 13:43:32 UTC
From: julian@bongo.tele.com
Message-ID: <1994Jan31.134332.10167@bongo.tele.com>
Source record: 271696

In article <2i6g6c$p1t@organpipe.uug.arizona.edu> hlester@helium.gas.uug.arizona.edu (howard n lester) writes:
>In article <1994Jan26.145524.6118@ke4zv.atl.ga.us>,
>
>An employee of our power company (Tucson Electric Power) is employed to track
>down power line interference by using radio direction finding equipment.
>He has a variety of radios in his truck, as well as a hand-held
>yagi (that looks as if
>it's cut for around 450 MHz). He is getting to be really good at this, and has
>recently helped me out by getting some ten or so poles in my neighborhood
>repaired. No more noise!
>
>The point of all this is that taking a sledgehammer to a pole is not the only
>way to pin down the noise.

I would imagine that a sledge hammer would be a bit slow.
Couldn't you borrow a chain saw?

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

914. Re: Your experiences on 40 meter CW QRP

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 13:55:16 UTC
From: junger@rsg1.er.usgs.gov
Message-ID: <1994Jan31.135516.1302@rsg1.er.usgs.gov>
Source record: 271726

In article <2ie8ki$2ih@clarknet.clark.net>,
Andrew M. Cohn <andy@clark.net> wrote:
>If you work 40 meter CW, with 5 watts or less, and use less than ideal
>antennas (no beams, dipoles or rhombics, etc), I would like to hear about
>your experiences. No...I'm not writing a book; I just want to know what
>I can expect before investing in a QRP station!
>
>Many thanks & 73,
>Andy, K4ADL
>andy@clark.net
>

The key for me in working 40 CW successfully (and I'm not all that
successful!!) is having a good receiver and listening carefully
and diligently. Band conditions seem to vary quickly and drastically
on 40; you should be able to recognize when it is a good time to work
hard for DX and when you just might as well rag chew with the guy
down the street. I wouldn't (and don't) use any antenna that was
"worse" then a resonant dipole in performance. You might consider
some of the "shortened" dipoles if space is a factor; but I don't
have any experience with them.

BTW, I use 100W; I'm not bored enough to try QRP yet..... I believe
that most successful QRP operators have spent lots of time working
with "normal" rigs before they go to QRP. At least that's the
impression that I have.

cheers -- John, W3GOI

915. FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 14:05:50 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199401311409.GAA25791@ucsd.edu>
Source record: 271724

>Does anybody know the FCC's daily processing rate for Ham licenses
>and upgrades?
>- Tim Ikeda (timi@mendel.berkeley.edu)

this information could be determined by computing the differences between the callsign status lists that have been published for some time. it would be an average, but from that you could predict about where they are in terms of average licenses/period.

916. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 14:45:32 UTC
From: greg@netcom.com
Message-ID: <gregCKI0zw.Kuo@netcom.com>
Source record: 271729

In article <1994Jan28.171743.483@arrl.org> ehare@arrl.org (Ed Hare (KA1CV)) writes:
>Greg Bullough (greg@netcom.com) wrote:
>
>: Steven has hit it on the head. As hams, we have for years said "can't
>: afford a commercial rig? Home-brew or build a simple kit." Then
>: QST and all the other magazines which bang this drum (which quite
>: handily fills up magazine pages with circuits that few ever
>: build) reap big advertising dollars from kit companies.
>
>For starters, I am not sure that few ever build projects from
>magazines.

Why? Haven't you polled your readers, in order to make intelligent
editorial decisions? Haven't you asked 'if not, why not?' '73' has
an article-by article reader feedback form, every issue. If you
don't have the information, you really aren't in much of a position
to either support or refute my assertion, are you?

>Some of the authors that have offered a kit have reported
>large sales

And god bless 'em if they do, for they are the ones who recognize
that parts procurement is 90% of the problem and 200% of the
expense of home-brewing. Someone who take the time to write an article,
and then offer a kit, with no intention of profiting by either is,
IMHO, entitled to some sort of sainthood.

>something else. Go to any hamfest, note the rows upon rows of
>vendors offering components. Hams are buying them, putting them
>in bags and taking them home. They must be doing something with
>the parts.

In my experience, they're gathering bits for something they'll
'get around to someday,' and or looking for a specific component
for some simple use.

>Even if hams don't actually build very many projects, they sure seem
>to enjoy reading (or thinking) about building them! All of the ham and
>electronics magazines offer construction articles. I don't think I
>would characterize printing articles that our readers like as "banging
>a drum", but you may have meant something I just didn't understand.

Yup. One of the difficulties, over the years, is that many of the
folks at ARRL HQ 'just didn't understand,' what it's like to live
in the real world without the worlds biggest junk box at their
disposal, as well as instrumentation, EE degrees, etc., in pursuit

of the hobby. Sure, I *like* reading the advanced construction articles, and dreaming that I might some day be entitled to hold the same end of a soldering iron as Wes Hayward. The fact is, though, that I'm doing good if I have the ability and time to crank up a two-transistor QRP transmitter.

The 'drum' being banged is one which rings out 'build build build.' The one that needs to be banged is 'how to get on the air with a key, a chunk of coax, and an HW-101 you picked up for a buck and a quarter at the ham-fest.' Or 'how can a tell a good old FM model HT from a dud?' Building is great. But there is NO substitute for getting a new ham *ON THE AIR* as expeditiously and cheaply as possible, and with the least angst. Sure, there're folks (like the gentleman from Hawaii who did some articles back in the 70's) who get their Novice ticket and home-brew everything from the wall out. And they're great. But that's just not realistic for most new hams.

The no-code ticket was instituted to reduce discouragement. The League fought it tooth-and-nail, until it was clear that the League had lost. This 'build it yourself' approach to basic communications gear is another source of discouragement, and a recipe for unrealistic expectations. The 'right' way, IMHO, is to get the new ham on the air down the path of least resistance, initially. Then encourage him/her to branch out, by building simple station accessories, perhaps a QRP transmitter to use alongside the HW-101 or IC-737, etc. By the way, the League and QST have flirted with this policy from time to time, but they can't seem to get away from the 'all home-built' ideal.

>Now, as for the big adverising dollars, I took a look at the February
>QST issue. I counted two 1/8th-page ads, two 1/12th page ad and a 1/24th-
>page ad, plus 4 ham ads, for companies offering kits.

I guess Ramsay's and Hamtronics' full-page ads didn't run in February.

>a small percentage of our total ad space; most of the ads are for
>some form of ready-made product. Our editorial policy is not influenced
>by our advertisers; it is determined by our perceptions of what
>hams want to see.

More correctly stated: 'by what the Directors want hams (particularly new hams) to see.'

>: As a hobby which has a tradition of mentoring ("elmering"), we are
>: doing the Right Thing(TM) when we identify something like a Ramsey
>: kit which is apt to blow a new ham's radio budget out the window
>: while discouraging him or her, and leaving him without a working
>: rig.
>
>Our QST Product Review did indeed point out the problems we found
>with the Ramsey FX-146. We also pointed out those things we like.
>This ensures that QST reviews are complete and unbiased. People
>who read these things are able to decide which things are important

>and buy accordingly.
>
>
And good it was. QST Product Reviews are the ONLY ones I would ever
trust. Mostly because I've seen gushing, press-release quality *articles*
in 73 and CQ, masquerading as product reviews. It only begs the question
of why, when this landmark kit has been on the market for several years
already, it was just recently the subject of a review in QST. Lots of
stuff of much lesser interest has appeared before this one. I mean,
I bought one of the close-outs of the first Ramsay 146 kits on sale
a good two years ago! Haven't got around to assembling it yet, but
I wish I'd known what to watch for before plunking even the bargain-basement
price on the counter.

Greg

917. Re: Your experiences on 40 meter CW QRP

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 14:59:48 UTC
From: greg@netcom.com
Message-ID: <gregCKI1no.LIu@netcom.com>
Source record: 271747

>Andrew M. Cohn (andy@clark.net) wrote:
>: If you work 40 meter CW, with 5 watts or less, and use less than ideal
>: antennas (no beams, dipoles or rhombics, etc), I would like to hear about
>: your experiences. No...I'm not writing a book; I just want to know what
>: I can expect before investing in a QRP station!

Andy...

The year was 1976, I was a Novice.

Rig: Ten Tec Argonaut 509, shiny and new. <3 watts out.

Antenna: Bent 40 meter dipole, fed with RG/174 1/8" coax. Antenna
hidden behind false roof on second-story. Three inches from wood
fascia, three feet above roof surface.

Sunspots: What sunspots, it was 1976!?

Results: Lots of fun on 40, some on 15, too. 30-odd states in four
months as a Novice. Enough contacts to go from 5 to 13WPM and upgrade
to Advanced in less than six months with no anxiety about code
speed. Typically five or six QSOs in each couple-hour session.

Recommendation: Go for it.

Greg

918. Panther Amateur Radio Club meeting

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 15:01:24 UTC
From: hpb@hpb.cis.pitt.edu
Message-ID: <13408@blue.cis.pitt.edu>
Source record: 271731
Cross-posted to: pitt.general,pgh.general,rec.radio.amateur.misc

The Panther Amateur Radio Club (PARC) will meet Tuesday February 1
(that's Goundhog Day Eve!) at 8:00 PM in 416 William Pitt Union.

Harry Bloomberg WA3TBL
hpb+@pitt.edu

919. Re: FCC Call sign question...

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 15:51:35 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCKI420.Bs@netcom.com>
Source record: 271735

```
In article <JXgwgc1w165w@p-cove.UUCP> wolfman@p-cove.UUCP (Aaron Smith) writes:
> I would like to know something.. What does the fcc do when they issue
>all the call signs for a certain area?? Do they start over with call
>signs that have not been used for a while, or do they just start issue
>from another group?
>
>73 de Aaron
>KB8PFZ
>
>
>------------------------------------------------------------------------------
>
>
> wolfman@p-cove.uucp (Aaron Smith)
> Amateur radio station KB8PFZ
>

They start issuing from the next group.

i.e. After N8ZZZ, they will pick up with KB8???

Scott

--
==============================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|----------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
==============================================================================
```

920. Bounty & Antipodes Is. N.Z.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 15:59:42 UTC
From: wb9tow@bluegrass.ecn.purdue.edu
Message-ID: <CKI4FI.M7v@noose.ecn.purdue.edu>
Source record: 271700

Greetings all. My curiousity abounds...How far from N. Z. are
the Boundy and Antipodes Is? They appear to be close to the limit
for "country" status...Not that we need more "new" countries, but
as a DXer, we sit and wonder....vir 73 es gl to all on Peter I
steve

921. RB311 MGT-SEMANTICS 1/7

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 16:03:05 UTC
From: Roy Engehausen <enge@almaden.ibm.com>
Message-ID: <$racesbul.311.1994@ampr.org>
Source record: 271701
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Bid : $RACESBUL.311

From: W6SIG@KD6XZ.#NOCAL.CA.USA.NOAM
To : RACES@ALLUS

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.311 RELEASE DATE: JANUARY 31, 1994

Subject: MGT - SEMANTICS 1/7

This is the first in a series in response to letters, messages, and queries at seminars.

Probably the biggest problem with these bulletins, and one that may never be resolved, is misinterpretation or misunderstanding of the written word. What is intended by the writer and how it is interpreted by the readers may not be the same. When RACES seminars are conducted in person it is much easier to clarify issues that arise over such misinterpretation as well as others.

Whereas these BULLETINS are called "RACES" they are for all communications volunteers in government service. This includes Public Safety, RACES and the Civil Air Patrol.

The current RACES BULLETIN series began in l985. It was the first effort to document program issues, ideas, definitions and guidance since 1960. They went national in 1989 at the request of the ARRL. In response, you have rewarded us with positive feedback, input and support from all over the U.S., Canada and Australia, for which we are most appreciative.

Series authored by Stanly E. Harter, originally titled "From My Lookout". Edited for digital transmission. Uploaded by unpaid [volunteer] professionals in public safety and public service telecommunications. (To be continued.)
eom

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

922. RB311 MGT-SEMANTICS 1/7

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 16:03:05 UTC
From: enge@almaden.ibm.COM
Message-ID: <199401311605.IAA06486@ucsd.edu>
Source record: 271752

Bid : $RACESBUL.311

From: W6SIG@KD6XZ.#NOCAL.CA.USA.NOAM
To : RACES@ALLUS

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
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eom

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

923. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 16:04:09 UTC
From: hatunen@netcom.com
Message-ID: <hatunenCKI4Mx.4HD@netcom.com>
Source record: 271734
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

In article <2igvqt$ov2@tcomeng.tcomeng.com> daryl@tcomeng.com (Daryl Jones) writes:
>We're experimenting with providing free public-access to our Informix
>database of FCC license information for radio transmitters located in
>California. The information should be accurate as of 09/30/93. More
>than 300,000 records are on file. Microwave, satellite, broadcast, and
>cellular records are included as well as business and public safety.
>
>Telnet to: tcomeng.com
>Login: fcc (no password)
>
>VT-100 terminal terminal emulation is required. If there is enough
>interest, we will enhance the query interface and support other
>terminal types. You will need to carefully read the introduction in
>order to successfully use the database.
>
>This service is provided in the public interest by Telecommunications
>Engineering Associates of South San Francisco, California. Send comments
>to fcc@tcomeng.com.

I did not see any introduction to carefully read.

What I was hoping for was antenna locations. Are these available in the
database?

--
********** DAVE HATUNEN (hatunen@netcom.com) **********
* Daly City California: *
* where San Francisco meets The Peninsula *
* and the San Andreas Fault meets the Sea *
****

924. Re: QST Article on Balloon Tracking using GPS Rcvr

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 17:11:13 UTC
From: pfluegerm@agcs.com
Message-ID: <2ije3h$1sn@alpine.agcs.com>
Source record: 271737

In article <21870059@hplvec.LVLD.HP.COM>, tcline@hplvec.LVLD.HP.COM (Ted Cline) writes:
)
) In rec.radio.amateur.misc, hpeach@ca.uky.edu (Harold G. Peach Jr.) writes:
) > Several months ago there was an article in QST about a guy that was
) > tracking balloons using data from a GPS receiver, transmitted back to a
) > ground station. He had written a spreadsheet in MS-Excell that would
) > graph the balloon's flight path based on the points reported back by the
) > GPS receiver. Does anyone have a copy of his spreadsheet or the
) > algorithim he used? Please e-mail me at <hpeach@ca.uky.edu>.
) >
) > ---
) > Harold
) > hpeach@ca.uky.edu
)
)
) Paul Ternlund, WB3JZV created the Macintosh PowerBook Excel program to
) track the balloon's position as determined by the radio
) direction-finding tracking team. Paul's phone is 303-699-7479 and his
) email address is paul.ternlund@filebank.com .
)
) ----
) Ted Cline, N0RQV Home: 3202 Spruce Drive
) ted_cline@hpisla.lvld.hp.com Fort Collins, CO 80526-1044 USA
) (303) 493-1136

FYI, there is also moving map software available in the $250 range for
either the Mac or PC. Takes the GPS output and displays position and
track on an image of the appropriate aeronautical sectional. It also
does a few other neat tricks.

Ads can be found in Flying magazine as well as AOPA Pilot - probably
many other flying mags.

--
Mike Pflueger, AG Communication Systems, Phoenix, AZ PP-ASEL
INTERNET: pfluegerm@agcs.com
UUCP: ...!{att | ncar!noao!enuucp}!gtephx!pfluegerm
Work: 602-582-7049 FAX: 602-582-7624 Packet: WD8KPZ @ K7BUC.AZ.USA.NA

925. Re: Help - your Vertical Ant. experences.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 17:26:04 UTC
From: sas@opus.xyplex.COM
Message-ID: <9401311726.AA10790@opus.xyplex.com>
Source record: 271704

Recently Terry Burge KI7M said...

>the R5 is a vertical dipole and as such does not have as much gain
>as a quarter wave gound plane or similar antenna. Note the Butternut as well
>as any other gound plane style antenna require radials, ground rods, etc.

The Cushcraft R5 is *not* a vertical dipole; it is a half wave vertical groundplane design. The R5 does not require any radials other than the ones provided by the manufacturer and mounted on the antenna at a specific point, i.e., no wires have to be laid out on the ground. The R5 also does not require a ground rod insofar as its performance is concerned, but a ground rod would probably be a good idea for safety purposes. The R5 covers 20,17,15,12, and 10 meters and works on 6m as well, although it is not claimed to do so. The R7 is the same design extended to include 30 and 40 meters.

Perhaps Terry was thinking of the GAP verticals when he said that the R5 is a vertical dipole. The GAP verticals are vertical mounted dipoles.

I've had a R5 for several years now and have worked many countries all around the world with it. I've also taken it to Field Day and carried it as luggage for a DXpedition. I'm very pleased with the R5's performance, and found it quick to take apart and put together for portable operation. When packed into the box it came in, it is within airline regs for normal luggage. The R7 is quite a bit bigger and when packed up would probably be considered as oversized luggage by airlines.

73,
Scott WO1G
P.S. I have no affiliation with Cushcraft.
==========
Scott Sminkey email: sasminkey@eng.xyplex.com
Software Sustaining Engineering voice: 508 952-4792
Xyplex, Inc. fax: 508 952-4887
295 Foster St. (Opinions, comments, etc. are mine,
Littleton, MA 01460 not Xyplex's...)

926. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 17:26:07 UTC
From: tweek@netcom.com
Message-ID: <tweekCKI8FK.5xr@netcom.com>
Source record: 271705
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

In article <hatunenCKI4Mx.4HD@netcom.com> posted to the Usenet Newsgroup(s)
rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc
hatunen@netcom.com (DaveHatunen) writes:
>
>I did not see any introduction to carefully read.
>
>What I was hoping for was antenna locations. Are these available in the
>database?

I too was hoping for a little different implementation. I noticed that
you must exactly match the Licensee name (MC DONALDS REST works whereas
MC DONALDS does not work) as it is in the licensee field.

I suspect that this is just an early version of the software and it is
still being revised. If this is so, a couple of features I would like
to see would be a secondary search criteria (do you know how many licensee's
there are for 154.6) such as city, zipcode, and maybe partial matches of
the licensee.

I do however realize that you (tcomeng) are providing a service and asking
nothing in return (cept name recognition). Thank you for providing this
lookup service.

tweek@netcom.com tweek@tweekco.uucp WWIVNet 1@511 DoD #MCMLX
I'd rather get my cable service from the phone company,
than my phone service from the cable company.

927. Re: Is there a faq list for GMRS?

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 17:49:08 UTC
From: bobw@col.hp.com
Message-ID: <2ijgak$mcn@hp-col.col.hp.com>
Source record: 271707

Thom Forbes (forbest@delphi.com) wrote:
: Frank,
: The best source of info re: GMRS, by far, is: Personal Radio Steering Group
: they are at: P.O. Box 2851, Ann Arbor Mich 48106, Voice (313)-MOBILE3, and
: have a BBS at (313)-995-2100.
:
I agree 132%

: PS. Iv'e not seen a GMRS FAQ on internet.
There really is one under rec.radio.cb (The last part of the
generic 'CB' FAQ)

Bob Witte / HP PMO (Colo Springs) / bobw@col.hp.com / KB0CY / (719) 590-3230

928. Re: Of Wouff Hongs and Royal Rites

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 17:53:17 UTC
From: ehare@arrl.org
Message-ID: <1994Jan31.175317.20693@arrl.org>
Source record: 271708

Jeffrey Wittich (jwittich@b4pph107.bnr.ca) wrote:

: Hi, everybody. Well, its about spring, and that means we are
: getting ready for the local HamFest round here. Im looking
: at the hamfest flyer, and one on the events listed is
: The Royal Order of Whoff Hong Induction. Well ya see, Im kind
: of a new guy, and dunno what thats all about. I asked about it
: the local 2 meter repeater, and you should have heard the
: snickers and snorks. I quickly surmised that it was a secret.
: So keeping with the spirit of fun, I will not just ask
: what this is all about, but I do have a few questions:

: 1. Is it something that the OFs will enjoy at us new guys expense?

No, if you are into a bit of nostalgia and tradition, you will probably
be glad you went. Those who want to look down their noses at anything
that is less modern than rap would probably be better off to retire
early.

: 2. Is it an event that I would prefer no one had a camera at?

Only if you plan on embarrassing yourself.

: 3. Would I be any less likely to get home that night than any
: other night?

You will be fine; well, maybe. At most of these ceremonies,
the chairs are arranged in rows, with a set of chairs across
the back. Don't sit in the two chairs across the back wall
in the middle row . . . no, I have said too much.

: 4. Will my health insurance cover anything thats likely to happen?

More'n likely.

: 5. Is there a potential for any embarassment to any involved?

Like most bad things in life, only that which is self-inflicted.

: 6. Could I be black-mailed for being there?

Only by those who look down their noses at anything less modern
than rap!

: 7. Why am I so paranoid about this?

See the answer to #5. :-)

Good luck!

Actually, I finally attended a cermony. I hate rap, so I enjoyed myself.

73, Ed

--

929. Re: Code tapes, looking for.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 17:58:51 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Jan31175851@mipgsun.mipg.upenn.edu>
Source record: 271632

One complaint about the ARRL code tapes. They are Farnsworth'ed a bit on the slow side. As a result, I was (or perhaps am) counting the didah's for the numbers.

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

930. QST article on batteries

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 18:02:09 UTC
From: geraldg@oakhill.sps.mot.com
Message-ID: <CKIA3M.J5K@oakhill.sps.mot.com>
Source record: 271709

QST printed an article a few montha ago on batteries. Would someone please post
or e-mail to me the appropiate biographical information? Thanks.

Regards,
Gerald

Gerald W. Garcia, P.E. N5UMB Motorola Inc., MD: TX30/OE37
Senior Design Engineer 6501 Wm. Cannon Dr. West
geraldg@spud.sps.mot.com Austin, TX 78735-8598
(512) 891-2806 (voice) (512) 891-8315 (fax)

931. Mail-order toroids, RF transistors, Help!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 18:04:08 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Feb1.020408.1@ntuvax.ntu.ac.sg>
Source record: 271710
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,

Can some kind hearted HAM help me order some parts from Amidon Associates Inc. I do not have the catalog so I do not know how much to send, how much for shipping, minimum order. This is for sending to Singapore where toroids are non-existent. I am also in need of MRF472 or MRF476. The toroids I am interested in are:-

4 x FT37-43 core
2 x FT50-43 core
2 x FB73-801 ferrite bead
73 de 9V Daniel 4 x T-50-6 core
2 x T-37-6 core

Would appreciate any help for ordering these stuffs. Need them fast. I need 2 MRF-472 (or MRF-476 if 472's are not available) and also a 14 mHz fundamental crystal. What is the fastest way I can get hold of these? Tks.

73 de 9V Daniel

932. Daily Summary of Solar Geophysical Activity for 30 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 18:07:38 UTC
From: oler@rho.uleth.ca
Message-ID: <9401311807.AA26706@rho.uleth.ca>
Source record: 271711
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

30 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 030, 01/30/94
10.7 FLUX=099.0 90-AVG=106 SSN=081 BKI=1022 1331 BAI=006
BGND-XRAY=B1.5 FLU1=3.1E+05 FLU10=9.5E+03 PKI=3123 3332 PAI=009
BOU-DEV=008,002,017,018,009,021,023,006 DEV-AVG=013 NT SWF=00:000
XRAY-MAX= C3.2 @ 0111UT XRAY-MIN= B1.2 @ 2359UT XRAY-AVG= B2.8
NEUTN-MAX= +002% @ 2210UT NEUTN-MIN= -002% @ 2140UT NEUTN-AVG= -0.2%
PCA-MAX= +0.1DB @ 2005UT PCA-MIN= -0.4DB @ 1145UT PCA-AVG= -0.0DB
BOUTF-MAX=55345NT @ 2359UT BOUTF-MIN=55318NT @ 1807UT BOUTF-AVG=55338NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+067,+000,+000
GOES6-MAX=P:+116NT@ 1707UT GOES6-MIN=N:-059NT@ 0740UT G6-AVG=+088,+029,-028
FLUXFCST=STD:105,105,105;SESC:105,105,105 BAI/PAI-FCST=010,010,010/010,015,012
KFCST=2223 4111 1112 3111 27DAY-AP=011,006 27DAY-KP=3133 3331 1322 2110
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 29 JAN 94 was 52.0.
The Full Kp Indices for 29 JAN 94 are: 1+ 2- 3o 3o 3o 2- 1- 2-

SYNOPSIS OF ACT

Solar activity was low. Only one C-class flare occurred:
an uncorrelated C3 at 0110Z. The remainder of the period was
remarkably void of any activity. Region 7662 (S16E10) is
showing some modest growth. Some new emerging flux groups were
observed just to the west of 7662. The remainder of the sun was
quiet and stable.

Solar activity forecast: solar activity is expected to be
low.

The geomagnetic field was quiet to unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to be predominantly unsettled for the next three days.

Event probabilities 31 jan-02 feb

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 31 jan-02 feb

A. Middle Latitudes
Active 25/15/15
Minor Storm 15/10/10
Major-Severe Storm 05/01/01

B. High Latitudes
Active 25/20/20
Minor Storm 15/10/10
Major-Severe Storm 05/05/05

HF propagation conditions were normal over all regions.
Near-normal conditions should continue over the next 72 hours.
The risk for SWF activity over daylit paths has diminished.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7658 N10W92 184 0020 CAO 05 002 BET
7661 N09W43 135 0020 CRO 02 003 BET
7662 S16E10 082 0040 DRO 06 010 BET
7663 N12E06 086 0000 AXX 01 002 ALPHA
7664 S07E49 043 0010 AXX 00 002 ALPHA
7665 N05E65 027 0060 HSX 02 002 ALPHA
7659 S12W53 145 PLAGE
7660 S09W22 114 PLAGE
REGIONS DUE TO RET
NMBR LAT
7651 S07 350

LISTING OF SOLAR ENERGETIC EVENTS FOR 30 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP SWF
NO EVENTS OBSERVED

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 30 JANUARY, 1994

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
60 S16W06 S26W08 S18W21 S14W13 112 ISO POS 003 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
29 Jan: 0059 0102 0104 C1.0
0247 0302 0306 B9.7
0314 0413 0422 M2.4 110 130
0735 0739 0742 C5.0
0819 0833 0842 C3.3
0847 0905 0918 C6.6 SF 7658 N12W71
1050 1059 1110 C2.3
1113 1129 1138 M2.4
1252 1308 1321 C6.5
1503 1514 1545 C8.8 35 26

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7658: 1 0 0 1 0 0 0 0 001 (10.0)
Uncorrellated: 6 2 0 0 0 0 0 0 009 (90.0)

Total Events: 010 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
29 Jan: 1050 1059 1110 C2.3 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

933. Not Re: FCC form 610-V

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 18:19:53 UTC
From: levin@bbn.com
Message-ID: <LEVIN.94Jan31131953@medea.bbn.com>
Source record: 271739

In article <CKCqDA.EpK@world.std.com> dts@world.std.com (Daniel T Senie) writes:
}Read the February QST!!! Lots of coverage on the subject.

And while you've got the issue open, don't forget to glance at the
"Behind the Diamond" sidebar about the new WMA Section Manager,
auther of the quoted article :-).

}--
}Daniel Senie Internet: dts@world.std.com
}Daniel Senie Consulting n1jeb@world.std.com
}508-365-5352 Compuserve: 74176,1347

/JBL
===
Nets: levin@bbn.com | "There were sweetheart roses on Yancey Wilmerding's
POTS: (617)873-3463 | bureau that morning. Wide-eyed and distraught, she
KD1ON (@KB4N.NH.USA) | stood with all her faculties rooted to the floor."

934. Hambladter Up date

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 18:28:22 UTC
From: jwa@tellabs.com
Message-ID: <1994Jan31.182822.3336@tellab5.tellabs.com>
Source record: 271713

The Hamblaster Update

Over the past several months I posted updates about a
DSP "The Hamblaster" that Will Torgrim (N9PEA) and myself
are developing.

We are focusing our efforts on a packet modem that allows
the user to improve H.F. reception by interfacing the Ham-
blaster (a PC compatable DSP sound board) to a transceiver
and a packet or all mode TNC. Modems/filters for RTTY,
Packtor, Amtor are also under developement and are compatable
with the same control panal software.

Here are the latest developements
1-31-94

1) The Hamblaster can play ".wav" files
at sample rates less than 15 kHz.

2) Adaptive (LMS) filter

There's ongoing developement in this area.
We are planing (I don't think this has been
done before) to add controls to the LMS algorithm.
You can, for example, change adaption time and
filter taps.

3) Fast autotune
We have a fast autotune routine that locks a packet
modem to the received signal in few milliseconds.
Tuning is a big problem on H.F. packet. Some stations
are off frequency so bad, the tnc can't receive the packets.
The auto tone (or AFC) locks the DSP modem by changing
the filter coefficients.

1-3-94

3) We now have FFT analysis software built into the o-scope control
panel. When you click on the "Freq" button the audio spectrum is
displayed. You can move the mouse cursor over the display and
where ever it is positioned, the frequency is displayed in the
status window. When you click the mouse the modem filters jump
to the frequency. This feature provides a simple tuning aid.

Another button allows you to convert all 4 traces (mentioned in
paragraph 3) to spectral displays. You can, for example, analyze
the frequency at the input signal, the modem prefilter and the

mark filter output. Based on the FFT, a second button allows
you to modify the filter tune limits by clicking on min-max
limits that you select.

I have to admit, After I debugged the FFT software and got the
control panel working to my satifaction, I got hooked on the
operation of the Hamblaster system. I spent hours tuning the 40
and 20 meter bands, displaying the FFT and copying CW/RTTY signals
through the Hamblaster filters. The FFT really simplifies the
tuning process.

Jack Albert Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-4590
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440
*
* *
* * *
* * * * * * *
* * *
* *
*
THE BOWTIE FILTER

935. Alinco MODS

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 19:01:02 UTC
From: carrl@GORDON-TSD1.ARMY.MIL
Message-ID: <9401311901.AA04708@gordon-tsd1.army.mil>
Source record: 271749

A friend is looking for mods on Alinco Handheld radios. Are any
available by anonymous ftp?
Reply to carrl@gordon-tsd1.army.mil

936. Ten Tech ARGOSY 2

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 19:28:36 UTC
From: rwilgus@PICA.ARMY.MIL
Message-ID: <9401311428.aa25406@FSAC3.PICA.ARMY.MIL>
Source record: 271756

If you are looking for a nice rig, Contact Sam,W2DDN, Area Code,
201-335-5732. He has a Mint Condition Ten-Tech Argosy 2, 5 watt
and 50 Watt Transceiver for sale, Original owner with less than
100 operating hours. Asking price $300.00.
a

937. Re: Question Regarding ITR

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 19:30:46 UTC
From: jackson@longlast.cs.nyu.edu
Message-ID: <2ijm96$4qs@slinky.cs.nyu.edu>
Source record: 271745

|> Having heard from one of my friend about the ITR, Internet Talk Radio.
|> Wonder what they were? Can anyone give me a light on this?

It's a professionally produced show that sounds much like National Public Radio's All Things Considered. Yes, it's actually sound files that are designed to be downloaded into your computer and played through the speaker.. you don't read it, you listen to it.

I believe it's more oriented towards technology discussions, but I understand they're going to break that mold in time. They distribute the sound files uncompressed, so they're huge. But, in today's market of below a buck a megabyte hard drives, space isn't so much of a consideration.

Poke around in alt.internet.talk-radio or something similar to that. They seem pretty interesting (I've read enough about them..) but never sat down, downloaded a show and played it. Sure made me think about Inet distributed sound materials, though.

--
Steven Jackson New York University
Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012
"Not in my head.. so I don't have to think.." -- Nik Fiend

938. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 19:39:45 UTC
From: alanb@sr.hp.com
Message-ID: <CKIEMA.KCq@srgenprp.sr.hp.com>
Source record: 271740

Greg Bullough (greg@netcom.com) wrote:

: Yup. One of the difficulties, over the years, is that many of the
: folks at ARRL HQ 'just didn't understand,' ...

: The 'drum' being banged is one which rings out 'build build build.'

If you're talking about QST, I disagree 100%. I wish QST had MORE construction articles, not fewer. In case you haven't noticed, QST has changed in the last few years. There are many fewer technical articles than there used to be and a lot more fiction and other "fluff" articles.

I liked it better the old way. But fortunately or unfortunately, the ARRL is a democratic organization and their perception is that the members are not as technically inclined as they used to be.

AL N1AL

939. Yaesu FT-41R Mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 19:52:43 UTC
From: edberg@netsun.mdc.com
Message-ID: <2ijnibINN9n@lynx.unm.edu>
Source record: 271716

A non-internet friend has asked me to post the following message:

For the Yaesu FT-41R, extended rx is accomplished by pressing the up/down
MHz arrows while powering on...giving you 420-470MHz.
Does anyone know of the extended tx mod...I've seen the FT-11R mod
jumper matrix and wonder if the 41R matrix is similar?

Please respond to me by email as I don't get on here very often.
thanks,
Don N6CLP

--
****
* e-mail: edberg@netsun.mdc.com * Don Edberg *
* CI$:72417.2067@compuserve.com * Advanced Programs & Technology*
* phone: 1-714-896-5210 * McDonnell-Douglas Aerospace *
* FAX: 1-714-896-6930 * 5301 Bolsa Ave, MS 13-3 *
* Call: N6CLP * Huntington Bch, CA 92647-2099 *
****

940. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 20:28:41 UTC
From: jholly@cup.hp.com
Message-ID: <CKIGvt.4zw@cup.hp.com>
Source record: 271773
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

Michael D. Maxfield (tweek@netcom.com) wrote:

: I too was hoping for a little different implementation. I noticed that
: you must exactly match the Licensee name (MC DONALDS REST works whereas
: MC DONALDS does not work) as it is in the licensee field.

of all the things to listen to on a scanner, I still am trying to figure
out why some one would want to listen to "that's a big Mac, ...". Watching
paint dry must really make some people wet thier pants.

941. Re: Boring WWV Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 20:43:20 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CKIHK9.2ss@ucdavis.edu>
Source record: 271746

ARMOND@delphi.com wrote:
: Those WWV people are not nice at all. I was just trying to be helpful
: when I called to tell them that my S-38 (which I got at a swapmeet
: for $15) inmdicated that WWV was about 10 kilocycles off. That, when
: they were not drifting. I suggested they go to crystal control.
: I got this really neat Timex watch at a yard sale for $5. It sez that
:] WWV is about 30 seconds off. What snotty people work at WWV. They did
: not appreciate my helpful call at all.

Perhaps you should have used the telephone instead of calling them on
frequency. BTW: yopu were 59 in No. Cal
;-)

--
---
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
---
* I do not speak for the University of California.... *
* and it sure as hell doesn't speak for me!! *
---

942. Re: Help - your Vertical Ant. experences.

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 20:53:21 UTC
From: gtaylor@taex003n.tamu.edu
Message-ID: <gtaylor.315.0@taex003n.tamu.edu>
Source record: 271748

>is one of the best all band verticals around. Don't know too much about the
>others but the R5 is a vertical dipole and as such does not have as much gain
>as a quarter wave gound plane or similar antenna. Note the Butternut as well

Probably depends on where in the pattern you are, can't think of any
inherent reason for a quarter wave ground plane to have more gain than a
vertical dipole. If I understand what is meant by a quarter wave ground
plane its a 1/2 wavelength antenna but the bottom leg(s) are not in the same
plane as the upper.

Greg Taylor, KD4HZ // g-taylor4@tamu.edu // 409-845-4445 // Fax-847-8744

943. ARRL-QST/QEX was Re: RAMSEY FX

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 21:09:49 UTC
From: galen@picea.CFNR.ColoState.EDU
Message-ID: <1994Jan31.210949.66591@yuma>
Source record: 271754

In article <CKIEMA.KCq@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Greg Bullough (greg@netcom.com) wrote:
>: Yup. One of the difficulties, over the years, is that many of the
>: folks at ARRL HQ 'just didn't understand,' ...
>: The 'drum' being banged is one which rings out 'build build build.'
>If you're talking about QST, I disagree 100%. I wish QST had MORE
>construction articles, not fewer. In case you haven't noticed, QST
>has changed in the last few years. There are many fewer technical
>articles than there used to be and a lot more fiction and other
>"fluff" articles.
>I liked it better the old way. But fortunately or unfortunately,
>the ARRL is a democratic organization and their perception is that
>the members are not as technically inclined as they used to be.
>AL N1AL

I recently subscribed to QEX for the technical stuff, and there was a
mention that some thought QEX was getting too technical, which left me
flabbergasted, since I thought QEX was for tech stuff.
I would like to see more technical articles in every ham magazine.
Galen, KF0YJ

944. More info: the DSP nobody mentioned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 21:28:29 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-310194132314@fp2-st-affairs-11.uoregon.edu>
Source record: 271762

Last week I described a DSP filter that several hams in the Eugene, OR area are now using. I also posted a short description about the filter which AI7W composed after we received several inquiries about the unit.

This morning I received the following message which might get your interest piqued a bit more:

After reading your description of Steve's filter, I went out to his place yesterday for a live demo. It's amazing! Why aren't these folks advertising in the ham mags? The filter plus program are less than the other popular DSPs I see.

Of course, it does have a couple disadvantages: you need a computer with considerable horsepower, and maybe VGA color monitor; and the filter and its control program are so interesting that I spent more time fiddling with it than I did listening!

73
W7KPZ

I have no affiliation with the company that makes this filter. I'm just amazed at what this unit does and how it does it. Steve gave this contact info:

The address and phone for Digital Interactive Signal Corp. is

Digital Interactive
2317 N.E. 168th Ave.
Vancouver, WA. 98684

206-256-8654

I don't think they're on the net.

good Luck Steve..AI7W

Hope this helps,

Steve/AA7FL

945. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 22:23:19 UTC
From: alan@olin.es.com
Message-ID: <2ik0cn$9hq@orca.es.com>
Source record: 271776

In article <CKBJtu.45s@freenet.carleton.ca> ab510@FreeNet.Carleton.CA (George Attallah) writes:
>
...Famous Hams...
>
>H0HO Santa Claus
>W7KID Billy The Kid
>

How could you forget:

SL1CE Lorena Bobbitt

--
Alan Brubaker, K6XO |~~|_ "Pumps have handles, Hams have names;
<IYF disclaimer> | * |mine's Lee, what's yours?" - Lee Wical,
Internet: alan@dsd.es.com|____|KH6BZF, the Bloomin' Zipper Flipper.

946. Re: More info: the DSP nobody mentioned

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 22:50:52 UTC
From: obrien@Aero.org
Message-ID: <2ik20c$lis@news.aero.org>
Source record: 271631

In article <milewski-310194132314@fp2-st-affairs-11.uoregon.edu>,
milewski@oregon.uoregon.edu (Steve Milewski) writes:
|> Last week I described a DSP filter that several hams in the Eugene, OR area
|> are now using. I also posted a short description about the filter which
|> AI7W composed after we received several inquiries about the unit.
|>
|> This morning I received the following message which might get your interest
|> piqued a bit more:
|> --
|> After reading your description of Steve's filter, I went out to his place
|> yesterday for a live demo. It's amazing! Why aren't these folks
|> advertising in the ham mags? The filter plus program are less than the
|> other popular DSPs I see.
|>
|> Of course, it does have a couple disadvantages: you need a computer with
|> considerable horsepower, and maybe VGA color monitor; and the filter and
|> its control program are so interesting that I spent more time fiddling
|> with it than I did listening!
|>
|> 73
|> W7KPZ
|> --
|>
|> I have no affiliation with the company that makes this filter. I'm just
|> amazed at what this unit does and how it does it. Steve gave this contact
|> info:
|>
|> The address and phone for Digital Interactive Signal Corp. is
|>
|> Digital Interactive
|> 2317 N.E. 168th Ave.
|> Vancouver, WA. 98684
|>
|> 206-256-8654
|>

I'll second the recommendation - this is the ONLY DSP filter that lets YOU
design the filter, on the fly. It's major fun to play with, if nothing
else!

I should mention one thing, though - in the time domain, this filter simply
doesn't exist. There's no automatic notch, for example. You can see the
whistle on the spectral display, and draw a notch filter to zap it, but
the box itself won't analyze the incoming signal at all, beyond displaying it.

What this means is that the white-noise reduction functions found in other DSP
boxes are flat-out missing. There is no time-domain correlation at all.
But if you want to create the world's greatest SSB filter, tuned exactly
to your ear, at the swipe of a mouse, then this is the box for you.
--
Mike O'Brien
obrien@aero.org

947. Automotive computers and amateur radios - Help!

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 23:00:55 UTC
From: obrien@Aero.org
Message-ID: <2ik2j7$lis@news.aero.org>
Source record: 271633

I need a pointer to a list of automotive models that have real problems when amateur radios are installed. Primary culprits, of course, would be unshielded/undershielded engine computers. I know that _SOME_ Toyotas have such problems, which are admitted and shined on by the corporation.

What models have problems? Is there a list somewhere?
--
Mike O'Brien
obrien@aero.org

948. Re: Global Alert For All: Jesus is Coming Soon

Newsgroup: rec.radio.amateur.misc
Date: 1994-01-31 23:53:55 UTC
From: marcbg@netcom.com
Message-ID: <marcbgCKIqDv.Lxw@netcom.com>
Source record: 271720

William Osborne (wosborne@nmsu.edu) wrote:
: Where is the radio to swap or sell?? Why do we have to put up with
: the nonsense in this group?

I believe that Jesus is now on-line, WA5CHRIST. Works 40 and 80 and is setting up a special events station for Easter (naturally, he's a little depressed around the season and mentioned something about a banquet - we all thought it was a bad idea).

Of course, the question we all ask: Why does Jesus have a 5 call?
--
Marc B. Grant fax 214-231-3998 voice 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

949. bearing1.zip - Hams: Bearing and distance computer/database

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 02:06:54 UTC
From: Rick=Jones%InfoServices%District@banyan.cccd.edu
Message-ID: <9402010206.kp23948@SimTel.Coast.NET>
Source record: 271727
Cross-posted to: comp.archives.msdos.announce,rec.radio.info,rec.radio.amateur.misc

I have uploaded to the SimTel Software Repository (available by anonymous ftp from the primary mirror site OAK.Oakland.Edu and its mirrors):

pub/msdos/hamradio/
bearing1.zip Hams: Bearing and distance computer/database

Bearing and Distance Computer 1.0 performs bearing and distance computations between any two point on earth. Source and target coordinates may be entered manually or selected from a fully user updateable database of coordinates keyed by ham callsign prefix.

Upload by the author.

Rick Jones, N6WQY
Rick=Jones%InfoServices%District@banyan.cccd.edu

950. repeaters in Western N.Y.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 03:38:00 UTC
From: opnpaul@ubvms.cc.buffalo.edu
Message-ID: <CKJ0sx.Ivz@acsu.buffalo.edu>
Source record: 271730

Greetings,
Does anybody know what repeater is located at the top of the Kissing Bridge
Ski Resort in Colden N.Y. Also, who runs it and what frequence does it use.

thanks in advance,

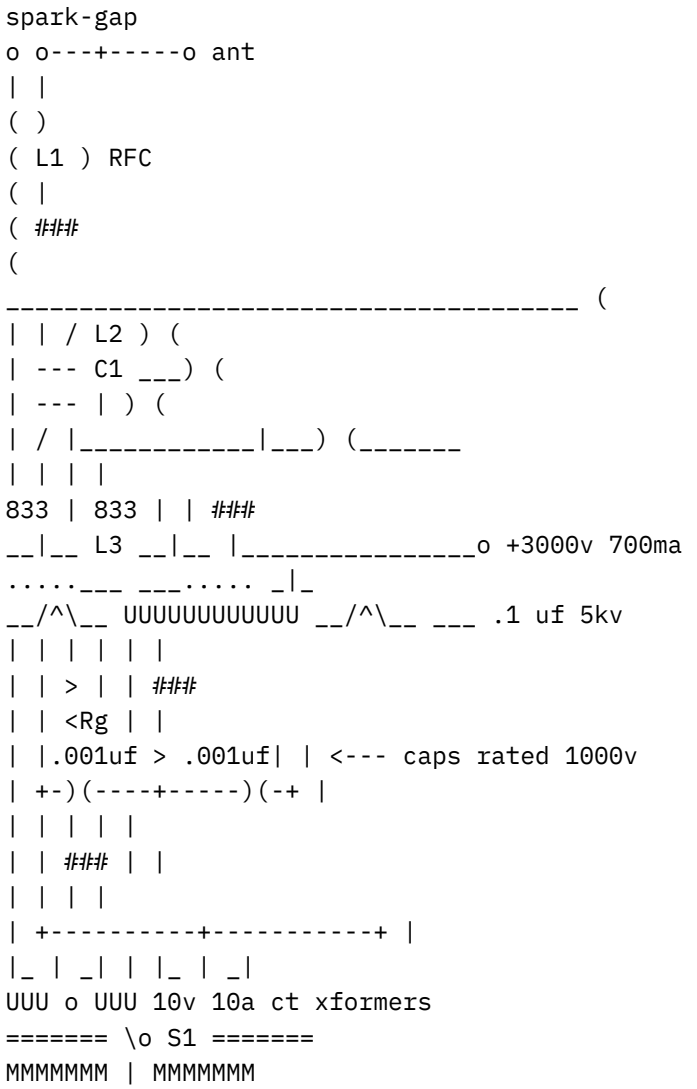
Paul Francavilla

951. Spark Gap Transmitter

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 05:12:40 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CKJ554.45u@news.Hawaii.Edu>
Source record: 271736

I posted this on .homebrew but thought some of you folks might get a kick
out of this too...
****
Gang,
If you actually build and attempt to operate this xmtr PLEASE do not
tell the authorities, when they come to pick you up, where you got the
circuit from (I'll deny everything).
Credit Randy, KA1UNW for the design. He's a prolific builder, specializing
in the design of QRP tube xmtrs, on our QRP mail net and on the boatanchors
mail net.
Remember boys and girls, this offer is void where prohibited...

TSB xmitter



```
| | (.)mtr | |
o 117v o | o 117v o
>D F-24-a 's may be subbed for
| carbon mic 833's if supply's are made
### larger.
```

How it works:

The 2 tubes form a push pull power oscillator which makes alternating
current, but at a radio frequency.
This is done by use of L1 , L3, and the 2 little tubes.

In this case, the actual frequency is not important, since the objective
is to generate maximum bandwidth...the goal of any 'phone station.
C1 is used to obtain maximum power by resonating L1 to L2's natural freq.

This RF voltage is stepped up by a factor of 30 to 100X by L2 and sent on
to the spark-gap, where the actual RF-to-be-sent is generated.

The RFC keeps the ant ckt at DC ground, yet will not short out the RF...which
is sent from the sparkgap, to the ant.

The ant wants to be one wire, and end fed. No coax required..just hook 'er
up and duck.

The length of the antenna determines the sending band it will be on.
The formula to use to get that length is...

Feet = 468/(((F*F) +730) -(F*F))

F = frequency in Mhz (rounded off to nearest 100 Khz)

Voice modulation is done by use of a special Carbon Microphone, as used in
the 1920's...which can handle several amps.

Here, rather than sending RF thru the mic as was done back then, only DC
is sent thru.

That way, the operator (or inflictor) won't get an RF burn on his lips if
he speaks too close to the mic.

That modulates the power to the tubes , which varies the intensity of the
spark which then puts quite suitable a signal on the air.
The intellegibility will match the content of some of the QSO's now on the air.

To operate:

1 Place mouth near carbon microphone.
2 Close S1 and adjust C1 for dip in current (mtr) quickly.
3 Make oinking and Mooing noises to indicate your presence to everyone.
4 Open S1 when you get around to it.
****

Again, credit (or blame) goes to Randy KA1UNW for this pup.

Jeff NH6IL

952. Re: safety of HT antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 06:49:21 UTC
From: craig@orb.apana.org.au
Message-ID: <2iku1hINNpsp@orb.apana.org.au>
Source record: 271738
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,aus.radio

In <CJy1Jv.GH4@sleeper.apana.org.au> matthew@sleeper.apana.org.au (Matthew Geier) writes:

>>Yes, I did think of this solution, although for mobile use when I'm on
>>a train it would not be so good since the antenna would always be
>>collecting bits of tree or tunnel or bridge or......

> Or 1.5KDC railway overhead..

Yes, that's the major problem. I doubt that the transmitter isolation
would stand up to 1500 volts DC being fed into it, and the received would
very definitely become plastic charcoal!

> Id go to the ocupational health and safety officer and present a case
>that useing these hand-helds in the cab next to ones head is a potential
>health risk, and that roof mounted attenna's should be fitted to all
>locomotives, and not just the select few that run interstate.
> Then you reduce the close emmissions to the times your are outside checking
>things.

This could be worthwhile pursuing, but of course with the new radio
system being progressively installed any action would be non-resultant.

> Not the best, but at least you have removed the situation where you are
>in a metal box, holding the annenna next to your head, with the RF bounceing
>around untill it finds a window..

Yeah - it's kind of like sitting in a microwave, except that the RF is
at UHF and not SHF. I never understood how these so-called communications
engineers worked out that we'd be able to get a decent ammount of RF
outside of the metalwork of the loco cabs. Most of the time when we're
on the older engines (hood units) the only way to get good signal levels in
and out is to stand outside on the walkway with the radio!

Craig, the Freight Raver.

--
Craig Dewick [Freight Raver Craig] (craig@orb.apana.org.au).
- Swimming in the MUSIQUARIUM of Life -
Always striving for a secure long-term future in an insecure short-term world.

953. Amateur Radio: Elmers List Info and Administrivia

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 12:00:23 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/admin-1-760104013@unomaha.edu>
Source record: 271741
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/elmers/admin
Revision: 1.6 12/26/93 15:45:09
Changes: Added new index file, Gopher, WWW, and WAIS entries

This administrivia file and the companion Amateur Radio Elmers Resource
Directory are intended for non-commercial distribution via Usenet. Any
other uses, please E-mail for permission.

A Brief Historical Overview:
++++++++++++++++++++++++++

If there is any one constant in the changing state of the communications
art, it is that "Hams" (Amateur Radio Operators) have always been on
the forefront of it. Rumors abound where the term "Ham" came from.
Some of the more amusing are described at the end of this article.

Regardless of origin of the name, a "Ham" is universally recognizable as
one who experiments in radio and communications.

Whether it be constructing a low-power CW radio with vacuum tubes, or
designing TCP/IP packet networks, such experimentation has historically
spilled over into the mainstream such as was the case with Edwin
Armstrong, who developed the regenerative oscillator and FM radio, or
General Curtis LeMay (W6EZV) who was instrumental in making Single-
Sideband the communications standard for the Strategic Air Command
(1947-1992, now reorganized into a joint command called USSTRATCOM) and
eventually the U.S. Air Force. Although packet-switching techniques
originated from DARPA (Defense Advanced Research Projects Agency) and
the ARPANet, no one can deny the tremendous influence that amateurs
have had in demonstrating the viability of TCP/IP and AX.25
communications via radio links. The efforts of AMSAT (the Amateur
Satellite Corporation), including the development of many ham satellites
and the low-orbiting Microsats (communications satellites no bigger than
a breadbox that use store-and forward packet techniques), have certainly
advanced the state-of-the-art in communications, one of the defined
purposes of the Amateur Radio Service, as recognized by international
treaty.

Since in many cases hams are writing "the book", there is often no
"book" or other established reference for a beginner to refer to.
Traditionally, information has been passed on from ham to ham via word-
of-mouth. Like many of the traditional crafts, a variation of the
Master-Apprentice system has emerged, the Elmer-Novice relationship.
Called "Elmers" because they are usually older and wiser, having the
```

benefit of many years in the hobby, including several failed projects, and an electric shock or two, they have traditionally been the mainstay of amateur radio, and the source of many new hams, particularly those interested in working on emerging technologies.

Even more importantly, Elmers provided an outlet for the impatient newcomer who wanted "to know everything, and right away." Faced with such a request, a good Elmer will smile and proceed to lead the novice through some project or operating experience. Several hours, days, or weeks later, the novice would have his answers, but would have earned them. Even better, the sense of accomplishment would boost the novice's confidence and nudge him or her down the road to being a model, experienced ham operator.

Many present hams feel that such an experience is missing today. In today's hustle-bustle world, the response to such natural curiosity and desire to learn is, more often than not, "I'm too busy" or "RTFM." As a result, the quality of new hams declines and the knowledge and operating habits they develop in their first formative months and years leave much to be desired. And the very same hams who claim that they "can't understand the new generation" also, in almost the same breath, lament about the "decline of amateur radio."

What is an Elmer today?
++++++++++++++++++++++

An Elmer today is of any age, male or female, who has some expertise and is willing to share it with beginners. Elmers don't even need to be licensed amateurs, just people with knowledge in some area of electronics or communications technology.

What is a Usenet Elmer?
++++++++++++++++++++++

With the ever-widening scope of the Internet, and the amateur radio newsgroups on Usenet, the potential for Elmers to share their knowledge to a wide audience has never been greater. To that end, I have started to maintain a list of such Elmers. Volunteers need only send me their name, E-mail address, and area of expertise. I have set up an administrivia mailbox for this purpose (elmers-request@unomaha.edu, the default Reply-To: of this message).

Those desiring a more extensive list, or who need more specific assistance, are encouraged to contact Rosalie White, WA1STO, Educational Services Manager at the American Radio Relay League, 225 Main St., Newington, CT 06111 or via electronic mail addressed to rwhite@arrl.org.

How may I obtain the latest copy of the Elmers List?
++

There are currently 7 ways of obtaining the Elmers List. Any site at least reachable by Internet E-mail can use options 3 or 4:

1. Usenet News: The latest copy of the list can be found in the companion posting to this message, "Amateur Radio: Elmers Resource Directory." Since the list is cross-posted to rec.radio.amateur.misc, rec.radio.info, rec.answers, and news.answers on the 1st of each month, with an expiration date 6 weeks into the future, there should always be a copy available at most news sites. Check your newsreader documentation for information about reading previously-read articles.

2. Anonymous FTP: If your site is directly connected to the Internet, you may retrieve the latest copy via File Transfer Protocol (FTP) from the following sites:

ftp.cs.buffalo.edu /pub/ham-radio/elmers*
rtfm.mit.edu /pub/usenet/news.answers/radio/ham-radio/elmers/*

3. Mailing-List: Since the list is cross-posted to rec.radio.info, the latest copy may be obtained from the mailing-list gateway for that newsgroup (along with many other informational articles about radio) when it is published each month. To subscribe, send E-mail to:

listserv@ucsd.edu

and in the BODY (not the Subject) of the message, write:

subscribe radio-info

The server may not be able to determine your return address. In that case write:

subscribe radio-info (your E-mail address)

You should get an acknowledgement very shortly.

4. Mail-Server: If you don't want to read through the entire gateway of rec.radio.info, or want a copy of the list right away, send E-mail to:

mail-server@rtfm.mit.edu

and in the BODY (not the Subject) of the message, write:

send usenet/news.answers/radio/ham-radio/elmers/admin
send usenet/news.answers/radio/ham-radio/elmers/index
send usenet/news.answers/radio/ham-radio/elmers/list
send usenet/news.answers/radio/ham-radio/elmers/diff

and the latest copy of the list should be sent to you E-mail within 24 hours (the mail-server uses batch priority to reduce system demand).

The last three services are experimental. I'm not terribly familiar with them, and cannot offer much technical support regarding their use. (I'd appreciate feedback on whether or not you find them useful, though.)

5. Internet Gopher: The latest copy of the list should be available from the following Gopher sites, all at standard port 70:

cc1.kuleuven.ac.be
jupiter.sun.csd.unb.ca
gopher.univ-lyon1.fr
ftp.win.tue.nl
gopher.win.tue.nl

see also comp.infosystems.gopher

6. World-Wide Web (WWW): The latest copy of the list should be available from the following WWW site:

URL: http://www.cis.ohio-state.edu:80/hypertext/faq/usenet

under pages:

radio/ham-radio/elmers/admin
radio/ham-radio/elmers/index
radio/ham-radio/elmers/list
radio/ham-radio/elmers/diff

see also comp.infosystems.www

7. Wide-Area Information Service (WAIS): The latest copy of the list should be available from the WAIS server at rtfm.mit.edu (standard port 210) in database "usenet."

see also comp.infosystems.wais

How may I contribute to the Elmers List?
++++++++++++++++++++++++++++++++++++++

By using this resource, you are benefitting the net by obtaining assistance in the fastest and most efficient way possible. By volunteering to appear on this list, you are contributing to the good reputation of the radio-related newsgroups.

Thanks to all the volunteer Elmers, as well as courteous list users, for making this service a success.

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)

* Possible origins of the word HAM:

The acronym "Home Amateur Mechanic" or...

from the Cockney pronunciation of "L'amateur" or...

the initials of the founder of the American Radio Relay League, Hiram Maxim, W1AW (his actual middle name being Percy apparently notwithstanding) or...

from the call letters of one of the first amateur stations at Harvard, H.A.M. (please, no flames from W1XM at MIT)

Dale Mosby, N7PEX, offers the explanation that HAM must stand for "Hardly Any Money," considering the investment one could make in the hobby.

Knowledgeable individuals from the American Radio Relay League (ARRL), and other radio historians, seem to agree that the terms "Ham" and "Lid" (an inept operator) both originated with landline telegraphy. A "Ham" was a show-off and a "Lid" was a telegraph operator so inexperienced, he had to use a pot or can lid to rest his telegraph sounder on to properly copy the code.

As an interesting historical footnote, early telegraph operators may have been the first to experience the infamous curse of our communications age, Repetitive Stress (or "Carpal Tunnel") Syndrome (called "Glass Arm" in those days, which encouraged the invention of the semi-automatic or "bug" key).

(Larry E. McDonald, N6ZMB, wrote to point out another plausible origin, which doesn't necessarily contradict the ARRL version. The term "ham" may have been derived from "ham-fisted" or "ham-handed" to describe poor telegraph operators who were hired from the ranks of radio operators. Or maybe "ham-fisted" and "ham-handed" are derived from "ham." Who knows?)

954. Amateur Radio: Elmers List Quick-Search Index

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 12:00:44 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/index-1-760104038@unomaha.edu>
Source record: 271742
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/elmers/index

Quick Search Index by Subject:

(Note: This index is not necessarily all-inclusive and some Elmers are
listed more than once.)

AMATEUR RADIO EMERGENCY SERVICE MAILING LISTS
(ARES)/RADIO AMATEUR CIVIL
EMERGENCY SERVICE (RACES) Botterell (Networks in Emergency
Mangement)
Botterell (Networks in Emergency Engehausen, et al (AA4RE Packet
Management Mailing List) BBS)
Chilton (EMA Radio Officer) Dodell (Land-Mobile Radio,
Engehausen (RACES Bulletins) MARS Members)
Fyodorov (Russia) Freeman, M (ACC Equipment)
Humphries (ex-Asst. EC) Hurder (ARRL Field Organization)
Hurder (ARRL Field Services) Kluft (rec.radio.amateur
Magid Working Group)
Stader (EMAS SEC) Knapp, et al (Iowa State Elmers)
Wilson Prescott (Antique and Older
Tube Equipment)
AMATEUR TELEPRINTER OVER RADIO Meredith (PBBS Bulletin Forwarding,
(AMTOR)/PACKET TELEPRINTER OVER F6FBB Packet BBS)
RADIO (PACTOR)/RADIO TELETYPE (RTTY) Nerenberg (DX)
Schleck, et al (College Clubs)
Battles Walker, et al (QRP)
Doane
Feeney (PACTOR) MILITARY AFFILIATE RADIO SYSTEM
Freeman, J (AMTOR and PACTOR) (MARS)
Graham, P
Richards Doane (Navy)
Sayer (also decoding CHU's Dodell (Air Force, Mailing List)
ASCII time code) Miller (Air Force)
Monson (Army)
AMERICA ON-LINE Sargent (Army)
Taylor (Air Force)
Stader (Host, Welch, J (Navy/Marine Corps)
Ham Radio Club forum) Welch, V (Navy/Marine Corps,
list of MARS members on the
AMERICAN RADIO RELAY LEAGUE Internet, tentative BBS
(ARRL) conference)

Battles (QST Features Editor) MICROWAVE
Bloom (ARRL HQ Postmaster,
QEX Editor) Graham, P (1.2 Ghz repeaters)
Doane (CT SM) Hammill
Elmore (CO TC) Jahnke (SSB/CW SHF Contesting)
Hare (Laboratory Manager) Lau (Transverters up to
Hurder (Field Services Deputy 24 Ghz)
Manager) Sargent (3, 5, and 10 Ghz)
Jahnke (VEC Manager)
Lau (Technical Editor) MOBILE
Redding (Educational Advisor)
Stader (EMAS SEC) Carruth (FM and HT's)
Turner (Volunteer Counsel) Hare (RFI issues)
Wilson (SCV SM) Humphries
Keller (HF)
ANTENNAS Salmon (Maritime)
Sargent
Brewer (wire HF) Salyzyn (HF CW)
Billson (HF)
Brubaker (HF) NATIONAL TRAFFIC SYSTEM (NTS)
DePolo (including VHF/UHF)
Elmore Doane
Freeman, J (wire HF and 160m) Elmore
Graham, J (wire HF for Hurder (ARRL Field Services)
apartments) Salyzyn (Canada)
Halbert (simple designs) Sargent
Humphries (VHF and multi-band Zurn (Europe)
wire arrays)
Myers (and transmission NOVICE/TECH INSTRUCTION
lines)
Ornitz (including computer Billson
modelling) Bono (AutoExam/AutoCW)
Potter Carlson (Macintosh Hamstacks)
Rymell Chilton
Salnick Knapp, et al
Salyzyn Larson
Standerfer Magid
Stine (wire HF) Maia
Stockton Myers (including basic
Taylor electronics and communications
Zurn (wire HF) theory)
Redding
ANTIQUE AND OLDER EQUIPMENT Reeves
Salmon
Brewer (40's-70's) Stader
Keys (including HF and CW)
Prescott (Mailing List) PACKET
Moore, T (VHF)
Standerfer Angus (TCP/IP, NOS, UUPC,
Turner (including Kenwood and Tnet, and SNEWS, IP
Ten-Tec) Coordinator for CA - LA

and SF Valley subnet)
APPLE MACINTOSH COMPUTER Battles (AX.25 and TCP/IP)
Bloom (IP Coordinator for
Braun Connecticut subnet)
Carlson (Macintosh Hamstacks) Braun (TCP/IP, Macintosh, IP
Ehrlich (FTP archive) Coordinator for WNY subnet)
Stader (List of Macintosh Cole (TCP/IP and NOS)
Amateur Radio Software) Dodell (IP Coordinator for
Van Peursem (Savant) Arizona subnet)
Elmore (including TCP/IP)
BATTERIES Engehausen, et al (AA4RE Packet
BBS and Mailing List)
Hammill (Sealed Lead-Acid) Freeman, J (KAM, TCP/IP, NOS for
Meyers DOS and OS/2)
Stuart (including Ni-Cads) Fyodorov (AX.25 and TCP/IP in
Russia)
CALLSIGN PROJECT/NATIONAL TECHNICAL Graham, J (KAMterm)
INFORMATION SERVICE (NTIS) Graham, P (VHF)
Knapp, et al
Carruth Meredith (AZ Packet Coordinator,
Lloyd (including QRZ Ham-Radio PBBS Bulletin Forwarding Mailing
CD-ROM) List, F6FBB Packet BBS Mailing
List)
CIVIL AIR PATROL (CAP) Salyzyn (Canadian)
Sargent
Carlson Sayer (VHF)
Moore, J Schallehn (Kantronics)
Stader (TCP/IP and Macintosh)
COLLEGE CLUBS Vail (TCP/IP, TAPR/9600, IP
Coordinator for East/Central
Edwards Massachusetts subnet)
Knapp, et al Van Peursem (Savant and
Schallehn Macintosh)
Schleck (et al, Mailing List)
MEDIA (PUBLICATION/WRITING/
COMMERCIAL EQUIPMENT BROADCATING)

Dodell (Mailing List) Battles (QST)
Richards Bloom (QEX)
Lau (QST/QEX)
CW (MORSE CODE) Moore (Co-Host, Ham Radio and More)

Bono (AutoCW) PART-15 BROADCASTING
Elmore
Fyodorov (including Cyrillic) Ornitz
Keys
Rosenfeld POWER SUPPLIES
Salyzyn
Squicciarini Myers
Stine Stuart
Stockton

Tescher (Computer Programs) PRODUCT INFO/FEEDBACK
Zurn (including European
abbreviations) Appell (Alinco and Yaesu)
Freeman, M and Shirley (Advanced
DIGITAL SIGNAL PROCESSING (DSP) Computer Controls - ACC)

Bloom QRP (LOW POWER)
Edwards
Billson
EQUIPMENT TESTING/TROUBLESHOOTING Halbert (HF)
Sargent (VHF)
Billson Stockton
Brewer (Tube Gear) Turner (including Ten-Tec
Freeman, J (PC ISA Bus) Argonaut)
Hare (ARRL Laboratory Manager) Walker, et al (Mailing List)
Myers Zurn
Ornitz (Instrumentation)
Rymell (Electronics and Computer RADIO FREQUENCY INTERFERENCE (RFI)
Service Work)
Salnick Elmore
Salyzyn Graham, P (including PC's)
Standerfer Hare (including Automotive)
Stockton Myers
Taylor Stockton
Tescher Witte
Witte (Instrumentation)
RECIPROCAL LICENSING/FOREIGN OPERATION
FREQUENTLY ASKED QUESTIONS (FAQ's)
Andrews (New Zealand)
Bloom (ARRL E-mail and Info Server) Flaherty (South Pacific)
Cheeseman (Australia) Fyodorov (Russia)
Jahnke (VE Exams Scheduled) Levine (Australia and Japan)
Kluft (General) Salmon
Salyzyn (Radio Amateurs on Usenet, Salyzyn (Canada)
rec.radio.info Moderator) Stockton (UK)
Stader (Macintosh Amateur Radio Zurn (Italy and Germany)
Software)
Watt (Packet and Digital Modes) REPEATERS
Woods (Mail Order Electronics)
Battles
HANDICAPPED OPERATING Chilton
De Armond
Billson DePolo (VHF/UHF)
Doane Graham, P (including 1.2 Ghz)
Hurder Keller (220 Mhz)
Knapp, et al Knapp, et al
Schallehn (VHF/UHF)
HIGH FREQUENCY (HF)/ Witte
CONTESTING/DX
SATELLITES

Battles
Brubaker Bass (including low-cost, QRP
Chilton Microsat stations)
Elmore Feeney
Fyodorov Flaherty (including OSCAR)
Knapp, et al
Nerenberg (DX Mailing List) SEMINARS/LECTURES
Rosenfeld (including practical
QSLing tips) Humphries
Salmon (including DXpeditions) Redding
Salnick Stuart (Batteries and Power
Squicciarini Supplies)
Tidd (DXCC Databases)
Zurn TANDY COLOR COMPUTER AND OS-9

HOMEBREWING/DO-IT-YOURSELF Billson

Billson (6809 uP) TELEVISION, FAST-SCAN (ATV)
Bloom (including DSP)
Carruth (Digital Design, Chilton
Software) Feeney
Chilton Hammill
De Armond
DePolo (including VHF/UHF TELEVISION, SLOW-SCAN (SSTV)
design and construction)
Edwards (including DSP) Langner
Fyodorov (including computers)
Halbert (QRP) UNIX
Keys (Junk Box projects)
Kohnen (Tubes) Carruth (System Administration)
Lau (Transverters, VHF/UHF, Cole (including Linux)
Filters, repeatable projects) Ehrlich
Myers (Transmission Lines, Freeman, J
Analog and Digital Design) Sayer (especially SunOS)
Moore, T (Junk Box projects) Tescher
Rymell (Electronics and Computers, Van Peursem (HP-UX and System
Low-Cost projects) Administration)
Salyzyn
Stine (Tube Amplifiers, VERY HIGH FREQUENCY (VHF)/
Receivers, and Exciters) ULTRA HIGH FREQUENCY (UHF)
Stockton (including QRP)
Stuart (Batteries and Power Battles
Supplies) Carpenter (6 meters)
Taylor (Tubes and Amplifiers) DePolo (Weak Signal, Contesting,
Tescher and Repeaters)
Flaherty (including Amplifiers)
IBM PERSONAL COMPUTER (PC) AND Graham, P (Commercial Rig
CLONES Conversions)
Hammill (including ATV and DX)
Angus Humphries (2m FM)
Bono (AutoExam, et al) Jahnke (CW/SSB Contesting and

Braun Weak Signal)
Cole Lau (CW/SSB to 222 Mhz)
Ehrlich Moore, T
Freeman, J (including OS/2 and Richards (Monitoring)
ISA bus) Sargent (2 and 6 meter AM and
Fyodorov Contesting)
Keller Witte (including Portable
Tescher and Mountaintopping)

INTERNET SERVICES VOLUNTEER EXAMINER (VE) PROGRAM

Schleck Billson
Carlson (W5YI)
MAIL-SERVERS/ARCHIVES DePolo
Jahnke (ARRL VEC Manager)
Bloom (ARRL Info Server) Kohnen (W5YI)
Deignan (Buckmaster CD-ROM) Maia (W5YI VEC)
Ehrlich (Boston ARC FTP archive) Reeves
Harding (Ham Server) Rosenfeld (W5YI)
Shirley (ACC Equipment) Salmon (Sunnyvale)
Sternitzke (W5YI Asst. VEC)

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)

955. Amateur Radio: Elmers Resource Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 12:01:08 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/list-1-760104055@unomaha.edu>
Source record: 271743
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/elmers/list

More information about this list can be found in the companion posting
to this file, "Amateur Radio: Elmers List Info and Administrivia."

73, Paul, KD3FU

Amateur Radio Elmers Resource Directory (as of 02/01/94)
++

David Andrews ZL2SX

andrews@kai.ee.cit.ac.nz

I have been involved with the Amateur Radio International Travel Host
scheme. I also chair the NZART Frequency Management and Technical
Advisory Group, which is responsible for all repeater coordination and
band-planning (LF, MF, HF, VHF, UHF, and above) in New Zealand. I would
be pleased to answer any queries with regard to reciprocal licensing or
frequency coordination that may arise.

++

Jeff Angus WA6FWI

jangus@skyld.tele.com

I run NOS as a tcp/ip <--> AX.25 mail bbs gateway. I also run a few nodes,
soon to replace with Tnet-x1g on one and a PC NOS-switch on the other.
And, I have successfully installed UUPC/extended 1.11k and SNEWS for those
MS-DOS afficionados out there.

ampr.org IP Coordinator for California - Los Angeles and San Fernando
Valley subnet (44.016.xxx.xxx)

"We're here to help, we don't loan tools" (Just kidding....put me on the
list). Monday-Thursday 8 AM to 9 PM Pacific time, Friday 8 am to 5 pm.

--
netcom!bongo!jangus@skyld.tele.com "Als ik Kan", Gustav Stickley
US Mail: PO Box 4425 Carson, CA 90749-4425 1 (310) 324-6080

++

Jay Appell --> KA1SNA

1976-1978 FCC Personal Users Radio Advisory Committee
Task force for rules Rewrite Citizens Radio Service
Rules Interpretation

1988-Present Stratus Computer/ Technical Support Engineer

I am CEO of Creative Media Productions a multimedia consulting
company.

Address: Jay_Appell@cac.stratus.com
Telephone: 1-508-478-6969 X200 at Creative Media Productions
1-508-478-1429 24 Hour Ham radio BBS and other topics

I enjoy SCA reception and multimedia use in Amateur Radio. If anyone would
like to reach me by modem, 508-478-1429 (24 Hr) BBS 14,400.

I have been referred to as the ham responsible for digital users manuals
in amateur radio. The first manual was the DJ-590 and subsequent manuals
included the 560,580 and 600 for Alinco. My contacts in the amateur radio
community have helped other amateurs to know more about products, hidden
features and new product offerings. The BBS will now included the latest
info on YEASU and ALINCO products. If you have a product that you wish to
have evaluated for the general amateur community, please contact before
sending.

If you have questions with regard to customer service at these
companies, please forward to me and they will be passed to the company
contacts.

++

Ken Bass K4EVH

bassanco@access.digex.net

Licensed since 1959.

Experience in presently mostly Microsats, but I have experience on Modes A,
B, J, and Oscars. I have concentrated on "cheap" and low-power setups, like
my Microsat setup using in-the-attic homebrew/Radio Shack omnidirectional
antennas.

++

""
Brian Battles, WS1O I Tel 203-666-1541, x222 I
QST Features Editor I Fax 203-665-7531 I "Stamp out sex:
ARRL HQ I Internet bbattles@arrl.org I Get married!"
Newington, CT USA I Amprnet ws1o@ws1o.ampr.org I
""

VHF packet (AX.25 and TCP/IP)
HF SSB and RTTY
FM/repeaters
Clubs/activities
Public relations

Writing (for newsletters and ARRL publications)

++

Bob Billson, KC2WZ Internet: bob@kc2wz.bubble.org
21 Bates Way UUCP: ...!uunet!kc2wz!bob
Westfield, NJ 07090
908-232-2603 (evenings)

Advanced (since 1975) Troubleshooting
Homebrewing C and 6809 uP programming
Antennas (particularly HF) Volunteer Examiner
Digital Communications QRP

OS-9 operating system (UUCP is run on my Tandy Color Computer 3 :-))

10m is my favorite band even when it is "dead".

Member of Handi-Hams. Work as an Interpreter for the Deaf (I am hearing).

Interested in helping *any* would-be ham get their ticket. Ham Radio is a
great(!) hobby and should not kept a secret!

++

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League | Justice is being allowed to do whatever
225 Main St. | I like. Injustice is whatever prevents
Newington, CT 06111 | my doing so. -- Samuel Johnson

Postmaster, ARRL HQ (arrl.org)
QEX Editor
Digital Signal Processing (DSP)
ampr.org IP Coordinator for Connecticut subnet (44.088.xxx.xxx)

Collecting information for the next annual ARRL Computer Networking
Conference.

For information about the ARRL info server, send E-mail to info@arrl.org
with the word "HELP" in the message body.

++

/**\
* Rich Bono IMRICH UUCP:rbono@necis.ma.nec.com *
* (508) 635-6300 NM1D AMPR: nm1d@nm1d.nh.usa.noam *
**/

Author of the following MS-DOS ham programs:

AutoExam - Examination simulator and study aid
AutoCW - Morse Code practice program
DOSGATE - allows users to run programs on your PC remotely (AutoExam
compatible)
AutoCall - Allows use of the Buckmaster HAMCALL CD-ROM online callbook

with DOSGATE
AutoFax - Allows reception of weather fax using Kantronics TNC's
SeeSats - Real time satellite tracking (text only), DOSGATE compatible

Most of these programs are available from wuarchive.wustl.edu under
/mirrors/msdos/hamradio or write me at:

7 Red Field Circle
Derry, NH 03038

and enclose:

A FORMATTED high density diskette (either 1.44 MB or 1.2 MB; 3.5" or 5.25").
A Self Addressed STAMPED return diskette mailer.
A note explaining that you want a copy of AutoExam and/or AutoCW
(or one of the other programs).

I am always receptive to individuals interested in maintenance,
enhancements, and non-commercial distribution for these shareware
programs.

++

NETWORKS IN EMERGENCY MANAGEMENT ("Nets") DIGEST

"Networks In Emergency Management" is a moderated forum on the
use of computer networks and networked computers in the practice of
emergency management.

To join the "nets" mailing list, please send e-mail to
"nets-request@oes.ca.gov" with the word "subscribe" in the text
of the message. To remove yourself from the list, send mail to
that same address with the word "unsubscribe" in the text.

- Art Botterell
acb@oes.ca.gov
(916) 262-1600 (in emergencies)
California Office of Emergency Services

++

Curtis Braun (curtis@computronics.com) (N2HKD)
Computronics, POBOX 1002 Fairport,NY 14450
Guest@Digital Telstar,Network Operations Center Kodak

Apple Macintosh, IBM-PC, and Sun Computers

I have extensive knowledge on Appletalk protocol down to the bit level.
I have also worked with various iterations of MacTCP applications.
(Routers, hubs, gateways, Ethernet, Localtalk, etc)

I am also familiar with the look and feel of the Mac OS, (Ver. 6 & 7),
and its associated troubleshooting. I have some application
experience with numerous programs. (including ARAP Apple remote
dial-in stuff).

ampr.org IP Coordinator for Western New York subnet (44.069.xxx.xxx)

(There is a readdressing plan which I will gladly mail to anyone
who requests it.)

++

John Brewer WB5OAU

brewer@anarky.enet.dec.com

Wire antennas, restoration, operation and parts/tubes supplies
for most 40's-70's vintage gear.

++

Alan Brubaker, K6XO
alan@dsd.es.com

HF Antenna Systems
Contest Operating
General HF Operations
Propagation

++

Diana L. (Syriac) Carlson
Hudson, NH
dls@genrad.com
KC1SP

QSL Bureaus (how to use them)
Volunteer Examiner Service (how to become one)
Macintosh Hamstacks (available from uxc.cso.uiuc.edu
under /pub/ham-radio)
Civil Air Patrol

++

Robert (Bob) Carpenter W3OTC

rc@cmr.ncsl.nist.gov
w3otc@amsat.org

6 meter SSB DX
Central States VHF Society

"2m FM isn't ham radio, but it's a good way to contact radio amateurs."

Disclaimer: Opinions expressed are those of the sender
and do not reflect NIST policy or agreement.

++

73 de Rusty Carruth, N7IKQ P.O. Box 27001, Tempe, AZ 85285
(602) 870-3330 !'s:{ames!ncar!noao!asuvax,mcdphx}!anasaz!rusty
@'s: rusty@anasazi.com LastResort: rusty%anasaz.UUCP@asuvax.eas.asu.edu

Join the Usenet Un-Net: 1700-1900Z Saturdays, 28.410 or 28.390 MHz

I'm willing to act as a reference for anyone wanting info on getting
tapes (especially Callsign tapes) from the Department of Commerce
National Technical Information Service (NTIS) or wanting other info on
callsign-project related stuff.

One of these days I'll actually be around for the un-net! I promise, really!

My job is currently System Administrator for a large Unix site so I know a
little bit about day-to-day Unix operations and Unix installation :-)
I also have much experience with constructing email paths that will work
rather than bounce.

I also have a fair amount of experience in hardware/software interfacing
and machine control.

++

Mark Cheeseman VK2XGK

cheese@asstdc.oz.au

Maintainer of the aus.radio FAQ

A copy of the FAQ may be obtained via anonymous FTP from
grivel.une.edu.au under /pub/ham-radio/aus.radio/faq/australia.

Please direct all feedback, submissions and administrivia to my E-mail
address above.

++

Ken Chilton
KA1TIH, Advanced Class
53 Alan Road
Marlborough, MA 01752
chilton@emc.com
Design Engineer

Amateur Qualifications:
Trustee of the Algonquin Amateur Radio Club Repeaters:
446.675 -- 223.86 -- 53.47
Assistant Radio Officer for the City of Marlborough
Emergency Management Agency
NESMC Region 440 MHz frequency coordinator
Trained in Electronics Engineering, Electrical Engineering,
Computer Sciences, Computer Programming, and Management
Knowledgeable in Rules, Regs, and interpretations

Areas I am also interested:
Homebrewing
Repeater Hardware, Control, Operation
Packet (AX.25)
Net Control Operations

Electromagnetics and EMP
HF SSB and CW operating
Satellite and Shuttle operation
Amateur Television
Elmering new HAMs

++

Derrick C. Cole KC4WEJ

cole@concert.net

Anything having to do with PC's, DOS, Unix, Linux, C, NOS, TCP/IP et al
is fair game. I'm not much help in the electrical/circuit department (but
I am learning/applying, though! :) If you feel such information could be
useful, I would of course offer any/all help I could provide.

++

John De Armond WD4OQC

jgd@dixie.com

Marietta, GA

Construction techniques, telemetry, repeater design and maintenance,
most aspects of circuit design.

++

Rev. Michael P. Deignan KD1HZ

A new ham-radio archive site and callsign server center has been set up
on the Internet.

The Buckmaster CD-ROM callsign database (which includes international
calls) and all the Buckmaster CD-ROM public domain files are available
for retrieval!

To access the Buckmaster callsign server

rlogin/telnet: 155.212.2.2 (or, ns.risc.net)
login as: hamradio (no password)

To access the file archives:

ftp to: 155.212.2.2
login as: ftp / anonymous
password: your email address

Please direct all feedback and administrivia regarding this service to
root@ns.risc.net.

++

-=-=-=

To subscribe to or unsubscribe from either of the above lists, please
send electronic mail to:

listserv@stat.com

and include the command:

subscribe list-name

or

unsubscribe list-name

as the first line of your message, where list-name is either
land-mobile-radio or mars-list. An acknowledgement/welcome message
should follow very shortly.

++

Thomas Edwards N3HAU

tedwards@eng.umd.edu

Technopagan Priest
Member, University of Maryland ARA - W3EAX

Digital Signal Processing (DSP)
Electrical and Electronics Engineering

The UMARA is running a World-Wide Web hypertext page at:

URL: http://w3eax.umd.edu/w3eax.html

Give it a try!

++

Kim Elmore, N5OP
1103 South Gay Drive
Longmont, CO 80501

elmore@brightband.rap.ucar.edu
n5op@n5op.ampr.org

I'm the Technical Coordinator for the Colorado Section.
Areas of expertise:
RFI/EMI
Antennas
DX'ing
Contesting
HF propagation
CW

Areas where I have enough knowledge to be dangerous:
Troubleshooting
Traffic Handling
Homebrewing and construction practices

++

Roy Engehausen AA4RE

enge@almaden.ibm.com

AA4RE Packet BBS

Poster of RACES Bulletins

Thanks to Chris Spell <spell@seq.uncwil.edu>, there is now a mailing
list for AA4RE BBS program sysops. I hope all will subscribe. It
should be very helpful to all of us.

To send a message to the mailing list send it to:

aa4re@matsci2.uncwil.edu

To subscribe to the mailing list a user needs to send a message to:

aa4re-request@matsci2.uncwil.edu

With the following in the body of the message:

subscribe aa4re your_account_name@your.address.whereever

To unsubscribe one would send this text in the message:

unsubscribe aa4re your_account_name@your.address.whereever

++

```
==========================================================================
| Scott Ehrlich Internet: wy1z@neu.edu |
| Amateur Radio: WY1Z AX.25: wy1z@wa1phy.#ema.ma.usa.na |
|------------------------------------------------------------------------|
| Know your weaknesses, show your strengths - Anonymous |
==========================================================================
```

Maintainer of the Boston ARC FTP area on world.std.com - check it out!
(Featuring amateur radio software for the Macintosh and ARRL files from
info@arrl.org)

I've been playing with most models of Macs from the 512 on up for a
number of years now. I'm also great with DOS, UNIX, and my VMS isn't
too bad, either. :)

++

F. Kevin Feeney WB2EMS
Network Video Engineer
172 Caldwell Hall
Cornell University
Ithaca, NY 14853-2602
Phone - (607) 255-5186
FAX - (607) 255-5771
EMAIL - fkf1@cornell.edu

Pactor, Satellites, and Amateur Television

I'd like to hear from people with Pactor experience, maybe even make a
sched with someone for a maiden Pactor QSO.

++

Reciprocal Licensing (South Pacific)
VHF (Propagation, Power Amplifiers)
Satellites (Project Oscar)

--
-=Paul Flaherty, N9FZX/5W1JX |"The enemy of the good is the better."
->paulf@Stanford.EDU | -- William "Wild Bill" Donovan

++

++
+ Jay Freeman, WT9S Packet: wt9s@w9yci.il.usa.noam +
+ internet: freeman@eagle.sangamon.edu +
++

I can assist anyone with most PC installation/troubleshooting
problems. I have a good deal of experience installing and configuring
OS/2, have a good grasp of Unix (not a wizard yet though :), and a
thorough familiarity with the ISA bus and the cards that go in it.

On the radio side of things, I like digital modes and experimenting with
antennas, specifically:

- PACTOR and AMTOR
- Configuring Kantronics All-Mode (KAM) TNC's for proper operation
- Over a decade of packet experience, including setting up both DOS and
OS/2 versions of KA9Q NOS
- HF wire antennas, including 160m full-wave delta loops

++

Monte Freeman KC4GPW

Operations Department / Information Technology
Georgia Institute of Technology, Atlanta Georgia, 30332
Internet: ccoprfm@prism.gatech.edu
Bitnet: ccoprfm@gitvm1.bitnet

I am the list owner of a mailing list for people who have/are interested
in products produced by Advanced Computer Controls Inc. (ACC). For those who
might not know what ACC does; they produce products (mostly for the amateur
radio service) such as repeater controllers, digital voice recorders, remote
base control units, etc.

To join the ACC (Advanced Computer Controls) equipment discussion
mailing-list, send E-mail to listserv@gtri01.gatech.edu with "subscribe
acc-l your-name" in the body of the message. An acknowledgement and
welcome message will follow. Administrivia, policy questions,
or other queries may be directed to me.

(see also Mike Shirley WB6WUI)

++

Andy B. Fyodorov RW3AH, WL7AP

rw3ah@emercom.msk.su

PACKET: RW3AH @ R3ARES.#MOS.RUS.EU (temporarily down)
IP: 44.178.1.7 or rw3ah@gw.ra3apw.ampr.org

PO Box 899 Moscow
Zip-127018 Russia

Licensed since 1975
Experience in Emergency communications, Russian ARES Chief
Coordinator (since 1987) of Russian ARES Organization matters and networks
Owner of R3ARES BBS
General HF, Contesting, Net Controlling operations
Data communications, networks (TCP/IP, AX25)
computers (IBM PC, home made)
homebrewing electronics
antennas (particularly HF).
Proficiency in CW (Morse code)
(also former Ten-Tec dealer in ex-USSR)

++

Jim Graham

#include <std_disclaimer.h> 73 DE N5IAL (/4)

INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W
AMATEUR RADIO: n5ial@w4zbb (Ft. Walton Beach, FL) AMTOR SELCAL: NIAL

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

KAMterm is a host mode terminal program for Kantronics TNCs that I wrote
and released as shareware.

My professional field is telecom (data communications is my key area of
expertise).

I also have experience with wire HF antennas for apartments and other
small spaces.

++

KJ6NN
Philip Graham
723 Berkshire Place
Milpitas, CA 95035

EMAIL: phil@ncd.com

My skills are listed below in no special order
- PC RFI reduction (Wrote a chapter for the new ARRL RFI BOOK)
- Repeaters (How to put one up)
- Repeaters (How to use one, without making others mad)
- 1.2 GHz (My repeater is on this band)
- VHF packet only (I hate HF packet)
- HF DX
- HF AMTOR, RTTY, ASCII
- Putting up a tower and/or HF beam

++

Dan Halbert, KB1RT
halbert@crl.dec.com

QTH: West Newton, MA, near Boston.

Building homebrew QRP gear.
Information about QRP-NE Club.
Advice on simple antennas.

++

Brian Hammill, KD4BFJ | brianh@dante.exide.com
Software Engineer | Exide Electronics - Small Systems Group
Raleigh, NC | "Powering Your Network with Intelligent Solutions"

I am especially interested in VHF/UHF and microwave amateur bands as well as Amateur television. I am treasurer and a founding member of the newly-formed Triangle Amateur Television Association in Raleigh-Durham-Chapel Hill, NC. I am willing to share my expertise in the following areas:

ATV - Getting started, starting local activity, repeaters.
VHF/UHF - Propagation, what you need to get started, operating portable, contesting, DX.

Sealed Lead Acid Batteries - How to take care of them.

++

Steve Harding KA6ETB

steveh@grafex.Cupertino.CA.US 408.252.0578 alternate: harding@nas.nasa.gov
For amateur radio related information, send a message to:
ham-server@grafex.Cupertino.CA.US
Place HELP and GET INDEX on separate lines in the text.

HAM-server has over 10-megs of amateur radio related information on-line, with more being continually added.

++

Ed Hare, KA1CV | ehare@arrl.org
American Radio Relay League |
225 Main St. |
Newington, CT 06111 |
(203) 666-1541 - voice
(203) 665-7531 - FAX
ARRL Laboratory Engineer

Radio Frequency Interference (RFI) matters
Equipment Testing

I want stories about automotive EMI problems, dealings with dealers, and, if possible, solutions. I plan to forward these to my contact at the Society of Automotive Engineers (SAE).

If anyone knows the *right* people at any particular company, I want to know. I am also pursuing (via the SAE) more official channels.

EMI/RFI Resource List and RFI Tips package available. A business SASE with 98 cents postage is appreciated. Electronic versions available soon. Please specify the desired documents in your correspondence.

Many amateur radio informational documents (including EMI/RFI files) are also available from the ARRL info server. Send E-mail to info@arrl.org with the word "HELP" in the message body.

++

Ed Humphries Hewlett-Packard NARC Atlanta GA
N5RCK Internet edh@hpuerca.atl.hp.com

Past President, Williamson County (TX) ARC
Former Assistant Emergency Coordinator for
Williamson County ARES/RACES

2-meter FM, VHF Antennas, Mobile Installations
Organizing Amateur Radio Seminars and Programs
Multiband wire antennas, Field Day Activities
and general WeatherNet & public service enthusiast

++

| | | Deputy Manager, Field Services, ARRL.
| |___| The ARRL Amateur Radio Emergency Service, the ARRL
| uck | |urder National Traffic System, The Amateur Auxiliary to
------ | | the FCC's Field Operations Bureau, the ARRL
KY1T Field Organization and the ARRL Monitoring System.
---
lhurder@arrl.org Prodigy - MGTS39A, BIX - ARRL,
MCI Mail - RPALM, MCI Mail - "ARRL", America On Line - "ARRL HQ"
Compuserve - 70007,3373 (ARRL HQ) -- Genie ARRL.HQ

Matters relating to the ARRL field organization, including emergency communications, traffic handling, referrals to

local Technical Coordinators, the Amateur Auxiliary to the
FCC's Field Operations Bureau, ARRL Volunteer Counsels, Public
Information Coordinators, etc.

Matters relating to Amateur Radio and the disabled/handicapped.
Suggestions on how computers and Amateur Radio can be easily
and very inexpensively) combined to assist the disabled.

At the very least, I can be a forwarding point to the others here at
ARRL HQ who CAN answer specific questions that are not covered above.

FIELDORG is an electronic mail reflector dedicated to hams interested
in any and all types of ARRL Field Organization matters. To subscribe,
send an E-mail message to FIELDORG-REQUEST@world.std.com.

++

Bart J. Jahnke, KB9NM | USENET: bjahnke@arrl.org
Manager, ARRL Volunteer |
Examiner Program | BIX: ARRL
ARRL VEC Dept. | PRODIGY: MGTS39A (c/o Luck Hurder)
225 Main St | MCI ID: 215-5052
Newington, CT 06111 | CompuServe: 70007,3373
Voice (203) 666-1541 | America On-Line: ARRL HQ
FAX (203) 665-7531 |
---
* Listings of Examination Opportunities -- bi-weekly postings
* Volunteer Examining procedures - ARRL VE Manual
* Support and Instruction for Volunteer Examiners - Coordinating Exams
* Member, National Conference of VECs Question Pool Committee
* Information on what's required to become an Amateur Radio licensee
* Contributing Editor - QST Magazine - Exam Info column
* On-the-air interests: VHF/UHF/SHF SSB/CW Weak Signal Operating and Contests

++

Michael S. Keller AB5EL

mkeller@flp.mhs.compuserve.com (work)
71620.447@compuserve.com (personal, checked far less often)

Areas of particular knowledge:

PC-style computers
Mobile installations (rearranging mobile HF right now)
Repeaters (after a fashion--building a 1.25m repeater)

++

R.D. Keys

Dept. of Crop Science
NCSU
Raleigh, NC 27695-7620

rdkeys@csemail.cropsci.ncsu.edu

de NA4G, "Boat Anchor Bob", an ol' cw fart .....

If I can be of assistance in older equipment, junk-boxing
your way to hamdom, the cheapskate's approach, let me
know.

22 yrs a ham, extra class, mostly cw, mostly boat anchors
and radio in the traditional sense.

{Telegraphy has been in my family for almost 100 years!}

++

Ian Kluft KD6EUI PP-ASEL
ikluft@thunder.sbay.org (home) ikluft@uts.amdahl.com (work) Santa Clara, CA

Maintainer of rec.radio.amateur.misc and rec.radio.cb FAQ lists

Please direct all FAQ submissions, feedback, and administrivia to
hamradio-faq@kluft.com or cb-faq@kluft.com.

A mailing list for rec.radio.amateur.* FAQ and Netiquette posting
maintainers, as well as anyone with a sincere interest in helping
keep the rec.radio.amateur.* newsgroups the friendly and useful
forums they are today, is now available. To subscribe, send E-mail
to rra-wg-request@amdahl.com.

++

Steven M. Knapp KA9QOA Computer Engineering Senior
sknapp@iastate.edu Vice President Cyclone Amateur Radio Club
Iowa State University; Ames, IA Durham Center Operations Staff

A few members of our ham radio club were interested in helping out.
Since our turnover is usually 4 years or so (graduation is a horrible
thing), I thought it may be difficult for us to keep the list up to
date. I thought that by creating a local mailing list called
"elmers@iastate.edu" we could add or remove people as need be. There
would always be at least one person receiving mail on that list,
usually more! Even after I graduate, this list will be maintained
allowing ISU hams to easily help others.

Currently we have people with packet experience, some HF experience,
much repeater experience, in addition to a considerable background in
theory, as many here are electrical engineering or computer engineering
students. If a question can not be answered by the readers of the list,
there are many other local hams that could be prodded for the info.

Our local ham radio club has been especially interested in helping local
disabled hams (or hams to be) get on the air. But anyone local who
needed help would find a group at their door ready to work.

++

I'll be glad to help out with tube circuits and VE testing.
(W5YI VE# 3182)

73,
Louis J. Kohnen K2ANC
Penfield, NY near Rochester

K2ANC.Wbst128@xerox.com

++

John Langner WB2OSZ
115 Stedman St.
Chelmsford, MA 01824-1823
(508) 256 6907 (home - civilized times only please)
johnl@avs.com

Slow-Scan Television

++

Alan Larson WA6AZP

larson@net.com
larson@w6yx.stanford.edu

My areas are fairly general, and I teach classes
(Novice, with code, and upgrade sessions) at W6YX. My
main audience is to the Stanford (University)
community.

++

Zack Lau KH6CP/1 Expertise: Design of SSB/CW amateur transceivers
c/o ARRL Lab : up to 222 MHz. Design of transverters
Newington CT 06111 : up to 10.5 GHz. Basic lossy filter
(203)-666-1541 : design. Developing repeatable projects
zlau@arrl.org : using cheap, easy to get parts.

I'm now starting to look into 24 GHz SSB/CW gear using 10 Ghz as a
convenient IF.

Especially looking to help anyone wanting to be a QST/QEX
author--I can't write it all myself!

++

Bob Levine KD1GG, VK2GYN, 7J1AIS

bob_levine@jericho.mc.com

Amateur radio licensing in Australia and Japan

++

[Fred Lloyd, AA7BQ Fred.Lloyd@West.Sun.COM]
[Sun Microsystems, Southwest Area Solaris Transition Manager]

[Phoenix, AZ (602) 275-4242]

Co-Coordinator, "Callsign Project" (see also Carruth)

The QRZ Ham Radio CDROM is here! For ordering information, call
Walnut Creek at +1 800 786-9907 (overseas +1 510 674-0783).

++

Joel Magid WU1F

magid@wrksys.enet.com

ARES/RACES
Novice Instruction
General Theory

++

Fred O. Maia, W5YI

3511297@mcimail.com

P.O. Box 565101
Dallas, TX 75356

1-(800)-669-9594

Volunteer Examiner Coordinator
The W5YI Report
License Exam Study Materials
VE Exam Schedules Nationwide

++

Daniel J. Meredith N7MRP
Arizona Packet Coordinator
Voice/Data = (602) 956-2566
Ax.25 = n7mrp@n7mrp.az.usa.na
Internet = dan@aznet.stat.com

Owner of the PBBS Bulletin Forwarding Mailing List

The purpose of this list is to provide Sysops and Networkers a server in
which to forward bulletins and also discuss forwarding problems and obtain
forwarding partners. This server is also for the exchange of general
information relevant to all Amateur Related PBBS software packages available
today.

Owner of the F6FBB Packet Bulletin Board System Mailing List.

The purpose of this list is to provide both sysops and networkers
with tricks/tips/help as well as software updates for the F6FBB
packet bulletin board system.

To subscribe to or unsubscribe from either of the above lists, please send electronic mail to:

listserv@stat.com

and include the command:

subscribe list-name

or

unsubscribe list-name

as the first line of your message, where list-name is either bull-fwd or mars-list. An acknowledgement/welcome message should follow very shortly.

++

John Monson WB0PLW, AAA9EC

johnm@is.sprint.com
816-854-3015, Work hours (Missouri, Central Time)

Army MARS (Chief Staff Emergency Coordinator)

++

Bob Myers KC0EW
Hewlett-Packard Co.
Ft. Collins, CO

myers@fc.hp.com

Antennas, Novice/Tech instruction, batteries, power supplies, RFI, equip. testing/troubleshooting, FAQs, homebrewing. Basic theory questions also welcome.

My particular interest is in antennas and transmission lines, but I'm also more than willing to answer whatever I can in general radio theory, propagation, analog and digital electronics, etc.. (I'm a display engineer in "real life", have done my share of digital design, and have taught communication electronics at the local community college. I'm also active in some display and television standards activities.)

++

Jeffrey C. Miller, NH6ZW/N8, AFA1HE | The Air Force is
AFIT School of Engineering | paying me to be a
Wright-Patterson AFB, OH | student, not write this
jmiller@afit.af.mil | or any other opinion!

USAF MARS

++

John Moore 7525 Clearwater Pkwy, Scottsdale, AZ 85253 USA
john@anasazi.com Amateur call:NJ7E Civil Air Patrol:Thunderbird 381
Voice: day or eve:(602) 951-9326 FAX:602-861-7642 (by prior arrangement)

Civil Air Patrol

Co-Host - Ham Radio and More

Ham Radio and More is available for free to any AM station that is willing to run it with national ads intact. If you want there to be a nationwide amateur radio talk show, call your local station and ask them to get the program. They don't have to be part of the Talk America network. They can call KFNN in Phoenix (602-241-1510) or Talk America at 508-460-0588.

++

Tom Moore K1KAY

[no E-mail address at this time]

home phone: (508) 840-6843

QSX: Fitchburg 145.45 MHz
Harvard 145.41 MHz
6m AM 50.40 MHz

Junque-box specialties
old conversions vhf-oriented
shoulder to cry (or laugh) on

++

Lyndon Nerenberg VE6TCP/VE6BBM

lyndon@unbc.edu

To subscribe to the DX mailing list, send an E-mail request to:

dx-REQUEST@unbc.edu

asking to be added. A short introductory message will promptly follow.

++

| ___ ________ | Dr. Barry L. Ornitz WA4VZQ
| | / / | | Eastman Kodak Company
| | / / | | Eastman Chemical Company Research Laboratories
| |< < K O D A K| | Process Instrumentation Research Laboratory
| | \ \ | | P. O. Box 1972, Building 167B
| |__\ ________| | Kingsport, TN 37662 615/229-4904
| | INTERNET: ornitz@kodak.com

Part 15 Low-Power Broadcasting

Antennas (including expertise in computer modelling using MININEC and
NIST modelling programs)

Instrumentation (my profession)

++

Dave Potter, K1MBO

potter@think.com

electronics theory, regulations, antennas and
transmission lines, operating practices.

++

There is an active mailing list for fans of hollow state
(i.e. tube) radio equipment. Send a subscription request to:

boatanchors-request@gnu.ai.mit.edu

and you will be added to the group!

An additional note: You can save the list owner (me!) a lot of trouble
by including your email address in the text of your subscription requests.
boatanchors is a mail alias, not an automated listserv. Thanks!

Paul Prescott
N1AAC
regnad@gnu.ai.mit.edu

++

Terrence R. (Terry) Redding WB5LMJ

DOMAIN: terry%red@lawton.lonestar.org
UUCP: . . . !rwsys!lawton!red!terry
PACKET: WB5LMJ @ WB5MJS.OK.USA.NA
Voice 405 536-8822, Ben's Place (Benjamin Franklin) BBS 536-6988 9p to 6a
PhD candidate, University of Oklahoma in Adult and Higher Education
Educational Advisor, American Radio Relay League
221 SW Crystal Hills Drive, Lawton, Oklahoma 73505

I am primarily an adult educator conducting research in self-directed
learning. I have been involved in the following activities:

- Teach licensing classes, since 1974.
- Organize clubs, Stuttgart Amateur Radio Club, Panama Canal Astronomy
Club, Lawton Astronomy Club.
- Public speaking and publish on growth in volunteer organizations,
marketing adult and higher education and teaching amateur radio
courses.
- Research in adult learning theory, adult motivation and organizational
theory.
- Conducted a SAREX activity that involve seven communities, 21 schools
and 3,000 children.

I am primarily interested in assisting amateur radio clubs grow.

++

Tony Reeves
KK6XC
QTH Beach Area of So. Los Angeles
Torrance, Redondo Beach, Hermosa Beach, Manhattan beach

tony@hacgate.scg.hac.com

Novice training, local VE for Novice-Tech tests,
General questions

++

James J. Richards

richardsjj@oa.frc.com

First-Class FCC Radiotelephone License

25 years of Public Safety Communications and Computer-
Aided Dispatch

Scanners - Digital Comm - Freqs - Business Band - Public Safety
MDT's - Fax - RTTY

++

_________ _________ The
Scott Rosenfeld \ / Long Original
ham@wam.umd.edu Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 109 QSLed on dipoles _________| Dipoles! Antenna!

Contact VE, University of Maryland ARA (W5YI VEC)

CW, HF DX, and QSLing

I'm by no means a QSL expert, and I don't even get the GO-list or have a
packet setup to get into the local packetcluster - but I'm always glad to
help out with practical QSLing tips. I still haven't been able to get
any cards out of ex-Soviet Asia, and I don't know that I ever will, to be
honest. Oh well, I'll just keep trying.

++

John Rymell N3PFF
ryme@bloomu.edu
Bloomsburg University
Bloomsburg, PA

Have over 25 years in electronic/computer service work, antennas, SWL,
and a love of building just about anything from next to nothing (:^)!
Glad to help those in need.

++

Stephen R. Salmon E-mail: steve@carlyle.com
Carlyle Systems, Inc. Phone: 415-345-2500
2000 Alameda de las Pulgas Fax: 415-349-3874
San Mateo, CA 94403

DXing - not Honor Roll, but about 200.

DXpeditioning (some) - did a single-handed one to North Cooks and Palmyra in 1990

Marine operation

I'm a VE (Sunnyvale VEC) and help administer the tests about every two months at the Berkeley Yacht Club. I also teach a novice class there every year or two.

Reciprocal Licensing/Foreign Operation

(I've done some foreign operation, and plan to do more. I'm getting ready for a circumnavigation/worldwide DXpedition).

73, Steve, AA6LF

++

Bob Salnick, Spokane,WA | USENET: oliveb!isc-br!tau-ceti!DejaVu!salnick
Amiga 1000, WB 1.3 | INTERNET: salnick@DejaVu.spk.wa.us
WA9BVE |

I can help people with HF stuff, cheap antennas, and am willing to help troubleshoot problems with rigs.

I believe that one of the pillars of ham radio - construction/ understanding at the burn-your-hand-with-a-soldering-iron level - is drifting out of ham radio. With Japanese radios which cost so much, fewer and fewer hams are willing to risk their warranty to service their own equipment. I would like to see a turn-around here...

++

Mark Salyzyn, VE6MGS mark@ve6mgs.ampr.ab.ca

Qualifications:

Repair Technician
Electrical Engineer (11+ years)
Advanced Amateur (Canadian) since 1988

Advice of value:

HF + VHF construction, homebrew, repair, circuitry, programming and mods
Operating Mobile
Packet Radio (Radio, TNC, AX.25, TCP/IP)
NTS (Net Control for 80m CW Alberta Traffic Net for 3 1/2 years)
Canadian Tests, Rules and Regulations
Antennas, Design and Installation

General Electronics, Repair, Diagnosis and Design
CW training
Having fun with Amateur Radio communications

Maintainer of Radio Amateurs on Usenet E-mail address directory

Please direct all Radio Amateurs on Usenet E-mail address feedback, submissions, and administrivia to hams-on-usenet@ve6mgs.ampr.ab.ca.

Moderator of rec.radio.info newsgroup

Please direct all rec.radio.info submissions to rec-radio-info@ve6mgs.ampr.ab.ca and all feedback and administrivia to rec-radio-request@ve6mgs.ampr.ab.ca.

++

Andrew Sargent N8OFS, AAN5HJT

andrews@fms.com
andrews@telemax.com

My primary interests include: 6M AM, 10GHz, 5.65-5.925 GHz, 3.3-3.5 GHz, the fact of being a No-Code is not a crime, 2M AM, 2M FM QRP SIMP, packet radio experimentation, mobile operations, NTS, VHF Contesting, and of course... Army Mars.

If your interested in Army MARS, e-mail me. If your interested in Air Force or Navy MARS, e-mail me and I will send you a list of those members which I have compiled. Try to decide, then let me know.

++

Nick Sayer <mrapple@quack.kfu.com> |
N6QQQ @ N0ARY.#NOCAL.CA.USA.NOAM | "Don't make me come in there..."
+1 408 249 9630, log in as 'guest' |
PGP 2.1 public key via finger | -- Powdered Toast Man

HF RTTY/AMTOR, Decoding CHU
VHF Packet
Unix, especially SunOS
Network Time Protocol (NTP)

(MC68HC11 Mailing List has moved, mc68hc11-request@elden.cse.nau.edu is now the place to write to get connected.)

++

Steve Schallehn, KB0AGD | Internet : steve@matt.ksu.ksu.edu
Kansas State University | UUCP : ..!rutgers!ksuvax1!ksuvm.bitnet!steve
Manhattan, Kansas 66506 | Bitnet : STEVE@KSUVM
Packet: KB0AGD @ K0VAY.#NEKS.KS.USA.NA

A contact for people with question about Kantronics packet equipment. I am not affiliated with Kantronics, but know quite

a bit about them.

University Clubs (Member of Kansas State ARC, W0QQQ)

VHF/UHF Repeaters

++

Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Internet Services (Finding FAQ's, using Usenet, FTP, telnet,
Archie, FTP mail-servers, mailing lists, etc., etc.)

Also willing to provide newsreader kill/select file help to anyone
interested in customizing their presentation of the rec.radio.*
newsgroups

College Clubs

Ham-Univ mailing list for college clubs has found yet another new
home at the New Jersey Institute of Technology. E-mail for
subscription information.

Maintainer of this list

Please direct all Elmers List submissions, feedback, and administrivia
to elmers-request@unomaha.edu.

++

Mike Shirley - WB6WUI mikey@slic.cts.com GEnie: SLIC
PO Box 460 Lakeside, CA 92040 USA PGP v2.1 Public Key Available

For archival information about ACC equipment, send E-mail to
acc-l-archives@slic.cts.com with "help" in the body of the message
or try my BBS at +1 619 390-7542 (390-SLIC).

(see also Monte Freeman KC4GPW)

++

Marty Squicciarini NR3Z

skitch@nadc.navy.mil

DX and Contesting
QSL'ing

++

Terry Stader - KA8SCP/1, America Online Ham Radio Club Host

Internet: tstader@aol.com _or_ p00489@psilink.com
(Files/messages larger than 27K, please send to "p00489@psilink.com")

KA8SCP@WA1PHY.#EMA.MA.USA.NOAM _or_
ka8scp@ka8scp.ampr.org [44.56.4.82]

- registered ARRL Instructor (teaching for the last 6 years Novice/Tech classes with an 87% pass rate)
- Host of the America Online Ham Radio Club (like CompuServe only a LITTLE smaller!)
- President for 5 consecutive years of an ARRL Special Service Club (The Police Amateur Radio Team of Westford, MA - WB1GOF)
- ARRL Section Emergency Coordinator (SEC) for EMAS section
- Area 1 Communications Officer for the Massachusetts Emergency Management Agency (formerly Mass. Civil Defense Agency)
- Expertise with Apple // and Macintosh computers. (I have over 80 MB of Mac ham radio software available.) and ham-related
- Operate TCP/IP with Macintosh
- plus all around source of information about communications

Maintainer of Macintosh Amateur Radio Software List

++

Bill Standerfer * Hewlett-Packard Company
CFI-A, IA, ME * VXI Systems Division
bills@lvld.hp.com * Loveland, CO 80539
Baron N222AB - KF0DJ - Pikes Peak 253 * 303-679-2378

I'm certainly willing to be an Elmer if there's a need. I hope I've learned a few things in 27 years on the air. :-) Here's a list of subjects I might be able to help with:

Antennas
General Operating Practices
Older (Tube) Equipment
Test Equipment and Measurements

++

Steve Sternitzke, NS5I

sds@sat.datapoint.com

I work with the W5YI-VEC organization ("official" title - assistant VEC) and I write the VE manuals for W5YI. Add my name to the list of people who are available to answer questions about volunteer exams, FCC policies (as related to hams), the licensing question pools, etc.

++

Dave Stine WA2JTA/6

My areas of expertise are:

- vacuum tube amps, receivers, exciters
- CW operating tips
- wire antenna tips, hints & kinks

++

David Stockton, GM4ZNX

dstock@hpqmola.sqf.hp.com

SWL since 1960
Licensed since 1984 (UK full class A)
Degrees in electronics&comms and digital techniques etc.
Currently senior design engineer doing RF design

Fairly broad interest in amateur radio (but not contests!)

Antennas, Transmission lines,filters from fundamental theory to practice
Receiver structures and circuits from simple to state of the art.
Transmitters, ATUs
Test equipment
Wide experience of troubleshooting/repairing equipment.
Professional experience of EMC/RFI
QRP
UK Operation and Licensing

My morse is flaky, but I keep working on it
No interest in contests
No interest in packet radio or in fixing computers

++

Ken Stuart, W3VVN
48 Johnson Road
Pasadena, Md. 21122
401-437-1758 (home)

kstuart@oasys.dt.navy.mil

via packet: W3VVN @ N3ETI.MD.USA

Have been licensed since '53, currently Advanced class. ARRL Technical
Advisor since '80 on Batteries and Power Supplies. You may have seen
my article in the Feb. '91 issue of QST on NiCads. Authored the rewrite
of the power supply chapter of the ARRL handbook in '85 when the new
format was generated (large page, versus the old small size). Most
of the stuff is still unmodified. Currently lecturing on battery
care and feeding to clubs in the Baltimore/Annapolis area.

I have been employed as a power supply design engineer for about the
last 25 years.

++

Roger H. Taylor, PE rtaylor@ux1.cso.uiuc.edu
1106 Rayburn Ct. K9ALD AFA3WG
Mahomet, IL 61853 Outdoor writer (Fishing)
217-586-4958 Skamania Reign Supreme!
Manager, Network systems, OIM, University of Illinois

Help on antennas, Air Force MARS, components, Tube circuits,
linear amplifiers, troubleshooting.

++

Ren J. Tescher N0PVI Resume~
ren@ncar.ucar.edu AAS, Electronic Technology
Electronic Technician/Sysop AAS, Computer Systems Technology
Research Applications Program (RAP) 4 years consumer electronics repair
National Center for 2 years calibration lab and repair
Atmospheric Research (NCAR) 2 year unix sysop
Rm 2078 Bldg 2, 3450 Mitchell Ln. ethernet and serial cable
PO Box 3000, phased-array radar
Boulder, CO 80307 (303)497-8407 doppler weather radar
FAX (303)497-8401 PC's
He knows enough to be dangerous. non-freon appliance repair
dona nobis pacem strung interior phone lines, too!
***I will email at your request, morse code programs for the
Sun, IBM Basica, and SCO which I've saved off the net.***

++

Bob Tidd KJ6CS

inp@violet.berkeley.edu

Computerized DXCC databases and query software (written in
BSD-Unix compatible C) available on request. Would welcome ports
to IBM-PC or Macintosh.

++

Clark Savage Turner, Graduate Student Researcher
Safety Critical Software Group home:
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717 Irvine, CA. 92715
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526
HHH WAS #489

Admitted to practice law in California, Massachusetts, and New York.
ARRL Volunteer Counsel

I would (have been doing it by default) be happy to be an Elmer in the
area of older HF gear, especially QRP operation with Ten Tec Argonauts
(and Power Mites, etc.). Also have experience with other 10-20 year-old
economy HF rigs, particularly the Kenwood TS-520.

++

_____
| | Johnathan Vail vail@tegra.com (508) 663-7435
|Tegra| jv@n1dxg.ampr.org N1DXG@448.625-(WorldNet)
----- MEMBER: League for Programming Freedom (league@prep.ai.mit.edu)

ampr.org IP Coordinator for East/Central Massachusetts subnet
(44.056.xxx.xxx)

TAPR/9600 modem (putting some stuff together for a local repeater)

++

Jim Van Peursem - KE0PH

jvp@iastate.edu

Author of Savant, the packet radio communications program for the
Apple Macintosh. For more information, consult Terry Stader's List
of Macintosh Amateur Radio Software.

Also have a few years experience in Unix (especially HP-UX) and system
administration.

++

--Bruce Walker WT1M (bruce@think.com)
Chuck Adams K5FO (adams@chuck.dallas.sgi.com)

The QRP Internet mailing list is open to all topics relating to low-power
amateur radio operation. Example topics: portable operation, equipment
design and construction, solar and battery power, QRPp, contesting, ...

The mailing list address is QRP@Think.COM; mail to that address will be
sent to everyone on the list without human intervention. There is also an
administrative address QRP-Request@Think.COM which will be monitored by the
list maintainer(s); please use that for such requests as adding or removing
yourself from the list, questions about the FTP access, etc.

++

Steve Watt KD6GGD Packet: KD6GGD @ N0ARY.#NOCAL.CA.USA.NA
ICBM: 121W 56' 53.1" / 37N 20' 16.7" Internet: steve@wattres.SJ.CA.US
"A person reveals his character by nothing so clearly as the joke he resents."
-- G. C. Lichtenberg

Maintainer of rec.radio.amateur.digital.misc FAQ

Please direct all FAQ submissions, feedback, and administrivia to
digital-faq@wattres.sj.ca.us. If you think you have some valuable
insights into non-packet digital modes, PLEASE contact me through
that address. You might get added to the list... No, that's not
a threat. ;)

++

John Welch N9JZW, NNN0WYZ
jjw@seastar.org

Navy/Marine Corps (NMC) MARS

++

Vikki Welch WV9K, NNN0AEE
vikki@seastar.org

Navy/Marine Corps (NMC) MARS
Region Four ECOMM Planning Officer: NNN0ASG TWO

There are other NMCMARS Members on the Internet and I'll be compiling a
list, if anyone is interested. I'd also welcome any correspondence
with other members of MARS. We are currently considering a MARS
conference on a dial-up BBS.

++

Areas of Interest: ARES/RACES, Emergency Comm, and ARRL
Field Organization.

73's de Steve Wilson, KA6S

SCV Section Manager
813 Berryessa St.
Milpitas, Ca 95035

Hm (408)946-7410 Wk (408)473-2580
stevew@netcom.com

++

Bob Witte HP Colorado Springs Division
bobw@col.hp.com P.O. Box 2197
Phone:(719) 590-3230 Colorado Springs, CO 80901
Radio: KB0CY
"There is no such thing as ground."

Mobile
RFI
Equipment Testing (instrumentation)
Repeaters
VHF/UHF (including mountaintopping/portable operation)

++

John F. Woods WB7EEL

jfw@ksr.com

Maintainer of My List of Mail Order Electronics Companies

Available via anonymous FTP from ftp.cs.buffalo.edu under /pub/ham-radio
or rtfm.mit.edu under /pub/usenet/rec.radio.amateur.misc

++

Martin A. Zurn IK2RMZ, DL1GBZ

Home QTH: v. Fermi 10, 21027 Ispra (VA) Italy
(Northern Italy near Swiss Border)

Position: Lat 45d49m N Long 8d38m E WW-Loc: JN45ht
On air: CW only, 160 thru 10 incl. WARC, wire ant only

Work QTH: TP 680, Centro CCR, 21020 Ispra (VA) Italy
E-mail at work: martin.zurn@jrc.it

Expertise:

Technical: Elbugs (incl. features like dot/dash memories, squeezing, touch sensors, auto spacing) Antennas used: Windom, Delta Loop, Trap Dipole, Marconi wire.

Operational: CW Operator since 1981, QRP Operation, Traffic handling nets (NTS, Swedish QTC nets) CW operating in several West European languages (Ham radio shorts, use of foreign CW characters in Italian, German, French, Spanish, and Swedish). QSLing (How to design a QSL that satisfies award hunters and operators of the QSL buro)

Club life: Mbr of AGCW, UFT, GQRP, HSC, VHSC, SMHSC, SCAG,...

Admin: License Regulations in Italy and Germany

Mathematics: Spherical Trigonometry, beam headings, calculation of sunset/sunrise times, etc.

++

End of Directory

956. Amateur Radio: Changes to Elmers Resource Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 12:02:18 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/diff-1-760104133@unomaha.edu>
Source record: 271744
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/elmers/diff

(Note: This diff file is taken from the list body only.)

/usr/bin/diff -c (last month's) (this month's)

*** /u3/pschleck/faq/elmers/list.body.old Sat Jan 1 06:00:58 1994
--- /u3/pschleck/faq/elmers/list.body.new Tue Feb 1 06:00:03 1994
***************
*** 1,4 ****
! Amateur Radio Elmers Resource Directory (as of 01/01/94)
++++++++++++++++++++++++++++++++++++++++++++++++++++++++

David Andrews ZL2SX
--- 1,4 ----
! Amateur Radio Elmers Resource Directory (as of 02/01/94)
++++++++++++++++++++++++++++++++++++++++++++++++++++++++

David Andrews ZL2SX
***************
*** 372,377 ****
--- 372,401 ----

++++++++++++++++++++++++++++++++++++++++++++++++++++++++

+ -=-=-=-
```

+ General Homebrewing
+ Antenna design/theory
+
+ ++
+
Betsey Doane, K1EIC

Doane@CCSUA.CTStateU.Edu
****
*** 385,391 ****

++

! David Dodell WB7TPY

Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15
--- 409,415 ----

++

! David Dodell WB7TPY, AFA6GB

Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15
****
*** 395,408 ****

Owner of the Land-Mobile-Radio Mailing List

! To Add Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

! And Include The Command:

! subscribe land-mobile-radio

++

Thomas Edwards N3HAU
--- 419,451 ----

Owner of the Land-Mobile-Radio Mailing List

! The purpose of this list is to allow discussion about commercial
! land-mobile radio equipment, its use and maintenance.

+ Owner of the Military Affiliate Radio Service (MARS) Members
+ Mailing List.
+
+ The purpose of this list is to allow discussion about MARS (Military
+ Affiliated Radio Service) activities. The list is open to all branches
+ of MARS.
+
+ To subscribe to or unsubscribe from either of the above lists, please

+ send electronic mail to:
+
listserv@stat.com

! and include the command:

! subscribe list-name

+ or
+
+ unsubscribe list-name
+
+ as the first line of your message, where list-name is either
+ land-mobile-radio or mars-list. An acknowledgement/welcome message
+ should follow very shortly.
+
++

Thomas Edwards N3HAU
****
*** 563,568 ****
--- 606,635 ----

++

+ Andy B. Fyodorov RW3AH, WL7AP
+
+ rw3ah@emercom.msk.su
+
+ PACKET: RW3AH @ R3ARES.#MOS.RUS.EU (temporarily down)
+ IP: 44.178.1.7 or rw3ah@gw.ra3apw.ampr.org
+
+ PO Box 899 Moscow
+ Zip-127018 Russia
+
+ Licensed since 1975
+ Experience in Emergency communications, Russian ARES Chief
+ Coordinator (since 1987) of Russian ARES Organization matters and networks
+ Owner of R3ARES BBS
+ General HF, Contesting, Net Controlling operations
+ Data communications, networks (TCP/IP, AX25)
+ computers (IBM PC, home made)
+ homebrewing electronics
+ antennas (particularly HF).
+ Proficiency in CW (Morse code)
+ (also former Ten-Tec dealer in ex-USSR)
+
+ ++
+
Jim Graham

#include <std_disclaimer.h> 73 DE N5IAL (/4)
****
*** 909,927 ****
Ax.25 = n7mrp@n7mrp.az.usa.na
Internet = dan@aznet.stat.com

- Owner of the F6FBB Packet Bulletin Board System Mailing List.
-
- The purpose of this list is to provide both sysops and networkers
- with tricks/tips/help as well as software updates for the F6FBB
- packet bulletin board system.
-
- To subscribe, send E-mail to listserv@stat.com, and in the body of
- the message, write:
-
- subscribe f6fbb-list
-
- An acknowledgement/welcome message should follow very shortly.
-
Owner of the PBBS Bulletin Forwarding Mailing List

The purpose of this list is to provide Sysops and Networkers a server in
--- 976,981 ----
****
*** 930,945 ****
information relevant to all Amateur Related PBBS software packages available
today.

! To Add Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

! And Include The Command:

! subscribe bull-fwd

! As The First Line of Your Message.

++

John Monson WB0PLW, AAA9EC
--- 984,1012 ----
information relevant to all Amateur Related PBBS software packages available
today.

! Owner of the F6FBB Packet Bulletin Board System Mailing List.

+ The purpose of this list is to provide both sysops and networkers
+ with tricks/tips/help as well as software updates for the F6FBB
+ packet bulletin board system.
+
+ To subscribe to or unsubscribe from either of the above lists, please
+ send electronic mail to:
+
listserv@stat.com

```
! and include the command:

! subscribe list-name

! or

+ unsubscribe list-name
+
+ as the first line of your message, where list-name is either bull-fwd
+ or mars-list. An acknowledgement/welcome message should follow very
+ shortly.
+
++++++++++++++++++++++++++++++++++++++++++++++++++++++++

John Monson WB0PLW, AAA9EC
***************
*** 1110,1115 ****
--- 1177,1196 ----

++++++++++++++++++++++++++++++++++++++++++++++++++++++++

+ James J. Richards
+
+ richardsjj@oa.frc.com
+
+ First-Class FCC Radiotelephone License
+
+ 25 years of Public Safety Communications and Computer-
+ Aided Dispatch
+
+ Scanners - Digital Comm - Freqs - Business Band - Public Safety
+ MDT's - Fax - RTTY
+
+ ++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+
_________ _________ The
Scott Rosenfeld \ / Long Original
ham@wam.umd.edu Amateur Radio NF3I Burtonsville, MD | Live $5.00
***************
*** 1522,1532 ****
insights into non-packet digital modes, PLEASE contact me through
that address. You might get added to the list... No, that's not
a threat. ;)
-
- Maintainer of On-Line Repeater Directory
-
- For more information about this service, send E-mail to
- repeaters@wattres.sj.ca.us with the word "help" in the message body.

++++++++++++++++++++++++++++++++++++++++++++++++++++++++

--- 1603,1608 ----
```

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)

957. Re: Coaxial cable

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 13:53:24 UTC
From: gdo@aloft.att.com
Message-ID: <CKJt94.Mow@cbnewsm.cb.att.com>
Source record: 271644

In article <CKE4EJ.3Fr@eng_ser1.ie.cuhk.hk>, ykchoy@ee.cuhk.hk (Frankie Choy) writes:
|> Hello,
|>
|> I'd like to have some good quality coaxial cable. Can you give
|> me any suggestions if you know?
|>
|> I am making a project on global position system. Previously, I used
|> a coaxial cable of 10 M to connect the antenna and the GPS together.
|> It worked normally. However, when I change the cable to be 80 M in
|> length, I can't get any signals. I suspect that the signal loss in
|> such a long cable is very great. So I want to buy a cable of
|> better quality to reduce the loss.
|>
|> Now, I am using a 50 ohm cable, RG-58 A/U!
|>
|> Thanks!
|>
|> --
|> Frankie Choy
|>
|> Pager: 1103301 A/C 1681
|>

Hi Frankie,
Your suspicions about the cable are absolutely correct. RG-58 is horrible
at the GPS frequencies. ANY RG-8 type cable is better than RG-58, but you
may want to invest the extra bucks in Belden 9913 (or equiv). It's about the
best RG-8 type cable around for the money. It's low loss and has a semi-hollow
dielectric which makes it a little more difficult to solder on connectors.
With a little care, you should be OK, though.
Good luck es 73 de Glenn, N3BDA.

--

Glenn D. O'Donnell, N3BDA Internet: gdo@aloft.att.com
AT&T Bell Laboratories Amateur Radio: n3bda@n3dpu.#epa.pa.usa.na
Allentown, PA Home QTH: Palmerton, PA (Grid FN20eu)

958. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 14:36:50 UTC
From: parnass@cbnewse.cb.att.com
Message-ID: <CKJv9p.83A@cbnewse.cb.att.com>
Source record: 271750
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

jholly@cup.hp.com (Jim Hollenback) said:

> of all the things to listen to on a scanner, I still am trying
> to figure out why some one would want to listen to "that's a
> big Mac, ...". Watching paint dry must really make some people
> wet thier [sic] pants.

"... don't criticize what you can't understand." - Bob Dylan
--
==========
Copyright 1994, Bob Parnass, AJ9S
AT&T Bell Laboratories - parnass@ih4gp.att.com - (708)979-5414

959. Re: Mail-order toroids, RF transistors, Help!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 14:37:49 UTC
From: jjw@seastar.org
Message-ID: <CKJvB2.4tq@seastar.org>
Source record: 271751
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

As quoted from <1994Feb1.020408.1@ntuvax.ntu.ac.sg> by asirene@ntuvax.ntu.ac.sg:

> I need 2 MRF-472 (or MRF-476 if 472's are not available) and also
> a 14 mHz fundamental crystal. What is the fastest way I can get hold of
> these? Tks.
>
>
> 73 de 9V Daniel

A very fast way to find a 14MHz crystal is to remove one from
an old IBM PC clone. They all have a 14.31818MHz crystal in them, and
you should have some luck finding old turbo PCs, dead, very cheaply
(like free if you know where to ask).

--
When I die, they'll bury me John Welch, N9JZW
in the Tomb of the Unknown Hacker. jjw@seastar.org

960. QRZ! Ham Radio CDROM $15.95 (Update)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 14:57:57 UTC
From: mjohnsto@ditdah.Morse.Net
Message-ID: <1994Feb1.145757.11513@ditdah.Morse.Net>
Source record: 271643

Thanks to all those who've responded to our offer for the QRZ! Ham Radio CDROM. The sheer volume of calls, though, took us by surprise and many of our customers have been complaining about incessant busy signals. To correct this, we're going to be adding additional 800 lines.

The ensure that everyone gets a chance to take advantage of this, we've extended the offer through the end of February. You can still get the *New* QRZ! Ham Radio CDROM (12/93) for $15.95 plus shipping. We offer an unconditional return policy on this CDROM. If you're not satisfied, simply mail it back to us and we will refund your money.

To place an order, call 800-706-4046, from 9AM to 5PM, EST. As an alternate means, you can email your ordering information (name, address, credit card info including expiration date) to info@morse.net. We will email you back an order confirmation.

=-=
Summary of Contents for the 12/93 QRZ! Ham Radio CDROM
=-=

The QRZ! Ham Radio CDROM is the most current amateur radio publication of its kind. It contains name, address and license information for over 650,000 amateur radio operators. Search and retrieval software for *both* DOS and Windows 3.1 provides rapid access at the touch of your fingertip. Search and display by callsign, name, city, street address, or zip code. Save the results to a file or generate pint ready mailing labels! Industry standard ASCII output files are word processor and database ready.

QRZ! Ham Radio CDROM also includes:

* Hundreds of PC compatible Amateur Radio Programs.

* Radio Mods (in hypertext under Windows)

* TCP/IP software, Packet Radio BBS's, Satellite Tracking Programs

* CW training software, Radio Control Programs, Contest Logging

* RTTY, WEFAX, Baycom, Rose, TheNet, TAPR, DSP

* FCC Part 97 rules and regulations, Amateur Radio Exam Question Pools

* USENET Ham Radio Archives, ARRL Bulletins

* Sound Blaster Compatible .wav files for TNC testing.

This edition is edited by Fred LLoyd, AA7BQ
--
Michael R. Johnston Linux Technical Support Service: lssinfo@Morse.Net

mjohnsto@Morse.Net Linux on Disk: linux@Morse.Net
Morse Telecommunications Unlimited, flat-rate Usenet feeds: netinfo@Morse.Net

961. Re: 2-Meter in London and Dublin?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 15:04:41 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CKJwJt.Bo9@hpqmoea.sqf.hp.com>
Source record: 271642

You'd best contact the ARRL, they should have all the info needed

You will need reciprocal licences for both the Irish republic and for the United Kingdom. You might have trouble even getting your radio into the country without one (or might not... enforcement is a little variable)

UK 2 metre band is only 144.000 to 146.000 usual channel spacing is 25kHz, with some people using 12.5 kHz. Repeaters have input freq 600 kHz below output freq.

Simplex FM calling on 145.500

repeater outputs usually 145.600 "R0"
145.625 "R1"
145.675 "R2"
145.700
145.725 etc.
145.750
145.775

Don't transmit above 146

There are fewer repeaters than you are likely used to, none are private, none are closed. One of their licence conditions is that they must be available to all licenced radio amateurs. Unfortunately some in the London area are prone to jammers.

In this country it is illegal (fines, jail, confiscation of all radios) to listen to anything that you do not have a specific licence for - this means ANYTHING other than broadcasters and amateurs. The police are growing aware of scanners and have made total fools of some people scanning their radio systems with spoof reports of flying saucers used to get the eavesdroppers to go see, and be arrested. Cases are rare, but it is most unwise to wander around a city with police, fire, etc noises coming out of your radio.

Have fun
David GM4ZNX

You might be tight on time..

962. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 15:41:28 UTC
From: nsyslaw@riogrande.acs.ncsu.edu
Message-ID: <1994Feb1.154128.15507@ncsu.edu>
Source record: 271753
Cross-posted to: rec.radio.scanner,alt.radio.scanner,rec.radio.amateur.misc

Jim Hollenback (jholly@cup.hp.com) wrote:
: Michael D. Maxfield (tweek@netcom.com) wrote:

: : I too was hoping for a little different implementation. I noticed that
: : you must exactly match the Licensee name (MC DONALDS REST works whereas
: : MC DONALDS does not work) as it is in the licensee field.

: of all the things to listen to on a scanner, I still am trying to figure
: out why some one would want to listen to "that's a big Mac, ...". Watching
: paint dry must really make some people wet thier pants.

Quite the contrary. I found one by accident, and while waiting for a
simple cup of coffee I could tell the two cars who had ordered before me
were going to cause a 15 minute + wait. I decided quickly (because I'd
heard the order/reply/sleepiness of the clerk) that maybe I should go
elsewhere. Had I not heard what was in front of me, I'd probably have
waited until I was fuming mad and then left. So now, I don't need blood
pressure treatment! :)

Actually - any radio broadcast has it's usefulness. Its up to the
listener to decide what that usefulness is. (and it's legality, of
course, disclaimer alert, etc, etc, etc)

--
Lou Williams (nsyslaw@acs.ncsu.edu) | aka: KE4ARM
Unix Systems Programmer | Phone: (919) 515-2794
NCSU Administrative Computing Services | FAX: (919) 515-3787

February 1st, 1993, The Raw Deal Countdown continues:
Day 378 for the poor & middle class.
Day 397 for the rich & the dead. (due to retroactivity)
1082 Days remaining for all of us.
----

963. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 15:51:05 UTC
From: ab510@FreeNet.Carleton.CA
Message-ID: <CKJyp5.F24@freenet.carleton.ca>
Source record: 271755

In a previous article, alan@olin.es.com (Alan Brubaker) says:

>In article <CKBJtu.45s@freenet.carleton.ca> ab510@FreeNet.Carleton.CA (George Attallah) writes:
>>
> ...Famous Hams...
>
>How could you forget:
>
>SL1CE Lorena Bobbitt
>
I had Lorena Bobbit tagged as N1CUT

--
GEORGE ATTALLAH - VE3KIA -OTTAWA CANADA
"THE LAST SURVIVOR OF THE GROUP OF ONE"
"THE ONLY ONE IN CAPTIVITY"

964. Callsign change

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 16:49:20 UTC
From: wiseman@atvl6.panasonic.com
Message-ID: <1994Feb1.164920.11347@MITL.Research.Panasonic.COM>
Source record: 271757

I am new to this group, so pardon me if this has been asked recently. I have not transmitted anything in the last 3 years due to the usual reasons (new job, new house, new kid, no time). Now that I am getting things back into shape, I would like to know what the FCC regs are in regards to a change of callsign. I moved from New Mexico where I had the call KA5WTO. I would like that changed to reflect my new district (3), and at the same time reflect my Advanced class. Is this possible, or do I just sign /3 forever?

John
KA5WTO

965. Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 16:54:24 UTC
From: prvalko@vela.acs.oakland.edu
Message-ID: <2im1g0$i6v@oak.oakland.edu>
Source record: 271758

Well folks, if you've read the latest Ham Radio Newsline you MIGHT have noticed the casual mention that their MIGHT(?) not be busses available to shuttle people around from hotels to Hara this year.

I tended to take my car anyways and pay the $5 to park in the field on the east side of HARA... but if those busses are not available... be prepared to spend HOURS in what will undoubtedly be the worse traffic jam this side of L.A.

Anyone remember the rain two (or three?) years back? That field turned into a swamp trapping dozens of cars and RV's for the weekend. Imagine it with... say... 6,000 more cars?

Is anyone associated with DARA on the net? What "improvements" do you folks plan to make with the money saved on not providing the WONDERFUL bus service? The hamvention is the greatest event in all of ham radio and short of moving to a bigger city, I can't think of anything you could do to make it better. Well, there are those grey hot dogs they sell... but that's Ohio for you.

I'm not out to scare anyone away (heh heh) but that guy who posted the "Jesus is coming" thread can rest easy because not even the Lord himself will be able to get out of the traffic jam around Dayton on April 29th!

73 all! CU on Shiloh Springs Road. paul

966. Re: Hy-Gain Phone

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 16:57:53 UTC
From: AGRI098@UNLVM.UNL.EDU
Message-ID: <199402011759.JAA16092@ucsd.edu>
Source record: 271759

Could not reply direct..... Phone number of Hy-Gain in Lincoln NE. is
(402) 467-5321

967. Motorola Micor Repeater

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:02:50 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <1994Feb1.170250.6751@umr.edu>
Source record: 271760

[No readable article body recovered]

968. Motorola Mitrek Repeater

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:06:15 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <1994Feb1.170615.6935@umr.edu>
Source record: 271761

[No readable article body recovered]

969. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:08:16 UTC
From: tweek@netcom.com
Message-ID: <tweekCKK29t.7qD@netcom.com>
Source record: 271763
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

In article <CKIGvt.4zw@cup.hp.com> posted to the Usenet Newsgroup(s)
rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc
jholly@cup.hp.com (Jim Hollenback) writes:
>Michael D. Maxfield (tweek@netcom.com) wrote:
>
>: I too was hoping for a little different implementation. I noticed that
>: you must exactly match the Licensee name (MC DONALDS REST works whereas
>: MC DONALDS does not work) as it is in the licensee field.
>
>of all the things to listen to on a scanner, I still am trying to figure
>out why some one would want to listen to "that's a big Mac, ...". Watching
>paint dry must really make some people wet thier pants.
>

Actually, that was just to test the system... Drive-ups indeed are rarely
exciting... although there may be other interesting things on the same
frequency... I remember one day in particular, after setting up some
audio-visual equipment for a conference at a conference center I do some
work at, I sneaked a peek at the frequency on the groups wireless
microphone and punced the frequency into my car's scanner... well, within a
mile from the conference center, I picked up three different transmissions...
the local McD's... the Dave DelDotto Conference, and the treat ;-) an
aerobics class at the local Health Club 1-2-3-breath ;-)

970. test

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:11:14 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <1994Feb1.171114.7113@umr.edu>
Source record: 271764

[No readable article body recovered]

971. test

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:12:14 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <1994Feb1.171214.7246@umr.edu>
Source record: 271765

[No readable article body recovered]

972. test

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:30:47 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <1994Feb1.173047.7964@umr.edu>
Source record: 271766

[No readable article body recovered]

973. test

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:32:26 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <1994Feb1.173226.8068@umr.edu>
Source record: 271767

[No readable article body recovered]

974. test

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:46:58 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <1994Feb1.174658.8533@umr.edu>
Source record: 271768

[No readable article body recovered]

975. Re: Ham call CDROMS & SunOS/Solaris

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:49:19 UTC
From: mjohnsto@ditdah.Morse.Net
Message-ID: <1994Feb1.174919.13041@ditdah.Morse.Net>
Source record: 271769

Ken Stamm (ken@boxhill.com) wrote:
: I am considering purchasing one of the popular ham-related
: CDROMs on the market such as Buckmaster or QRZ!.

: How useful are these to the non-Intel/DOS/Microsoft
: population out there who use Sun SPARC SunOS/Solaris?

: I wish to use them for their callsign databases.

: Can I mount these CDROMs from SunOS/Solaris? (ISO9660?)

Yes. Any CDROM that is ISO9660 will work on a Sun.

: Is the callsign database contained therein usable without
: any of the x86 .EXEcutables that may be there?
: Is the callsign database in a reasonably massageable format
: that a reasonable C program could grok?

C source code for the retrieval software is included for Unix.
This software would probably also work under other systems, although
some modifications would no doubt be necessary.

--
Michael R. Johnston Linux Technical Support Service: lssinfo@Morse.Net
mjohnsto@Morse.Net Linux on Disk: linux@Morse.Net
Morse Telecommunications Unlimited, flat-rate Usenet feeds: netinfo@Morse.Net

976. test

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 17:50:41 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <1994Feb1.175041.8713@umr.edu>
Source record: 271770

[No readable article body recovered]

977. Re: Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 18:04:28 UTC
From: cnj002@email.mot.com
Message-ID: <cnj002.2.001213A4@email.mot.com>
Source record: 271638

In article <2im1g0$i6v@oak.oakland.edu> prvalko@vela.acs.oakland.edu (prvalko) writes:
>From: prvalko@vela.acs.oakland.edu (prvalko)
>Subject: Dayton Parking: Hell on Earth!
>Date: 1 Feb 1994 16:54:24 GMT

>Well folks, if you've read the latest Ham Radio Newsline you MIGHT have
>noticed the casual mention that their MIGHT(?) not be busses available
>to shuttle people around from hotels to Hara this year.
.
.
.
.

I attended the Dayton Hamvention for the first time last year.

The first day (Friday) my friend and I tried parking close to the arena (We had to leave early to pick up a friend at the airport in Cincianti). We ended up walking several blocks. It was a rainy weekend and we figured the private lot would turn into a mud pit very quickly (It did).

The next day we tried parking at the Salem Mall, one of the satellite parking lots.

We were close to the bus (50 ft). The Busses (sp ?) arrived every 10 minutes, and it only took a couple of minutes to get to the arena.

It worked so well that we made serveral trips back and forth carrying our purchased treasures to our car.

(The lots were patrolled by security personel)

Needless to say, that's what we did for the rest of the Hamvention and plan on doing this year.

Oh, and it was FREE too!

I hope that the DARA keeps this service, it's an excellent idea!

-Neil Johnson, N0SFH
-Network Analyst
-Motorola, Land Mobile Products Sector
-Mount Pleasant, IA

978. 3CX800A7 Transmitting Tubes

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 18:06:36 UTC
From: rwilgus@PICA.ARMY.MIL
Message-ID: <9402011306.aa01568@FSAC3.PICA.ARMY.MIL>
Source record: 271771

Looking to buy Two ea Subject Tubes, call Sam W2DDN,
Tel.area code 201-335-5732, between 4-9PM EST.

979. Freebies from ARRL HQ

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 18:44:48 UTC
From: lhurder@arrl.org
Message-ID: <1994Feb1.184448.11502@arrl.org>
Source record: 271772

A reminder to all that the American Radio Relay League
continues to make available to Amateur Radio Operators and
non-amateurs alike a wide variety of free materials and
services. Of particular interest to the not-yet-licensed
individual would be the ARRL Prospective Ham Package. In
the PHP, one would find:
-
1. Printouts of Volunteer Examination session
opportunities in his/her area.
-
2. Listings of Amateur Radio clubs in his location.
-
3. Helpful promotional material about the Amateur Radio
Service.
-
The already-licensed individual might well be interested
in another free ARRL publication, the ARRL Public Service
Communications Manual. The PSCM represents the "bible" of
public service communications, and clearly/concisely
points out how the ARRL National Traffic System and the
ARRL Amateur Radio Emergency Service function as a
cohesive unit to provide the maximum support to the public
both in times of disaster as well as "normal" times.
-
To obtain these free ARRL services, please
provide me with:
-
A. Your name
B. Your mailing address
C. A Specific request for either of the two services
(the PHP or the PSCM) mentioned above.
-
73!
-

| | | Deputy Manager, Field Services, ARRL.
| |___| The ARRL Amateur Radio Emergency Service, the ARRL
| uck | |urder National Traffic System, The Amateur Auxiliary to
------ | | the FCC's Field Operations Bureau, the ARRL
KY1T Field Organization and the ARRL Monitoring System.
---
lhurder@arrl.org Prodigy - MGTS39A, BIX - ARRL,
MCI Mail - RPALM, MCI Mail - "ARRL", America On Line - "ARRL HQ"
Compuserve - 70007,3373 (ARRL HQ) -- Genie ARRL.HQ

980. Human Rights Report Available from VOA/Worldnet Public Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 19:12:13 UTC
From: ck@VOA.GOV
Message-ID: <CKK80E.3LA@VOA.GOV>
Source record: 271656
Cross-posted to: comp.infosystems,comp.infosystems.gopher,rec.radio.amateur.misc,rec.radio.shortwave,rec.video.satellite

The full text of the annual report on the status of internationally recognized human rights that is prepared each year by the U.S. State Department is now available via anonymous FTP, the Internet Gopher and electronic mail from the public Internet server maintained by the Voice of America and Worldnet Television.

The report may be found in the directory pub/documents/human_rights_94 (FTP) or in the "Miscellaneous Public Documents" menu in the "All Files Available from VOA and Worldnet" hierarchy (Gopher).

The report is divided into individual country segments to make it more maneageable.

Anonymous FTP Access
====================

Host: ftp.voa.gov
Logon: anonymous
Password: <your electronic mail address>

Internet Gopher Access
======================

Host, Port: gopher.voa.gov, 70

Link Info:

Type=1+
Name=Voice of America and Worldnet Television
Path=
Host=gopher.voa.gov
Port=70
Admin=VOA Computer Services Division, +1-202-619-2020 <postmaster@VOA.GOV>

Electronic Mail Access
======================

Address: info@voa.gov

To request emailed instructions on how to use the server, send a message with the contents "send help" to the above address.

To request emailed instructions on how to use the server plus an index of available files, send a message with the contents "send index" to the above address.

--
Chris Kern ck@voa.gov ...uunet!voa3!ck +1 202-619-2020

981. Re: Coaxial cable

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 19:18:00 UTC
From: derry@NeXTwork.Rose-Hulman.Edu
Message-ID: <2im9t8$p87@master.cs.rose-hulman.edu>
Source record: 271657

]> I'd like to have some good quality coaxial cable. Can you give
]> me any suggestions if you know?
]> Now, I am using a 50 ohm cable, RG-58 A/U!
]>
]> Frankie Choy

Howdy, Frankie:

Get some Belden 9913 or equivalent. But remember it's not as flexible as
RG-58. I only use RG-58 for short junmpers arounbd the shack. And I'm
even replacing those cables with RG-223.

73 de Jack, K9CUN

982. Re: Coaxial cable

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 19:18:48 UTC
From: derry@NeXTwork.Rose-Hulman.Edu
Message-ID: <2im9uo$p89@master.cs.rose-hulman.edu>
Source record: 271658

>I'd like to have some good quality coaxial cable. Can you give
>me any suggestions if you know?
>Now, I am using a 50 ohm cable, RG-58 A/U!
>
> Frankie Choy
Howdy, Frankie: Get some Belden 9913 or equivalent. But remember it's
not as flexible as RG-58. I only use RG-58 for short junmpers arounbd the
shack. And I'm even replacing those cables with RG-223.

73 de Jack, K9CUN

983. Re: Coaxial cable

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 19:19:19 UTC
From: derry@NeXTwork.Rose-Hulman.Edu
Message-ID: <2im9vn$p8a@master.cs.rose-hulman.edu>
Source record: 271659

>I'd like to have some good quality coaxial cable. Can you give
>me any suggestions if you know?
>Now, I am using a 50 ohm cable, RG-58 A/U!
>
> Frankie Choy
Howdy, Frankie: Get some Belden 9913 or equivalent. But remember it's
not as flexible as RG-58. I only use RG-58 for short junmpers arounbd the
shack. And I'm even replacing those cables with RG-223. Hope you are
having fun with the project.

73 de Jack, K9CUN

984. Re: Coaxial cable

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 19:19:39 UTC
From: derry@NeXTwork.Rose-Hulman.Edu
Message-ID: <2ima0b$p8b@master.cs.rose-hulman.edu>
Source record: 271660

>I'd like to have some good quality coaxial cable. Can you give
>me any suggestions if you know?
>Now, I am using a 50 ohm cable, RG-58 A/U!
>
> Frankie Choy
Howdy, Frankie Choy: Get some Belden 9913 or equivalent. But remember
it's not as flexible as RG-58. I only use RG-58 for short junmpers
arounbd the shack. And I'm even replacing those cables with RG-223. Hope
you are having fun with the project.

73 de Jack, K9CUN

985. Attn: Frankie Choy

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 19:22:24 UTC
From: derry@NeXTwork.Rose-Hulman.Edu
Message-ID: <2ima5g$p9i@master.cs.rose-hulman.edu>
Source record: 271665

]Hello,

] I'd like to have some good quality coaxial cable. Can you give
] me any suggestions if you know?
]
] I am making a project on global position system. Previously, I
]used
] a coaxial cable of 10 M to connect the antenna and the GPS
]together.
] It worked normally. However, when I change the cable to be 80 M
]in
] length, I can't get any signals. I suspect that the signal loss
]in
] such a long cable is very great. So I want to buy a cable of
] better quality to reduce the loss.
]
] Now, I am using a 50 ohm cable, RG-58 A/U!

] Thanks!

--
Frankie Choy

Frankie:

Use some Belden 9913 or equivalent. Buit remember it's not very flexuble.

I don'y use any RG-58 anymore except for a few jumpers around the shack.
As the need replacing, I'm converting to RG-223

73 de Jack, K9CUN

986. DSPs are hot

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 19:25:10 UTC
From: kg7bk@indirect.com
Message-ID: <CKK8Lz.3zG@news.direct.net>
Source record: 271662

Here's a quote from Feb. 8, 1994 PC Magazine:
"Modems and sound boards are shifting from fixed-function chips to more versatile digital signal processors(DSPs). You'll also see DSPs speed up video boards, enable PC-based videoconferencing products, and control some of the cellular-phone/personal-organizer products you'll see competing with PDAs. Because none of the programming is hardwired in, DSP-based products are infinitely upgradable. Find a bug in the soundboard? Want to upgrade the modem from 9,600 to 14,400 to 19,200 bps? Want to add fax? Just download a new version of the code to the DSP from a BBS or a floppy disk. The implications:(1)DSPs, while not cheap, are so flexible they'll drive down board prices. (2)You'll see more two-in-one boards, such as modem plus sound and sound plus video."

73, Cecil, kg7bk@indirect.com

987. RECIPOPS from ARRL HQ

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 19:36:15 UTC
From: lhurder@arrl.org
Message-ID: <1994Feb1.193615.12926@arrl.org>
Source record: 271774

Yet another of the many free services that ARRL HQ offers is the
ability to obtain Reciprocol Operating permit information.

Matter of fact, ARRL HQ is the ONLY place on the planet where
this information resides!

"Awrite, already" sez you, "why would I ever want one, and how
much are ya gonna burn me to GET one?" "Glad you asked!" sez I

Radio amateurs are a constantly-travelling, very mobile, bunch
of folks, it appears, and their travels clearly take them to
countries near and far. Myself, I prefer "far" rather than 'near',
but if you're inclined to travel to Canada, you can ignore this whole
tome, as the Canadian government and our own here in the States have
worked out an automatic-reciprocity agreement.

But if Belize is on your itinerary perhaps, or any of the other many
countries with whom we share a reciprocol operating agreement, you're
in luck! Many foreign administrations DO allow U.S. Amateur Radio
licensees to apply for a reciprocol operating permit, and you need
but ask us for the complimentary package that we make available.

To make your trip more enjoyable in that regard, we need:

1. Your name
2. Your mailing address
3. A specific request for the RECIPOP package for the specific country
you'll be off to.

And, yes, an e-mail request is fine!

| | | Deputy Manager, Field Services, ARRL.
| |___| The ARRL Amateur Radio Emergency Service, the ARRL
| uck | |urder National Traffic System, The Amateur Auxiliary to
------ | | the FCC's Field Operations Bureau, the ARRL
KY1T Field Organization and the ARRL Monitoring System.
---
lhurder@arrl.org Prodigy - MGTS39A, BIX - ARRL,
MCI Mail - RPALM, MCI Mail - "ARRL", America On Line - "ARRL HQ"
Compuserve - 70007,3373 (ARRL HQ) -- Genie ARRL.HQ
The 5-line ARRL BBS - 203-666-0578

988. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 20:18:54 UTC
From: alanb@sr.hp.com
Message-ID: <CKKB3I.Eyu@srgenprp.sr.hp.com>
Source record: 271775

Greg Bullough (greg@netcom.com) wrote:
: In article <CKIEMA.KCq@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
: >... I wish QST had MORE construction articles, not fewer. ...

: I agree, but I also believe that the construction articles have
: to be carefully targeted, and within reach. I'd also like to
: see articles on older gear, both generic and specific, that with
: some wrenching, tuning, and tweaking, can be made more serviceable
: for the average newcomer.

: Call them 're-construction' articles. :-)

20 or 30 years ago, when military surplus was plentiful, there were lots of articles in the ham rags about how to convert military gear for ham use. There were also many articles on how to modify commercial amateur gear: "Add a Product Detector to a 75A2 Receiver" "A Q-Multiplier for the HQ-110" "Convert Your Command Set Into an SSB Exciter" etc. Not many amateurs built complete stations from scratch even then, but most did at least some surplus conversion or modifications to commercial gear.

I agree with you that QST should do at least occasional articles of that genre. Some years ago, QST virtually banned tube-based construction articles (other than high-power RF amplifiers), and I suppose that's all to the good. But there's a lot of older tube-type gear out there that sells for a song. With a little modification, those old clunkers could have a lot of life left in them.

For example, how about a digital readout that could be configured to work with most any transceiver/transmitter/receiver? (With modification instructions for several of the most-popular older rigs?) How about a synthesized external VFO? If it covered the 5 - 5.5 MHz (or so) range it would work with many older radios. I wish I had the time to work on some of those projects! Anybody else have more ambition than I?

AL N1AL

989. Re: Callsign change

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 20:19:33 UTC
From: jholly@cup.hp.com
Message-ID: <CKKB4L.14n@cup.hp.com>
Source record: 271777

John Wiseman (wiseman@atvl6.panasonic.com) wrote:

: I am new to this group, so pardon me if this has been asked recently.
: I have not transmitted anything in the last 3 years due to the usual
: reasons (new job, new house, new kid, no time). Now that I am getting
: things back into shape, I would like to know what the FCC regs are in
: regards to a change of callsign. I moved from New Mexico where I had
: the call KA5WTO. I would like that changed to reflect my new district
: (3), and at the same time reflect my Advanced class. Is this possible,
: or do I just sign /3 forever?

: John
: KA5WTO

/3 forever? good god, why? There is no requirement to sign portable, so
the /3 would be for contesting or DX'ing only. If you wish to change your
call sign to reflect you class and district, filing a 610 would do it.
make sure you check the box for a new callsign.

Jim Hollenback, WA6SDM
jholly@cup.hp.com

990. Re: Rtty Dx Notes

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 20:25:04 UTC
From: mikewood@rock.concert.net
Message-ID: <2imdr0$qgq@inxs.concert.net>
Source record: 271628

In article <Angelo_Glorioso_Iii.2mmf@agwbbs.new-orleans.LA.US>,
Angelo Glorioso Iii <Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US> wrote:
>VK2SG DX NOTES 28 JAN 94
>
>S.M.O.M. 1A0KM. After three years a group of operators will be on from
>Jan. 26 to 31 on CW/SSB and RTTY on all bands but no 160. Qsl via
>I0IJ.(No report on the Cluster anyway up to now). MOUNT ATHOS. Monk
>Apollo, has been quite active recently on 20, 80 and 40 SSB. Keep
>fingers crossed for a return also to RTTY.
>
>

Did anyone any where actually work or even hear this Dxpedition?

Nothing at all was reported in S.E. USA.

Thanks, Mike / NT4O

Mike Wood Internet: mikewood@rock.concert.net
The Signal Group
P.O. Box 1979 ***Avoid company disclaimers by owning the company ***
Wake Forest, NC 27588

Phone: 919-556-8477 Fax: 919-556-0115

991. Re: WWCR 5.810MHZ 8pm 12pm Eastern(CHECK IT OUT!!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 20:28:12 UTC
From: eb795@cleveland.Freenet.Edu
Message-ID: <2ime0s$e0i@usenet.INS.CWRU.Edu>
Source record: 271629
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

But socialism is a way to enslave people, do you think it is not?
--
Eric Matthews
eb795@cleveland.freenet.edu

992. Re: Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 21:07:44 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb1.210744.13168@ke4zv.atl.ga.us>
Source record: 271676

In article <2im1g0$i6v@oak.oakland.edu> prvalko@vela.acs.oakland.edu (prvalko) writes:
>I'm not out to scare anyone away (heh heh) but that guy who posted the
>"Jesus is coming" thread can rest easy because not even the Lord himself
>will be able to get out of the traffic jam around Dayton on April 29th!
>
>73 all! CU on Shiloh Springs Road. paul

They're going to use the money saved to print up nice award certificates
for all the hams who earn WAS while trapped in the traffic jam. :-)

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

993. Kenwood TS940 pll-car unlock....HELP!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 21:14:59 UTC
From: hawley@aries.scs.uiuc.edu
Message-ID: <hawley.760137299@aries>
Source record: 271630

My TS940 (1987 vintage) unlocks during warmup, receive (or xmit) goes away
and a half second later the display goes to all dots. This lasts for a blink
to a few seconds each time, and happens zero to a half dozen times only during
warmup from cold which takes 5 or so minutes.
I have done the following:
1. Inspected the PLL, CAR, and DIG A board for solder breaks...nothing obvious.
2. Flexed (lightly), cooled, and resoldered many connections on these boards.
3. Inspected the VR board and resoldered this and that.
4. Observed no power supply voltage changes during the unlock on these boards.
5. Observed the unlock signal occuring during the problem, but was unable to
tell which pll chip was sending it first.
During all of this extreme invasion of the 940's guts, the characteristics of
the unlocking during warmup has not changed one bit. Makes me think I'm on the
wrong boards.
I've also checked all the peaking up, and setting of vco ranges on the pll and
car boards according to many suggestions and bulletins. R100 on the pll board
was not the problem, as once reported here on the net.
Is there any particular coil that has been troublesome, or some other part
perhaps that anyone knows about?
The problem goes away during the summer months.
Help.

994. CQ NR

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 23:03:28 UTC
From: brunob@hpldsla.sid.hp.com
Message-ID: <121020035@hpldsla.sid.hp.com>
Source record: 271634

Just a reminder that yearly Novice Roundup is ON.
Would appriciate any/all G/A/E level hams to extend there generous help
and if only for one QSO contribute to the glory of our wonderful hobby.

Yes it can be borring to work at 4wpm but try to remember when you started.

fron the log of AA6AD

995. Re: Your experiences on 40 meter CW QRP

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-01 23:13:41 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <CKKJ6u.4xx@odin.corp.sgi.com>
Source record: 271635

In article <1994Jan31.135516.1302@rsg1.er.usgs.gov>,
junger@rsg1.er.usgs.gov (John Unger) writes:
...stuff deleted...
|>
|> The key for me in working 40 CW successfully (and I'm not all that
|> successful!!) is having a good receiver and listening carefully
|> and diligently. Band conditions seem to vary quickly and drastically
|> on 40; you should be able to recognize when it is a good time to work
|> hard for DX and when you just might as well rag chew with the guy
|> down the street. I wouldn't (and don't) use any antenna that was
|> "worse" then a resonant dipole in performance. You might consider
|> some of the "shortened" dipoles if space is a factor; but I don't
|> have any experience with them.
...more stuff deleted...
|> cheers -- John, W3GOI
|>

1. QRPers usually hang out around 7.040MHz on 40.

2. Late and nite the band comes and goes, so if it seems dead it might
be, but then again, just try it.

3. Three nites ago, worked an F6 from the home qth near Dallas. I was
using 0.95W on a 250' long wire up 33' pointed north. He was in the
contest.

4. In QRP work, the antenna seems to be everything. But, don't give up
just because you have only a dipole.

5. Patience, patience, patience. QRP separates the tolerant from the
intolerant rather rapidly.

6. Listen to 7.050MHz. If you hear a warbling signal, then the band is
very very long. I haven't found anyone to tell me what in the world
(or outta of this world) this signal is. Kinda reminds me of the
Over the Horizon Radar from the old USSR.

All the above IMHO. I've been doing QRP over 30 years and CW 35+, thus
I'm an OF, but I'm still learning. I haven't had any operations to talk
about over the air, so I guess I won't fit in the phone crowd..... :-)

dit dit

--
Chuck Adams K5FO CP-60 wpm
adams@sgi.com

996. Re: Boring WWV Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 00:45:26 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CKKnFq.M24@news.Hawaii.Edu>
Source record: 271636

In article <CKIHK9.2ss@ucdavis.edu> ez006683@chip.ucdavis.edu (Daniel D. Todd) writes:
>ARMOND@delphi.com wrote:
>: Those WWV people are not nice at all. I was just trying to be helpful
>: when I called to tell them that my S-38 (which I got at a swapmeet
>: for $15) inmdicated that WWV was about 10 kilocycles off. That, when
>: they were not drifting. I suggested they go to crystal control.
>: I got this really neat Timex watch at a yard sale for $5. It sez that
>:] WWV is about 30 seconds off. What snotty people work at WWV. They did
>: not appreciate my helpful call at all.
>
>Perhaps you should have used the telephone instead of calling them on
>frequency. BTW: yopu were 59 in No. Cal
>;-)

You could get even with them by reporting them to the FCC for not ID'ing every ten minutes. I really don't know who they think they are - hogging so many frequencies; and they're certainly running more than the legal limit. Stuck up, too - they never answer my QRZ? calls...

Jeffrey NH6IL jherman@hawaii.edu

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.

997. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 00:53:43 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CKKntK.M8M@news.Hawaii.Edu>
Source record: 271637

In article <2ik0cn$9hq@orca.es.com> alan@olin.es.com (Alan Brubaker) writes:
>In article <CKBJtu.45s@freenet.carleton.ca> ab510@FreeNet.Carleton.CA (George Attallah) writes:
>>
> ...Famous Hams...
>>
>>H0HO Santa Claus
>>W7KID Billy The Kid
>>
>
>How could you forget:
>
>SL1CE Lorena Bobbitt

SK8TR Tonya ``Will she be indicted?'' Harding

Jeffrey NH6IL jherman@hawaii.edu

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.

998. CALLER-ID

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 01:05:58 UTC
From: tmather@tsd.arlut.utexas.edu
Message-ID: <1994Feb2.010558.21092@titan.tsd.arlut.utexas.edu>
Source record: 271669

From: tmather@titan.tsd.arlut.utexas.edu

Subject: CALLER-ID INFORMATION NEEDED!!!

Hi Netter,

I am working on a paper concerning "caller-id". It is quite
new in the state of Texas so if anyone has ANYTHING,
from technical to rights, privacy, controversial matters, etc...please
please please please please please and please forward the information
WITH references to me. I would appreciate it very much and thanks in advance.

-- Cheers, Alex

999. Help With PK232!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 02:07:24 UTC
From: acc_cal@exodus.valpo.edu
Message-ID: <1994Feb1.200724.1@exodus.valpo.edu>
Source record: 271578

Can anyone help me?

I have have the PK 232 and am having a hard time
trying to get it to work. I have a few different
TERM Programs but ther still do not talk to the
PK232.
I have a DOS PC and have the cable hooked up to
the big 25 pin serial port. The PK232 is hoked up
with Radio 1 hooked up by the phone plug for Receive
audio and the 8 or what ever pin gray cable to the
Xmit PTT and Mike Audio.
When I plug it all in and power it up it starts to
transmit a dead signal. If I disconnect the mike
plug and try to receive nothing will appear on my
Term.
When I power it up it will not even see the PK232.
I am not sure what that problem is.

If anyone can help Plese do I am LOST!!!

Thank You Ahead of Time For Any HELP!!!

Chris Lewandowski KB9FUN

ACC_CAL@ EXODUS.VALPO.EDU

1000. Daily Summary of Solar Geophysical Activity for 31 January

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 03:07:58 UTC
From: oler@rho.uleth.ca
Message-ID: <9402020308.AA05043@rho.uleth.ca>
Source record: 271639
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

31 JANUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 031, 01/31/94
10.7 FLUX=097.6 90-AVG=106 SSN=081 BKI=2122 1202 BAI=005
BGND-XRAY=B1.4 FLU1=4.8E+05 FLU10=3.7E+04 PKI=2132 2223 PAI=007
BOU-DEV=013,009,015,012,006,010,003,016 DEV-AVG=010 NT SWF=00:000
XRAY-MAX= B4.8 @ 0415UT XRAY-MIN= B1.1 @ 0158UT XRAY-AVG= B2.2
NEUTN-MAX= +002% @ 2220UT NEUTN-MIN= -002% @ 2320UT NEUTN-AVG= -0.1%
PCA-MAX= +0.1DB @ 2045UT PCA-MIN= -0.3DB @ 1400UT PCA-AVG= -0.0DB
BOUTF-MAX=55348NT @ 1220UT BOUTF-MIN=55330NT @ 2237UT BOUTF-AVG=55340NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+064,+000,+000
GOES6-MAX=P:+117NT@ 1909UT GOES6-MIN=N:-056NT@ 0751UT G6-AVG=+086,+030,-026
FLUXFCST=STD:100,100,100;SESC:100,100,100 BAI/PAI-FCST=010,010,005/012,012,010
KFCST=2223 4322 2233 4321 27DAY-AP=006,005 27DAY-KP=1322 2110 1112 2212
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 30 JAN 94 was 53.0.
The Full Kp Indices for 30 JAN 94 are: 3- 1- 2+ 3- 3- 3- 3- 2o
The 3-Hr Ap Indices for 30 JAN 94 are: 11 3 10 11 12 12 11 7

SYNOPSIS OF ACT

Solar activity was very low. All regions on the
disk were quiet and stable.

Solar activity forecast: solar activity is expected to be
very low to low.

The geomagnetic field was predominantly quiet to unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to be generally unsettled for the next two days and
should be quiet to unsettled on the third day.

Event probabilities 01 feb-03 feb

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 01 feb-03 feb

A. Middle Latitudes
Active 10/15/10
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 15/15/10
Minor Storm 10/10/05
Major-Severe Storm 05/05/01

HF propagation conditions were normal over all regions.
No changes are forseen over the next 72 hours.

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==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7659 S13W71 150 0000 AXX 00 001 ALPHA
7661 N10W55 134 0000 AXX 00 001 ALPHA
7662 S17W04 083 0060 DAO 06 014 BET
7663 N13W07 086 0000 AXX 00 001 ALPHA
7664 S13E41 038 0010 BXO 02 003 BET
7665 N04E53 026 0080 HSX 02 001 ALPHA
7660 S09W35 114 PLAGE
REGIONS DUE TO RET
NMBR LAT
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 31 JANUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP SWF
NO EVENTS OBSERVED

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 31 JANUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
31/03111 0417 0507 LDE B4.8 116

INFERRED CORONAL HOLES: LOCATIONS VALID AT 31/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
60 S20W18 S28W26 S26W30 S14W22 111 ISO POS 003 10830A

61 S40E88 S40E88 S30E34 S18E48 020 ISO NEG 020 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
30 Jan: 0102 0110 0118 C3.2

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 1 0 0 0 0 0 0 0 001 (100.0)

Total Events: 001 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
30 Jan: 0102 0110 0118 C3.2 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1001. Re: Help - your Vertical Ant. experences.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 04:14:50 UTC
From: durham@w2xo.pgh.pa.us
Message-ID: <20@w2xo.pgh.pa.us>
Source record: 271640

In article <gtaylor.315.0@taex003n.tamu.edu> gtaylor@taex003n.tamu.edu (Gregory S. Taylor) writes:

>>others but the R5 is a vertical dipole and as such does not have as much gain
>>as a quarter wave gound plane or similar antenna. Note the Butternut as well
>
>Probably depends on where in the pattern you are, can't think of any
>inherent reason for a quarter wave ground plane to have more gain than a
>vertical dipole. If I understand what is meant by a quarter wave ground

If you are really interested in the relative gains, etc, of various lengths of vertical radiators, you can get a copy of the FCC rules and regs for AM broadcast stations. This used to be available for a very small sum from the government printing office. In it is a chart showing the field strengths developed by various lengths of vertical radiators. You will see that a quarter wave vertical does *not* have more gain than a half wave, actually less. The signal strength continues to increase as the length of the radiator is increased and tops out at 5/8 wavelength..hence the popularity of the 5/8 for 2 meter mobile work.

Also at work here is the fact that a 1/2 wave radiator has a very high driving impedance. Consider the antenna and ground to be in series, like two resistors. If the ground connection is high impedance,like when you have no radials, then, if the antenna is low impedance (1/4 wave), most of the energy is dissapated in the ground connection.. not at all what you want. However, if the antenna is high impedance (1/2/wave), then a much larger part of the RF is consumed in the antenna, which is what you want.

It's still probably a good idea to ground even a half wave vertical. It won't hurt and probably will help. Otherwise you're depending on the capacitance of the coax feedline to act as a ground and then there's the lightning thing...

One note concerning ground plane antennas. They don't work as "ground plane" antennas until they are sufficiently high that the RF field from the antenna flows more in the ground plane wires than in dirt. If it is too low, you get severe losses from a quarter wave ground plane. This can be overcome by increasing the number of ground radials. THe FCC used to require 120 radials to achieve proper efficency when the vertical was right on the ground. When it's higher, then you need fewer. Since the half wave antenna has mostly voltage at the bottom and not current (high impedance), then the RF field is highest

at the middle of the antenna and does not flow in the ground
so much..ergo, the efficiency is higher when ground mounted..unless
you want to put 120 radials on the 1/4 wave!

Hope this helps..

Jim, W2XO

1002. Soundblaster radio programs?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 06:14:56 UTC
From: hruska@toybox.raleigh.nc.us
Message-ID: <1994Feb2.061456.1043@toybox.raleigh.nc.us>
Source record: 271641

I've just gained some interest in playing with my soundblaster
card for radio purposes.

I have been trying to use FFTMORSE, but I can't get it to do
anything but make clicking noises - nothing displays in the
frequency box. Any ideas on what could be wrong?

Also, what other radio programs are available that use the
soundblaster, and where might I find them?

--
+---+
Bob Hruska DoD #1982	email: hruska@toybox.raleigh.nc.us
Toybox Linux system	
Raleigh, NC	Say no to MS Windows - run Linux

1003. ARLB015 Vanity call extension sought

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 11:53:05 UTC
From: marcbg@netcom.com
Message-ID: <$arlb015.1994@ampr.org>
Source record: 271599
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

SB QST @ ARL $ARLB015 ARLB015 Vanity call extension sought
ZCZC AG79 QST de W1AW ARRL Bulletin 15 ARLB015 >From ARRL
Headquarters Newington CT January 28, 1994 To all radio
amateurs

The ARRL has requested an extension of the comment
deadline on an FCC proposal to establish a ''vanity'' call
sign system.

The FCC's Notice of Proposed Rule Making, in PR Docket 93-
305, was released December 29, 1993, with a comment
deadline of March 7, 1994.

The League immediately published the NPRM, in its
entirety, in February 1994 QST, asking members to make
their views on the matter known to their elected
representatives.

In its request for an extension of time for comments,
until April 21, 1994, the ARRL said that because the
matter of issuing preferred call signs involves a ''scarce
resource,'' the maintaining of fairness in the program
must be addressed.

The League also said that the March 7 comment deadline
simply did not allow enough time for ARRL members to
express their views on the proposal and for the ARRL board
to then formulate a position.
NNNN
/EX

--
Marc B. Grant fax 214-231-3998 voice 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

1004. ARLP004 Propagation de KT7H

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 11:53:46 UTC
From: marcbg@netcom.com
Message-ID: <$arlp004.1994@ampr.org>
Source record: 271600
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

SB PROP @ ARL $ARLP004 ARLP004 Propagation de KT7H
ZCZC AP18 QST de W1AW Propagation Forecast Bulletin 4
ARLP004 >From Tad Cook, KT7H Seattle, WA January 28, 1994
To all radio amateurs

Average solar flux was up over 20 points last week
compared to the week earlier. If it hasn't peaked
already, flux is expected to reach 135 in the next few
days and then begin a decline to below 100 before the
middle of February. Around February 9, 15 and 18 there
could be some disturbances, but look for February 3
6 to be very quiet, with especially good conditions on 80
and 160 meters.

Sunspot Numbers from January 20 through 26 were 54, 78,
102, 105, 106, 116 and 90, with a mean of 93. 10.7 cm
flux was 105, 110.8, 113, 118.3, 129.1, 132.1 and 127.8,
with a mean of 119.4.

The path projection for this week is from Seattle,
Washington to the South Cook Islands.

80 meters looks good from 0530z to 1500z, with 75 meter
openings beginning and ending a half hour sooner and
later. 40 meters should be open from 0500z to 1530z, and
30 meters from 0400z to 1630z. 20 meters looks good on a
few days around the clock, but the best bet is from 1600z
to 1800z and 0130z to 0400z. Check 17 meters from 1700z
to 2100z and from 2330z to 0300z. 15 meters looks good
from 1730z to 0200z, and 12 meters from 1800z to 0100z.
Check 10 meters from 1900z to 0000z.
NNNN
/EX

--
Marc B. Grant fax 214-231-3998 voice 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

1005. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 12:56:30 UTC
From: wpns@newshost.pictel.com
Message-ID: <1994Feb2.125630.7024@newshost.pictel.com>
Source record: 271645

The Pyrotechnic <haga@zach.fit.edu> wrote:
>My god, ive been paitently waiting for my call sign to come in... it's been
>well over 9 weeks now, and it still hasn't arrived.

I'd start with your VE. Ask them when they sent the paperwork to the
VEC, and have them ask the VEC when they sent the paperwork to the
FCC. The majority of the time it takes to process a ticket is spent
getting to the FCC... [Yes, the FCC is getting behind lately, but I
waited 12 weeks for my ticket, and 8-10 of those it sat on a desk at
the ARRL...]. Besides, by the time you get a response from your VEC,
you'll have the ticket! :+)
--
Willie Smith wpns@pictel.com N1JBJ@amsat.org
Some people you don't have to satirize, you just quote em - Tom Paxton

1006. Re: Contacts for arranging formal sked with SAREX?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 13:29:02 UTC
From: ehare@arrl.org
Message-ID: <1994Feb2.132902.6387@arrl.org>
Source record: 271646
Cross-posted to: rec.radio.amateur.misc,sci.space

: rcamama@dewey.cc.utexas.edu (Robert Camama) writes:

: >As the header reads, is there any way I can contact the SAREX (Shuttle
: >Amateur Radio eXperiment) coordinator or anyone else in a significant position
: >within the SAREX program?

lhurder@arrl.org responded:

: Bob - most often it's the ARRL's Educational Activities
: Department which coordinates the efforts of clubs and individuals
: wishing to QSO with SAREX missions.

: If you'd like, I'd be happy to forward any formal inquiry youy
: (you) have to ARRL HQ's Educational Activities Department.

People on Internet can contact the Educational Activities Department
(and most HQ staff) directly.

Here are the addresses:

Rosalie White - rwhite@arrl.org
Bob Inderbitzen - rinderbi@arrl.org

Having your message forwarded by another HQ staffer will only create
un-necessary delays.

73 from ARRL HQ, Ed
--

1007. Expansion board for TI DSK

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 14:04:10 UTC
From: schro@nessos.sni.de
Message-ID: <schro.760197850@nessos>
Source record: 271647
Cross-posted to: comp.dsp,rec.radio.amateur.misc,rec.radio.amateur.digital.misc

Expansion board for the Texas Instruments DSP Starter's Kit

Playing with the TI DSK is fun, but once my DSP application worked i found it boring to do the download every time i switched it on. I just wanted to use the DSK as a stand-alone device, so a boot EPROM was needed.

Fortunately i know a hardware designer and asked him for advice.
He said: "No problem with fast chips. Would you like a prototype?"
A week later i got it and it works great.

Now what about some indicators?
A few days later he had added an output port with some LEDs attached.
What about some external RAM for just another FIR filter?
...and i got 8K words of zero-wait RAM!

A board like this would be useful for other DSK owners and it's no problem to make a PCB, but first i have to find out if there is enough interest and what should be on it.

Boot EPROM?

EPROM/RAM in program/data space?

Parallel I/O ports?

Serial I/O chip with RS-232 socket?

Anything else?

If you have a DSK and are interested in an expansion board please send e-mail to the address below:

schroeder.pad@sni.de

W.F.Schroeder

1008. Will Wayne See His Shadow???

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 14:31:44 UTC
From: hpb@hpb.cis.pitt.edu
Message-ID: <13659@blue.cis.pitt.edu>
Source record: 271648

If Wayne Greene sees his shadow on Groundhog Day, does that mean
we'll have 6 more years of bad sunspots? :-) :-) :-)

Harry Bloomberg WA3TBL
hpb+@pitt.edu

1009. Ham exam Saturday, U of MD

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 14:46:48 UTC
From: ham@wam.umd.edu
Message-ID: <2ioeco$7ol@cville-srv.wam.umd.edu>
Source record: 271649
Cross-posted to: dc.general,rec.radio.amateur.misc

The Univ. of MD ARA will be having ham exams this Saturday, Feb. 5,
in the Student Union Building on the College Park campus of UMd.
They will begin at 10 a.m., and the cost is $5.60 (W5YI).

For more info call Scott Rosenfeld, NF3I, at 301-206-9921, or send
email.

Scott

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 123 QSLed on dipoles __________| Dipoles! Antenna!

1010. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 15:40:22 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.94Feb2104022@prince.cs.columbia.edu>
Source record: 271650

The Pyrotechnic <haga@zach.fit.edu> wrote:
>My god, ive been paitently waiting for my call sign to come in... it's been
>well over 9 weeks now, and it still hasn't arrived.

Some people here who took their tests from us on November 28th ('93)
had their licenses arrive last week. That's a little under 9 weeks.

I'd expect your license to show up any day now. If it gets to 12
weeks and it still hasn't arrived, call your VEC, as an earlier poster
said. Maybe you could call after 10 weeks, if you've noticed your
mailman fingering his can of Mace every time he walks up to your
house. :-) We've all experienced that "attack the mailman" feeling...
-Steve, WB3I

1011. Re: Coaxial cable

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 15:44:25 UTC
From: Anthony_Pelliccio@brown.edu
Message-ID: <Anthony_Pelliccio-020294104608@138.16.64.8>
Source record: 271651

In article <2im9t8$p87@master.cs.rose-hulman.edu>,
derry@NeXTwork.Rose-Hulman.Edu (John Derry) wrote:

>
>]> I'd like to have some good quality coaxial cable. Can you give
>]> me any suggestions if you know?
>]> Now, I am using a 50 ohm cable, RG-58 A/U!
>]>
>]> Frankie Choy
>
> Howdy, Frankie:
>
> Get some Belden 9913 or equivalent. But remember it's not as flexible as
> RG-58. I only use RG-58 for short junmpers arounbd the shack. And I'm
> even replacing those cables with RG-223.
>
> 73 de Jack, K9CUN

Some other things to keep in mind about 9913. Remember that you'll need
special UHF N connectors if you plan on using the cable for UHF
applications.

Second, because it's solid core it takes a little more oomph to solder.

Tony
--
== Anthony_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)
== Brown University Alumni & Development Computing Services
== Box 1908, Providence, RI 02912 Tel. (401) 863-1880
== I speak for myself, and not for Brown University. Remember that!

1012. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 16:03:34 UTC
From: richw@lsid.hp.com
Message-ID: <CKLtxy.Lyn@hpcvsnz.cv.hp.com>
Source record: 271652
Cross-posted to: rec.video,rec.radio.amateur.misc,sci.electronics

Hey, guys, let's watch the creative math!

: Deviations from day to day are less than 5 parts
: in 1000 billion (5x10^12).

5 parts in 1000 billion is not 1 part in 5x10^12, it's
5 parts in 10^12, or one part in 2x10^11.

1013. Access to VOA News by United States Residents

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 16:18:28 UTC
From: ck@VOA.GOV
Message-ID: <CKLuMt.IA3@VOA.GOV>
Source record: 271653
Cross-posted to: comp.infosystems,comp.infosystems.gopher,rec.radio.amateur.misc,rec.radio.shortwave,rec.video.satellite

Since we announced the availability of the Voice of America and
Worldnet Television public Internet server a couple of days ago,
I have received a number of anxious emailed inquiries from
Americans regarding the disclaimer attached to the announcement:

In accordance with U.S. law, program materials such as
the News and English Broadcasts newswire are provided
exclusively for recipients outside the United States.

The restriction on domestic dissemination of VOA and Worldnet
program materials applies to employees of VOA and Worldnet, and
not to other residents of the United States. In other words, we
may not actively attempt to transmit our programs or distribute
our program materials to recipients within the United States.
But anyone living in the United States who wants to take the
initiative to listen to VOA or watch Worldnet or read the News
and English Broadcasts newswire is free to do so, even though
they are not the reason why we have radio broadcasts, television
satellite feeds or a public FTP/gopher server on the Internet.

Here are some examples of how the law works:

o VOA may not establish a network of affiliated radio stations
inside the United States, as we have in many other countries.
However, if a cable television provider wants to downlink VOA
programs from a satellite and carry them on an audio channel
-- as, indeed, one does here in Washington, D.C. -- the
government may neither facilitate nor interfere with that
activity.

o Worldnet does not offer its television programs to American
networks or stations. However, if an original Worldnet program
is newsworthy, anyone who can receive it is free to rebroadcast
it. (Obviously, this does not apply to copyrighted commercial
programs that Worldnet distributes to other countries under
licenses from their producers.)

o Anyone in the United States can listen to a VOA shortwave
broadcast or FTP a script from our public Internet server,
and then redistribute that tape or script to anyone else in
the United States. The broadcasts and the texts of the
scripts are not intended for recipients within the United
States, however, so please don't ask us to help you make
copies of them.

I hope this allays some of the concerns that have been expressed about access to the materials on our public server by residents of the United States. Normally when I post a USENET article, I speak only for myself, but in this instance I have been authorized to provide this explanation on behalf of VOA and Worldnet by our Office of External Affairs.

If anyone wants to discuss this subject further with VOA and Worldnet, there is a list of public electronic mail addresses on our server (ftp.voa.gov). Probably the most appropriate on is pubaff@VOA.GOV. Please don't send mail to me; I'm already swamped.

--
Chris Kern ck@voa.gov ...uunet!voa3!ck +1 202-619-2020

1014. Mail Server Info Wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 16:24:47 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <yxyJjGG8yPjE053yn@dorsai.dorsai.org>
Source record: 271654

Now that all those bounced messages have been eliminated, I realize I
forgot to take down the address of the e-mail server for this newsgroup.
I know someone who has e-mail, but no newsgroups at his site and would like
to subscribe, and I'm kicking myself. So, I would like someone to forward
to me the address and the proper subscribe format to use so I can send it
out.

Please post a follow up or e-mail the info to me.

Does anyone know if there are any e-mail servers for the other
rec.radio.amateur.* newsgroups? I could use that info too.

```
< ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^>
< "Big Steve" Coletti >
< Shortwave Listener, Broadcaster, Computer Consultant >
< and all around nice guy >
< Internet: bigsteve@dorsai.dorsai.org ==== S.COLETTI2@genie.geis.com >
< UUCP: Steve_Cole@islenet.com ==== steveny@lopez.marquette.mi.us >
< Fidonet: 1:278/712 US Mail: P.O. Box 396, New York, NY 10002 >
< Voice: +1 212 995-2637 >
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

1015. Predicting inductor self resonant freq?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 16:46:04 UTC
From: tomb@lsid.hp.com
Message-ID: <CKLvwt.MH7@hpcvsnz.cv.hp.com>
Source record: 271655

Anyone out there have any reasonably accurate formulas for _predicting_ the self resonant frequency of an air-core (self-supporting) inductor, given the geometry? Yes, I can make measurements, but I want to predict what I will get so I can wind the coil I need, then just measure to verify/tweak.

73, Tom -- K7ITM

1016. Daily Summary of Solar Geophysical Activity for 01 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 17:10:19 UTC
From: oler@rho.uleth.ca
Message-ID: <9402021710.AA08744@rho.uleth.ca>
Source record: 271661
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

01 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

NOTE: The SIDC Brussels Provisional International Mean Monthly Sunspot
Number (RI) for January 1994 is 58.8.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 032, 02/01/94
10.7 FLUX=094 90-AVG=106 SSN=055 BKI=1123 2211 BAI=006
BGND-XRAY=B1.0 FLU1=3.0E+05 FLU10=1.1E+04 PKI=2123 2111 PAI=006
BOU-DEV=009,007,016,028,017,010,005,005 DEV-AVG=012 NT SWF=00:000
XRAY-MAX= B1.9 @ 0418UT XRAY-MIN= A9.1 @ 1836UT XRAY-AVG= B1.1
NEUTN-MAX= +002% @ 1215UT NEUTN-MIN= -002% @ 2210UT NEUTN-AVG= -0.1%
PCA-MAX= +0.1DB @ 0440UT PCA-MIN= -0.4DB @ 0535UT PCA-AVG= -0.0DB
BOUTF-MAX=55348NT @ 1452UT BOUTF-MIN=55327NT @ 1934UT BOUTF-AVG=55342NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+070,+000,+000
GOES6-MAX=P:+119NT@ 1741UT GOES6-MIN=N:-063NT@ 0848UT G6-AVG=+091,+028,-026
FLUXFCST=STD:090,090,090;SESC:090,090,090 BAI/PAI-FCST=010,005,005/008,008,008
KFCST=1112 2111 1112 2111 27DAY-AP=005,011 27DAY-KP=1112 2212 3333 3312
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 31 JAN 94 is not available.
The Full Kp Indices for 31 JAN 94 are: 2o 1o 3- 2o 2- 2+ 2- 3-
The 3-Hr Ap Indices for 31 JAN 94 are: 7 4 12 7 7 9 7 12

SYNOPSIS OF ACT

Solar activity was very low. All the regions on the disk
were quiet and stable. A 17 degree filament near S32W06
disappeared sometime between 31/2336Z and 01/1451Z.

Solar activity forecast: solar activity is expected to be
very low.

The geomagnetic field was quiet to unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled for the next three days.

Event probabilities 02 feb-04 feb

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 02 feb-04 feb

A. Middle Latitudes
Active 15/05/10
Minor Storm 10/05/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 20/05/10
Minor Storm 10/05/05
Major-Severe Storm 05/01/01

HF propagation conditions were normal over all regions.
Good propagation is expected to continue through the next 72
hours.

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REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7659 S14W85 150 0030 BXO 04 003 BET
7662 S17W18 083 0040 CRO 06 008 BET
7663 N11W23 088 0010 AXX 02 003 ALPHA
7665 N05E39 026 0080 HSX 02 001 ALPHA
7660 S09W48 113 PLAGE
7661 N10W68 133 PLAGE
7664 S13E28 037 PLAGE
REGIONS DUE TO RET
NMBR LAT
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 01 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP SWF
NO EVENTS OBSERVED

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 01 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
01/A0018 B1451 S40E08 DSF

INFERRED CORONAL HOLES: LOCATIONS VALID AT 01/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
60 S25W30 S25W40 S25W40 S15W38 110 ISO POS 002 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
31 Jan: 0135 0138 0142 B1.9
0311 0417 0507 B4.8

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 002 (100.0)

Total Events: 002 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1017. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 17:40:24 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-020294104024@waters.corp.mot.com.corp.mot.com>
Source record: 271663

In article <1994Feb2.125630.7024@newshost.pictel.com>,
wpns@newshost.pictel.com (Willie Smith) wrote:

> The Pyrotechnic <haga@zach.fit.edu> wrote:
> >My god, ive been paitently waiting for my call sign to come in... it's been
> >well over 9 weeks now, and it still hasn't arrived.
> [Yes, the FCC is getting behind lately, but I
> waited 12 weeks for my ticket, and 8-10 of those it sat on a desk at
> the ARRL...]. Besides, by the time you get a response from your VEC,
> you'll have the ticket! :+)

They are slow for all of the licenses BTW, I applied for a Ship Station
license in December and still haven't received it. The FCC allows a
temporary call in that service though, so its not a problem.

1018. STS-60 SAREX Frequencies ...?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 18:00:15 UTC
From: kleite@sentry.ndhm.gtegsc.com
Message-ID: <kleite-020294130016@157.176.173.2>
Source record: 271664

Hi,
I know this question has been probably posted a zillion times, but I am looking for the uplink and downlink frequencies of the shuttle. Does any have the current uplink & downlink freq's ...???? I would like to see if I will be able to hear them from above ....Thanx de Keith

1019. Re: Access to VOA News by United States Residents

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 18:14:07 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2ioqhf$q4f@vixen.cso.uiuc.edu>
Source record: 271666
Cross-posted to: comp.infosystems,comp.infosystems.gopher,rec.radio.amateur.misc,rec.radio.shortwave,rec.video.satellite

The local nameserver does not know voa.gov. Can you provide the IP number?

Ignacy Misztal, NO9E
University of Illinois

1020. For Sale

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 18:20:58 UTC
From: rwilgus@PICA.ARMY.MIL
Message-ID: <9402021320.aa12472@FSAC3.PICA.ARMY.MIL>
Source record: 271667

Have a nice ICOM 737 Mint Condition less than 40 Operating hours w/External Speaker Asking $1050.00 Also a External VFO for Yaesu FT 107 Mint Asking $125.00 Call Sam W2DDN, Area code 201-335-5732.

1021. Hamblaster Update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 18:43:04 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb2.184304.18118@tellab5.tellabs.com>
Source record: 271668

The Hamblaster Update

Over the past several months I posted updates about a
DSP "The Hamblaster" that Will Torgrim (N9PEA) and myself
are developing.

We are focusing our efforts on a packet modem that allows
the user to improve H.F. reception by interfacing the Ham-
blaster (a PC compatable DSP sound board) to a transceiver
and a packet or all mode TNC. Modems/filters for RTTY,
Packtor, Amtor are also under developement and are compatable
with the same control panal software.

Here are the latest developements
1-31-94

1) The Hamblaster can play ".wav" files
at sample rates less than 15 kHz.

2) Adaptive (LMS) filter

There's ongoing developement in this area. We are
planing (I don't think this has been done before)
to add controls to the LMS algorithm.

3) Fast autotune

We have a fast autotune routine that locks a packet
modem to the received signal in few milliseconds.
Tuning is a big problem on H.F. packet. Some stations
are so far off frequency, the tnc can't receive the packets.
The auto tune (or AFC) locks the DSP modem to the FSK
center frequency.

4) More autotune info.

The Hamblaster can interface to a PK232 via the
the 232's External Modem connector and the Hamblaster
digital port. The PK-232/Hamblaster connection emulates
a PK-2232 allowing the user to take advantage of the DSP
capabilities by accessing a library of modems or filters.

5) Using the auto tune demodulator with the PK232:

When the auto tune feature is enabled, the modem locks
onto the FSK signal and, hopefully, the PK232 will
fewer packets. Even though the Pk232 filters are by-
passed, I connect the Hamblaster's audio output to the

PK232's "Radio 1 input". It allows me to use
the PK232's tuning indicator to roughly tune the fsk
center frequency within 100 Hz.

At least for now, the Hamblaster doesn't decode the data,
It just a filter. We are working on a KISS mode emulation
software. If we're successful, The hamblaster will interface
directly to the KA9Q software.

Jack Albert Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-4590
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440
*
* *
* * *
* * * * * * *
* * *
* *
*
THE BOWTIE FILTER

1022. SUBSCRIBE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 19:30:36 UTC
From: llake1@services.DEse.state.mo.US
Message-ID: <Pine.3.07.9402021336.A10963-5100000@services>
Source record: 271670

SUBSCRIBE

1023. Group purchase of FoxTango Newsletters (Yaesu FT101 era)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 19:51:04 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Feb2195104@mipgsun.mipg.upenn.edu>
Source record: 271592
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.misc

Before I submit an order for the FoxTango Newsletters to IRC I wanted
to ask one last time if there are any interested parties who would
like to get in on the group purchase.

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

1024. A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 20:14:17 UTC
From: elendir@enst.fr
Message-ID: <2ip1ip$15s@cismsun.univ-lyon1.fr>
Source record: 271671

Hi there,

I am learning the morse code, and occasionaly I try accelerated rates
(15 wpm, e.g). And while I can get many letters, I find it impossible to
write them down. So this is my question :
How can you achieve at the same time listening and writing of the letters
at such speeds ? That seems a mistery to me.

73, Vince (9 weeks and waiting, still...)

1025. Re: Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 20:21:38 UTC
From: tcain@brtph87.bnr.ca
Message-ID: <1994Feb2.202138.13634@brtph560.bnr.ca>
Source record: 271672

In article <2im1g0$i6v@oak.oakland.edu> prvalko@vela.acs.oakland.edu (prvalko) writes:
>I'm not out to scare anyone away (heh heh) but that guy who posted the
>"Jesus is coming" thread can rest easy because not even the Lord himself
>will be able to get out of the traffic jam around Dayton on April 29th!
>
>73 all! CU on Shiloh Springs Road. paul

Yeah, its gonna be horrible! So, I guess all you folks better stay home... ;-)

--
Tom Cain WB8OUE@ko23 tcain@bnr.ca

1026. Re: Access to VOA News by United States Residents

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 20:22:56 UTC
From: rathinam@ins.infonet.net
Message-ID: <2ip230$nqj@insosf1.infonet.net>
Source record: 271673
Cross-posted to: comp.infosystems,comp.infosystems.gopher,rec.radio.amateur.misc,rec.radio.shortwave,rec.video.satellite

In article <2ioqhf$q4f@vixen.cso.uiuc.edu>, ignacy@ux2.cso.uiuc.edu (Ignacy Misztal) writes:
>The local nameserver does not know voa.gov. Can you provide the IP number?
>

Try 152.75.16.1
It was posted in an earlier post also.

1027. From Usenet to print

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 20:28:30 UTC
From: paulb@harley.tti.com
Message-ID: <1994Feb2.202830.3211@ttinews.tti.com>
Source record: 271674
Cross-posted to: rec.radio.shortwave,rec.radio.scanner,rec.radio.amateur.misc,tti.vox

Back on May 13th, I published an article on USENET about a SWAT incident that involved using my home as a command post.

Several readers suggested that I send the article to Monitoring Times or QST. I really did not think that either publication would have any interest in it, but since it was already written, I sent it to MT with a note that I can clean it up if they were interested.

They said that they were and would pay me $75 plus a year's sub, if published. They also said not to rewrite it too much or it would lose the spontanaity.

So, I cleaned it up & resubmitted it. It is on page 27 of the February issue. Thanks to those that suggested that I publish it!

Paul

"We hate our politicians so much that if they tell us that they lied, we don't believe them" -- Peter Newman
---
Paul Blumstein, paulb@harley.tti.com, DoD #36, ABATE, AMA, HOG, BWA #1
Transaction Technology, Inc., Santa Monica, CA

1028. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 20:51:27 UTC
From: jdc@cci.com
Message-ID: <CKM79r.45H@sunsrvr6.cci.com>
Source record: 271675
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <2i8rnf$o5n@explorer.clark.net>,
matt roberts <robocop@clark.net> wrote:
>In article <ah301-260194121225@129.228.248.39>,
>Jerry Sy <ah301@yfn.ysu.edu> wrote:
>>I have pretty much narrowed down my choice to these two 2m ht's.
>
>>I'd like to get comments and opinions from people in the net who
>>have actually used both.
>>currently, I am leaning towards the dj-162 because of its wide
>>receive.
>
>The HTX202 is a good radio. It comes with the CTCSS, DTMF squelch, and
>it can store telephone numbers. It has 14 memories, I think.
>
> Matt Roberts N3GZM

I'll second the motion. The HTX-202 is also more sensitive on receive
than my ICOM-27H, of a late 70's or early 80's vintage. And the price
is right when Radio Shack runs one of their periodic "sales".

73...Jim
N2VNO

1029. BEGINNER: Radio Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 21:19:29 UTC
From: "F. Clayton Rote" <p00936@psilink.com>
Message-ID: <2969306281.1.p00936@psilink.com>
Source record: 271677

Hi all:

I have decided to dip my toe into the HAM radio hobby. I have a general idea of what I want but I want to make sure it is possible and that I purchase the correct equipment. I thought I would put the features I am looking for in a message and solicit any feedback.

FEATURES:

o Portable

o 2 Meter and 440 (I have no idea what this means but I have been told by several operators that this is the way to go)

o Scanning Functions
- Civilian and Military Air (Air Shows)
- Police and Fire
- Weather
- Cellular (for fun on Saturday nights)

I have looked at a couple of magazines and there are some really nice looking things out there like the Kenwoods and Icoms. I guess the dual band means 2 Meter and 440 but how do I figure out what channels they can scan and how good they are at scanning them.

Thanks in advance for your help.

Clayton

1030. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 21:50:17 UTC
From: jbiehn@i-link.com
Message-ID: <2ip76p$o1i@ilink1.i-link.com>
Source record: 271579
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

rich@mulvey.com wrote:
: James Biehn (jbiehn@i-link.com) wrote:
: : Jerry Sy (ah301@yfn.ysu.edu) wrote:
: : : I have pretty much narrowed down my choice to these two 2m ht's.

: : : I'd like to get comments and opinions from people in the net who
: : : have actually used both.

: : : currently, I am leaning towards the dj-162 because of its wide
: : : receive.

: : : please email responses if possible.
: : : thanks in advance.

: : : jerry
: : Jerry, I myself have used both and found the DJ-162 all around better in
: : its operations as well as its structure. The HTX-202 has no Mod info and
: : is virtually an unknown radio internally. Maybe time will change that, but
: : meantime technology moves on.

: So you're saying that you *LIKE* intermod?

: :-)

: - Rich

: --
: Rich Mulvey Amateur Radio: N2VDS Rochester, NY
: rich@mulvey.com "Full power on half a watt."
Rich, the problem is that todays HAM is a buyer not a builder. Thae
closest thing to this now days is a loose radio and a reliable set of
mods. Is this truly HAM radio, that is the true question.

1031. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 22:27:42 UTC
From: JMG@tntech.edu
Message-ID: <01H8EZGJ1SCIDU7RYC@tntech.edu>
Source record: 271580

I think somewhere back in the dark ages some QRPer decided that they wanted to make themselves look good. They wanted to hang out in the local tavern and wind tall tales of their famous exploits. In order that the exploits appeared to be great they had to change some of the basic facts. Kinda like a guy taking a big old gun and shooting a caged tiger in the head then trotting down to the local bar and weave a tall tale about how a vicous tiger that had some dread disease escaped on a wild killing rampage and he was forced without regard to personal safety to track town the terrible scorge and with great personal peril save the lives of thousands and put the beast to rest (run-on sentence?).

OK, this opening may be as exaggerated as some QRP claims. I have been working QRP almost all the time I have had my license. We aren't talking hundreds of contact, we are talking thousands. I don't cq with a QRP identifier most of the time because it is really uneccesary. Most of the times you just don't need all that much power to have a QSO. Now there are many exceptions.. if you are in a big pileup you will need very good operating skills to get your puny signal thru the guys with a 2000 foot tower and a 50 element Yagi running 2000 watts. But it can be done if you develop the technique.

For normal contacts QRP is just ham radio with less watts. The majority of time the person on the other end of the QSO doesn't have a clue I am using lower power. I operate mobile ssb/QRP as well as mobile QRP/CW. Now speak about ineffecient antennas.. a mobile vertical (like Hustler) just ain't a Yagi or a Quad.. guess what .. I don't have much problem making contacts. I regularly operate on the 7 mile trip to town and even on a couple mile trip to get some lunch. I use a Ten Tec Argonaut 509. I have used the MFJ 20 and 40 meter rigs as well as small rigs that are from kits or construction articles. Yes the Texas Bug Catcher I just put on makes things better. A better antenna is always the best investment. But if you don't have one.. use what you got.

The way I got into QRP was by buying one of the first MFJ QRP rigs out. I made a quick resonant dipole and brought a spark plug and some rope around in a knap sack to help through the antenna up in the tree. Old age struck and I found places I wanted to operate that either didn't have the trees or I didn't want to hastle with the dipole. I found and article in CQ on making a portable PVC antenna that was real inexpensive and you can change to different bands by simply changing the top section. I have mine for 20,30,40.. 20 second changover time. Guess what.. that's right. .works fine..operate all weekend from a tiny 4 ah gell cell.

To test my "QRP is just ham radio" theory I often get in my car during SSB and CW contests and operate for fun mobile.. no problem..I don't do it seriously.. but have a great time.

Now .. take a really good antenna and you can make up the difference between the 100 watts and 4 watts quite easily. I finally got to put up a directional antenna about 9 months ago. It is the lightning bolt 5 band 2 element quad (also tunes 30,40, 80 with tuner). The first night I had it operational the only other QRPer in town came over and decided to put the new antenna through its paces. The first thing he did was turn the rig down from 100 to 5 watts on 20 meters.. the band was wide open. worked all over. Next he went down to 1 watt..no problem.. then 1/2 .. finally 70 mw.. worked Hungry for about half hour.. ended up going down to 1 mw and perfect copy. We worked Macedonia and all over Europe and some of Asia while less than 100 mw.. no problem. the band was really good.. but that happens. I have no problem with 1-4 watts regulary. The car rig is about 3 watts SSB and CW.

You will find that with CW you can get away with much less power than SSB.. but SSB QRP is fine also. I have recently started to work 80 meters QRP.. had thought it wouldn't work.. haven't had much of a problem.

There are times when you will need more power.. but I usually don't and feel real good about it.

but... don't find it that much of a difficulty or hardship.. OHHHHH think I will be shot for giving away well kept secrets.

73,

Jeff, AC4HF

1032. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 22:54:23 UTC
From: cravit@world.std.com
Message-ID: <CKMCyo.4Gv@world.std.com>
Source record: 271581

In article <1994Feb2.125630.7024@newshost.pictel.com>,
Willie Smith <wpns@newshost.pictel.com> wrote:
>The Pyrotechnic <haga@zach.fit.edu> wrote:

>FCC. The majority of the time it takes to process a ticket is spent
>getting to the FCC... [Yes, the FCC is getting behind lately, but I
>waited 12 weeks for my ticket, and 8-10 of those it sat on a desk at
>the ARRL...]. Besides, by the time you get a response from your VEC,

I certainly hope that this is not true, since if I recall correctly,
the VEs MUST (according to the FCC regs that set up the VE system)
file their forms with the VEC within 10 days of the test, and the VEC
MUST file with the FCC within 10 days as well (the ARRL has stated
that this is their policy, whether it is law or not).

/Matthew N9VWG

--
Matthew Cravit, N9VWG | All opinions expressed here are
Michigan State University | my own. I don't speak for The World,
East Lansing, MI 48825 | and they don't speak for me (luckily
E-Mail: cravit@world.std.com | for both of us).

1033. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 23:10:30 UTC
From: engberg@edfue0.ctis.af.mil
Message-ID: <2ipbt6$893@iris.mbvlab.wpafb.af.mil>
Source record: 271582

And don't forget:

I0BOY Michael Jackson

--

Bob Engberg
phone: 907-552-7172
e-mail: engberg@ctis.af.mil
packet: K0MVL@KL7AA

1034. Re: Automotive computers and amateur radios - Help!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 23:16:49 UTC
From: engberg@edfue0.ctis.af.mil
Message-ID: <2ipc91$893@iris.mbvlab.wpafb.af.mil>
Source record: 271583

Mike,
I once had my Plymouth Reliant die momentarily when I keyed the 2 mtr rig.
45 watts to a wet 1/4 wave mag mount. No problem when it's dry.
When I keyed the transmitter, the electronic fuel injection stopped.
Not a problem if your going down hill, I suppose.

--

Bob Engberg
phone: 907-552-7172
e-mail: engberg@ctis.af.mil
packet: K0MVL@KL7AA

1035. Re: Boring WWV Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-02 23:37:01 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseCKMExq.AFH@netcom.com>
Source record: 271584

"This is WWV, with the time, all the time!"

1036. Antenna Price vs Performance

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 00:15:46 UTC
From: pschou@delphi.com
Message-ID: <9402021914591.pschou.DLITE@delphi.com>
Source record: 271585

FWIW here are my thoughts on the price/performance ratio of Ham HF antennae. The BEST and most expensive for point to point communication is a BIG multi-element rotatable directional antenna mounted at least one and one half wavelengths high over a saltwater marsh. <BG> Since this type of installation is not doable and/or desirable for most of us we need alternatives.

In my years of Ham activity starting in the late 1940's I have owned or used many types of antennae including some that came close to the theoretical BEST. I travelled extensively and used borrowed/scrounged stuff when I had to. The usual antenna would be a trapped 1/4 wave vertical dipole of some sort with whatever ground plane I had room for. I never noticed a bit of difference in performance between any of the major brands providing that they were of about the same physical length. I had the impression that a roof mounted vertical with four quarter wave radials worked better than a ground mounted vertical with the same radials. It should but I never ran any real tests. I also used wire dipoles and long wires at various times. In all cases I had a usable Ham station. I could communicate with other Hams all over the world as long as the propagation would cooperate.

My present antenna is a 105' G5RV strung haphazardly through the trees in my backyard. It works as well if not better than anything I have used. Because it is mounted more or less horizontal it does exhibit some lobing on the higher bands. I have tried a shorter G5RV (52') mounted vertically and was impressed with its performance even though the top was only 40' or so above the ground. We just folded the excess 90 degrees a few feet above the ground. If it ever gets warm again I suspect that a vertical G5RV type dipole will become my prime radiator.

I have found that the old adage "The more Copper the better." is true.
I have found that a long piece of wire hung from a tall tree is usually better than a trapped vertical, be it called quarter or half wave.
I have found that the tallest commercial Ham vertical works better than the shortest. (See "more Copper")
I have found that to work DX the fewer skips the better. This means height to lower the radiation angle.
I have found that even a 10' random wire will work under good band conditions.
I have found that a 20 meter beam at 30' is not much better than anything else at the same height. (Yes it's a little quieter.)

All in all I'd recommend a wire antenna as high as possible. Mount it vertically for an omni directional pattern or horizontally to favor a particular direction. Put your money in a tuner with a VSWR bridge.

If you can't hang a wire someplace a roof mounted 1/4 wave vertical with a minimum of four radials is probably the least expensive option.

The point of all this is that there are a myriad of antenna options and
that for the most part the difference in on the air performance is marginal.
The point is to get on the air. 73

1037. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 00:25:34 UTC
From: aa813@cleveland.Freenet.Edu
Message-ID: <2ipg9u$6r9@usenet.INS.CWRU.Edu>
Source record: 271586

In a previous article, elendir@enst.fr (Elendir) says:

> Hi there,
>
> I am learning the morse code, and occasionaly I try accelerated rates
>(15 wpm, e.g). And while I can get many letters, I find it impossible to
>write them down. So this is my question :
> How can you achieve at the same time listening and writing of the letters
>at such speeds ? That seems a mistery to me.
>

I found that disconnected script worked well. I could not print that fast
and regular script presupposes that you know what the next letter will be
(which I never do). Happiness is thinking, "This makes no sense, but
looking at the paper and finding WORDS!"

I still cannot copy in my head.

73, Joe N8IPC

1038. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 00:29:08 UTC
From: slay@netcom.com
Message-ID: <slayCKMHCM.B0r@netcom.com>
Source record: 271587

Elendir (elendir@enst.fr) wrote:
: I am learning the morse code, and occasionaly I try accelerated rates
: (15 wpm, e.g). And while I can get many letters, I find it impossible to
: write them down. So this is my question :
: How can you achieve at the same time listening and writing of the letters
: at such speeds ? That seems a mistery to me.

A few comments and suggestions for you, Vince:
1) Use cursive writing - NOT PRINTING
2) Learn to use a keyboard (typewriter or PC). If you use this method,
after awhile, you may learn that you don't really know what you've
copied and will actually need to read it off the typewriter/PC display.
3) If you must copy with pencil/pen, it is likely you will actually be
several characters behind in your writing. That's natural.
4) BEST of all - put your pencil down. Copy everything in your head. This
will be the way to copy at the highest rate of speed. The *downside*
is if you need to have written copy for an exam. One friend, Ed AH6MI
(and 7J1AAE) passed his FCC exam at 20 wpm without ever writing any of
the transmission on paper. He claims he was too nervous. But, he was
good enough to remember all the key comments in the transmission and thus
was able to answer all the questions on the CW test.

Good luck & 73 de Sandy WA6BXH/7J1ABV slay@netcom.com

1039. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 01:26:02 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CKMJzF.KFA@news.Hawaii.Edu>
Source record: 271588

Jeff wrote an excellent article on QRP, and I want to reiterate a very
important point he made:

In article <01H8EZGJ1SCIDU7RYC@tntech.edu> JMG@tntech.edu (JEFF M. GOLD) writes:
> .... The first thing he did was turn
>the rig down from 100 to 5 watts on 20 meters.. the band was wide open.
>worked all over. Next he went down to 1 watt..no problem.. then 1/2 ..
>finally 70 mw.. worked Hungry for about half hour.. ended up going down
>to 1 mw and perfect copy. We worked Macedonia and all over Europe and
>some of Asia while less than 100 mw.. no problem. the band was really
>good.. but that happens. I have no problem with 1-4 watts regulary. The
>car rig is about 3 watts SSB and CW.
> ....
>73,
>
>Jeff, AC4HF

Now, those of you who are readers of r.r.a.homebrew have seen the dozen
or so simple QRP xmtrs I've posted the last 6 months; a couple folks
thought the less-than 1 watt xmtrs were useless for serious communications.
That's just not true, as you read above! And don't think that the band
conditions were abnormal that particular day; daily, on the QRP email net,
the guys and gals are documenting accounts just like above.

Again, if any of you would like to receive the QRP xmtr circuits I've
been posting, email me and I'll shoot them out to you (the response
has been huge).

72 (the QRPers version of 73),

Jeffrey NH6IL jherman@hawaii.edu

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.

1040. Re: Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 01:36:27 UTC
From: sww@csuohio.edu
Message-ID: <1994Feb3.013627.13063@news.csuohio.edu>
Source record: 271589

There was a comment that "all you people better stay home". A bunch
of offshore folks are. They have no intention of either driving in Ohio
(hi hi) or placing their welfare in the hands of another ham they do not
know well.
73,
Steve
NO8M.#NEOH.OH.USA.NA

1041. ARRL Letter Jan 26, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 03:16:34 UTC
From: marcbg@netcom.com
Message-ID: <$arll0126.1994@ampr.org>
Source record: 271590
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

The ARRL Letter Vol. 13, No. 2 January 26, 1994
Appeals court sides with amateur; tower victory reinforces PRB-1;
A federal appeals court in Minnesota has found in favor of an amateur and against a local municipality, the latest round in a three-year battle. The decision could affect how PRB-1, the federal declaration preempting local regulations, may be applied in the future.
Sylvia Pentel, N0MRW, applied in January 1991 for a zoning variance for a 68-foot crank-up tower from the city of Mendota Heights. At the time, she was using a roofmounted vertical which, she was unaware, violated the city's zoning rules (since it was taller than 25 feet). The city denied her application for a tower but granted a special-use permit to allow her to keep the vertical.
Pentel sued the city in US district court, saying that its ordinance was preempted by PRB-1, which recognizes the needs of both municipalities and amateurs, and which requires a "reasonable accommodation" of the needs of amateurs. The district court found in favor of the city, and Pentel appealed.
In overturning the lower court's decision, the US Court of Appeals for the 8th Circuit said that the FCC in PRB-1 "was attempting to strike a balance" between the interests of municipalities and amateurs, and exhorted Pentel and the city to work together to "arrive at a satisfactory solution."
The court of appeals said that its decision does not mean that the city must necessarily grant Pentel's tower application as it stands, but rather that the city must make a reasonable accommodation for her interests. The court said that granting a special-use permit for Pentel's vertical was not an accommodation "in any practical sense" because the record showed it was inadequate for her purposes.
Pentel's lawyer, John B. (Jay) Bellows Jr, K0QBE, said the importance of this decision lies in the court's shifting the burden away from the amateur and more toward the municipality.
"PRB-1 really is not about 'balancing'" Bellows said, "and this decision recognized that.
"I was particularly impressed with the appeals court's grasp of the overall subject," Bellows said.
The court said the distinction between balancing a municipality's and an amateur's interests, on the one hand, and accommodating an amateur's interests "is important, because a standard that requires a city to accommodate amateur communications in a reasonable fashion is certainly more rigorous than one that simply requires a city to balance local and federal interests when deciding whether to permit a radio antenna."
Bellows has previously appeared with amateurs at town council meetings and helped with the drafting of several local antenna

ordinances. He appeared with Pentel before both the Mendota Heights planning commission and the city council in her quest for a permit. Bellows was assisted by an ARRL amicus curiae brief filed by General Counsel Chris Imlay, N3AKD. Imlay also provided advice on strategy in the case.

"You never know how a court is going to be swayed by a friend of the court brief," Bellows said. "In this case," the League's participation did show that there was a national interest in such a matter, and demonstrated that the decision of the court could have wide-ranging effects."

Does public service work

Sylvia Pentel, an amateur since 1988, is primarily interested in public service communication. She is National Communications Officer for the Emergency Medical Preparedness Office of the National Disaster Medical Service.

She first became involved in public service communication after the Loma Prieta (California) earthquake in October 1989. Her local work, on VHF and UHF, expanded to the HF amateur bands, and she originally sought to replace her vertical with a beam following the earthquake.

"I especially wanted better HF coverage during the Desert Shield buildup to the Persian Gulf War," she said, but the town denied her permit at that time.

Pentel has an illustrious Amateur Radio legacy. Her father was Maurice Goldberg, 9APW and later 9ZG, a radio pioneer and early ARRL official in his division. His name appears over several technical articles in 1920s QSTs.

Goldberg, who died in 1977, did not live to see his daughter become a licensed amateur, but he did lay the groundwork. "Dad tried to teach me CW when I was far too young," Pentel said. "I thought it was a family thing, the 'Maurice code.'"

Pentel said getting a permit for her tower has "been a long, frustrating haul. I should have just gone ahead and put it up, considering there are several other amateur towers in town.

"Instead, I did the 'right thing,'" she said. "I got the ARRL package of materials and made a comprehensive application to the town, with engineering drawings and so on."

After getting favorable signatures from nine neighbors, Pentel ran into trouble when a couple of neighbors "began stirring things up at the hearings," she said.

But she is not to be deterred.

Her lawyer, Bellows, said the next step is to sit down with the the town fathers and "talk about accommodation."

League testifies at New Jersey RF hearing

ARRL General Counsel Chris Imlay, N3AKD, and Northern New Jersey Section Manager Rich Moseson, NW2L, have led a delegation of hams in testifying against a proposed New Jersey state regulation which, they argued, could effectively shut down Amateur Radio in the state.

The regulation, proposed by the state Department of Environmental Protection and Energy (DEPE) would require the owners of all fixed-station transmitting antennas and certain RF-generating industrial equipment to register with the state and pay a hefty annual fee. The fees

would pay for state inspections -- once every ten years -- to determine whether each RF source is in compliance with state limits for exposure to non-ionizing RF radiation. (The state limits are the same ones specified by ANSI - the American National Standards Institute - in their 1984 standards.)

The summary that was issued along with the proposed regulation stated that amateurs would be exempted "at this time," but there was no specific exemption in the regulation itself. And the department specifically invited comments on whether hams should be subject to the inspection program in the future.

The appearance by Imlay, Moseson, and about 10 other hams at a public hearing on January 11 in New Jersey's capital capped two weeks of intense efforts to spread the word about the proposal and to organize the ARRL response.

The proposal first surfaced the week before Christmas. As details emerged, it became obvious that the proposal posed a major threat to all ham radio activities in New Jersey. ARRL Hudson Division Director Steve Mendelsohn, WA2DHF, along with Moseson, asked ARRL President George Wilson III, W4OYI, to authorize Imlay's testimony at the DEPE hearing. Wilson agreed, noting the gravity of the threat to hams in New Jersey, plus the likelihood that, if the measure was enacted, other states might follow New Jersey's lead.

Some 50 people attended the hearing and about 20 testified, half of those being amateurs (although some hams appeared in their professional capacities). All of the speakers opposed the proposal, generally arguing that the state was duplicating FCC regulations and that those FCC rules already assured that workers and the public were protected from excessive RF radiation. They saw the fees as nothing more than a new tax on the businesses and people of New Jersey.

The first ham to testify was leadoff witness Vivian Lopez, N2NZN, a lawyer familiar with the state regulatory process. She challenged the DEPE's authority to enact the regulations at all, charging that the law under which they were proposed had been written to deal with threats from nuclear radiation, not RF.

"If the department seeks to stretch that authority as a basis for regulating whole industries," Lopez testified, "then the enabling legislation ought to first be amended to specifically grant that power."

Imlay and Moseson appeared on behalf of the ARRL. In his testimony, Imlay cited numerous court decisions, dating back to 1927, giving the federal government "exclusive" and "expansive" authority to regulate radio and TV. He also noted that the FCC had categorically exempted amateurs from routine reporting on compliance with RF exposure standards, and that RF safety questions are included on amateur license exams.

Moseson testified as to the likely impact of the regulation on Amateur Radio in New Jersey, explaining that annual fees of $1000 or more for a typical station would simply force most hams off the air. Without ham radio, he said, the state would lose a vital emergency communications resource as well as endanger millions of dollars in federal emergency management aid, since backup communications abilities would be lost.

Measurements difficult

Moseson also explained the difficulty of taking measurements at a typical ham station, which can operate on many frequencies with infinitely variable power levels and radiation patterns, as well as the stifling effect that the regulation would have on station changes and experimentation.

Finally, the ARRL representatives reminded the department that FCC rules limit state and local regulation of amateur antennas to the "minimum practicable" extent required to achieve their purposes, and that those regulations may not preclude amateur communication. Applying the proposed regulation to hams, the League argued, would effectively preclude amateur communication and would therefore be in violation of FCC rules.

The League's testimony concluded with a request that, if the department decides to enact the regulation, then, at the very least, it should specifically exempt any RF source that is "a component of a federally licensed station in the Amateur Radio Service," as defined by FCC rules.

There also was testimony from representatives of broadcasters, telephone companies, land-mobile users and municipal government. One municipal spokesman was Bill Sohl, President of the Mt. Olive, New Jersey, town council (as well as being K2UNK and an ARRL Local Government Liaison). He told the panel that, if his town applied the reasoning behind the proposed regulation to its police department, then each motorist in the town would have to register and pay a fee to the town to cover expenses in case the motorist violated a traffic law and a police officer needed to take time to write a ticket.

At the end of the hearing, department officials gave no indication of how they might respond to the criticisms leveled at the proposal. At the request of several witnesses, however, they did extend the deadline for written comments from January 20 to February 22. A final decision on the proposal must be made by December 6, 1994.

One week after the hearing, a new governor took office and appointed as DEPE commissioner a state legislator with a reputation for trying to accommodate business as well as environmental concerns. Moseson said he and others plan to work with the new state leadership.

(This story was reported by ARRL Northern New Jersey Section Manager Rich Moseson, NW2L.)

League seeks primary 902-MHz slots

The ARRL has petitioned the FCC to provide the amateur service with primary allocations from 902 to 904 MHz and from 912 to 918 MHz, with certain geographic limitations.

Amateurs already are allocated from 902 to 928 MHz on a shared basis with several other services, including government radio-location; fixed and mobile services; industrial, scientific and medical (ISM) equipment; and various nonlicensed, low-power, "Part 15" devices.

Last spring, the FCC proposed to expand Automatic Vehicle Monitoring (AVM) systems in the 902 to 928 MHz range, and also has suggested permitting non-government wind profiler systems in the band. In June 1993 the ARRL said that further study of the band was needed.

In its January 13, 1994, petition, the ARRL said that these FCC

proposals jeopardize Amateur Radio use of 902 to 904 and 912 to 918 MHz, segments that the League said have not interfered with AVM systems and which are critical to the development and continuation of specialized communication techniques by amateurs.
The ARRL petition said that since the 902 to 928 MHz band was made available to amateurs in most of the US in 1985, its use has grown, particularly for weak-signal work and television; the two primary segments sought by the League would be aimed at those users.
The League mentioned, again, that two current Commission agenda items -- the first an inquiry into placing non-government wind profilers on the band (in Docket 93-59), and the second, a proposal to expand AVM systems in the band -- were a departure from the US position at the 1979 World Administrative Radio Conference, at which amateur access to the band was first addressed.
The League said that the adoption of the requested primary segments for amateurs would not "prejudice" the development of AVM systems or wind profilers.
The ARRL petition said that the FCC had considered the availability of 902 to 928 MHz to amateurs in its decision to take 220 to 222 MHz away from them.
And the League said since amateurs now rely more and more on the 902-MHz band, a significant reduction of its usefulness would "constitute a breach of the Commission's previous assurances" of continued availability.
The League cited as an example the Los Angeles area, where a local band plan works around AVM operations. Use of the 902 to 903 MHz segment is "heavy," the League said, with not only weak-signal operation there, but point-to-point links and repeater inputs as well. Similarly, 912 to 918 MHz is heavily used, the League said, for digital wideband, ATV simplex, and ATV repeater operation.
This local band plan is an example of the sharing arrangements necessary in a crowded RF environment, the League said, and it points up the need for the primary amateur allocations being sought.
The exceptions to the primary allocations for amateurs that the League seeks in its petition would be restrictions in certain parts of Texas and New Mexico, where such restrictions already are in effect to protect government operations.
ARRL Board of Directors meeting highlights
The ARRL Board of Directors met in Rocky Hill, Connecticut, on January 21 and 22, 1994. The following is a summary of meeting highlights. Details will appear in March QST.
* The Board re-elected its present slate of officers: President George Wilson III, W4OYI; First Vice President Rod Stafford, KB6ZV; Vice President Jay Holladay, W6EJJ; Vice President Tom Frenaye, K1KI; International Affairs Vice President Larry Price, W4RA; Treasurer Jim McCobb, K1LLU; Secretary and Executive Vice President David Sumner, K1ZZ; and Chief Financial Officer Barry Shelley.
* Elected to the Executive Committee were Rocky Mountain Division Director Marshall Quiat, AG0X; Hudson Division Director Stephen Mendelsohn, WA2DHF; Delta Division Director Joel Harrison, WB5IGF; and Great Lakes Division Director Al Severson, AB8P.

* An interim report and band plan recommendation of an ad hoc committee was adopted, looking to the early implementation of the expected allocation of 219 to 220 MHz for limited amateur use.
* The 1994-95 ARRL budget plan was adopted.
* The Volunteer Resources Committee was tasked with studying the feasibility of a system of technical awards to recognize achievement in fields ranging from design and construction to the creation of innovative communication systems, and to develop appropriate criteria.
* The League will file a petition for rule-making seeking to remove overly restrictive rule provisions concerning the use of spread spectrum techniques, and an ad hoc committee was created to recommend technical standards.
* The Membership Services Committee will study the possibility of relocating the
40-meter Novice subband. The committee will report back to the Board in July.
* The Board approved a revision of the ARRL/Red Cross Statement of Understanding.
* ARRL Headquarters will begin to notify members of license expirations, and will include a Form 610 to effect license renewals.
* The Administration and Finance Committee will study the feasibility of offering group legal defense insurance to ARRL members to cover legal costs in antenna cases and RFI lawsuits.
* The ARRL Letter will be offered to affiliated club newsletter editors free of charge, on a trial basis.
* The Administration and Finance Committee was asked to investigate the development of a multi-media production capability for Headquarters, to keep pace with the changing technology in today's personal computing revolution.
* Perry Williams, W1UED, was commended for 40 years of dedicated service and congratulated on the occasion of his forthcoming retirement from the Headquarters staff, in April 1994.
BRIEFS
* Beginning March 1 the FCC will accept only the new version of its Form 610, as explained in February QST (page 103). March QST "Exam Info" reprints the new form and will have further information on its use. Use of the new form applies to everyone, from new licensees to renewals, call sign changes, etc.
In early February the ARRL-VEC's newsletter, VE Express, will include a full-size version of the new Form 610. The ARRL-VEC also will mail bulk quantities of the new form to all of its 650-plus "field stocked" VE teams. The ARRL-VEC will recommend that its VE teams begin using the new form on February 12, to allow for sufficient turnaround time.
* In 1993 ARRL members sent about 7.25 tons of QSLs to the ARRL Outgoing QSL Service for shipment to bureaus overseas. This was 2,182,000 cards for DX destinations. The US Incoming QSL Bureau's volunteers sorted just over two million cards in 1993, as well.
Information about these services is on pages 98 and 99 of QST for January 1994.
* Tucson Amateur Packet Radio has scheduled its annual meeting for

March 4 through 6 in Tucson at the Best Western Inn at the Airport. The annual meeting will feature presentations and papers on several new hardware projects, discussions of projects in progress, hands-on demonstrations, and a minisymposium on the future directions of amateur packet radio. For more information contact Program Chairman Keith Justice, KF7TP, at 602-461-8687.
And TAPR has a new address: 8987-309 East Tanque Verde Road, No. 337, Tucson AZ 85749. Their voice mail system number is 817-383-0000; the fax number is 817-566-2544.
* Shack in the USSR: Tandy Corp. has opened its first Radio Shack in Russia. The Moscow store, which officially opened January 14, is "identical in look and layout" to stores in the US, according to Tandy. The store is franchised to the Trident Group, a Florida-based international distribution company, and is managed by Trident A/O, a Russian company.
* The American Digital Radio Society has acquired the RTTY Digital Journal, and will retain Dale Sinner, W6IWO, as its editor. For more information on the ADRS and a copy of its newsletter, write to ADRS, Box 2465, New York NY 10185 (BBS at 212-698-2102).
* Fred Doob, AA8FQ, will once again run, for ICOM and charity, in the Los Angeles Marathon on March 6. As in the New York Marathon last November, Doob will operastore, with his son Don Busick, K5AAD, until his death.
* Two more shuttle astronauts have received their amateur call signs: Charles Bolden is KE4IQB, and Ronald Sega is KC5ETH. Both are members of the STS-60 crew, scheduled for a February 3 lift-off, and are Technician class licensees. Russian cosmonaut Sergei Krikalev, U5MIR, is also an STS-60 crew member.
* NASA Television has moved to satellite Spacenet 2, transponder 5, C Band, 69 degrees west longitude, on 3880 MHz, horizontal polarization, with audio on 6.8 MHz. During space shuttle flights NASA Select TV occasionally carries Shuttle Amateur Radio Experiment (SAREX) activity.
* The Foundation for Amateur Radio will administer 49 scholarships for the 1994-95 academic year to assist licensed amateurs who are students. The awards, from $500 to $2000, are available to full-time college students, including those who have been accepted for 1994. Additional information and application forms should be requested before April 30, 1994, from FAR Scholarships, 6903 Rhode Island Ave., College Park MD 20740.
* In the days following the earthquake near Los Angeles on January 17 you may have heard or read about an experimenter named Jack Coles, of San Jose, California. Coles listens to the 10 to 12 kHz range for 0.5 to 2 second pulses and is one of a group of experimenters who think this may be a way to predict earthquakes. Coles says he's always been interested in radio and is currently studying for an amateur ticket.
10 Years Ago in The ARRL Letter
The ARRL Executive Committee authorized the League's counsel, Chris Imlay, N3AKD, to file friend of the court briefs in two local cases involving Amateur Radio. One of them, involving John Thernes, WM4T, was ultimately successful, and has been cited in later cases, including

Pentel v. Mendota Heights (see accompanying story).
The first Shuttle Amateur Radio Experiment (SAREX) video was unveiled, produced by Roy Neal, K6DUE. The 28minute film featured the first SAREX flight, of W5LFL on STS-9. This film was superseded by one titled "SAREX," a general-interest film that the ARRL still widely circulates to clubs, and another, "Ham Radio in Space," which concentrates on how schools can use the SAREX program.
The League was meeting informally with the FCC to promote Amateur Radio third-party message service at the Olympic Games that summer in Los Angeles, although it was unclear if security concerns would allow stations to be set up in the Olympic Village.
ARRL membership rose in 1983 from 124,000 to 126,000, a 1.6% increase, after a 12.5 percent decline in 1982 following a dues increase. (League membership growth in the US for 1993 was 2.05 %).

--
Marc B. Grant fax 214-231-3998 voice 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com Richardson, TX

1042. TS850 & PK-232MBX

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 03:31:00 UTC
From: COLERK%snypotvx.BITNET@CUNYVM.CUNY.EDU
Message-ID: <A3B3402D202058D0@snypotvx.bitnet>
Source record: 271591

Well I've tried just about everything I can think of...I'm attempting to use the PK-232 with my TS-850.....problem is an awfull lot of rf getting back into the Kenwood. I've tried shielded cable, additional grounding straps between both units, shorter lengths of cable - no luck. Anyone have a clue as to how to eliminate the unwanted rf? Seems I might of saw a posting here addressing this very problem but not sure. Thanks in advance for any replies, 73...Roger/N5IFH.

1043. FTP site with Mods!!! et al.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 04:12:26 UTC
From: segigot@students.wisc.EDU
Message-ID: <199402030412.WAA09375@audumla.students.wisc.edu>
Source record: 271593

My modem isn't working, but I have seen that people are looking for a FTP site with mods. Well, the other nite my friend and I were playing with his modem and I found a whole bunch of mods at:

garfield.catt.ncsu.edu
in
pub\???
I forget the directory; it was a while ago. There were probably plans for 40 or so radios; once again I'm not sure. Only word of caution: they only allow 10 anonymous users, so you might have fun trying to get in.

Point 2: the other night I was scanning with my 2m HT and on 145.990 I heard some squawking and beeping, as well as VV7VW, in British Columbia. I am in Madison, WI, and that's true VHF DX if I ever heard it. Granted, the band was up, but I'm still wondering...is that a satellite frequency?

Point 3: I got my radio late in December, and brought it home from school with me to Green Bay, WI. I noticed that I always got a static signal on 146.760. There is a repeater on that freq in Appleton, 30 miles away, but that wasn't the source because I could key that repeater up while the static was being recieved. I noticed the same problem in Madison, where I go to the UW. There is a repeater on 146.760 here, too, and I can use it. Is this chronic interference unique to my radio, or is the HTX-202 susceptible to QRM on this freq?

Point 4: (I said it was an FTP site, et al.) There will be a Hamfest/VE test session in Green Bay, WI on February 20. It will be at Ashwaubenon High School, from 8:00 am until the middle of the afternoon. Admission is $3 at the door. Proceeds go to help the AHSTC put up their new 2m repeater on 147.075 +, P/L 107.2. Talk-in will be on the 147.075, and if that's not up it will be on 147.270 + P/L 107.2 and 146.520 simplex.

For more information email:
segigot@students.wisc.edu

or call Chad Stiles N9PAY at:
(414)-494-2936

Thanks for hearing me.

Scott Gigot N9VOM
segigot@students.wisc.edu

1044. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 04:33:53 UTC
From: ab510@FreeNet.Carleton.CA
Message-ID: <CKMsoH.GvC@freenet.carleton.ca>
Source record: 271594

In a previous article, engberg@edfue0.ctis.af.mil (Bob Engberg) says:

>And don't forget:
>
>I0BOY Michael Jackson
>
>--
How about A1FAG ?

>
>

--
GEORGE ATTALLAH - VE3KIA -OTTAWA CANADA
"THE LAST SURVIVOR OF THE GROUP OF ONE"
"THE ONLY ONE IN CAPTIVITY"

1045. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 05:37:43 UTC
From: myers@cypress.West.Sun.COM
Message-ID: <2iq2j7INNb87@abyss.West.Sun.COM>
Source record: 271595

In article jjc@unbc.edu, lyndon@unbc.edu (Lyndon Nerenberg) writes:
>myers@sunspot.West.Sun.COM (Dana Myers) writes:
>> I had the experience of tinkering
>>with well-built, high-performance radios. An FX-440, for example,
>>is de-sensed by anything transmitting below 440MHz.
>
>I too have a pile of modified commercial gear that I use. I can tell you
>horror stories about some of *those* rigs, too. As for desense on the
>FX-440, can't that be solved with an outboard bandpass filter?

I'm curious about your horror stories on modified commercial gear. People frequently use the term "convert" or "modify" when talking about commercial land-mobile gear and ham radio. Now, I know someone who moved a VHF-High Band GE Mastr Exec II to 220Mhz, _that_ required modification. However, I've never had to actually modify any radios like that. I try to buy the radios on the correct split, and then put them on frequency using the tuning instructions in the service manual.

Of the radios I've tinkered with, all of the land-mobile gear was extremely good. If someone dinks heavily with the radio, sure, it may not work well, but I've never had to dink heavily with one. The closest I may have come was swapping the capacitors in a Micor VHF High-band exciter to make it a low-split exciter, but that used standard values from the service manual and works like a charm.

Try sharing your horror stories where you tuned and operated land-mobile gear in accordance with the service manual...

>>Well, I've pointed out three radios that are far superior to the
>>Ramsey FX-146, and I bought all of them for under the cost of one
>>Ramsey FX-146 and cabinet.
>
>Yup, me too. Sometimes, though, it's tough to find surplus commercial
>gear. And some of that gear requires a microscope and tweezers to work
>on. In both cases, the FX kits are a viable alternative.

Hmmm... not even my MCX100s require microscopes and tweezers. As for availability, call John Lansdale and ask for his price sheet. He sells VHF Lo-band (for 6m) Micors, complete with control group, for $75+shipping.

>>The method to generate useful SS is either by DDS frequency hopping
>>or I/Q modulated carrier. PLL approach to SS is doomed to relatively
>>few hops/second and/or considerable "bounce" in the desired frequency.
>
>Who said anything about *useful* ? I said I want to *experiment*. Maybe
>I want to find these things out myself? If I wanted commercial grade SS

>I'd buy a pair of WaveLAN boards.

Well, you did say you wanted to experiment with SS. I _assumed_ you meant
actual, working SS. If you just want to generate a bunch of RF noise, have fun.
Somehow the response "who said anything about *useful* ?" took a chunk out of
your technical credibility. I guess we're in a flame war :-).

How about actually building a working SS link? How about looking at the
body of published material on such technology? Am I sensing just a tad
of NIH (Not-Invented-Here) attitude?

>>>It's a shame that the Amateur Experimental Service has turned into the
>>>Amateur Appliance Service.
>
>>It is a shame amateurs won't take advantage of readily available
>>high-quality surplus to use as a platform for experimentation and spend
>>considerable effort defending junk radios that don't even come up to the
>>performance standards of a Part 15 cordlesst telephone. :-)
>
>Ya, but you just backed up my point - it's not an experimental service
>any more...

Can you take a moment and explain how I've backed your point up? If
you think that repeating ancient expirements to verify that they indeed
fail is advancing the state of the radio art, I guess I'm backing up your
point. If you think taking a DDS synthesizer and integrating into a
UHF Micor to experiment with SS is operating an appliance, then, yes,
I'm backing up your point.

Buying some box of parts, soldering it together and asking for a radio
check on the local repeater is awfully close to appliance operating,
don't you think?

---
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1046. Daily Summary of Solar Geophysical Activity for 02 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 05:43:21 UTC
From: oler@rho.uleth.ca
Message-ID: <9402030543.AA12277@rho.uleth.ca>
Source record: 271596
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

02 FEBRUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 033, 02/02/94
10.7 FLUX=096.3 90-AVG=106 SSN=052 BKI=1334 3311 BAI=012
BGND-XRAY=A9.7 FLU1=3.8E+05 FLU10=1.1E+04 PKI=1234 5321 PAI=015
BOU-DEV=000,020,013,060,035,023,008,008 DEV-AVG=020 NT SWF=00:000
XRAY-MAX= B4.1 @ 1937UT XRAY-MIN= A9.1 @ 1611UT XRAY-AVG= B1.2
NEUTN-MAX= +001% @ 1425UT NEUTN-MIN= -003% @ 2355UT NEUTN-AVG= -0.5%
PCA-MAX= +0.4DB @ 1000UT PCA-MIN= -0.3DB @ 0605UT PCA-AVG= -0.0DB
BOUTF-MAX=55349NT @ 0609UT BOUTF-MIN=55325NT @ 1223UT BOUTF-AVG=55338NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+062,+000,+000
GOES6-MAX=P:+107NT@ 1819UT GOES6-MIN=N:-061NT@ 0658UT G6-AVG=+086,+030,-028
FLUXFCST=STD:100,100,100;SESC:100,100,100 BAI/PAI-FCST=010,005,005/012,008,008
KFCST=1113 3111 1112 2111 27DAY-AP=011,006 27DAY-KP=3333 3312 1113 3121
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 01 FEB 94 was 50.0.
The Full Kp Indices for 01 FEB 94 are: 2- 1- 2o 3- 2+ 1o 1o 1-
The 3-Hr Ap Indices for 01 FEB 94 are: 6 3 8 13 10 4 4 3

SYNOPSIS OF ACT

Solar activity was very low. No flares were observed
during the period. A new, small, but bright region was rotating
into view at N17E70 near day's end.

Solar activity forecast: solar activity is expected to be
very low.

The geomagnetic field was mostly quiet to unsettled. A
period of active conditions at mid-latitudes and minor to major
storm conditions at high latitudes was observed form 0900Z to
1500Z. The increase may be related to a small coronal hole

which was in a favorable position.

Geophysical activity forecast: the geomagnetic field is
expected to be mostly quiet to unsettled for the next three
days.

Event probabilities 03 feb-05 feb

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 03 feb-05 feb

A. Middle Latitudes
Active 10/10/10
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 10/10/10
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

HF propagation conditions were normal over all regions.
Similar conditions are expected over the next 72 hours, through
05 February inclusive.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

LISTING OF SOLAR ENERGETIC EVENTS FOR 02 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 02 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 02/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
01 Feb: 1505 1508 1512 B1.6

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 001 (100.0)

Total Events: 001 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1047. Re: ANARTS RTTY NEWS BULLETIN 792 16/01/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 08:19:15 UTC
From: rogerb@eiffel.demon.co.uk
Message-ID: <760263555snz@eiffel.demon.co.uk>
Source record: 271597
Cross-posted to: aus.radio,rec.radio.amateur.misc

In article <1994Jan31.064521.3076@fawlty.towers.oz.au>
steve@fawlty.towers.oz.au "Steve Blanche" writes:

> > Amateur Radio Teletype : By FRANK VK2FJL.
> > ...
> > For instance - it is known that at least four
> > different keyboard layouts using different keys for the upper
> > case or upshift characters are in use by Amateur RTTY
> > stations ...

> Seems like an awful lot of bother, why not scrap the old metal
> monster and run a protocol that supports the ASCII subset, such
> as the many packet protocols in use, even PACTOR probably works.

Around 1980 I was a student at UNSW. One of the UNSWARS members had
gained access to computer time on a PDP-11, and the necessary interfaces
to make a RTTY repeater. We applied to the WIA for repeater approval,
including a document which explained all about the ASCII code.
We were refused permission for any kind of repeater running ASCII. The
official response was simply "NO", the rumour was that WIA disposals
had a lot of metal monsters that they still wanted to get rid of.
I suspect the actual reason was just that those in control didn't want
to see anyone doing anything different or innovative.

Roger
(ex-VK2BEQ)
--
-- Roger Browne, 6 Bambers Walk, Wesham, PR4 3DG, UK | Ph 0772-687525
-- Everything Eiffel: compilers/libraries/publications | +44-772-687525

1048. Re: call book typo... sorry

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 08:27:50 UTC
From: cfm1471@ucs.usl.edu
Message-ID: <1994Feb3.082750.23616@usl.edu>
Source record: 271598

>I made a mistake on my end here, BAD typo! The correct address should be:
>
>cs.buffalo.edu 2000 or 128.205.32.2
>
>again, the word 'callsign' was not needed here. sorry for the trouble.
>
> 73 to all - shawn

Try pc.usl.edu 2000.

Charlie

1049. 28 MHz beacons

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 11:24:04 UTC
From: poa01@keele.ac.uk
Message-ID: <2iqmsk$2og@gabriel.keele.ac.uk>
Source record: 271601

Can anyone confirm from recent reception whether any of
the following 10-metre beacons is currently operational?

28237 NV6A San Diego CA
28257 KM4Y Hollywood FL
28257 WB4JHS Kissimmee FL
28268 KB4UPI Birmingham AL
28275 K4VXP Campbellsville KY
28281 VE1MUF Keswick NB
28289 WJ5O Corpus Christi TX
28292 W3RGQ Berwick PA

Information required to update HF beacon list, shortly
to be available by ftp.

Replies, please, through this group or e-mail poa01@keele.ac.uk.

Martin G3USF IARU HF beacon coordinator

1050. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 12:21:00 UTC
From: elendir@enst.fr
Message-ID: <2iqq7c$ht5@cismsun.univ-lyon1.fr>
Source record: 271602

Okay, thanks a lot to everybody. I guess I'll try to set up a practice.
Wouldn't be easy though.

Hopefully for me, the French exam for the "Full license" (Class E) is only
10 wpm.

Thanks again.

Vince.

1051. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 12:30:44 UTC
From: rich@mulvey.com
Message-ID: <1994Feb3.123044.10848@mulvey.com>
Source record: 271603
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

James Biehn (jbiehn@i-link.com) wrote:
: rich@mulvey.com wrote:
: : James Biehn (jbiehn@i-link.com) wrote:
: : : Jerry Sy (ah301@yfn.ysu.edu) wrote:
: : : : I have pretty much narrowed down my choice to these two 2m ht's.

: : : : I'd like to get comments and opinions from people in the net who
: : : : have actually used both.

: : : : currently, I am leaning towards the dj-162 because of its wide
: : : : receive.

: : : : please email responses if possible.
: : : : thanks in advance.

: : : : jerry
: : : Jerry, I myself have used both and found the DJ-162 all around better in
: : : its operations as well as its structure. The HTX-202 has no Mod info and
: : : is virtually an unknown radio internally. Maybe time will change that, but
: : : meantime technology moves on.

: : So you're saying that you *LIKE* intermod?

: : :-)

: Rich, the problem is that todays HAM is a buyer not a builder. Thae
: closest thing to this now days is a loose radio and a reliable set of
: mods. Is this truly HAM radio, that is the true question.

Well, personally, I don't considering building to be a necessary
part of amateur radio, even though I enjoy it a great deal. Heck,
whatever it takes to enjoy the hobby, even if it's just walking
into a store and pointing to a rig, is just fine. However, I'm just
astounded at the way that people will purchase low-performance
equipment at a high price, just because they think that a clock, 99
memories, and the ability to listen to the local airport are
reasonable items to add to a HT. I mean, come on, what's the point of
all the toys when you can't use any of them whenever you come in the
range of a paging tower? Meanwhile, those of us with the inexpensive,
less glamourous rigs will still be happily chatting or packeting
away without a care in the world. :-)

- RIch
--
Rich Mulvey Amateur Radio: N2VDS Rochester, NY
rich@mulvey.com "Full power on half a watt."

1052. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 12:55:40 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-030294075300@136.141.220.39>
Source record: 271604

In article <2ip1ip$15s@cismsun.univ-lyon1.fr>, elendir@enst.fr (Elendir) wrote:

> I am learning the morse code, and occasionaly I try accelerated rates
> (15 wpm, e.g). And while I can get many letters, I find it impossible to
> write them down. So this is my question :
> How can you achieve at the same time listening and writing of the letters
> at such speeds ? That seems a mistery to me.

Practice!

Actually, that was how I learned Morse...listen to fast transmissions, write down as much as I could, and look for a pattern of letters I was missing. Then I'd concentrate on those for a while. Pretty soon I was getting them all, and at 15 wpm or so. I ran into another writing block at about 25-30 wpm that I've never overcome. I can listen and comprehend at 35 - 40, but can't get it down on paper much beyond 25.

Hang in there-you'll get it with persistence.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1053. Re: BEGINNER! - Advice on Radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 12:58:25 UTC
From: dino@CAM.ORG
Message-ID: <2iqsdh$f0u@altitude.HIP.CAM.ORG>
Source record: 271605

"F. Clayton Rote" <p00936@psilink.com> writes:

>Hi all:

>I have decided to dip my toe into the HAM radio hobby. I have a
>general idea of what I want but I want to make sure it is possible and
>that I purchase the correct equipment. I thought I would put the
>features I am looking for in a message and solicit any feedback.

Well the features you listed are all very popular, but the point that I think you need to consider the most is the ruggedness of a portable. I have have a dozen HT since my carreer began and you can have the nicest radio with all the bell and whistles you want but if it breaks the first time you carry it then it is of no use to you. Also remeber that HTs are Hts and if you plan using it for all around talking from your home and work place and car, you will soon find out that irtt is a pain to carry cables and amplifier, speaker mikes and spare batteries.

Mobile are nice. I have both and I used to carry my HT everywhere, but found after a year or so that I really didnt use it that much. As a result I still have 2 hts, one on 220 Mhz and a dual band IC32At and I have had a smallest ones too, but if I have to take care of a radio like a human baby then, I find it a drag anyhow its your call but it pays to consider it along with all the features you are looking for.

good luck, Dino VE2DM dino.cam.org

1054. Re: Boring WWV Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 13:40:02 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1994Feb3.134002.18315@rsg1.er.usgs.gov>
Source record: 271606

We have an NBS time clock tuned to WWVB (or is it L?) which we use to calculate delta time adjustments to onboard satellite clocks when acquiring data from the NOAA satellites. This particular box even has an adjustment to allow for propogation delay - so the resulting time is accurate to at least a millisecond. It has a nice display on it too, which we use to set our watches!

We once had someone tell us that our NBS clock was off. They knew this because they set their time to their favorite AM station and they're always right...

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

1055. Field Day Logging Program

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 13:55:40 UTC
From: jennings@eng115.rochny.USpra.abb.COM
Message-ID: <9402031354.AA23136@nms1.abb.com>
Source record: 271607

Hello,

Well it's time to start planning for Field Day. It's my job
to find a good logging program. So I am looking for suggestions
and opinions and will summarize the responses in case anyone else
is doing the same.
Please e-mail direct to me.

Thanks and 73

Tom, kv2x

--

|
Thomas J. Jennings | Tel: (716) 273 7071
Development Engineer | Fax: (716) 273 7262
|
ABB Process Automation |
Post Office Box 22685 |
Rochester, New York 14692-2685 |
|

Internet: jennings@jennings.rochny.uspra.abb.com

1056. Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 13:56:18 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199402031424.GAA14139@ucsd.edu>
Source record: 271608

>They're going to use the money saved to print up nice award certificates
>for all the hams who earn WAS while trapped in the traffic jam. :-)

yeah, but Gary, the Dayton guys always seemed to have trouble getting organized on mass transit. maybe they should 'qsy' to some place that can handle large crowds routinely -- say Orlando....not that the OARC would approve...8)

of course, maybe we should just get everyone organized to park at the mall -- "economic turmoil reigns! Salem Mall closed by invading hordes of radio hams...McDonalds makes emergency deliveries to restaurant after the entire food supplies were consumed by the horde..Noble Romans reported improved sales reached 'sluggish' levels over the weekend..residents report lamps glowing with power turned off, wavy lines on their TVs and strange thumping out of stereo and radio speakers..young children frightened..strange vehicles roaming the streets -- could they be operators of cat detector vans? are your cat licenses up to date? is it the end of the world? is Elvis there?"

maybe the hamfest should be at the mall...any old NCR warehouses unused? and has anyone found a use for the old Western Electric plant in Indianapolis? That place even has a very large parking lot AND a huge amount of space under cover and an International Airport that's on an Interstate and easy to get in and out of (unless Dayton's changed a bunch..)

maybe dayton needs another big event around september/october so having a large parking area at the Hara Arena would be more practical -- maybe the arena could be leased out to the Tonya Harding Physical Therapy Center for Injured Skaters.

Dayton may have had the "natural" for a large convention and has certainly worked to get this spot as the "big one", but maybe it's ripe for plucking given the constraints forced upon them by the area.

bill wb9ivr

1057. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 14:13:27 UTC
From: greg@netcom.com
Message-ID: <gregCKnJIF.LGx@netcom.com>
Source record: 271609

In article <01H8EZGJ1SCIDU7RYC@tntech.edu> JMG@tntech.edu (JEFF M. GOLD) writes:

>For normal contacts QRP is just ham radio with less watts.
>
>but... don't find it that much of a difficulty or hardship.. OHHHHH
>think I will be shot for giving away well kept secrets.

No truer words were ever said.

Jeff's posting reflects my experience, too.

All this stuff about 'the antenna is the key to QRP' and 'don't try
it for your first rig' are really over-statements. Yes, when I took
my Argonaut to the local high-school and put it on their quad at
50 feet, I felt like a big-gun. But I made plenty of contacts on
my mediocre antenna, too.

If you're not getting contacts with five watts, something is wrong
which would really hurt you at 100 watts. Operating technique,
feed-line, band-choice, something.

Correct that, and you'll be back in business.

After all, it's only two S-units, maybe three. On CW that hardly matters,
unless you're 'way down already.

It works, really it does. (They'll never believe us, will they, Jeff?)

Greg

1058. Re: CQ NR

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 14:23:26 UTC
From: greg@netcom.com
Message-ID: <gregCKnJz2.M9y@netcom.com>
Source record: 271610

In article <121020035@hpldsla.sid.hp.com> brunob@hpldsla.sid.hp.com (Bruno Bienenfeld) writes:
>Would appriciate any/all G/A/E level hams to extend there generous help
>and if only for one QSO contribute to the glory of our wonderful hobby.
>
>Yes it can be borring to work at 4wpm but try to remember when you started.

And for the Techs and Novices... ...try it, you'll like it. I fondly remember NR as the week my code speed went from 8WPM to about 15WPM!

Novice Roundup is the best license upgrade material ever invented (well, that and Field Day).

Greg

1059. Tech No-Code computer test - is there a Macintosh version?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 14:26:56 UTC
From: hberg@sun.sws.uiuc.edu
Message-ID: <17880.hberg@sun.sws.uiuc.edu>
Source record: 271611

Is there a Macintosh version of the Novice/Tech No-Code question pool available via FTP? I am part of a group studying for the Tech No-Code, and most of us have been using a DOS program that generates sample tests from the current question pool to practice. One of our group has access only to a Macintosh, and he would like to have something similar to practice with.

Thanks in advance.

-Steve-
shooting for the March 20 test date

1060. Re: Hams With Pacemakers

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 15:07:03 UTC
From: stevej@pillock.moron.vware.mn.org
Message-ID: <guF7gc1w164w@pillock.moron.vware.mn.org>
Source record: 271612

pauld@fs1.ece.cmu.edu (Paul Dujmich) writes:

> I would like to get in touch with active hams (HF or VHF) who have
> a pacemaker. My father just received an on-demand type pacemaker, and
> I am concerned about operating radio gear and the rfi that it might
> cause to the pacemaker. I operate 2-meters with 25 watts, and the
> HF bands with 100 watts. If you are an active ham and currently wear
> a pacemaker, please reply to:

To Paul and any other interested hams:

I used to do part 15 subpart J testing at the same lab that Medtronic, one of the largest manufacturers of pacemakers, used. The lab would not tell m me the levels of rf that they exposed the pacemakers to in the chamber but I know what they had for amps and anntennas in the lab and I know that they were using greater than 10kw at 1 meter for hf frequencies and greater than 4kw at 1 meter for uhf.

You may be able to call up the manufacturers and obtain some information on their minimum rf acceptance failure.

With more and more people getting pacemakers, it might be a good idea for the ARRL testing lab to publish some information on pacemakers and rf so that if your next door neighbor gets a pacemaker, he doesn't try to get the city council to shut you down because he is afraid that the next time yu key up, it will stop his pacemaker.

Steve KA0VYB

Hey Gary, do you know what the Gov. minimums are???

1061. Re: Automotive computers and amateur radios - Help!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 15:09:48 UTC
From: kenman@iastate.edu
Message-ID: <2ir43s$390@news.iastate.edu>
Source record: 271613

In article <2ipc91$893@iris.mbvlab.wpafb.af.mil> engberg@edfue0.ctis.af.mil (Bob Engberg) writes:
>Mike,
>I once had my Plymouth Reliant die momentarily when I keyed the 2 mtr rig.
>45 watts to a wet 1/4 wave mag mount. No problem when it's dry.
>When I keyed the transmitter, the electronic fuel injection stopped.
>Not a problem if your going down hill, I suppose.
>

When I speak into my 2 mtr HT my electric wheelchair instantly powers up and moves at full speed (abt 7 mph). It only took once, and some broken furniture, to remember to shut off my wheelchair before transmitting. 8)

--
Ken Anderson N0ZEM Kenman@iastate.edu PH: 515.294.8996
126 Soil Tilth Bldg., Iowa State University, Ames, Iowa 50011

1062. Re: CQ NR

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 15:13:17 UTC
From: fms@sw.stratus.com
Message-ID: <2ir4ad$aua@transfer.stratus.com>
Source record: 271614

brunob@hpldsla.sid.hp.com (Bruno Bienenfeld) writes:
> Just a reminder that yearly Novice Roundup is ON.
> Would appriciate any/all G/A/E level hams to extend there generous help
> and if only for one QSO contribute to the glory of our wonderful hobby.
>
> Yes it can be borring to work at 4wpm but try to remember when you started.
>

Absolutely, get on the air and work the NR! It's a great way to help out Novices & Techs aspiring to upgrade (that's how I got _my_ General, anyways!). It's a great practice session for those aspiring Novices & Techs, too.

But for this one poor Advanced who hasn't touched CW in almost 2 years, the code speeds that some of these whiz-kids are working at are just too fast! I only wish I _could_ find somebody working at 4WPM!!! :-) :-)

Oh, one small hint to those of you who work the contest. If you're calling CQ, PLEASE send your callsign more than once! I was listening to one fellow the other night who was sending his CQ's like this:

CQ NR CQ NR CQ NR DE KE4xxx/N K

It took me three complete QSOs to finally figure out what his full call was, because he never sent it often enough for me (the fact that he was running at about 12WPM and I can't copy terribly cleanly above 10 didn't help matters much, either :) He worked one person at about the same code speed he was at, one person running down around my speed who was obviously using a straight key and equally obviously going too fast for himself, and one person running at something close to 15WPM. On KE4's next CQ, I finally got the last letters of the call confirmed. BOY am I out of practice on this stuff! :-)

73 de Faith N1JIT
--
Faith M. Senie InterNet: fms@vos.stratus.com
Stratus Computer, Inc. InterNet: fms@hoop.sw.stratus.com
55 Fairbanks Blvd. Pkt Radio: n1jit@wa1phy.ma.usa.na
Marlboro, MA 01752 Phone: (508)460-2632

Curiosity doesn't flourish among the burned-out...

1063. Re: Field Day Logging Program

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 15:54:31 UTC
From: greg@netcom.com
Message-ID: <gregCKno6v.42L@netcom.com>
Source record: 271615

In article <9402031354.AA23136@nms1.abb.com> jennings@eng115.rochny.USpra.abb.COM (Tom_Jennings) writes:
>Hello,
>
>Well it's time to start planning for Field Day. It's my job
>to find a good logging program.

ESPN runs the lumberjack championships every so often. You could tape them, but who has time to watch TV on Field Day?

Anyway, an axe or chainsaw works better than a floppy disk, but isn't it more effective to just shoot a wire over the top. Besides, it isn't right to chop down a bunch of trees, just to make a clearing for Field Day. I know it isn't called 'Forest Day,' but you don't HAVE to have a field.

Greg

1064. Johnson Radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 16:33:00 UTC
From: gu4@cosmail1.ctd.ornl.gov
Message-ID: <1994Feb3.163300.8456@ornl.gov>
Source record: 271616

I am looking for information concerning a Johnson model jph5141 radio, i'm not sure if the model number in correct or complete but it's all I have at the time .

any information would be greatly appreciated

1065. Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 16:42:36 UTC
From: taylor@tix.timeplex.COM
Message-ID: <9402031642.AA02567@tix.timeplex.com>
Source record: 271617

I hafta agree with others that the traffic jam is going to be beyond description if no shuttle bus service is provided. Somehow the Hamvention organizers have to maintain some level of transport to outlying areas. I'm only one possible attendee, but I might consider not going this year if I don't have the abililty to use a bus to get to the site. For those who choose to drive, they will probably never get there and back because of all those extra cars on the road. I would be willing to pay a 3 day fee for unlimited rides to help defray the cost just to have the buses. Did anyone think of that as an option ? After paying for air fare to get to Dayton and $100 per night for hotels etc., what's a few extra dollars?

Seth T. KC2WE

1066. ((THANKS!!)) re 40m CW QRP

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 16:46:04 UTC
From: andy@clark.net
Message-ID: <2ir9oc$ama@clarknet.clark.net>
Source record: 271618

To all of you who responded to my original post seeking your experiences
on 40 meter QRP, many thanks! Your comments were much appreciated. I
tried to respond by e-mail individually, but I may have missed a few folks.
So thanks again, & 73. -andy/k4adl

1067. Shuttle STS-60 Ground Communications retransmission

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 17:13:00 UTC
From: stocker@nssdca.gsfc.nasa.gov
Message-ID: <3FEB199413132447@nssdca.gsfc.nasa.gov>
Source record: 271619

INTERESTED IN THE CURRENT SHUTTLE MISSION
The current mission has a number of interesting aspects: this first Russian astronaut to fly on a shuttle, the 100th GSFC managed Get Away Special payload, as well as planned Shuttle Amateur Radio Experiment activities.

The Goddard Amateur Radio Club (GARC) WA3NAN invites you to tune into Shuttle transmissions. As a public service to the Amateur radio community, the GARC retransmits space shuttle air-to-ground communications. During the STS-60 mission, Amateur radio operators, shortwave listeners, and those individuals with scanners can listen to these communications on the following frequencies:

3.860 MHz (lower sideband)
7.185 MHz (lower sideband)
14.295 MHz (upper sideband)
21.395 Mhz (upper sideband)
28.650 Mhz (upper sideband)

and

147.45 Mhz (FM)

Erich, N3OXM
GARC PI Coordinator

1068. Using land-mobile gear (was Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 17:18:04 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2irbkcINNblk@abyss.West.Sun.COM>
Source record: 271620

In article <750@comix.UUCP> jeffl@comix.UUCP (Jeff Liebermann) writes:
>In article <2i2bmrINN5hu@abyss.West.Sun.COM> myers@sunspot.West.Sun.COM (Dana Myers) writes:
>>
>>It is a shame amateurs won't take advantage of readily available
>>high-quality surplus to use as a platform for experimentation and spend
>>considerable effort defending junk radios that don't even come up to the
>>performance standards of a Part 15 cordlesst telephone. :-)
>
>Ah, this brings back fond memories of the early 1960's. The
>commercial services were replacing their wide band FM radios
>with narrow band FM boxes. For a mere pittance, you could
>have a 60 lb block of sold iron, complete with a Carter Super
>Motor Dynamotor, Mallory synchronous vibrator power supply,
>loctal tubes, and persuader microphone. (Ah, nostalgia).
>With a starter relay to the on-off switch and welding cable
>to the trunk, one could have a radio far superior to the typical
>"ham" AM (not FM) radio of the day. "Goonie-birds" (Gonset
>Communicator I thru IV) were grossly inferior to the average
>commercial radio. Why would anyone want a non-commercial radio?

I'm sure the recollections of 30 years ago are warm, nostalgic
memories, but they have nothing to do with the actual discussion.
My point is simply that one can take the $175 they'd spend to
buy a Ramsey kit, hunt around, and come up with a perfectly
useful radio. The mention of boat-anchor wide-band FM radios
is misleading; sure Micors are kind of bulky, but Custom MVPs
are small and MCX100s are even smaller. You can't criticize
the receiver performance, other than it often helps to add
a GaAsFET pre-amp to the radios which don't have a pre-amp.

As for learning, the service manuals go over the radio in
quite a bit of detail. They don't explain how to build it,
but they do explain the theory quite well. Everytime I say
this, Ramsey advocates change the subject. Even John Ramsey
changed the subject when I made this comment.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1069. Re: TS850 & PK-232MBX

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 17:36:01 UTC
From: hawley@aries.scs.uiuc.edu
Message-ID: <hawley.760296961@aries>
Source record: 271621

COLERK%snypotvx.BITNET@CUNYVM.CUNY.EDU writes:
>Well I've tried just about everything I can think of...I'm attempting to
>use the PK-232 with my TS-850.....problem is an awfull lot of rf getting
>back into the Kenwood. I've tried shielded cable, additional grounding
>straps between both units, shorter lengths of cable - no luck. Anyone
>have a clue as to how to eliminate the unwanted rf? Seems I might of saw
>a posting here addressing this very problem but not sure. Thanks in
>advance for any replies, 73...Roger/N5IFH

I use the FT240-77 ferrite toroid from Amidon to remedy rf getting into
things thru hookup cables. The 240 size is big enough to get even line cord
plugs thru it. Try to thread about 10 or so turns through the toroid with the
toroid ending up right next to the 850 (or whatever device you're trying to
keep the rf out of...works great with tv line cords!).
There is a mod to reduce the 850's audio data input sensitivity (that's the
input at the rear din connector), but I have found the choke to work well
instead. Bundle all the leads together, no need to have a separate toroid
for each cable. Amidon Assoc. ph# 310-763-5770.

Chuck Hawley
KE9UW

1070. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 17:39:52 UTC
From: garym@alsys.com
Message-ID: <CKnt2K.Dsl@alsys.com>
Source record: 271622
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

In <tweekCKI8FK.5xr@netcom.com> tweek@netcom.com (Michael D. Maxfield) writes:
>I too was hoping for a little different implementation. I noticed that
>you must exactly match the Licensee name (MC DONALDS REST works whereas
>MC DONALDS does not work) as it is in the licensee field.

I tried it today and noticed you can use * as a wildcard. So if you try
MC DONALDS* it will work.
--GaryM

1071. Q's on actual repeater locations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 17:44:40 UTC
From: adamstr@cc.uvcc.edu
Message-ID: <1994Feb3.104440.1@cc.uvcc.edu>
Source record: 271623

I have a question about repeater locations. What I'd like to be able to do is have a poster size map of my state on the wall with the actual physical repeater locations marked. Can anyone tell me how I can go about finding the _actual_ location of a repeater?? Please e-mail since I don't get a chance to read the net on a regular basis. Thanks!

Tracy - KB7YAP
adamstr@cc.uvsc.edu

1072. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 18:01:07 UTC
From: robocop@clark.net
Message-ID: <2ire53$o2g@explorer.clark.net>
Source record: 271624
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <CKM79r.45H@sunsrvr6.cci.com>, James D. Cronin <jdc@cci.com> wrote:
>In article <2i8rnf$o5n@explorer.clark.net>,
>matt roberts <robocop@clark.net> wrote:
>>In article <ah301-260194121225@129.228.248.39>,
>>Jerry Sy <ah301@yfn.ysu.edu> wrote:
>>>I have pretty much narrowed down my choice to these two 2m ht's.
>>
>>>I'd like to get comments and opinions from people in the net who
>>>have actually used both.
>>>currently, I am leaning towards the dj-162 because of its wide
>>>receive.
>>
>>The HTX202 is a good radio. It comes with the CTCSS, DTMF squelch, and
>>it can store telephone numbers. It has 14 memories, I think.

>I'll second the motion. The HTX-202 is also more sensitive on receive
>than my ICOM-27H, of a late 70's or early 80's vintage. And the price
>is right when Radio Shack runs one of their periodic "sales".

The radio is also free of intermod. I hear a lot of complaints on the
air about intermod, but I never hear these from HTX202 owners.

--
Matt Roberts 410-451-0790
CompuServe: 73042,16
Genie: G.roberts1
Amateur radio: n3gzm@wb3v.md.usa.na

1073. Securing VXO coils, what glue?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 18:14:01 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Feb4.021401.1@ntuvax.ntu.ac.sg>
Source record: 271625
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,

I am winding some coils for a VXO and want to know if
the "glue-gun" melted plastic is suitable for securing the coil
or if it is too lossy?

73 de 9V Daniel

1074. RE: 940 pll unlock problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 18:15:47 UTC
From: hawley@aries.scs.uiuc.edu
Message-ID: <hawley.760299347@aries>
Source record: 271626

Thanks for the email suggestions. I finally hung the scope on pll1, then pll2, etc. I had to look at the scope for up to 5 min to catch a unlock... kind of a long time for a fast oxidizer. The results were: CAR stayed up, pll1 stayed up, but pll2 failed. The inputs to pll2 stayed up. Upon inspection C68, a coupling cap in the vco of pll2, had a cracked solder connection. It was hard to see, and hard to determine if it was cracked all the way around. Anyway, resoldering the joint fixed the problem. I wonder if the often reported cure of unpluging and pluging connectors results in an apparent cure due to the mechanical flexing of the board. Someone complained about the phenolic boards. Do they cause these cracked joints over time?
So I'm happy now.......for awhile.

Chuck Hawley
KE9UW

1075. Re: Coaxial cable

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 18:26:20 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2irfkcINNbmh@abyss.West.Sun.COM>
Source record: 271627

In article <2im9t8$p87@master.cs.rose-hulman.edu> derry@NeXTwork.Rose-Hulman.Edu (John Derry) writes:
>
>]> I'd like to have some good quality coaxial cable. Can you give
>]> me any suggestions if you know?
>]> Now, I am using a 50 ohm cable, RG-58 A/U!
>]>
>]> Frankie Choy
>
>Howdy, Frankie:
>
>Get some Belden 9913 or equivalent. But remember it's not as flexible as
>RG-58. I only use RG-58 for short junmpers arounbd the shack. And I'm
>even replacing those cables with RG-223.

9913 isn't the answer to all problems. An 80m run of 9913 at 1.6GHz will have 10-12dB of loss. 7/8" Hardline will have more like 5-7dB of loss. In comparison, RG-58 has maybe 50dB of loss in the same length.

However, 9913 is a reasonable choice, especially when combined with a mast-mounted pre-amp with just enough gain to overcome feedline loss. Since this is a receive-only application, this is likely the best way to go.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1076. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 18:35:52 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <CKnvnt.I4E@cscsun.rmc.edu>
Source record: 271528
Cross-posted to: rec.radio.scanner,alt.radio.scanner,rec.radio.amateur.misc

Michael D. Maxfield (tweek@netcom.com) wrote:

: I suspect that this is just an early version of the software and it is
: still being revised. If this is so, a couple of features I would like
: to see would be a secondary search criteria (do you know how many licensee's
: there are for 154.6) such as city, zipcode, and maybe partial matches of
: the licensee.

I also thank tcomeng for providing this service. I'd like to see a listing
by class and I'd like to be able to search a (narrow) frequency range. You
might like to chat with the folks that run the ham callsign server at
cs.buffalo.edu - they've got a relatively versatile setup.

: I do however realize that you (tcomeng) are providing a service and asking
: nothing in return (cept name recognition). Thank you for providing this
: lookup service.
--
David Tiller | Network Administrator | Voice: (804) 752-7373 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
n2kau@wa4ong.va.usa.na | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
+++Arch-Conservative+++ | Ashland, Va 23005 | 77d 31' 32.19" W |

1077. HTX202 belt clip

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 19:27:44 UTC
From: hlb@li.loral.com
Message-ID: <hlb.760303664@loral>
Source record: 271529

Is the belt clip of the HTX202 used as a heat sink or can it be operated without the belt clip attached?

Thank you.
hlb@li.loral.com

--
hlb@li.loral.com

1078. Re: Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 19:56:54 UTC
From: lakeith@robins.af.mil
Message-ID: <2irku6$o5v@wrdis02.robins.af.mil>
Source record: 271530

William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:

: Dayton may have had the "natural" for a large convention and has certainly
: worked to get this spot as the "big one", but maybe it's ripe for plucking
: given the constraints forced upon them by the area.

: bill wb9ivr

Where are you going to find a facility that has that much display
space along with 3000+ flea market spaces? And, we need parking for
say 20,000 vehicles (not everyone drives to Dayton).. I don't know
the total statistics but, during my 20 years in Ohio, I have always
been told that no better facility exists..

Now, if I only had a 100 acres between Dayton and Cincinnati (or
Dayton and Columbus).....

73,

Larry, KQ4BY

1079. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-03 20:19:38 UTC
From: tedtrost@delphi.com
Message-ID: <9402031515591.tedtrost.DLITE@delphi.com>
Source record: 271531

I just got mine after almost 75 days.

Sit tight, as hard as it is.

Ted Trost
Internet: tedtrost@delphi.com Delphi: TEDTROST CompuServe: 71175,1043
Amateur Radio station N1RDQ

1080. Re: HTX202 belt clip

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-04 14:22:22 UTC
From: mellis@ramcad.pica.army.mil
Message-ID: <CKpELB.9sz@pica.army.mil>
Source record: 271532

>Is the belt clip of the HTX202 used as a heat sink or can it be operated
>without the belt clip attached?
>
>Thank you.
>hlb@li.loral.com
>
>--
>hlb@li.loral.com
>

Heh. Interesting thought. No, I don't believe it's necessary to
use the belt-clip. I never put the clip on mine, and use it at
high power with a 13.8V source all the time. It gets warm,
but not terribly hot. The back case is metal, and that is
probably all the heat sink it needs.

-----Mark n2wzb
<mellis@ramcad.pica.army.mil>

1081. Re: Hams With Pacemakers

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-04 15:12:10 UTC
From: ehare@arrl.org
Message-ID: <1994Feb4.151210.7540@arrl.org>
Source record: 271533

Paul Dujmich (pauld@fs1.ece.cmu.edu) wrote:

: I would like to get in touch with active hams (HF or VHF) who have
: a pacemaker. My father just received an on-demand type pacemaker, and
: I am concerned about operating radio gear and the rfi that it might
: cause to the pacemaker. I operate 2-meters with 25 watts, and the
: HF bands with 100 watts. If you are an active ham and currently wear
: a pacemaker, please reply to:

Paul,

The ARRL doesn't have much information on pacemakers. EMC Test and Design, April 1993, ran an article entitled "EMC History of Cardiac Pacemakers." This is not available through the ARRL Technical Information Service, but if you send me your postal address, I will make you a personal photocopy.

From the article, it appears that most pacemakers average about 200 V/meter immunity, a level rarely seen in lower-power amateur installations.

You can also contact:

FCC
Office of Engineering Technology
Robert Cleveland, PhD
2025 M St NW
Room 7130
Washington, DC 20554

See also the Safety section of the ARRL Handbook and ARRL Antenna Book. If you don't have these books, a reprint of the Bioeffects pages is available for an SASE from the ARRL Technical Department Secretary -- ask for the "Bioeffects" package.

73 from ARRL HQ, Ed Hare - KA1CV
--

1082. Re: ARRL-QST/QEX was Re: RAMSEY FX

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-04 15:23:27 UTC
From: jbloom@arrl.org
Message-ID: <1994Feb4.152327.7689@arrl.org>
Source record: 271534

Galen Watts (galen@picea.CFNR.ColoState.EDU) wrote:
: In article <CKIEMA.KCq@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
: >Greg Bullough (greg@netcom.com) wrote:
: >: Yup. One of the difficulties, over the years, is that many of the
: >: folks at ARRL HQ 'just didn't understand,' ...
: >: The 'drum' being banged is one which rings out 'build build build.'
: >If you're talking about QST, I disagree 100%. I wish QST had MORE
: >construction articles, not fewer. In case you haven't noticed, QST
: >has changed in the last few years. There are many fewer technical
: >articles than there used to be and a lot more fiction and other
: >"fluff" articles.
: >I liked it better the old way. But fortunately or unfortunately,
: >the ARRL is a democratic organization and their perception is that
: >the members are not as technically inclined as they used to be.
: >AL N1AL

: I recently subscribed to QEX for the technical stuff, and there was a
: mention that some thought QEX was getting too technical, which left me
: flabbergasted, since I thought QEX was for tech stuff.

Don't worry, Galen. The overwhelming response to my editorial question was: keep QEX technical. Which is what I expected and what I will do. It was nice, though, to find out that there *are* readers out there who care! (Of course, there were a few responses supporting the "too technical" point of view. I'm afraid those readers are going to be disappointed. Oh, well.)

: I would like to see more technical articles in every ham magazine.

Me too. But I recognize that ham radio is a multi-faceted hobby. I don't want to ram my interests down others' throats any more than I want theirs rammed down mine. Fortunately, I don't have to read *National Contest Journal*, which is good since my interest in things contesty is near zero. Likewise, I don't expect that all hams will want to read QEX. My view is that we should strive to make wanted material available, but not force-feed it to people who don't want it. And that's what we are trying to do.
--
Jon Bloom KE3Z jbloom@arrl.org

1083. Re: Famous hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-04 19:18:27 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CKpsAr.6qu@news.Hawaii.Edu>
Source record: 271535

In article <CKMsoH.GvC@freenet.carleton.ca> ab510@FreeNet.Carleton.CA (George Attallah) writes:
>
>
>In a previous article, engberg@edfue0.ctis.af.mil (Bob Engberg) says:
>
>>And don't forget:
>>
>>I0BOY Michael Jackson
>>
>>--
>How about A1FAG ?
>

Dang it - why didn't *I* think of that!

Jeffrey NH6IL jherman@hawaii.edu

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.

1084. Re: Will Wayne See His Shadow???

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-04 19:24:07 UTC
From: dbushong@wang.com
Message-ID: <CKpsK7.FC5@wang.com>
Source record: 271543

clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) writes:

>In article <13659@blue.cis.pitt.edu>,
>Harry Bloomberg <hpb@hpb.cis.pitt.edu> wrote:
>>
>> If Wayne Greene sees his shadow on Groundhog Day, does that mean
>>we'll have 6 more years of bad sunspots? :-) :-) :-)
>>
>No it means Wayne won't write anything in 73 for 6 years. Then I'll
>start subscribing again.

How could he see his shadow when he can't even see his reflection in a
mirror?

--
Dave Bushong, Wang Laboratories, Inc.

1085. Re: Kenwood TS940 pll-car unlock....HELP!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-04 20:53:49 UTC
From: ehare@arrl.org
Message-ID: <1994Feb4.205349.11271@arrl.org>
Source record: 271536

Chuck Hawley (hawley@aries.scs.uiuc.edu) wrote:

: My TS940 (1987 vintage) unlocks during warmup, receive (or xmit) goes away
: and a half second later the display goes to all dots. This lasts for a blink
: to a few seconds each time, and happens zero to a half dozen times only during
: warmup from cold which takes 5 or so minutes.

Well, you have checked many of the "connection" type things. It sounds
like the bad connection is inside one of the ICs or other components.
I do have one off-the-wall suggestion to try first, though. Many of the
pc boards rely on thier mounting screws to get a good ground. It is
probably worth checking these to make sure they are tight and that
the pc board is making good electrical connection. Do NOT tighten
all the screws inside those little metal cans, though! Those are
aligment screws; they do not need to be tight. :-)

A year or so ago I fixed a '940 that had a bad IC socket on the
the main microprocessor chip. That unit had developed all sorts
of flaky problems. It was a pain in the neck, but I managed to get
the old socket out and put in a new one. Do NOT remove an IC socket
as your FIRST pc-board solder experience; get some practice first.
Solder-wick or a desoldering tool makes the job a lot easier.

After that, I suggest that you purchase a can of "freeze spray", available
from most mail-order electronic distributors or from the electronics
jobber that supplies your local TV repair shop with parts.

Turn it on and let it warm up. Once it starts working fine,
use the spray to cool down major sub-assemblies, one at a time. When
the problem returns, you have found the bad board. Let it warm up
and start working again. Then, cool down the components one at a time.
When it acts up again, you have found the thermally intermittant
component.

Good luck.

73 from ARRL HQ, Ed -- KA1CV
--

1086. Re: CQ - Hams in Rochester, NY

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-04 22:31:07 UTC
From: schwarz@kodak.com
Message-ID: <schwarz-040294173107@150.220.61.78>
Source record: 271537

In article <2irc5c$mae@news.acns.nwu.edu>, rdewan@casbah.acns.nwu.edu
(Rajiv Dewan) wrote:

> I will be moving to Rochester, NY this fall. I will be working at
> the U of R. I do not know much about ham radio activity in
> Rochester. I am curious:
> - What towns are good for amateurs - re permission for towers etc.
> - Which towns to avoid?
> - DX packet clusters
> - active repeaters, especially ones that dxers/contesters use
> - ham radio clubs, univ clubs

There is a ham radio club at the U of R. I was business manager one year
when I was an undergrad. That was around 1975 so I don't know how active
the club is now. The call sign of the club station is K2ZWI.

> etc
>
> BTW, I saw the ad for Rochester Hamfest in 73 magazine. I am looking forward
> to it. How big is it?

Big.

Doug Schwarz, KE2MW
Eastman Kodak Company
schwarz@kodak.com

1087. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-04 23:32:57 UTC
From: 082589@hyperion.lanl.gov
Message-ID: <1994Feb4.233257.24583@newshost.lanl.gov>
Source record: 271538

16 memories. 12 standard - 3 priority - and 1 call memory. good radio I agree, but I would like the wide receive too.

1088. Re: Dayton Parking: Hell on Earth! (not!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 04:42:30 UTC
From: macy@telemax.com
Message-ID: <CKqIEv.64v@telemax.com>
Source record: 271539

In article <jra.69.000996A6@lawdept.daytonoh.ncr.com> jra@lawdept.daytonoh.ncr.com (John R. Ackermann) writes:
>
>Every year the Hamvention comes off with (apart from the $#%@!% weather here)
>no major hitches.

You are absolutely correct.

I am constantly amazed at how well the Dayton Hamvention works, every time, every year. The DARA people have learned how to do the job well.

Given the natural tendencies of hams toward anarchy and chaos, the Hamvention is well organized without becoming overly regimented.

I think they will think through the bus situation carefully. Perhaps they can work out special routes and rates with their local transit people. I just hope the local transit authority management is progressive enough to cooperate, everyone will win.

Parking has improved. Last year was the best year for parking in some time. Yes, it now costs a few bucks, but then still have people who buy a flea mkt space in order to have a place to park. (I'd like to see this dealt with more firmly. There's always a shortage of flea mkt spaces.)

Now, the one thing the Hamvention committe has not been able to properly organize is the weather. Last year was one of the worst years for weather at Dayton in recent memory. Hmmm, maybe we are overdue for a good weekend this year...

Rule of thumb at Dayton:
One day you freeze.
One day you get very wet.
One day you get sunburned.
Its figuring out which will be which ahead of time that is an art.

--
Macy M. Hallock, Jr. N8OBG +1.216.723.3030 macy@telemax.com macy@fms.com
Telemax, Inc. - F M Systems, Inc. 152 Highland Drive Medina, OH 44256 USA

1089. rsgb gb2rs news 6th feb

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 07:49:59 UTC
From: ted@tedb.demon.co.uk
Message-ID: <760434599snz@tedb.demon.co.uk>
Source record: 271544
Cross-posted to: rec.radio.amateur.misc,uk.radio.amateur

Good morning. It's Sunday the 6th of February and here is the GB2RS news broadcast, prepared by the Radio Society of Great Britain.

First the headlines:- RSGB member, Andy Watts, G4VIW, is awarded the MBE in the New Years Honours List; A correction to the QSL sub-manager for the GM2 callsign series address has been advised; Lists of special event stations for the Guides Thinking Day on the Air now available from RSGB Headquarters; Your chance to help us to improve the GB2RS news broadcast; Winners of the VHF 144MHz Trophy and the 144MHz CW Marconi Contest.

Firstly, our congratulations to another RSGB member Andy Watts, G4VIW. who received an MBE in the 1994 New Year Honours list for services to plumbing. Andy is Chief Executive and Secretary of the Institute of Plumbing based in Hornchurch, Essex.

Next, we have been advised of a correction to the RSGB QSL Sub-Manager details for the GM2 Callsign Series and to the address which is printed in the RSGB Callbook. The GM2 series should read, GM2AA to GM8ZZ. The Sub-Manager is James T A Johnston, GM3LYY, and his address should read: "The Dolphins", 2c Montgomerie Drive, Fairlie, Ayrshire. KA29 0DZ.

The Guides Thinking Day on the Air will take place during the weekend of Saturday the 19th and Sunday the 20th of February. A list of participating British GB Stations and of countries permitting Third Party Greetings Messages for this event is available from RSGB Headquarters on receipt of a Self Addressed Stamped Envelope, size A5 or larger. The address is: RSGB Lambda House, Cranborne Road, Potters Bar, Herts, postcode EN6 3JE. Please mark the envelope 'TDOTA 1994 List'.

On Tuesday the 8th, the RSGB Exhibition and Rallies Committee will be meeting in London.

In an effort to make the GB2RS News bulletin more interesting, we are seeking more news stories from amateurs throughout the UK. The most suitable stories refer to events which have taken place during the previous week, or which are about to happen during the following week or two. Apart from club and rally information, we would be pleased to receive operating news (have you worked anything really interesting this week?), news about achievements in amateur radio (has your club presented a trophy recently?). Perhaps you have news of repeaters, beacons or packet stations which are newly operational, are temporarily or permanently off the air, or are providing improved service. We would also like to hear about DXpeditions, or contesters who are going to rare parts of the UK. If you are using a GB or club call for a special event, send us a few details for the news broadcast. News items should be sent to RSGB, Lambda House, Cranborne Road, Potters Bar, Herts EN6 3JE, marking the envelope

"Urgent news for GB2RS". The deadline is noon on the Tuesday preceding the Sunday broadcast.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO. From the Philippines, G4ZVJ will be active as DU/G4ZVJ from Tuesday the 8th of February for one week. From Fiji, JI3ACL will sign 3D2CL from Thursday the 10th to Wednesday the 16th of February on all bands 10 - 40 metres on CW and SSB. 20 metres. From Ariosto de Souza, PT2BW will use the special callsign PV2A for the EAWW RTTY Contest on Saturday the 12th and Sunday the 13th of February. And from Mexico, NE8Z/HC1MD will sign XE1/NE8Z from Puerto Vallarta from Sunday the 13th to Sunday the 20th of February. Activity will be on all bands 10 - 160 metres, including the WARC, on CW and SSB. On CW check 5 and 25 up.

Rally news now and we know of only one event for today, Sunday the 6th of February: The South Essex Amateur Radio Society Radio Rally which is being held at The Paddocks, Long Road, Canvey Island, Essex. Right at the end of the A130. Doors open at 10am. The disabled visitors' parking area is near the main door entrance. Features the usual trade stands and a bring & buy stall. Refreshments are available and talk-in is on channel S22.

Now the Rallies for next weekend, and we know of three for Sunday the 13th of February:

The Welsh (Barry) Mobile Rally is to be held at the Barry Leisure Centre, off Holton Road, Barry. Doors open at 10am, 9.30 for disabled visitors. This event features trade stands and a bring & buy stall. Refreshments will be available and the talk-in will be on 145.550MHz, channel S22. Further details can be obtained from Mike, GW8CMU on 0446 711426.

Cambridge & District Amateur Radio Club Radio and Computer Rally is to be held at Addenbrookes Hospital Ambulance Station, Cambridge. There is easy access from the M11, junction 11 and the A45 via the Ring road. Doors open at 10.30am. The event features trade stands and a bring & buy stall. Refreshments will be available and talk-in will be on channel S22. Bookings and further information can be obtained from George, G0OEL on 0954 719273.

Northern Cross Rally is to be held at the Rodillian School on the A61 between Leeds and Wakefield, near the junction of the M1 and M62. Doors open at 11am, 10.30 for disabled visitors and bring and buy vendors. Event features over 60 trade and group stands and a bring & buy stall. Morse Tests are available on demand, please remember to bring two passport size photographs. Also there will be the RSGB Propagation Studies and Planning Committee stands and the Wakefield and District Radio Society with some new Morse test practice aids and RSGB books. Refreshments will be available and talk-in will be on channel S22 and via GB3WU. Further details can be obtained from Dave, G0FLX on 0532 827883.

Next some dates for your diary:

The 1994 RSGB VHF Convention is to be held at its usual venue, Sandown Race Course, Esher, Surrey on Sunday the 20th of February. See January's RadCom for full details of the comprehensive lecture programme. Note that this event is

being held much earlier in the year than usual.

The 1994 RSGB London Amateur Radio and Computer Show is to be held during Saturday the 12th and Sunday the 13th of March, at the Lee Valley Leisure Centre, Picketts Lock Lane, Edmonton, London. This is the usual venue, but with a new name. February RadCom contains full details of the comprehensive lecture programme. This event is being run by RadioSport Limited, in conjunction with the RSGB and the Southgate Amateur Radio Club. Morse Tests will be available on demand, but please remember to bring two passport size photographs. There will be no RSGB National Convention this year so the Society will be putting on a larger stand at the London Show.

HF contest news now:

The last of 3.5MHz RSGB LF Cumulative Contests takes place today, Sunday, the 6th from 1600 to 1800 UTC. December's RadCom, page 84, gives detailed information on all of these LF Cumulative Contests. The RSGB 1.8MHz CW Contest takes place from 2100 UTC on Saturday the 12th to 0100 UTC on Sunday the 13th. See August RadCom page 81 for further details. The PACC Contest and the EA RTTY Contest both takes place during next Saturday the 12th and Sunday the 13th of February. The BYLARA Contests are scheduled to take place during Thursday the 10th from 1900 - 2200 UTC and again on Saturday the 12th from 1000 to 1300 UTC. For further details of the last three mentioned see February's RadCom, page 19.

Next some VHF contest news:

First we have some results through for some of the VHF Contests held during 1993. These have only just arrived into the office and the full results will be published in RadCom as soon as possible.

In the 144MHz Trophy Contest held in September 1993, the winners and runners up for the various sections are as follows:

In the Open Section the winner was GU4APA/P with 16,465 points, with G4IVX/P second with 11,713 points. In the Fixed Station, Single Operator section the winner was G4PIQ with 9,945 points, with G6HKM as runner up with 3,604 points. In the Portable Station, Single Operator section GM4ZUK/P came in first with 8,008, and GW4BVY/P came second with 7,266 points.

In the 144MHz CW and Marconi Contest held in November, the winners and runners up were as follows:

In the 24 Hour Single Operator Section G4PIQ came first with 70,289 points and G4OUT was second with 14,138 points. For the 6 Hour Single Operator Section the winner was G3JRM with 14,856 points and G3JJZ, was second with 6,498 points. The winner of the 24 Hour Multi-Operator Section was G4XBF/P with 78,350 points, with GM4VVX/P coming second with 630 points. In the 6 Hour Multi-Operator Section G0FBB/P with 22,255 Points and G0PNT with 12,934 points came first and second respectively..

Now we have news of contests taking place within the next week.

The RSGB 432MHz Fixed, AFS and Listeners Contest takes place today Sunday, the 6th of February, from 0900 to 1500 UTC. There are three sections:- Single operator fixed, Multiple operator fixed and Listeners. The next RSGB 70MHz Cumulative Contest is next Sunday the 13th of February, from 1000 to 1200 UTC. There are three sections:- Fixed station single operator, Open and Listeners. See December's RadCom page 83 for details for both VHF events

And now the solar factual data:

The period from the 24th to the 30th of January saw the more active side of the sun looking our way, which was accompanied by some flare activity. A series of flares occurred from the 25th to the 28th, ranging from an M2.7/1B on the 27th, down to an M1.1 on the 28th. There were a number of SIDs Sudden Ionospheric Disturbances particularly on the 29th, but they only lasted a short time. The sunspot indices generally declined over the period and meaned about the 70s. Solar flux levels also declined from 132 on the 25th, down to 99 by the 30th, giving an average of 118 units for the period. The 90 day flux mean on the 28th was 105 units. The geomagnetic Ap indices started the period being very quiet with an Ap index of only 3 on the 24th. But due to the passage of a coronal hole, levels quickly rose to a sub storm of 26 units on the 26th, which affected mainly high latitudes, and by the 30th levels were back to just unsettled. The period averaged an Ap of 13.5 units. The state has been 'nil nothing of any note to report' all the period. The daily averages of the aa indices as supplied by the British Geological Survey for the period, the 18th to the 24th of January were 22.8 nanoTeslas. Over the period the daily levels declined from unsettled, about K4, down to quiet of only 7.2 nanoTeslas, K1 on the 24th, with some periods down to only 2 nanoTeslas. The X-Ray flux has remained reasonably high and was up to B4.4 on the 25th and did not drop below 4 until the 30th, when it declined to B1.5, giving an average of B3.6 for the period.

Now the ionospheric data for Central France:

The F2 daytime critical frequencies at Poitiers as reported by Meudon averaged 9.0MHz, though the 26th was up to 10.2MHz. The daily highs are now centred around mid-day. The darkness hour lows averaged 2.9MHz, hardly varying day to day, and are centred around 06.00 hours. There were a few periods of Spread F and other phenomena but they only lasted 2 or 3 hours.

Now the ionospheric data for the north:

The F2 daytime critical frequencies at Ekaterinberg averaged 7.3MHz and the darkness hour lows 2.5MHz. It is not all gloom - we have just heard that the new ionosonde installed at RAL Chilton is now being tested. It is intended that the new ionosonde data will be made as comparable as possible to the old Slough one. If all goes well the calibration and testing should be complete by about the summer.

And lastly the solar forecast:

This week, the quiet side of the sun will be looking our way. Solar flux levels are expected to be about the 90s, and the geomagnetic activity is expected to be unsettled, with Ap indices up to about 20 units. The daytime ionospheric MUFs in the south are expected to be about 24MHz, with north/south

paths being possibly up to 29MHz. The darkness hours lows are expected to be about 9MHz with again north/south paths up to 14MHz.

And that's the end of the solar information.

Finally in the main news, SSL has informed the Society that as of last Wednesday morning, the latest callsigns issued were in the G0 U K and G7 R P series, and Novice calls in the 2 0 A H and 2 1 C N series.

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

Next, the local news.

NEWS FOR THE SOUTH EAST

Meeting for Monday the 7th of February:

Surrey Radio Contact Club has a talk entitled 'Home Construction of Test Equipment' by Bob, G3OOU. For further details contact Berni, G8TB on 081 660 7517.

Meeting for Tuesday the 8th of February:

Stevenage and District Amateur Radio Society has a 'General Evening', discussion, also 'On the Air' and Morse practice. Details from Neil, tel: 0438 350882.

Meetings for Wednesday the 9th of February:

Bracknell Amateur Radio Club has a Bring and Show evening. Details from Steve, G4AUC on 0344 420577.

Cheshunt and District Amateur Radio Club has a talk on 'DX from Andorra' by Chris, G8AMG. Details from Roger, G4OAA on 0992 464795.

Darenth Valley Radio Society has a talk 'The Kent IP Group'. More details from Len, G0HRD, tel: 0474 703322.

Dover Radio Club has a 'Questions and Answers' evening chaired by G7NOR. For further details contact Mick, G7NOR on 0304 825030.

Farnborough and District Radio Society has a talk on 'PMR Systems' by G4WGX. For more information telephone 0252 715765.

Grafton Radio Society has a talk on 'Experiences from Hong Kong' by Bill Guest. Further information from Rod, G0JUZ, tel: 081 368 8154.

Worthing and District Amateur Radio Club has a talk entitled 'Packet' by G8VEH. For further details contact G4GPX on 0903 753893.

Meetings for Thursday the 10th of February:

Colchester Radio Amateurs has a talk entitled 'HF Construction' by Peter, G0DZB. Further details from Mike, G4YJN on 0206 738189.

Edgware and District Radio Society has a talk entitled 'Worked All Britain' by Rob, G4OBE. Details from Rod, G0SQL, tel: 081 204 1868.

Shefford and District Amateur Radio Society has a talk entitled 'Top Band DF' by Stewart, G3RXQ. Contact Paul, G1GSN on 0462 700618 for further details.

Southgate Amateur Radio Club has a talk on 'An Introduction to 24cm ATV' by Adrian, G0OJY. Further information from Brian, G0MEE on 081 360 2453.

Vange Amateur Radio Society has a talk on 'Aerials - Noise Phasing' by Robin, G3JWI. Contact Doris on 0268 552606 for further information.

Meetings for Friday the 11th of February:

Clifton Amateur Radio Society has a talk entitled "What's in a Computer". The club now meets at Kidbrooke House Community Centre, 90 Mycenae Road, London, SE3 7SE. Further details from Keith, G4TJE on 081 859 7630.

Hilderstone Amateur Radio Society has a talk on 'The History of the Service and The Channel Navigation Information Service' by Eric Musson, HM Coastguard, Dover . For further details, telephone 0843 869812.

Itchen Valley Amateur Radio Club has an 'Open Meeting'. Contact Les, G3ABA on 0703 732997 for details.

Medway Amateur Receiving & Transmitting Society has a Construction Contest, any item 'relating' to radio. Further details from Gloria, G7OVI on 0634 710023.

NEWS FOR SOUTH WEST

Exeter Amateur Radio Society Club has a new venue and now meets in The Moose International Centre, Blackboy Road, Exeter. For details contact Ray, G3YBK 0392 78710.

Meetings for Monday the 7th of February:

RSGB City of Bristol Group has a Demonstration of HF Operation. Contact Dave, G4NKT on 0272 62124 for further information.

Wincanton Amateur Radio Club has a talk entitled 'Worked All Britain' by G1THG. Further details from Dave, G3ZXX on 0963 34360 or Andy, G1FPW on 0747 51381.

Meeting for Thursday the 10th of February:

Yeovil Amateur Radio Club has a talk on 'The Development of a Ballistic Missile' by G5JJ. Contact Cedric, G4JBL on 0258 473845 for further information.

Meetings for Friday the 11th of February:

North Bristol Amateur Club has a Video on 'The Royal Air Force - 75 Years'. More details from Tony, G4ROX tel: 0272 513573.

Shirehampton Amateur Radio Club has a talk on 'Neural Networks' by G0FGZ. The club will be closed next week, the 18th of February. For further details

contact Ron, G4GTD on 0272 770504.

NEWS FOR EAST ANGLIA

Meeting for Monday the 7th of February:

Felixstowe and District Amateur Radio Society has a 'Practical Satellite Operating Demonstration' led by Ken, G4RHR. For further details contact Paul, G4YQC on 0394 273507 any evening.

Meetings for Wednesday the 9th of February:

Ipswich Radio Club has a Social evening. Contact Sheila, G8HYE on 0473 742072 for details.

Norfolk Amateur Radio Club has a Construction and QRP evening. For further details contact Sheila, G0KWP on 0603 618810.

Meetings for Thursday the 10th of February:

Dereham Amateur Radio Club has a TV Video from the ARRL. The club meets at the St John Ambulance Station on the Yaxham Road near the new Tesco in Dereham, at 8pm. Further information is available from Mark, G0LGJ, tel: 0362 691099.

Yarmouth Radio Club has a talk on 'Codes and Cyphers' by G3PPD. Contact Tony, G3NHU, on 0493 721173 for details.

Meeting for Friday the 11th of February:

Cambridge and District Amateur Radio Club has a Rally Preparation evening. All members are asked to attend, please. Call John, G0TIL on 0763 243570 for club details and George, G0OEL on 0954 719273 for rally information.

NEWS FOR THE MIDLANDS

Meeting for Monday the 7th of February:

Aldridge and Barr Beacon Amateur Radio Club now meets at its new venue: The Aldridge Central Community Association Hall, Middlemore Lane, Aldridge, Walsall, WS9 8AN. Further details from Charles, G0NOL 0922 36162.

Meetings for Tuesday the 8th of February:

Bromsgrove Amateur Radio Society has a talk entitled 'Noise Bridge Construction and Construction Kits' by Derek Pearson of Jandek. Further details from Barry, G0TPG on 0527 542266.

Buxton Radio Amateurs has a talk on 'Shack Design'. Details from Derek, G4IHO, tel: 0298 25506.

Loughborough and District Amateur Radio Club has a talk entitled 'The Other Man's Shack' by John, G4CCI. For further details contact G8SNF, tel: 0509 218259.

Meetings for Wednesday 9th of February:

Bolsover Amateur Radio Society has a Quiz Night. For further details contact Colin, G0RXT, tel: 0246 822856.

Telford and District Amateur Radio Society has a demonstration of radio orientated software on the club's new computer, led by Robin, G1MHU. For further details contact Dave, G4EIX, on 0952 588878.

Meetings for Thursday the 10th of February:

Amateur Radio Club of Nottingham has a 2 Metre Direction Finding Hunt talk and a discussion with a Questions and Answers session. Further details from Simon, G0IEG on 0602 501733.

Redditch Radio Club meets for its Annual General Meeting. For further details contact G3EVT Tel: 0789 762041.

Salop Amateur Radio Society has a Quiz evening, between SARS and the Powys Radio Club. For details contact Sheila, G0SST on 0743 361935.

Meetings for Friday the 11th of February:

Bromsgrove and District Amateur Radio Club has a talk and slide show on 'St Kilda, Outer Hebrides' by Stuart Lamb. More information from Brian, G3MRC, tel: 0562 710010.

Coventry Amateur Radio Society meets for an Indoor Direction Finding competition. Further details from David, G1ORG, tel: 0203 311468.

South Notts Amateur Radio Club has a Visit to Nottingham Urban Traffic Control Centre, meeting at Trinity Square. Contact Julie, G0SOU on 0602 216342 for details.

NEWS FOR THE NORTH OF ENGLAND

Meeting for today, Sunday the 6th of February:

Wakefield Repeater Group is holding its Annual General Meeting, starting at 2.30pm in the Ossett Community Centre, Prospect Road, Ossett. Details from Richard, G4BLT, tel: 0924 255215.

Meetings for Monday the 7th of February:

Central Lancs Amateur Radio Club meets for its Annual General Meeting plus an Extraordinary General Meeting at the Priory Club, Broadfield Drive at 8pm promptly. Details from Jack, G0FQN 0772 423741.

Sheffield Amateur Radio Club has an Inter-Club Quiz, the eliminator round 1. Further details from David, G0JJR Tel: 0742 446282.

Thornton Cleveleys Amateur Radio Society has an Auction of Surplus Equipment. Further details from G4BFH who is QTHR.

Woodford (RATEC) has a talk on 'Traps - Their Making and Practical Application' by Dave, G3IPZ. Details from Don, G4SFU on 061 485 3912.

Meetings for Tuesday the 8th of February:

Bury Radio Society has a talk on 'Medical Electronics' by Kevin Haylett of the Medical Engineering Group at M/Cr Royal Infirmary. Details Mike, G4GSY 061 761 5083.

Chester and District Amateur Radio Society has a talk on 'The Law and Radio Amateurs' by Jonathan, G0KCT. Further details are available from G0OXA, tel: 051 608 3229.

Fylde Amateur Radio Society has a Packet Demonstration evening by G7HJQ and G7CUL. Details from Rob, G7CUL, QTHR or Tel: 0772 635464.

Mid-Cheshire Amateur Radio Society has an 'Ask the Expert' night. Contact Mike, G7LQD on 0606 331210 for details.

Wakefield and District Radio Society meets for a rally preparation evening. Further details from Roy, G0TBY on 0924 893321.

Meetings for Wednesday the 9th of February:

Stockport Radio Society has a talk entitled 'Digital CQ Caller for SSB' by David, G4JLG. Details 061 439 4952.

White Rose Amateur Radio Society has a talk by John, G3TDZ, the designer of the White Rose Transceiver, with a circuit description and tips with construction. Details from G0MYM, QTHR.

Meetings for Thursday the 10th of February:

Hambleton Amateur Radio Society has a talk entitled 'The Novice Licence Discovered' by Liz Whelan (Novice Examinee). For further details contact Nigel, G0NHM, 0609 776608.

Keighley Amateur Radio Society has a talk on 'Navigation' by G0BWY. For further details contact Kathy, G0RLO on 0274 496222.

Meetings for Friday the 11th of February:

Goole Radio and Electronics Society has a talk on the subject 'HF Listening' by Richard, G0GLZ. For further details contact Steve, G8VHL on 0405 769130.

The Isle of Man Radio Society has a talk entitled 'The RSGB' by Brian, GD4PTV. Further details from GD3UMW on 0624 852196.

South Manchester Radio Club has a talk entitled 'The TRF Receiver, part 2'. For further details contact Edward, G7FQY, tel: 061 969 1964.

Stockport Radio Society Computer Group has a talk entitled 'Packet Radio' by G3SHF. For further details telephone 061 439 4952.

NEWS FOR SCOTLAND

Meeting for Tuesday the 8th of February:

Dundee Amateur Radio Club has a Construction evening. Details from GM4FSB who is QTHR.

Meeting for Wednesday the 9th of February:

Lothians Radio Society has a Video show with amateur radio interest. All are welcome Details from Tommy, GM1GEQ who is QTHR.

Meeting for Thursday the 10th of February:

Dunfermline Radio Society has an HF Operating session, ideal for Class B amateurs to gain HF experience. Further details from Wallace, GM0GNT who is QTHR.

Meetings for Friday the 11th of February:

Aberdeen Amateur Radio Society has a talk entitled 'What is RDS'. Details from Gordon, GM7PXW, tel 0224 780591.

Ayr Amateur Radio Group has a talk on 'The History of Communications' by Dennis, GM3YDN. Details from Ian, GM43VMG on 0292 260870.

West of Scotland Amateur Radio Society has a talk on 'Pre-war Marine Operations' by Arthur Wainwright, GM1FML. For details contact Jack, GM4COX on 0698 350926.

NEWS FOR WALES

Meeting for Monday the 7th of February:

Dragon Amateur Radio Club has a talk entitled 'Noise Bridges and Their Uses' by Stewart, GW0ETF. Further details from Tony, GW0FMQ, tel: 0248 600963.

Meeting for Thursday the 10th of February:

Aberystwyth & District Amateur Radio Society has a Construction Night - 'The Absorption Wavemeter' by Les, GW3SON. For further details contact GW0FSO on 0545 580675.

NEWS FOR NORTHERN IRELAND

Meeting for Tuesday the 8th of February:

Carrickfergus Amateur Radio Group has a talk entitled 'Amateur TV' by Tommy Martin. Details from GI0JOF, tel: 0960 351807.

And that's the end of this week's GB2RS news broadcast, which was prepared by the Radio Society of Great Britain.

1090. Need testing info (where is that list?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 09:13:50 UTC
From: adoane@shell.portal.com
Message-ID: <CKquz4.4AK@unix.portal.com>
Source record: 271540

I'm not sure who has been posting those nice testing oppertunities(sp)
list, but.. I am planning on taking a few friends to the Decatur. Illinois
test this Sunday (2-6-94) but I lost the phone number of the person in charge,
and I need an address. If someone has the current list, could you please email
it to me? Time *is* important on this one...

Thanks in advance,
Andrew (N9KET)
adoane@shell.portal.com

--
Andrew J. Doane Nuclear Greenhouse BBS adoane@shell.portal.com
1010 W. Springfield Ave (708) 998-0008 Amateur Radio N9KET
Apt #303 Running GTalk/GTnet (800) 302-0896 Pager
Urbana, IL 61801 Agent_X (Sysop) andyd@IRC (IRC Op)

1091. Could you help me?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 10:22:42 UTC
From: h8807817@hkucc.hku.hk
Message-ID: <1994Feb5.182242.1@hkucc.hku.hk>
Source record: 271541

I understand that this may not be the right news-group for me to post in the message below and I apologise for any troubles caused to you. But I do need the co-operation and help from people of any displines from any part of the world!

You are invited to join my little pilot study. All you have to do is just spending some time to read and fill in the questionnaire below.

I am doing a master thesis on the topic of envy (social-comparison jealousy) and I want to collect some information for my pilot study. Please complete the following questionnaire and E-mail it back to me (my address is in%"h8807817@hkucc.hku.hk").

This research studies the variety of response under situation of envy.
I hope you can understanding the following points before answering the question-naire:

1. The sole purpose of this questionnaire is to collect data for an academic research. I am NOT going to evaluate or judge your behaviours or characters via your answers. In fact, as reaction to emotion varies from one person to another, there are no standardized "model answer" for any questions in the questionnaire. Therefore, any of your answer can not (and will not) said to be right or wrong, moral or immoral, by anybody.

2. The data collected will be treated in highly confidential way.
Every returned questionnaires will be collapsed for analysis and the raw data will be erased as soon as possible. No individual analysis will be done on any one piece of questionnaire.

Therefore, please answer every questions as sincerely and seriously as possible, basing on your REAL experience and feeling in the past. Please feel free to E-mail any enquiry to me.

Thanks again for your kindest co-operation.

Everybody should have experienced the feeling of envy toward somebody else, and that kind of feeling usually occurs when we are having some kind of competition, real or imaginary, with that person.

Now, could you please stop for a while and try to recall a past situation in which you found yourselves inferior to someone when you were compared with that person, and hence experienced the strongest feeling of envy toward that person.

Then, please try to recall as vividly as possible this past situation.
Imagine yourselves to be in that situation again, and try to re-experience the

feelings and thoughts at that time. Who were you envious of? Why did you feel envy toward that person? How did you feel, think, and behave toward yourselve and toward that person at that moment?

Also, you felt envious of that person after some kind of defeat (or being out-performed) by that person. From your point of view, why did you get such a disappointed outcome when compared with that person? If you were asked to suggest ONE SINGLE cause for that disappointed outcome, what cause would you suggest?
After you have re-experienced vividly the above event, please try to answer the following questions based on your real experiences and thoughts at that time. Each questions will be followed by a answer scale and please put an "*" on top of the proper number to represent your answer to that question:

eg.: *
(Not at all): < 1 2 3 4 5 6 7 > :(very much)

(Please note that the meaning of the two poles may varies from one question to another.)

In the following questionnaire, the word (X) will be used to refer to the person you feel envious of.

You are supposed to have thought of a SINGLE cause for the disappointed outcome in the comparison with X. Now I want to know something about how you view that CAUSE (not how you view the OUTCOME):

According to your own view:

1. Is the cause that you have mentioned something that:

reflects some aspects < 1 2 3 4 5 6 7 > reflects some aspects
of yourselves of the external situation

2. Is the cause that you have mentioned:

controllable by you or < 1 2 3 4 5 6 7 > uncontrollable by you or
some other people any other people

3. Is the cause that you have mentioned something that is:

permanent < 1 2 3 4 5 6 7 > temporary

4. Is the cause that you have mentioned something:

intended by you < 1 2 3 4 5 6 7 > unintended by you
or someone else or anyone else

5. Is the cause that you have mentioned something that is:

outside of you < 1 2 3 4 5 6 7 > inside of you

6. Is the cause that you have mentioned something that is:

variable over time < 1 2 3 4 5 6 7 > stable over time

7. Is the cause that you have mentioned something:

about you < 1 2 3 4 5 6 7 > about other people

8. Is the cause that you have mentioned something that is:

changeable < 1 2 3 4 5 6 7 > unchangeable

9. Is the cause that you have mentioned something for which:

no one is responsible < 1 2 3 4 5 6 7 > someone is responsible

10. Is the cause that you have mentioned something that is:

dispositional to someone < 1 2 3 4 5 6 7 > purely situational

The cause that you have suggested may not have a specific relationship
with both you and X, or it may implies some quantitative difference between you
and X (ie. there were some quantitative difference between X and you on the
quality that you have mentioned as the cause of the outcome).

If you think your cause falls into the former category (no specific
relationship with you and X), please skip question 11 and go to question 12
directly.
If you think your cause falls into the latter category (implying some
quantitative differences between you and X in some domains), please answer the
following question:

11. Talking about the cause you have mentioned, which of the following two
ways of thinking did you incline to?

[X got better outcome than me did because:

X was superior to me < 1 2 3 4 5 6 7 > I was inferior to X,

in terms of the quality that I have mentioned as cause of outcome.]

* * * * * * * * * *

At the time you felt unhappy because of the comparison with X:

12. How angry did you felt at X? Not at all < 1 2 3 4 5 6 7 > Very much

13. How much did you like X? Not at all < 1 2 3 4 5 6 7 > Very much

14. If you had saw X in the street
and X had not saw you, would Certainly < 1 2 3 4 5 6 7 > Certainly
you have greeted and said not yes
hello to X?

15. If you had saw X on the bus
and X had not saw you, would Certainly < 1 2 3 4 5 6 7 > Certainly
you have sat beside and talked not yes
to X?

16. Would you like to have a Not at all < 1 2 3 4 5 6 7 > Very much
chance of co-operation with X?

17. How much you would want X as Not at all < 1 2 3 4 5 6 7 > Very much
a friend of you?

18. Have you ever done (or thought Never < 1 2 3 4 5 6 7 > Frequently
of doing) something negative
toward X?

19. Have you ever made (or thought Never < 1 2 3 4 5 6 7 > Frequently
of making) some nasty comments
about X in front of other people?

How much did you agree with the following two statements?

20. You should not have got such a Do not < 1 2 3 4 5 6 7 > Totally
bad outcome comparing with X. agree at all agree

21. Something that was rightfully Do not < 1 2 3 4 5 6 7 > Totally
yours or should have been yours agree at all agree
was taken away from you.

Whether you are familiar with X or not, would you please point out your
own personal impression on X in the following aspects.

From your point of view, could X be described as:

22. a sensitive person? Not at all < 1 2 3 4 5 6 7 > Very much

23. a reliable person? Not at all < 1 2 3 4 5 6 7 > Very much

24. an attractive person? Very much < 1 2 3 4 5 6 7 > Not at all

25. an interesting person? Not at all < 1 2 3 4 5 6 7 > Very much

26. a popular person? Very much < 1 2 3 4 5 6 7 > Not at all

27. a warm person? Very much < 1 2 3 4 5 6 7 > Not at all

28. a nice person? Not at all < 1 2 3 4 5 6 7 > Very much

29. a sympathetic person? Very much < 1 2 3 4 5 6 7 > not at all

30. Finally, how envious did you felt toward X?

Very much < 1 2 3 4 5 6 7 > not at all

Personal information: (please put an '*' inside appropriate brankets.)

Sex: male ( ) or female ( )

Age range: below 20 ( ), 20-29 ( ), 30-39 ( ), 40-49 ( ), above 49 ( )

Student ?: Yes ( ) or No ( )

Are you an: African ( )
American ( )
Arabian ( )

Asian (Chinese) ( )
Asian (Non-Chinese) ( )
European ( )
Others (pls specify): ( )

** End of questionnaire **

Now you have finished the whole questionnaire. Would you please e-mail
it back to me via the following address.

In%"h8807817@hkucc.hku.hk"

As this is only a prototype of my final questionnaire, any comments on
the construction of the questionnaire as well as any questions related to my
topic (envy) are welcomed. Thanks again for you time and effort!

****
* | *
* Ronnie T.W. Hung | E-mail: *
* (M.Phil student) | h8807817@hkucc.hku.hk *
* Department of Psychology, | or *
* The University of Hong Kong. | h8807817@hkusub.hku.hk *
* | *
* *
* World without strangers ! *
* *
****

1092. Re: TS850 & PK-232MBX

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 12:26:02 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9402050716591.gilbaronw0mn.DLITE@delphi.com>
Source record: 271542

>Well I've tried just about everything I can think of...I'm attempting to
>use the PK-232 with my TS-850.....problem is an awfull lot of rf getting
>back into the Kenwood. I've tried shielded cable, additional grounding
>straps between both units, shorter lengths of cable - no luck. Anyone
>have a clue as to how to eliminate the unwanted rf? Seems I might of saw
>a posting here addressing this very problem but not sure. Thanks in
>advance for any replies, 73...Roger/N5IFH.
>
With my TS440SAT I must make sure that the microphone is not plugged at the
same time. Removing it and placing the toroid around the audio leads solved
my problem. Also an antenna far away such as a beam on a tower helps a lot.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

1093. Mailing List

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 15:40:50 UTC
From: twise@shell.portal.COM
Message-ID: <Pine.3.07.9402050750.A22190-9100000@jobe.shell.portal.com>
Source record: 271561

Please add me to you mailing list

Travis A. Wise /wwwwwww\ email: twise@shell.portal.com
1421 Grace Avenue o o AX.25: KB8FOU@N6LDL.CA.USA.NA
San Jose, CA 95125 | Fax: 408/267-6981
Del Mar High School _____/ Tel: 408/267-9562

1094. Info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 15:41:56 UTC
From: twise@shell.portal.COM
Message-ID: <Pine.3.07.9402050756.A22206-9100000@jobe.shell.portal.com>
Source record: 271562

Please add me to your mailing list.

Travis A. Wise /wwwwwww\ email: twise@shell.portal.com
1421 Grace Avenue o o AX.25: KB8FOU@N6LDL.CA.USA.NA
San Jose, CA 95125 | Fax: 408/267-6981
Del Mar High School _____/ Tel: 408/267-9562

1095. Re: Radar Detector Detectors

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 16:02:33 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.760464153@BIX.com>
Source record: 271564

tskloss@zeus.tamu.edu (SKLOSS, TIMOTHY WILLIAM) writes:

>In article <CKo1pB.MBJ@nrtpa22.bnr.ca>, billag@b4pphff.bnr.ca (Bill Gutknecht) writes...
>> Since this group contains all the RF types ... I was wondering
>> if anyone here knows where I can find out about radar detector
>> "detectors" ... specifically something published ... I have
>> a friend who is quite the sceptic and doesn't believe me that
>> they exist ...

>Tell your friend to drive around Canada, or a state which outlaws radar
>detectors, with a powered up radar detector in the glove box and see what
>happens. They will probably even show the detector to him.

>-tim
But no sooner have radar detector detectors arrived, than I see ads now
for "undetectable" radar detectors. Right here in front of me, I have
one in a Herrington catalog (Ph 800-622-5221/FAX 603-437-3492) for a
Bel SuperWideband "Undetectable" Radar/LaserDetector for $339. Do you
know if in fact these "undetectable" detectors are really undetectable?

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715

1096. Re: Dayton Parking: Hell on Earth! (not!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 16:10:53 UTC
From: wb8foz@netcom.com
Message-ID: <wb8fozCKrEA5.HEv@netcom.com>
Source record: 271563

macy@telemax.com (Macy Hallock) writes:

>>Every year the Hamvention comes off with (apart from the $#%@!% weather here)
>>no major hitches.

>You are absolutely correct.

>I am constantly amazed at how well the Dayton Hamvention works, every
>time, every year. The DARA people have learned how to do the job well.

Last time I checked, the Hamvention had one, repeat, one, year-round
employee -- the secretary. Everyone else is a club volunteer. By my
back_of_the_envelope SWAG it must be a million-dollar operation.

How many million-dollar companies do so much with so little?

"wearing my SCUBA suit over my sunblock, and under my parka"
--
A host is a host from coast to coast.................wb8foz@nrk.com
& no one will talk to a host that's close...........(v)301 56 LINUX
Unless the host (that isn't close)....kibo# 777.............pob 1433
is busy, hung or dead..............vr...................20915-1433

1097. Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 18:39:01 UTC
From: ecarp@netcom.com
Message-ID: <ecarpCKrL52.57s@netcom.com>
Source record: 271566
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

I know that I can operate in Canada without having to go through the
reciprocal operating stuff, but how long can I do this in Canada?
If I decide to immigrate, does having a US license do me any good?
What frequencies can I operate on in Canada (I'm sure that their
allocations are different than in the US)?

Is there an FTP server in Canada that has this information? I've looked
through the FAQs and browsed world.std.com, but didn't find anything.
Any help is appreciated!! Thanks!
--
Ed Carp, N7EKG ecarp@netcom.com 510/659-9560
an38299@anon.penet.fi, anon-1157@twwells.com
If you want magic, let go of your armor. Magic is so much stronger than
steel! -- Richard Bach, "The Bridge Across Forever"

1098. ARLP005 Propagation de KT7H

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 18:43:10 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlp005.1994@ampr.org>
Source record: 271545
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB PROP @ ARL $ARLP005
ARLP005 Propagation de KT7H
ZCZC AP19
QST de W1AW
Propagation Forecast Bulletin 5 ARLP005
From Tad Cook, KT7H
Seattle, WA February 4, 1994
To all radio amateurs

SB PROP ARL ARLP005
ARLP005 Propagation de KT7H

Solar flux dipped below 100 last week. Geomagnetic conditions were stable most of the time, but there was one period around 1200z on February 2 when the K index went as high as four. Activity should stay low, but increase again later this month.

WA4TTK has new versions of his popular free solar activity graphing program, including one for Windows. Watch this bulletin next week for more details. In the meantime, you can get a free copy by mailing a formatted MS DOS diskette of any size or format in a postage paid return mailer to Scott Craig, 409 Jessie Drive, Nashville, TN 37211.

Sunspot Numbers from January 27 through February 2 were 63, 60, 89, 81, 81, 55 and 52, with a mean of 68.7. 10.7 cm flux was 120.5, 119, 102, 99, 97.6, 94 and 96.3, with a mean of 104.1.

The projection for this week is from the center of the continental United States to Peter 1 Island.

80 meters should be good from 0400 to 1000z, with the best times from 0530 to 0730. 40 meters should be good from 0300 to 0930, and 30 meters from 0130 to 1130. 20 meters should be open from 2330 to 0200, and possibly until 0530. 17 meters may be open around 1430 to 1630, and has a better chance from 2330 to 0130. On some days 15 meters may be open from 1900 to 0000. 10 and 12 meters do not look good over this path.
NNNN
/EX

1099. Center Console Mount

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 19:30:14 UTC
From: hopken@interaccess.com
Message-ID: <2j0s47$7p4@mailhost.interaccess.com>
Source record: 271568

Hello all. I just got an Oldsmobile Cutlass with a center, floor mounted console. Kind of like "four on the floor". Looks real sporty but absolutely no place to mount my dual band Yaesu FT-5100 rig. Can someone who has solved this puzzle help me out? How did you mount your radio? Must be vertical along the console but how did you attach it. Does someone make a vertical mount that slips over these consoles or maybe you put velcro on your radio. Anyway, I'd appreciate some suggestions on the best approach. Tnx es 73's...

--

==========
Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA

1100. Connect callsign for the Shuttle?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 19:58:55 UTC
From: "Eleen N. Kamas" <kamas+@CMU.EDU>
Message-ID: <IhIzdzm00WBM43cn9K@andrew.cmu.edu>
Source record: 271569
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

Hi All!

Well, I managed to hear the shuttle's packet radio this morning, but I have no Idea what call sign to connect to. Or for that matter what is the procedure once you do connect. Could someone give a brief tour of connecting to the Shuttle and getting a QSL card?

Also, can I recieve the equivalent of a QSL card for just hearing them?

Chuck Kamas
N3QAT
ee2g+Charles@andrew.cmu.edu

Eleen N. Kamas
kamas+@cmu.edu

1101. Re: Antenna Lawsuit

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 22:40:00 UTC
From: edellers@delphi.com
Message-ID: <14.14553.822.0NAC3E66@delphi.com>
Source record: 271546

Carole L. Hamilton <clh6w@faraday.clas.Virginia.EDU> writes:

>That's a very fine distinction. The government runs the court system. If
>I win my law suit I can get the sherrif to remove your radio tower.
>If that's not the government enforcing my rights, it sure walks like a duck.
>73, Ned AB6FI

It may sound like a "fine distinction" to you, but it's a very real one.

If I commit a crime against you, you can call the police and have me arrested; the DA prosecutes and I end up in jail. This takes NO effort or expense on your part except for talking to the cops and the DA's investigators and for testifying against me in court.

In a civil case, YOU have to file the suit and hire the lawyers. If the court rules against me and I defy the order, YOU have to go back to court to get an order directing the sheriff to enforce the original order, again with your own legal counsel at your own expense.

-- Ed Ellers, KD4AWQ

• Cam-GOLD v1.00:

1102. Re: Antenna Lawsuit

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 22:42:00 UTC
From: edellers@delphi.com
Message-ID: <14.14554.822.0NAC3E67@delphi.com>
Source record: 271547

Carole L. Hamilton <clh6w@faraday.clas.Virginia.EDU> writes:

>Sorry but I have to ask this question: Do you really think that
>discrimination against a person merely because he has black
>skin or because she is a female is the same as discrimination
>against someone who wants to put a radio antenna?

Yes. Both restrictions are based on irrational behavior against someone who is
not committing harmful acts.

• Cam-GOLD v1.00:

1103. RB312 SEMANTICS 2/7 FOR FEB 7TH

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 22:47:15 UTC
From: enge@almaden.ibm.com
Message-ID: <$racesbul.312.1994@ampr.org>
Source record: 271429
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Bid : $RACESBUL.312

From: W6WWW@KD6XZ.#NOCAL.CA.USA.NOAM
To : RACES@ALLUS

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.312 RELEASE DATE: February 7, 1994

Subject: MGT - Semantics 2/7 - Civil Defense

Semantics is the basis for the majority of misunderstandings or disagreements. Semantics: the definition of words. A word that means one thing in one part of the country can mean either nothing or something else altogether in another part of the country. Let's discuss some of the common position titles most of us have heard at one time or another. Some of the titles apply to paid staff, others to volunteers, and some are held by both.

CIVIL DEFENSE. This term is still used by many jurisdictions. In others it has been changed to emergency services, emergency management, disaster preparedness or similar name --- but it's role is still the same. In some jurisdictions the civil defense official is principally a planner and delegates all or most activities to departments in the jurisdiction. In other jurisdictions the position has command and control authority and responsibility. The CD official may directly supervise the RACES program in some jurisdictions. In others it has been delegated to another department head. The final authority and responsibility, however, always rests with the civil defense official.
(Part 2 of 7. Continued)

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

1104. RB312 SEMANTICS 2/7 FOR FEB 7TH

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 22:47:15 UTC
From: enge@almaden.ibm.COM
Message-ID: <199402052248.OAA12181@ucsd.edu>
Source record: 271567

Bid : $RACESBUL.312

From: W6WWW@KD6XZ.#NOCAL.CA.USA.NOAM
To : RACES@ALLUS

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
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(Part 2 of 7. Continued)

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

1105. BP-8S battery for HTX-202 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-05 23:23:28 UTC
From: partos@larry.larc.nasa.gov
Message-ID: <PARTOS.94Feb5232328@larry.larc.nasa.gov>
Source record: 271438

Does anyone know if the RS HTX-202 can accept the Icom BP-8S battery? The battery is rated at 9.6v. Is this too high for the 202 ? I know there is a limit to the voltage of the batteries the 202 can accomodate, even though it will accept 13.8v via the input on top of the radio. Apparently there is a circuitry difference in the two inputs, but I don't know what the maximum battery voltage is. Any help or experiences appreciated. Dick KE4AZJ

--

|---|
| Richard D. Partos KE4AZJ Norfolk, VA |
Internet: r.d.partos@larc.nasa.gov

1106. SAREX Update 2/6 at 00:30 UTC

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 00:50:37 UTC
From: ABFHB@STDVAX.GSFC.NASA.GOV
Message-ID: <940205195037.21c27c39@STDVAX.GSFC.NASA.GOV>
Source record: 271574

SB SAREX @ AMSAT $STS-60.007
SAREX Update 2/6 at 00:30 UTC

SAREX was officially activated at 14:27 UTC on February 4 with a successful voice contact through the University of Surrey amateur radio station. Doug Loughmiller, G0SYX was the operator at the microphone to intitate the first contact with the STS-60 crew.

The SAREX team reports a highly successful direct contact one orbit later with a school group in Boise Idaho. The contact, held at the Discovery Center included students from several schools including the Boise Senior High School. 19 students were able to ask direct questions to Shuttle Commander Charlie Bolden.

The packet robot has also been quite active. The packet QSO sequence number exceeded the 800 mark about 30 hours after SAREX operations was initiated.

Problems with RFI on the Wake Shield Facility have delayed the deployment of this primary payload. This has affected the SAREX payload somewhat. Currently, the Mars, Pennsylvania school contact, which was scheduled for today, has been postponed until the Wake Shield issues have been resolved.

The official SAREX element set for today will be GSFC-003. Gil Carman, WA5NOM reports that the predictions using GSFC-003 are 1 second later than the current orbiter state vector.

1 22977U 94006A 94 35.13981770 0.00000202 00000-0 58718-5 0 37
2 22977 56.9857 213.2731 0008535 263.0773 96.9324 15.72145611 115

Satellite: STS-60
Catalog number: 22977
Epoch time: 94035.13981770 (04 FEB 94 03:21:20.25 UTC)
Element set: GSFC-003
Inclination: 56.9857 deg
RA of node: 213.2731 deg Space Shuttle Flight STS-60
Eccentricity: 0.0008535 Keplerian Elements
Arg of perigee: 263.0773 deg
Mean anomaly: 96.9324 deg
Mean motion: 15.72145611 rev/day Semi-major Axis: 6730.8981 Km
Decay rate: 0.20E-05 rev/day*2 Apogee Alt: 358.25 Km
Epoch rev: 11 Perigee Alt: 346.77 Km

NOTE - This element set is based on NORAD element set # 003.
The spacecraft has been propagated to the next ascending
node, and the orbit number has been adjusted to bring it
into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO, for the SAREX Working Group

/EX

1107. Re: why 29.94 fps?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 03:49:55 UTC
From: clifto@indep1.chi.il.us
Message-ID: <2704@indep1.chi.il.us>
Source record: 271437

In article <19940205.00314981.edellers@delphi.com| edellers@delphi.com (Ed Ellers) writes:
|Cliff Sharp <clifto@indep1.chi.il.us| writes:
|| While we're on the subject, it's worthy of note that (apparently by FCC
||fiat):
||
||* the color subcarrier is 3,579,545 Hz +- 10 Hz
|
|No, it's actually 3.579545454545454545... MHz, +/- 10 Hz. The 5454s go on
|to infinity. The exact definition is 63/88 x 5 MHz.

73.682(a)(5) says:

"The chrominance subcarrier frequency shall be 3.579545 MHz +- 10 hertz
[sic] with a maximum rate of change not to exceed one-tenth hertz [sic]
per second."

--
+---+
| Cliff Sharp | |
| WA9PDM | |
+---+

1108. Daily Summary of Solar Geophysical Activity for 04 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 04:24:36 UTC
From: oler@rho.uleth.ca
Message-ID: <9402060424.AA26838@rho.uleth.ca>
Source record: 271434
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

04 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 035, 02/04/94
10.7 FLUX=095.3 90-AVG=106 SSN=075 BKI=2222 2232 BAI=008
BGND-XRAY=A8.6 FLU1=8.0E+05 FLU10=1.6E+04 PKI=1222 3232 PAI=008
BOU-DEV=010,017,015,010,015,019,021,014 DEV-AVG=015 NT SWF=00:000
XRAY-MAX= B4.8 @ 0734UT XRAY-MIN= A7.8 @ 1658UT XRAY-AVG= B1.2
NEUTN-MAX= +002% @ 1900UT NEUTN-MIN= -002% @ 2140UT NEUTN-AVG= -0.2%
PCA-MAX= +0.1DB @ 2300UT PCA-MIN= -0.3DB @ 1405UT PCA-AVG= -0.0DB
BOUTF-MAX=55346NT @ 0557UT BOUTF-MIN=55317NT @ 2018UT BOUTF-AVG=55338NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+066,+000,+000
GOES6-MAX=P:+122NT@ 1846UT GOES6-MIN=N:-059NT@ 0622UT G6-AVG=+088,+029,-026
FLUXFCST=STD:095,095,090;SESC:095,095,090 BAI/PAI-FCST=005,010,015/008,010,015
KFCST=1123 2132 2113 3124 27DAY-AP=008,005 27DAY-KP=1233 3221 1121 2221
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 03 FEB 94 was 52.0.
The Full Kp Indices for 03 FEB 94 are: 1o 2+ 3- 3- 3+ 3+ 2+ 1+
The 3-Hr Ap Indices for 03 FEB 94 are: 4 10 11 13 20 18 10 5

SYNOPSIS OF ACT

Solar activity was very low with only small B-class
bursts observed. Region 7666 (N17E37) grew slightly. New spots
emerged in the plage of Region 7664 (S12W09). Yohkoh images
show the southern coronal hole as similar to last rotation with
a slight equatorward expansion.

Solar activity forecast: solar activity should be at a
very low to low level for the forecast period.

The geomagnetic field was predominantly quiet. Some high
latitude stations experienced isolated active to minor storm

conditions but this level of disturbance was not observed
globally.

Geophysical activity forecast: the geomagnetic field
should be mostly quiet for 05 Feb. Unsettled conditions are
forecast for 06 feb. Beginning on 07 Feb, the coronal hole
related disturbance experienced last rotation should recur.
This long-lived disturbance resulted in daily A indices in
the active range with some K indices in the minor to severe
storm range. Similar conditions are expected this rotation.
The moderate to high fluxes of energetic electrons observed
with this disturbance last rotation may also recur.

Event probabilities 05 feb-07 feb

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 05 feb-07 feb

A. Middle Latitudes
Active 15/30/40
Minor Storm 05/20/30
Major-Severe Storm 01/01/05

B. High Latitudes
Active 15/30/40
Minor Storm 05/20/30
Major-Severe Storm 01/05/10

HF propagation conditions were normal over all regions.
No changes are expected over the next 48 hours. Minor signal
degradation may begin to be observed on 07 February over the
high and polar latitudes.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7662 S17W55 081 0000 AXX 01 001 ALPHA
7663 N13W63 089 0030 CRO 04 006 BET
7664 S12W10 036 0020 BXO 04 007 BET
7665 N04W02 028 0060 CSO 03 002 BET
7666 N17E36 350 0120 DAO 07 009 BET
REGIONS DUE TO RET
NMBR LAT
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 04 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 04 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 04/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
03 Feb: 0005 0006 0015 SF 7666 N17E64
0157 0202 0205 B3.4 SF 7666 N18E62
0407 0417 0422 C1.5 SF 7666 N17E62
0455 0458 0502 B5.0 SF 7666 N18E62
0609 0614 0622 C1.1
0742 0746 0749 B3.9
1823 1844 1913 C1.1 SF 7663 N13W48

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Region 7663: 1 0 0 1 0 0 0 0 001 (14.3)
Region 7666: 1 0 0 4 0 0 0 0 004 (57.1)
Uncorrellated: 1 0 0 0 0 0 0 0 002 (28.6)

Total Events: 007 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
03 Feb: 0609 0614 0622 C1.1 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1109. Re: Guns and O2 (was Re:

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 05:50:00 UTC
From: dan@mystis.wariat.org
Message-ID: <14.14557.822.0NAC3E6A@mystis.wariat.org>
Source record: 271548

myers@pongo.West.Sun.COM (Dana Myers) writes:

> In article <2irn94$rsj@sugar.NeoSoft.COM> xraytech@sugar.NeoSoft.COM (A great
> >In article <2irhk2INNbna@abyss.west.sun.com>,
> >Dana Myers <myers@pongo.West.Sun.COM> wrote:
> >>
> >>Now, back to amateur radio concerns...
> >> * This Extra supports the abolition of the 13 and 20 WPM tests *
> >
> >Why not abolish ALL testing. It seems to me that's what most of the
> >whiners want anyway, right?
> >
>
>
> Does anyone else suspect that Robert Coyle (WA3J) is back?

I was thinking the very same thing, just not enough to mention it!

Dan Pickersgill N8PKV - dan@mystis.wariat.org - ac447@po.cwru.edu
---
• Cam-GOLD v1.00:

1110. ANS Bulletin 036.06

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 05:54:56 UTC
From: 70323.2750@CompuServe.COM
Message-ID: <940206055455_70323.2750_CHV23-1@CompuServe.COM>
Source record: 271549

SB SAT @ AMSAT $ANS-036.06
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 036.06 FROM AMSAT HQ
SILVER SPRING, MD FEBRUARY 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-036.06

Weekly OSCAR Status Reports: 6 FEB-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Jan 31-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 145 |<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 240/0, Apr 04
Poor Sun angle and battery testing need maximum OFF time.
[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current FO-20 operating schedule:
From January '94 thru March '94, the analog mode and the
digital mode will be on alternately for a week at a time.
ANALOG MODE:
09-FEB-94 7:15 -TO- 16-FEB-94 7:40 UTC
23-FEB-94 8:05 -TO- 02-MAR-94 6:40 UTC
09-MAR-94 7:05 -TO- 16-MAR-94 7:30 UTC
23-MAR-94 7:52 -TO- 30-MAR-94 8:15 UTC
DIGITAL MODE: Unless otherwise noted above.
[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

AO-21: ZL3VTV works AO-21 with great success from his QTH in Christchurch, New
Zealand. He reguarly works stations in Australia with ease using a
a fixed 10 element beam pointed 30 deg above the horizon on the uplink
and using a collinear antenna for the downlink. ZL3VTV is looking for
to work more ZL's and would entertain schedules. [ZL3VTV @ZL3AC]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly
OSCAR status reports. If you have a favorite OSCAR which you work on a
regular basis and would like to contribute to this bulletin, please send
your observations to WD0HHU at his CompuServe address of 70524,2272, on
INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO
area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current
set of orbital elements are not generating the correct AOS/LOS times at

your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

1111. ANS Bulletin 036.05

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 05:55:10 UTC
From: 70323.2750@CompuServe.COM
Message-ID: <940206055509_70323.2750_CHV23-2@CompuServe.COM>
Source record: 271550

SB SAT @ AMSAT $ANS-036.05
AO-13 ZRO TEST SCHEDULES!

HR AMSAT NEWS SERVICE BULLETIN 036.05 FROM AMSAT HQ
SILVER SPRING, MD FEBRUARY 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-036.05

AO-13 ZRO Tests Begin For '94

AMSAT-OSCAR-13

ZRO TEST SCHEDULE

FEBRUARY-MARCH 1994

The ZRO Memorial Technical Achievement Award Program, or just
"ZRO Test" has a new schedule for February and March, 1994, via
AMSAT-OSCAR-13. This activity is a test of operating skill and equipment
performance.

During a typical ZRO run, a control station will send numeric
code groups using CW at 10 words-per-minute. At the beginning of the
run, uplink power from the control station is set to match the general
beacon downlink strength. This is level "zero". The control operator
will send and repeat a random five-digit number, then lower his uplink
power by 3 dB (half power) and repeat the procedure with a new random
number (level "1"). This will continue to a level 30 dB below the beacon
(level "A").

A participating listener monitors the downlink signals until he
or she can no longer copy the numbers. Those who can hear the beacon
will qualify for the basic award by copying the code group heard at level
"zero". The challenge is to improve home-station performance to a point
where the lower-level downlink signals can be copied (levels 6 through
A). To date, only one station, Darrel Emerson (AA7FV), has successfully
copied level "A".

The following schedule of Mode "B" tests were chosen for convenient
operating times and favorable squint angles. The tests can be heard on
145.840 MHz. Andy WA5ZIB will conduct all the tests. Mode "JL" tests
will no longer occur due to the failure of AO-13's 70-cm transmitter.

Day Date (UTC) Time Areas covered

Saturday Feb. 12, 1994 2345 UTC NA, SA, Europe, W. Africa
Sunday Feb. 20, 1994 0330 UTC NA, NW SA, Japan, Pacific
Saturday Feb. 26, 1994 1930 UTC NA, SA, Europe, Africa, ME

Saturday Mar. 19, 1994 1930 UTC NA, SA, Europe, Africa
Saturday Mar. 26, 1994 2315 UTC NA, SA

Note that the dates and days are shown in "UTC", thus the second test occurs at 9:30 PM CST Saturday night (the 19th). Any changes will be announced as soon as possible via the AMSAT HF and AO-13 Operations Nets.

All listener reports with date of test and numbers copied should be sent to Andy MacAllister WA5ZIB, AMSAT V.P. User Operations, 14714 Knights Way Drive, Houston, TX 77083-5640. A report will be returned verifying the level of accurate reception. An S.A.S.E. is appreciated but not required.

Information about the AMSAT Awards Program can be found on page 197 of the "Proceedings of the AMSAT-NA Tenth Space Symposium" (1992). This paper, covering all the AMSAT-NA awards including specifics on the ZRO Test, was reprinted on page 10 in the March/April 1993 issue of "The AMSAT Journal". The ZRO Test information provided in the article covers test procedures, means for obtaining certificates and gives some historical background about the program. Reprints of the article can be obtained for an S.A.S.E. to WA5ZIB at the address above.

/EX

1112. ANS Bulletin 036.04

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 05:55:17 UTC
From: 70323.2750@CompuServe.COM
Message-ID: <940206055516_70323.2750_CHV23-3@CompuServe.COM>
Source record: 271551

SB SAT @ AMSAT $ANS-036.04
OSCAR-21 CELEBRATES THIRD BIRTHDAY

HR AMSAT NEWS SERVICE BULLETIN 036.04 FROM AMSAT HQ
SILVER SPRING, MD FEBRUARY 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-036.04

OSCAR-21 CELEBRATES THIRD BIRTHDAY

On 29 January 1991 the first international Orbiting Satellite Carrying
Amateur Radio (OSCAR) in which radio amateurs from the former
Soviet Union (CIS) worked together with radio amateurs from
Germany was successfully launched.

The official name of the project was RM1, which stands for "RADIO M-1".
The digital transponder RUDAK-2 is part of RM1.

After the launch from the Northern Cosmodrome in Plesetsk, Russia
the satellite was named as AMSAT-OSCAR 21, to emphasize that the
spacecraft was built by, and for, Radio Amateurs around the world.

AMSAT OSCAR-21 is an attached secondary payload (Piggy-back) aboard
the CIS geological research satellite "INFORMATOR-1".

OSCAR-21 (also known as RS-14) is a joint project between AMSAT-U
in Russia and AMSAT-DL in Germany.

Two UUENCODED files which show the RUDAK hardware and two pictures taken from
an original launch video have been uploaded to AMSAT-BB by DB2OS. The picture
is compressed using CJPEG.

ANS thanks Peter Guelzow DB2OS for this item.

/EX

1113. ANS Bulletin 036.03

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 05:55:22 UTC
From: 70323.2750@CompuServe.COM
Message-ID: <940206055522_70323.2750_CHV23-4@CompuServe.COM>
Source record: 271552

SB SAT @ AMSAT $ANS-036.03
AMSAT NET ON GALAXY 3

HR AMSAT NEWS SERVICE BULLETIN 036.03 FROM AMSAT HQ
SILVER SPRING, MD FEBRUARY 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-036.03

AMSAT NET ON GALAXY 3

Satellite users may be interested in an experimentbeing conducted in the Houston, Texas area. The group there is uplinking the Houston Area Amsat Net, heard locally on the 147.10 FM repeater, to Galaxy 3, Channel 17, 5.8 Mhz. audio subcarrier (Shop-At-Home Channel). This net is carried in realtime on Tuesday evening, from approximately 10PM (CST) until completion at approximately 10:30 - 10:45 PM. This is an experiment but could be continued on a regular basis if interest is sufficient. Please send reports of your reception and your comments to: davidsonc@tcd.jsc.nasa.gov via Internet, or call (713) 483-0078 during business hours, or during the uplink period (713) 595-2393. Ask for Craig Davidson, WD5BDX.

ANS wishes to thank Craig Davidson WD5BDX for this information.

/EX

1114. ANS Bulletin 036.02

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 05:55:34 UTC
From: 70323.2750@CompuServe.COM
Message-ID: <940206055534_70323.2750_CHV23-5@CompuServe.COM>
Source record: 271553

SB SAT @ AMSAT $ANS-036.02
SAREX UPDATE AS OF FEB 6 at 00:30 UTC

HR AMSAT NEWS SERVICE BULLETIN 036.02 FROM AMSAT HQ
SILVER SPRING, MD FEBRUARY 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-036.02

SAREX Begins Operation

SAREX was officially activated at 14:27 UTC on February 4 with a successful voice contact through the University of Surrey amateur radio station. Doug Loughmiller, G0SYX was the operator at the microphone to intitate the first contact with the STS-60 crew.

The SAREX team reports a highly successful direct contact one orbit later with a school group in Boise Idaho. The contact, held at the Discovery Center included students from several schools including the Boise Senior High School. 19 students were able to ask direct questions to Shuttle Commander Charlie Bolden.

The packet robot has also been quite active. The packet QSO sequence number exceeded the 800 mark about 30 hours after SAREX operations was initiated.

Problems with RFI on the Wake Shield Facility have delayed the deployment of this primary payload. This has affected the SAREX payload somewhat. Currently, the Mars, Pennsylvania school contact, which was scheduled for today, has been postponed until the Wake Shield issues have been resolved.

The official SAREX element set for today will be GSFC-003. Gil Carman, WA5NOM reports that the predictions using GSFC-003 are 1 second later than the current orbiter state vector.

1 22977U 94006A 94 35.13981770 0.00000202 00000-0 58718-5 0 37
2 22977 56.9857 213.2731 0008535 263.0773 96.9324 15.72145611 115

Satellite: STS-60
Catalog number: 22977
Epoch time: 94035.13981770 (04 FEB 94 03:21:20.25 UTC)
Element set: GSFC-003
Inclination: 56.9857 deg
RA of node: 213.2731 deg Space Shuttle Flight STS-60
Eccentricity: 0.0008535 Keplerian Elements
Arg of perigee: 263.0773 deg
Mean anomaly: 96.9324 deg

Mean motion: 15.72145611 rev/day Semi-major Axis: 6730.8981 Km
Decay rate: 0.20E-05 rev/day*2 Apogee Alt: 358.25 Km
Epoch rev: 11 Perigee Alt: 346.77 Km

NOTE - This element set is based on NORAD element set # 003.
The spacecraft has been propagated to the next ascending
node, and the orbit number has been adjusted to bring it
into agreement with the NASA numbering convention.

ANS thanks Frank H. Bauer, KA3HDO, of the SAREX Working Group for this item.

/EX

1115. ANS Bulletin 036.01

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 05:55:49 UTC
From: 70323.2750@CompuServe.COM
Message-ID: <940206055549_70323.2750_CHV23-6@CompuServe.COM>
Source record: 271554

SB SAT @ AMSAT $ANS-036.01
STS-60 SAREX Mission Begins

HR AMSAT NEWS SERVICE BULLETIN 036.01 FROM AMSAT HQ
SILVER SPRING, MD FEBRUARY 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-036.01

STS-60 News as of 3 February 1994 at 12:30 UTC

The Space Shuttle Discovery made a spectacular, historic, on-time liftoff this morning from the Kennedy Space Center. Discovery's launch marks the first joint U.S.-Russian Space Shuttle Flight. This will be the first of several joint missions planned in preparation for the development of the international Space Station. Cosmonaut Sergei Krikalev, U5MIR, was one of the six crew members on board this morning's Shuttle flight. His fellow American crew mates include Commander Charlie Bolden, KE4IQB, Pilot Ken Reightler, and Mission Specialists Jan Davis, Ron Sega, KC5ETH, and Franklin Chang-Diaz. The primary payloads on-board Discovery are the Wake Shield Facility, which will be deployed and retrieved during the flight and the Spacehab facility. Of particular interest to radio amateurs is the Shuttle Amateur Radio Experiment (SAREX) secondary payload. SAREX information for STS-60 including frequencies, callsigns and Keplerian elements, follows:

STS-60 Shuttle Amateur Radio Experiment (SAREX)
Information Sheet

Mission: STS-60 Space Shuttle Discovery
Wake Shield Facility & Spacehab-2 Mission

Launch: February 3, 1994, 12:10 UTC

Orbit: 57 degree inclination

Mission Length: 8 days (Nominal)

Amateur
Radio
Operators: Charlie Bolden, KE4IQB, Ron Sega, KC5ETH,
Sergei Krikalev, U5MIR

Modes: FM Voice
Prime callsign: KE4IQB

Packet Radio
Callsign: W5RRR-1

Frequencies: All operations in split mode. Do not transmit on
the downlink frequency.

Voice Freqs: Downlink: 145.55 MHz (Worldwide)
Uplinks: 144.91, 144.93, 144.95, 144.97, 144.99 MHz
(Except Europe)
144.70, 144.75, 144.80 MHz (Europe only)

Note: the crew will not favor any specific uplink
frequency, so your ability to work the crew will
be the "luck of the draw"

Packet Freqs: Downlink: 145.55 MHz
Uplink: 144.49 MHz

Info: Goddard Amateur Radio Club, WA3NAN, Greenbelt Maryland,
SAREX Bulletins and Shuttle Retransmissions
3860 KHz, 7185 KHz, 14,295 KHz, 21,395 KHz, 28,650 KHz
and 147.45 MHz (FM)

Johnson Space Center ARC, W5RRR, Houston, Texas
SAREX Bulletins
7225 KHz, 14,280 KHz, 21,395 KHz, 28,650 KHz, (SSB)
and 146.64 MHz (FM)

ARRL Amateur Radio Station, W1AW, Newington, CT
SAREX News Bulletins
3990, 7290, 14,290, 18,160, 21,390, and 28,590 KHz
and 147.555 MHz (FM)

Also, bulletins available on internet, via AMSAT ANS,
Compuserve, and your local PBSS.

School Group Participation: 5 school groups will participate
in SAREX with pre-scheduled direct
and telebridge contacts. These include
4 in the U.S., and one in Russia.

ANS wishes to thank Frank Bauer KA3HDO AMSAT VP for Manned Space Programs for
this information.

/EX

1116. Re: Robert is back (?) (w

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 06:00:00 UTC
From: dan@mystis.wariat.org
Message-ID: <14.14558.822.0NAC3E6B@mystis.wariat.org>
Source record: 271555

myers@pongo.West.Sun.COM (Dana Myers) writes:

> In article <CKoDx2.ALv@ucdavis.edu> ez006683@chip.ucdavis.edu (Daniel D. Todd
> >A great x ray technician! (xraytech@sugar.NeoSoft.COM) wrote:
> >
> >: Why not abolish ALL testing. It seems to me that's what most of the
> >: whiners want anyway, right?
> >
> >Dianne, if you had read my previous post before hitting the 'followup'
> >key you'd know what most of the 'whiners' want.
Only when you misquote them.

>
> It appears that "Robert" Robert Coyle WA3J is back, this time
> attempting to hide behind some "Great X-ray technician" moniker.
> The mention of "Dianne" is the attribution of a quote in his
> ".signature", though we know Robert would rather be anonymous
> and just stir up trouble, like most jammers. So, just like
> the way jammers should be dealt with, ignore Robert's pathetic
> attempts at attention.

You are SO right! With the salvo fired right at me, I should have seen
it. My appologies to the Net. (Not to Robert!)

Dan Pickersgill N8PKV - dan@mystis.wariat.org - ac447@po.cwru.edu
---

Cam-GOLD v1.00:

1117. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 06:00:40 UTC
From: drt@world.std.com
Message-ID: <CKsGp5.2KF@world.std.com>
Source record: 271439
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

Ed Carp (ecarp@netcom.com) wrote:
: I know that I can operate in Canada without having to go through the
: reciprocal operating stuff, but how long can I do this in Canada?
: If I decide to immigrate, does having a US license do me any good?
: What frequencies can I operate on in Canada (I'm sure that their
: allocations are different than in the US)?

: Is there an FTP server in Canada that has this information? I've looked
: through the FAQs and browsed world.std.com, but didn't find anything.
: Any help is appreciated!! Thanks!
: --
: Ed Carp, N7EKG ecarp@netcom.com 510/659-9560

This stuff really should be put in a FAQ.

Well, your US licence is good in Canada indefinitely, as long as it is valid, as far as I know. If you become a landed immigrant, and wish to obtain a Canadian licence, I have been told by a government official that you must pass all the exams. I have also been told by Rich, who went through the process, that you can get credit for code and theory and will only have to pass the rules exam.

Unlike US rules, Canadian rules do not explicitly void reciprocal privileges upon taking out Canadian citizenship. You could therefore make a case that that means, as long as you retain US citizenship, your US licence is valid in Canada. You could also make the case that the reciprocity treaty doesn't apply to a citizen of Canada regardless of any other citizenship. I don't know the actual legal answer, but the latter makes more sense to me. You'll have to ask them for an authoritative answer, though. Let me know if you find out.

PRIVILEGES: Although others claim to have been told otherwise, both the Canadian rules and the Canadian official I talked to said the following:

US Generals, Advanceds, and Extras (in fact, anyone with a license requiring a 12 wpm test or higher) have all the privileges of the Canadian Advanced + 12 wpm qualification, and hence all Canadian amateur privileges. Forgive me for not detailing these - they are in the rules, instructions for requesting them below. On HF, Canadians have all the frequencies US amateurs do, with no mode restrictions - they did away with these an number of years ago. On 30 meters, the bandwidth limit is 1 KHz; everywhere else on HF/MF, it is 6 KHz. That means that phone is legal, technically, at 14.020. It does violate the bandplan, which limits phone to 14.100-14.350 (I think). Canadian

amateurs have bandplans for all HF bands the way we have one for 160 meters. They do not rely on rules to restrict modes.

Technicians WITHOUT code (and anyone with a no-code licence) are considered to have Canadian Advanced (no-code) privileges (i.e., everything about 30 MHz).

Novices and Technicians WITH code (and anyone with a licence carrying a code requirement of less than 12 wpm) are considered Basic operators above 30 MHz (all bands, all modes), plus below 30 MHz they can use CW and CW only on all amateur frequencies.

(Basic operators cannot put up a or posess a repeater, or be the trustee of a club station, or use or posess homebrew. They also cannot use full power: for example, while an Advanced is allowed 1000 watts input, the Basic is limited to 250. Complete power regulations are found in the rules.)

(Yes, that means a Technician who passes a code test *loses* the ability to use high power and do these other things above 30 MHz in Canada. An anomoly in the Canadian rules when applied to the US licensee. Too bad you can't happen to find that code certificate all of the sudden, isn't it? :->)

According to that government official I talked to, as well as the rules near as I can tell, you are NOT, repeat NOT, restricted to your US amateur privileges while in Canada, contrary to what the ARRL rule book says. That means that it is perfectly legal for a General, while in Canada, to use phone on 14.110, or CW on 7.010. It's somewhat frustrating, because others have reported being told otherwise. But I, for one, am convinced this is the case after reading the rules.

Source, GR2: 45(1)-(4), in RIC-25.

You can contact the offices I talked to (both in Quebec) by calling (514) 283-5682 or (819) 564-5543. Or you can get the number of a district office nearer to you and call them - they're in most every city you'd care to think of. While you ask them your questions, you can also ask them for the following pamphlets:

RIC-3 ("rick three", stands for Radiocommunication Information Circular): Canadian Banned countries/ 3d party countries / Reciprocal Countries list. Clearly useful.

RIC-24: Information on the Amateur Operator's Certificate Examinations (includes syllibi)

RIC-25: Rules and Regulations Affecting the Amateur Service. Don't operate in Canada without it!

RIC-66: Addresses and Telephone Numbers of Regional and District offices of Communcations Canada (or whatever their name is now)

All free, aussi disponible en francais if you're so inclined (CIR-25, etc.).

That's my understanding of the subject. Good luck.

-drt

|David R. Tucker KG2S drt@world.std.com|

| Adams: In the middle of the afternoon?? |
| Franklin: Not everyone is from Boston, John. |
| -"1776" |

1118. Re: Guns and O2 (was Re:

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 06:02:00 UTC
From: dan@mystis.wariat.org
Message-ID: <14.14559.822.0NAC3E6C@mystis.wariat.org>
Source record: 271556

xraytech@sugar.NeoSoft.COM (A great x ray technician!) writes:

> In article <qe10gc3w165w@mystis.wariat.org>,
> Dan Pickersgill N8PKV <dan@mystis.wariat.org> wrote:
> >xraytech@sugar.NeoSoft.COM (A great x ray technician!) writes:
> >
> >> In article <CKq1Fu.Fq7@ucdavis.edu>,
> >> Daniel D. Todd <ez006683@chip.ucdavis.edu> wrote:
> >> >A great x ray technician! (xraytech@sugar.NeoSoft.COM) wrote:
> >>
> >> >: Abolish ALL testing.
> >> >Is this what you believe?
> >>
> >> Perhaps you should direct that question to the biggest whiner
> >> in this newsgroup, Dan Pickersgill.
> >
> >At least I use my name and call. I don't hide behind a "Handle" like a
> [self-serving bullshit deleted]
> >of intelect, maybe not. 10-4 Good Buddy...
>
> Ah yes, a natural born Two Meter operator.

And PROUD of it!

(Actually I spend most of my (on air) time on 440, but Robert hasn't
gotten ONE SINGLE thing right yet, why start now.)

And _I_ do not hide behind a (CBer style) HANDLE.

(Who is the 'Good Buddie' here?)

Dan Pickersgill N8PKV - dan@mystis.wariat.org - ac447@po.cwru.edu
---
• Cam-GOLD v1.00:

1119. Re: Antenna Lawsuit

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 06:08:00 UTC
From: dan@mystis.wariat.org
Message-ID: <14.14560.822.0NAC3E6D@mystis.wariat.org>
Source record: 271557

Ed Ellers <edellers@delphi.com> writes:

> Carole L. Hamilton <clh6w@faraday.clas.Virginia.EDU> writes:
>
> >That's a very fine distinction. The government runs the court system. If
> >I win my law suit I can get the sherrif to remove your radio tower.
> >If that's not the government enforcing my rights, it sure walks like a duck.
> >73, Ned AB6FI
>
> It may sound like a "fine distinction" to you, but it's a very real one.
>
> If I commit a crime against you, you can call the police and have me arrested
> the DA prosecutes and I end up in jail. This takes NO effort or expense on y
> part except for talking to the cops and the DA's investigators and for
> testifying against me in court.
>
> In a civil case, YOU have to file the suit and hire the lawyers. If the cour
> rules against me and I defy the order, YOU have to go back to court to get an
> order directing the sheriff to enforce the original order, again with your ow
> legal counsel at your own expense.

_IF_ you can get a judge to take such drastic action. More likely he(she)
would just hold you in contempt of court until you came around to the
courts way of thinking.

Dan Pickersgill N8PKV - dan@mystis.wariat.org - ac447@po.cwru.edu
---
• Cam-GOLD v1.00:

1120. ARLB016 Georgia bill introduced

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 06:49:59 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlb016.1994@ampr.org>
Source record: 271558
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB QST @ ARL $ARLB016
ARLB016 Georgia bill introduced

ZCZC AG80
QST de W1AW
ARRL Bulletin 16 ARLB016
From ARRL Headquarters
Newington CT February 4, 1994
To all radio amateurs

SB QST ARL ARLB016
ARLB016 Georgia bill introduced

A bill introduced in the Georgia Legislature that would eliminate the effect of restrictive property covenants on amateurs is believed to be the first of its type in the nation, according to Georgia Section Manager Jim Altman, N4UCK.

The bill, H.B. 1134, would prevent all new and renewed covenants from regulating, controlling, or restricting antennas owned and operated by licensed amateurs in the state.

Altman said that, in Georgia, all restrictive covenants have a life of 20 years, but can be renewed. This law, in banning new and renewed covenants, would leave the existing covenants in place until their natural expiration, and prevent new ones. Over the next 20 years, all existing covenants would disappear.

The bill was initially referred to the State Bar committee on real property law, which gave the measure a ''do pass'' recommendation.

Amateurs in Georgia are urged to contact their state legislators and urge their support of H.B. 1134. For more information, contact Altman or the Regulatory Information Branch at ARRL Headquarters.
NNNN
/EX

SB SAREX @ AMSAT $STS-60.006
STS-60 Element Set for 2/4/94

The official SAREX element set for today will be GSFC-003. Gil Carman, WA5NOM reports that the predictions using GSFC-003 are 9 seconds later than with JSC-004. Element set GSFC-003, developed by Ron Parise, WA4SIR, and shown below, is consistent with the current orbiter state vector.

1 22977U 94006A 94 35.13981770 0.00000202 00000-0 58718-5 0 37
2 22977 56.9857 213.2731 0008535 263.0773 96.9324 15.72145611 115

Satellite: STS-60
Catalog number: 22977
Epoch time: 94035.13981770 (04 FEB 94 03:21:20.25 UTC)
Element set: GSFC-003
Inclination: 56.9857 deg
RA of node: 213.2731 deg Space Shuttle Flight STS-60
Eccentricity: 0.0008535 Keplerian Elements
Arg of perigee: 263.0773 deg
Mean anomaly: 96.9324 deg
Mean motion: 15.72145611 rev/day Semi-major Axis: 6730.8981 Km
Decay rate: 0.20E-05 rev/day*2 Apogee Alt: 358.25 Km
Epoch rev: 11 Perigee Alt: 346.77 Km
NOTE - This element set is based on NORAD element set # 003.
The spacecraft has been propagated to the next ascending
node, and the orbit number has been adjusted to bring it
into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO, for the SAREX Working Group
NNNN
/EX

1121. ARLB017 RF standards opposed

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 06:57:42 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlb017.1994@ampr.org>
Source record: 271559
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB QST @ ARL $ARLB017
ARLB017 RF standards opposed

ZCZC AG81
QST de W1AW
ARRL Bulletin 17 ARLB017
From ARRL Headquarters
Newington CT February 4, 1994
To all radio amateurs

SB QST ARL ARLB017
ARLB017 RF standards opposed

RF standards opposed

The ARRL has told the FCC that a proposal to adopt new standards for exposure to radio frequency radiation should be terminated.

The League said that the proposal, which would change the Commission's guidelines to match those adopted by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronic Engineers (IEEE) in 1992, was premature, and more properly should have been introduced as an FCC notice of inquiry.

The ARRL said that the ANSI/IEEE standards were not properly delineated and not a proper basis for evaluating communications facilities. The new standards would replace less stringent standards adopted in 1982.

The League said that an FCC Report and Order in 1987 that concluded that amateur stations should be exempted from such RF exposure guidelines, because amateur stations operate only intermittently, and at low power levels, still applies. Only rarely, the League said, would amateur stations even exceed the proposed, more stringent 1992 ANSI/IEEE standard.

The League said that the FCC's proceeding should be terminated in favor of more study, by a more appropriate government agency, such as the Environmental Protection Agency, or else by an FCC notice of inquiry.

This proposal, in ET Docket 93-62, was made in the spring of 1993 and its comment deadline has been extended several times, most recently to January 25, 1994, based on a request by CBS Inc. The reply comment deadline is February 24, 1994.
NNNN

/EX

1122. ARLD008 DX news

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 06:58:33 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arld008.1994@ampr.org>
Source record: 271560
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ARL $ARLD008
ARLD008 DX news

ZCZC AE06
QST de W1AW
DX Bulletin 8 ARLD008
From ARRL Headquarters
Newington CT February 3, 1994
To all radio amateurs

SB DX ARL ARLD008
ARLD008 DX news

The items in this week's bulletin are courtesy of Bob, W5KNE; QRZ DX; and the Ohio/Penn and Yankee Clipper Contest Club PacketCluster networks. Thanks.

PETER FIRST ISLAND. 3Y0PI has been active for several days. The last 100 PacketCluster spots show stations in the northeast US working them on all bands 40 through 10 meters.

On CW try 1826, 3522, 7022, 10104, 14024, 18074, 21024, 24894 and 28024 kHz. Listen for their SSB on 1845, 3785, 7065, 14195, 18145, 21295, 24945 and 28475 kHz. For RTTY try 1825, 3680, 14080, 21080 and 28180 kHz; and satellite action on 145.890 MHz listening down on OSCAR 10 and 13.

On HF the split windows are 5 to 10 kHz wide maximum on CW and 25 kHz on SSB. Stateside stations are being worked by call areas following propagation patterns, typically 1, 2, 3, 4, 8, 9, 0, 5, 7 and 6.

At around 1800z February 3, the DXpedition crew had some problems with their generators. The icebreaker that is to pick them up is running six days behind schedule, so the new pick up date is February 19.

MOUNT ATHOS. Monk Apollo, SV2ASP/A, has been heard on some of the WARC bands with a very strong signal, most notably on 17 meters. Also check between 3790 and 3795 kHz at 0530 and 1700z. He recently showed up on the 21335 DX Net around 1345z.

KERGUELEN ISLAND. New amateur Pierre, FT5XJ, will be on the island until July for a three month leave. When he returns his stay will be for a year. He has been on 14250 kHz at 0500z, 14191 kHz at 1420z and can sometimes be found on 14198 kHz. QSL via F5NLL.

TONGA. Jim, VK9NS, is on as A35MR. He was worked on 21260 kHz between 2100 and 2200z. A35KB has also been active. Nob, JF2MBF, ex VR6JJ, along with Yasu, JI1NJC, will start a four week Pacific DXpedition from Tonga as A35JJ from February 12 to 20. This will be all band CW, SSB, RTTY and satellite operation. QSL A35JJ via JR2KDN.

TURKS AND CAICOS ISLANDS. Ed, K9IMM, and Carol, NS9L, will be on Provos from February 17 to 24. K9IMM will operate the ARRL CW DX Contest on 160 meters as VP5B. Before and after the contest Ed and Carol will operate as VP5/ their own calls on 160 through 10 meters, some of which may be with QRP. QSL via WB9NOV w/SASE.

THIS WEEKEND ON THE RADIO. The North American Sprint CW, sponsored by the National Contest Journal, NCJ, runs for four hours starting at 0000z February 6, or Saturday night local time. Check around 3540, 7040 and 14040 kHz. Complete rules appear on page 127 of January QST.

The 1994 Classic Radio Exchange is from 2000z February 6 to 0400z on the 7th. Amateurs are encouraged to operate restored equipment at least 10 years old. Exchange name, RST, QTH, receiver and transmitter type. CW action will be 60 kHz up from the bottom of the band. For SSB try 3880, 7290, 14280, 21380 and 28320 kHz. Novice/Tech stations on HF will be 20 kHz up from lower subband edge.

The Vermont QSO Party, sponsored by the Central Vermont ARC, is a must for those needing Vermont for their WAS awards. It starts at 0000z February 5 and ends at 0500z on the 6th. Activity will be on 160, 80, 40, 20, 15 and 10 meters.

For further information on these three operating events, check page 127 of January QST.
NNNN
/EX

1123. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 13:38:09 UTC
From: drt@world.std.com
Message-ID: <CKt1vn.JL9@world.std.com>
Source record: 271435
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

Addendum:

David R Tucker (drt@world.std.com) wrote:
: Well, your US licence is good in Canada indefinitely, as long as it is
: valid, as far as I know. If you become a landed immigrant, and wish
: to obtain a Canadian licence, I have been told by a government
: official that you must pass all the exams. I have also been told by
: Rich, who went through the process, that you can get credit for code
: and theory and will only have to pass the rules exam.

: Unlike US rules, Canadian rules do not explicitly void reciprocal
: privileges upon taking out Canadian citizenship. You could therefore
: make a case that that means, as long as you retain US citizenship,
: your US licence is valid in Canada. You could also make the case that
: the reciprocity treaty doesn't apply to a citizen of Canada regardless
: of any other citizenship. I don't know the actual legal answer, but
: the latter makes more sense to me. You'll have to ask them for an
: authoritative answer, though. Let me know if you find out.

Well, almost. Canadian rules also require that reciprocal operators
from the US be not only US citizens but US residents, too. That would
mean landed immigrants needed a Canadian license. The way the rules
are written seems to imply that Americans residing elsewhere (e.g.,
Britain) are not eligible for reciprocal privileges at all, but that's
such an odd result that I doubt they enforce it that way (that result
may violate the treaty, too, which makes no mention of residency
requirements). In any event, you'll need to ask a Canadian official
for the real answer.

-drt

|David R. Tucker KG2S drt@world.std.com|

1124. Antenna Erection Aids

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 14:42:42 UTC
From: julian@bongo.tele.com
Message-ID: <1994Feb6.144242.14808@bongo.tele.com>
Source record: 271565
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Recently, there was much correspondence about getting antennas
up in trees. Short of hiring a trained monkey, there are various ways
of getting a line up on a high limb. The favourites seemed to be: bow
and arrow or catapult (sling shot) and spinning (fishing) reel with a
weight.

The most compact and least troublesome is the catapult and
fishing reel combo. It is small and allows you to reel the line back.
For the standard anti-social contester, it also means being able to do
it alone, so you don't have to be nice to your neighbours or fellow
hams so they will help you get that top band dipole up.
The bow and arrow solution can use a fishing reel, but usually
involves a second person to hold a rod and line while someone does the
Robin Hood stuff. The second person often ends up being a grumpy
spouse who needs no further persuasion that amateur radio is a waste
of time, money and useful house space.

For those appliance operators that would like the catapult
and reel option but lack the motivation or skills to attach a $10.00
reel to a $10.00 catapult with $00.02 of duct tape there is a
solution.

For only $39.95, you can buy a fishing reel catapult combo
designed for the job. Call Chicago's Telecom Expert, 812 Nerge Road,
Roselle, Illinois 60172. Phone (708) 980-7710 (24 Hours). Order the
"Sling-A-Line". All the usual credit cards accepted.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

1125. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 15:08:21 UTC
From: NADO000 <NADO@UNB.CA>
Message-ID: <06FEB94.12030322.0075@UNBVM1.CSD.UNB.CA>
Source record: 271445
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

In article <CKsGp5.2KF@world.std.com> drt@world.std.com (David R Tucker) writes:
>Well, your US licence is good in Canada indefinitely, as long as it is
>valid, as far as I know. If you become a landed immigrant, and wish
>to obtain a Canadian licence, I have been told by a government
>official that you must pass all the exams. I have also been told by
>Rich, who went through the process, that you can get credit for code
>and theory and will only have to pass the rules exam.

Two things you should know folks: If you ask one question to 4
Canadian officials, you will get at least 2 or 3 different answers.
Also, there is no such thing as a Rule exam. There is a Basic exam
and an Advanced exam. The Basic has 100 questions, with multiple
choices, and covers rules, basic theory, propagation, interference,
etc. You need 60% to pass. This gives you access to a max. of 250
Watts and frequencies (all mode) over 30 mhz. The Advanced exam has
50 questions and if you pass you can go to a full kilowatt, have
your own club, your own repeater, and you can fix and modify your
ham gear.
>
>
>PRIVILEGES: Although others claim to have been told otherwise, both
>the Canadian rules and the Canadian official I talked to said the
>following:
>
>US Generals, Advanceds, and Extras (in fact, anyone with a license
>requiring a 12 wpm test or higher) have all the privileges of the
>Canadian Advanced + 12 wpm qualification, and hence all Canadian
>amateur privileges. Forgive me for not detailing these - they are in

I would agree with the above

>the rules, instructions for requesting them below. On HF, Canadians
>have all the frequencies US amateurs do, with no mode restrictions -
>they did away with these an number of years ago. On 30 meters, the
>bandwidth limit is 1 KHz; everywhere else on HF/MF, it is 6 KHz. That
>means that phone is legal, technically, at 14.020. It does violate
>the bandplan, which limits phone to 14.100-14.350 (I think). Canadian
>amateurs have bandplans for all HF bands the way we have one for 160
>meters. They do not rely on rules to restrict modes.
>
>Technicians WITHOUT code (and anyone with a no-code licence) are
>considered to have Canadian Advanced (no-code) privileges (i.e.,
>everything about 30 MHz).
>

>Novices and Technicians WITH code (and anyone with a licence carrying
>a code requirement of less than 12 wpm) are considered Basic
>operators above 30 MHz (all bands, all modes), plus below 30 MHz they
>can use CW and CW only on all amateur frequencies.
Impossible! There is no such thing in Canada now that allows you to
use code only on certain bands. You either have access to a band or
you don't. The 5 wpm gives you access to both 160 m and 80 m. On 80
m, legally, you could use SSB everywhere, but in practice Canadians
(in Canada) will be between 3690 and above. Most Canadian nets are
around 3735 and 3780 mhz
>
>(Basic operators cannot put up a or posess a repeater, or be the
>trustee of a club station, or use or posess homebrew. They also
>cannot use full power: for example, while an Advanced is allowed 1000
>watts input, the Basic is limited to 250. Complete power regulations
>are found in the rules.)

I also understand that the way Power is measured is different than
it is in the US. I heard someone explain that 1000 Watts in Canada
is around 2.5 kw in the US.
>
>
>According to that government official I talked to, as well as the
>rules near as I can tell, you are NOT, repeat NOT, restricted to your
>US amateur privileges while in Canada, contrary to what the ARRL rule
>book says. That means that it is perfectly legal for a General, while
>in Canada, to use phone on 14.110, or CW on 7.010. It's somewhat
>frustrating, because others have reported being told otherwise. But

I disagree. You are stuck with US limits when you visit Canada
*unless you have obtained a Canadian licence _and_ a Canadian
Callsign*, in which case you have full Canadian privileges *while
operating in Canada* When Canadians are say, Mobile W4 in Florida
they are restricted by the US bandplan and cannot use voice to talk
to their friends on say 14,140 nets.

>Source, GR2: 45(1)-(4), in RIC-25.
>
>You can contact the offices I talked to (both in Quebec) by calling
>(514) 283-5682 or (819) 564-5543. Or you can get the number of a
>district office nearer to you and call them - they're in most every
>city you'd care to think of. While you ask them your questions, you
>can also ask them for the following pamphlets:
>
>RIC-3 ("rick three", stands for Radiocommunication Information
>Circular): Canadian Banned countries/ 3d party countries / Reciprocal
>Countries list. Clearly useful.
>
>RIC-24: Information on the Amateur Operator's Certificate Examinations
>(includes syllibi)
>

>RIC-25: Rules and Regulations Affecting the Amateur Service. Don't
>operate in Canada without it!
>
>RIC-66: Addresses and Telephone Numbers of Regional and District
>offices of Communcations Canada (or whatever their name is now)
>
>All free, aussi disponible en francais if you're so inclined (CIR-25,
>etc.).
>
>That's my understanding of the subject. Good luck.
>
>-drt
>
>---
>|David R. Tucker KG2S drt@world.std.com|

Luis Nadeau
Box 7, Site 4, RR4, Fredericton, NB
CANADA E3B 4X5
FAX: (506)450-2718; Hamcall: VE9LN

1126. Re: Dayton Parking: Hell on Earth! (not!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 15:21:06 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb6.152106.325@ke4zv.atl.ga.us>
Source record: 271448

In article <jra.69.000996A6@lawdept.daytonoh.ncr.com> jra@lawdept.daytonoh.ncr.com (John R. Ackermann) writes:
>
>Let's be a bit reasonable here -- it doesn't make sense for DARA to put on a
>Hamvention if no one can get to it, does it?

Well they've *been* doing it. :-) Even with the Shuttles, traffic is about the worst I've seen for any event of this size or larger. Any major NASCAR event has better traffic control than Dayton, and they have crowds over 100,000 to get in and out. *The* major problem seems to be a poor interface to the Dayton Police. They should have officers out directing traffic at *all* the major choke points, not just at the Arena. But they *don't*. So traffic backs up at the lights for miles. That's easily fixed I would think.

>Every year at about this time we start to hear the rumours -- that Hara Arena
>is being torn down, that there won't be any parking, and who knows what else.
>
>Every year the Hamvention comes off with (apart from the $#%@!% weather here)
>no major hitches.

Well sure, aside from the tornados, ice storms, hurricanes, blizzards, and heat waves, Dayton weather is perfect in April. (NOT!) I've been sunburned, nearly drowned, and frozen stiff on different ocasions, some of them the *same* year. :-)

>Why don't we all just take a deep breath and calm down.

Because it wouldn't be nearly as much fun. :-)

Hey, we all show up year after year don't we?

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1127. Re: Illegal Activities of Dominique Cormann (Re: CB/HAM equipment)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 15:24:41 UTC
From: barnaby@world.std.com
Message-ID: <CKt6t6.Brs@world.std.com>
Source record: 271444

jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:

>In article <jchappel.106.759620599@sanders.lockheed.com> jchappel@sanders.lockheed.com (Joel Chappell) writes:

>I guess it is all a matter of interpretation: Does self-policing mean
>I just police myself, or does it mean we police, in addition to ourselves,
>each other? I believe it means the latter.

>Jr. FCC hat? Nope, just doing what I believe in.

>Jeff NH6I

I agree with you Jeff. I think self-policing means that we take responsibility for our hobby. It doesn't have to be FCC-Jr. style. There's a big difference between *saying* you are going to put up a 5 KW station, and *doing* it! Ahead of time, letting the potential offender know that there are *many* hams that would love to shut down unwarranted QRM listening, and with e-mail quickly reporting it, could kill whatever urge there is to actualize this activity (not inexpensive).

It's an interesting question though.
my $.02
73's AA1IB Richard Barnaby Worcester,VT

1128. Re: Lightning+EMP devices

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 15:31:44 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb6.153144.467@ke4zv.atl.ga.us>
Source record: 271449

In article <2itp81$bsf@hopper.acm.org> smithson@ACM.ORG writes:
>
>My question is this, does anyone have any experience with the PolyPhaser
>devices, or any other independant-source comparison data between the two?
>As expected, each manufacturer does a great job of illustrating why thiers
>is the best, etc. About the only thing they agree on is the concept of
>bulkhead grounding.

We use PolyPhaser equipment in all our broadcast plants, and I use
them at home. They've rode out direct hits and saved equipment when
installed properly. I'm a believer. Other brands (one begins with 'C'
and the other has the initals 'A''D') haven't done so well. I hadn't
heard of the ICE units. Can you give an address and phone number?

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1129. How to test 3-500 tube?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 15:58:31 UTC
From: kriss@austin.lockheed.com
Message-ID: <2j3437$bcl@kestrel.austin.lockheed.com>
Source record: 271447

Just tried to work the 3Y0PI and Mr. Murphy visited my shack.
The Ameritron AL-80X (X means factory installed 10 meters)
will not load on either 10 or 15 meters. It loads on lower
bands with less output than it used to have.

I have heard the sign of a 3-500 going bad is it goes soft
on the higher freqs.

I hate to spend the $ for a new tube if there is another
problem.

Dick Kriss, KD5VU
kd5vu@kd5vu.ampr.org [44.76.1.40]
kriss@austin.lockheed.com
On: 2/6/94 10:00:04 AM CST

1130. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 16:41:05 UTC
From: hardie@herald.usask.ca
Message-ID: <2j36j1$hq5@tribune.usask.ca>
Source record: 271450
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

From article <CKsGp5.2KF@world.std.com>, by drt@world.std.com (David R Tucker):
> Novices and Technicians WITH code (and anyone with a licence carrying
> a code requirement of less than 12 wpm) are considered Basic
> operators above 30 MHz (all bands, all modes), plus below 30 MHz they
> can use CW and CW only on all amateur frequencies.
No, i am sure this is wrong. Below 30Mhz they would have the same privileges
as the Basic license with 5wpm code test and these are that they can operate
all modes ONLY on 160 and 80 meters.

Pete
ve5va.qrp@usask.ca
--
ve5va.qrp@usask.ca

1131. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 17:35:09 UTC
From: hardie@herald.usask.ca
Message-ID: <2j39od$k0a@tribune.usask.ca>
Source record: 271453
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

From article <06FEB94.12030322.0075@UNBVM1.CSD.UNB.CA>, by NADO000 <NADO@UNB.CA>:
> In article <CKsGp5.2KF@world.std.com> drt@world.std.com (David R Tucker) writes:
>>According to that government official I talked to, as well as the
>>rules near as I can tell, you are NOT, repeat NOT, restricted to your
>>US amateur privileges while in Canada, contrary to what the ARRL rule
>>book says. That means that it is perfectly legal for a General, while
>>in Canada, to use phone on 14.110, or CW on 7.010. It's somewhat
>>frustrating, because others have reported being told otherwise. But
>
> I disagree. You are stuck with US limits when you visit Canada
You can disagree, but he's right. The regs clearly state that a U.S. amateur
who is a U.S. citizen AND resident and who is qualified to send and receive
Morse code at a speed of at least 12 wpm has all the privileges of the Basic,
12wpm, and Advanced qualifications. Which means they can operate all modes
on all bands, just like I can.

Pete
ve5va.qrp@usask.ca
--
ve5va.qrp@usask.ca

1132. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 17:54:01 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb6.175401.1118@ke4zv.atl.ga.us>
Source record: 271570
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <2iui7p$vm@cascade.ens.tek.com> t1terryb@cascade.ens.tek.com (Terry Burge) writes:
>In article <2ip6he$933@cascade.ens.tek.com> t1terryb@cascade.ens.tek.com (Terry Burge) writes:
>>>Just for the record, I will state it again. A ground plane antenna has higher
>>>gain than a vertical dipole. A quarter wave ground plane has a gain of some-
>>>where around 6 db over isotropic where a dipole has a gain of 2.14 db over
>>>isotropic at it's theoritical best. Gain in an antenna is directly related
>>>to it's RF pattern. I believe the reason a ground plane has more gain than
>>>a vertical dipole is because it has a more concentraited pattern like an
>>>elongated tear drop as opposed to the fat donut shape of a dipole.
[ke4zv]
>>Repeating false statements makes them no less false. A 1/4 wave vertical
>>over a *perfect* groundplane has *exactly* the same gain and pattern as
>>a 1/2 wave vertical. But alas, there are no perfect groundplanes in the
>>real world, so all real 1/4 wave verticals have less gain than 1/2 wave
>>verticals because of losses in the imperfect current mirror.
>
>>> As to weather an R5 or R7 are vetical dipoles or half wave verticals,
>>>I am no expert on them. I have never used one. But from everything I have
>>>read about vertical antennas, they must have a ground plane to mimic the
>>>other have of the antenna. Some systems utilize the shield of the coax cut
>>>to a certain length to do this I believe...seems some VHF/UHF antennas lend
>>>themselves to this. Other than that, ground rods would help as would sea water
>>>too.
[ke4zv]
>>A 1/2 wave antenna, it doesn't matter if it's fed in the middle or from
>>the end, doesn't require a current mirror, so it doesn't require a groundplane
>>or any other connection to ground. It's a resonant structure by itself,
>>there is no "other half" required. On the other hand, a 1/4 wave vertical
>>is self-resonant at *twice* the design frequency in the absence of a current
>>mirroring groundplane. So it must have a groundplane to function as a 1/4
>>wave vertical antenna at the design frequency.
>
>>> It is true that a half wave vertical has more gain than a 1/4 wave
>>>vertical.
[ke4zv]
>>What? You just stated otherwise above. Make up your mind.
>
>No I didn't, I said Half Wave Vertical, not dipole. You are the one who said
>there is no differance in gain weather it is fed in the middle or at the end.

That's right, because there *is* no difference in radiation pattern, and hence forward gain. The only effect of feedpoint placement is different impedances presented to the transmission line, a non-issue with proper matching networks.

The relevant power formulas for isotropic (theoretical) and actual 1/2 wave radiatiors are

Isotropic P=Pt/(4*pi*R^2)

halfwave P=1.64*Pt/(4*pi*R^2)

Pt is transmitted power in watts
R is the perpendicular distance from the radiator in meters.

There is *no* distinction as to feed point placement.

From _Reference Data for Radio Engineers_, 4th edition, pp 675-676.

>Let me state it again...for vertical antennas, a half wave vertical has more
>gain than a quarter wave vertical, a 5/8 wave has more gain still, a 3/4 wave
>has more yet, and so on...But how does the gain change if fed from the center
>or off center like a Zepp (don't I remember something about them having a gain
>of 1.66 over a dipole or something like that...probably wrong).

Feedpoint location is irrelevant for pattern calculations of halfwave radiators, that's strictly a matching issue. (In practice, different matching systems can impact antenna *system efficiency*, but that's a separate issue. The relevant formula for vertical radiator field strength at a given angle from the vertical is

E=((60*I)/(D*sin(2*pi*h/L))*
((cos((2*pi*h/L)*cos(phi)))-(cos(2*pi*h/L))/sin(phi))

Where E is field intensity in mV/m,
I is antenna base current in amperes
h is length of antenna in meters
L is wavelength in meters
D is distance from the antenna is kilometers,
Phi is the angle from the vertical of the radiation

If you run this equation for a family of antenna lengths, you'll find that maximum radiation perpendicular to the antenna (toward the horizon) occurs at an antenna length of 0.639 wavelengths. This was worked out in 1935 by Gihring and Brown, "General Considerations of Tower Antennas for Broadcast Use", Proceedings of the IRE, vol 23, pp.311-356, April, 1935.

>But, we have to remember for a vertical antenna at given frequency, as the length
>of the radiating element increases the angle of radiation rises. And since it is such
>a theoretical nightmare to compute real world RF patterns we talk about theoretical
>perfect situations over perfect grounds and then compare those to the real world ones
>in the ARRL Antenna Handbook and other such material. I don't know too many Hams who
>can setup an acre of land with 120 radials spaced equaly around in a circle, seed the
>ground with the proper amound of rock salt, and do the rest to make as perfect of
>ground as possible (this is suppose to work for Yagi/Quad beams on towers too). Wish

>I had the place to do this...or is it 100 acres?

Well we broadcasters do, and the angle of maximum radiation does *not*
rise monotonically with increasing length. In fact, starting with a short
antenna, it *decreases* until a length of 0.636 wavelength is reached, and
then increases back toward the short antenna case as length increases further
until it reachs the *same* value at 0.75 wavelength as it had at 0.25
wavelength. Beyond 0.75 wavelength, the pattern breaks into minor lobes
and gain perpendicular to the antenna continues to decrease. A vertical
antenna 0.639 wavelengths in height has the *maximum* broadside gain of
any simple vertical.

Data from _Reference Data for Radio Engineers_, 4th edition, pp.672-673.

>>>It is not true that a 5/8 wave vertical is the highest gain vertical.
>>>What it is is the best compromise for the gain and angle of radiation. As the
>>>vertical element, or any element for that matter, gets longer for a given
>>>wavelength the major lobe/lobes eminating from the antenna start skeewing(sp)
>>>towards the far end of the antenna. This is why long wire antennas several wave
>>>length long at a given frequency are directional antennas. And, why Rhombic
>>>antennas are a combination of this characteristic.
>
>>Well that's almost true anyway. The 5/8 wave vertical over real
>>ground has the best gain perpendicular to it's axis of any *simple*
>>vertical antenna. Stacked and phased sections can have more gain
>>toward the horizon. Really long antennas develop minor lobes and
>>have their power directed in multiple undesired directions.
>Gary
>
>Gary, I agree that stacked dipoles develope more gain than single ones. And
>their radiation pattern is perpendicular to the direction they are setup,
>normally in a vertical configuration although I believe a collinear array
>is an example of horizontally polarized broadside dipole array with stubs
>to bring their patterns into phase and combine to make a higher gain signal.
>(now how is that for a run on sentence). But, on page 8-32 of the 1991 ARRL
>Antenna Handbook they list the theoretical power gain of various 1/2 wavelength
>collinear arrays...
> ' 2 collinear elements---1.6 db
> 3 collinear elements---3.1 db
> 4 collinear elements---4.2 db '
> ARRL Antenna Handbook, 16th Edition
>
>On page 8-24 of the same book is listed a 3 element, 1/4 wavelength vertical array in a
line,
>1/2 wavelength appart, each being fed with 3/4 wavelength coax phasing line to bring them
into
>phase. It is not clear weather this is a broadside of end fire (think that is the correct
term)
>array. Gain figures are states as follows...
>
> ' If the element currents are equal, the resulting pattern has a foward gain of 5.7 db

>(for lossless elements) ... If the currents are tapered in a binomial coefficient 1:2:1 ratio
>(twice the current in the center element as the two end elements), the gain drops to 5.2 db, the
>main lobes widen, and the side lobes disappear. ... '
> ARRL Antenna Handbook, 16th Edition
>
>
>This seems to indicate that it is possible to get more gain from 1/4 wavelength verticals than
>from 1/2 wavelength elements in a vertical or horizontal pattern. Hum... I would be the first to
>admit antenna theory makes my head spin sometimes but when the ARRL says a 4 element horizontal
>colliniear array has less gain that a 3 element 1/4 wave vertical array, I tend to believe it. I
>may not understand all the wherefores and as such but I tend to believe them.

Yeah, well that's because you're comparing apples and oranges. In the
case of the endfire 3 el array, the horizontal pattern is a figure 8.
In the case of the colinear vertical array, the horizontal pattern is
omni-directional. Both have a compressed vertical pattern, though the
colinear is much more compressed (that's where it gets *all* it's gain).
Compressing the pattern in *two* planes naturally gives more gain than
only compressing it in one, but forms a *directional* vertical antenna
rather than an omni-directional antenna. Apples and oranges. (Note too
that the example colinear has *zero* spacing between elements. That's
the lowest possible gain stacking arrangement. See your Cushcraft 4-pole
numbers for vertical elements stacked with 1/2 wave spacing. Much higher
gain.)

>On page 2-23 of the same text...
> ' ...An infinitely thin 1/2 wavelength dipole has a theoretical gain of 2.14 db
>over an isotropic radiator (dBi)... '
> ARRL Antenna Handbook, 16th Edition
>And I know that the thinner the dipole the higher the Q of the resonant circuit, so an "infinitely
>thin" dipole has the highest Q. In other words, the highest gain. This is why a Quagi, quad driven
>element and reflector with dipole directors has more gain theoretically than a quad with the same
>boom length. (I have a love/hate relationship with quads) Higher Q elements.

No. Gain and Q are not directly related. A quad loop has a lower Q
than a dipole element, that's one of it's features, greater bandwidth,
but a 2 el quad has more gain than a 2 el yagi, about the same as a
3 el yagi in fact. That's because a loop has a bigger capture area,
and antenna gain is related to capture area by the following formula

G=(4*pi*A)/L^2

Where G is gain,
A is aperture area,
L is wavelength.

>I haven't been able to find a gain figure for a single 1/4 wavelength vertical in the ARRL Antenna
>Handbook. Looking through the Amateur Radio Supply catolog(Winter 93/94) it is easy to see how gain
> figures vary.
>Having had some experience with Cushcraft antennas and believing they do their homework, I quote
>some of their specs...
> ' Four Pole Array ... (stacked dipole for VHF/UHF ranges)...
> AFM-4DA...144-148 (MHz)... Gain, dBd ... (over a dipole) ... 9 Offset(?)...6 Omni...'
> (page 107)
> (that is a 4 dipole stacked array with 6 db gain over a dipole...sounds like
> a bit of difference from the ARRL Handbook figures...4.2 db, so much
> for homework)

Apples and oranges again. The 4-pole is a 1/2 wave spaced stacked array of halfwave dipole elements while the colinear you chose from the Handbook has *zero* spacing. Halfwave spacing gives a *much* sharper lobe, hence greater gain, than a zero spaced array. What they mean by offset and omni in the 4-pole spec is that the elements can be arranged all on one side of the mast (offset) for 9 dbd gain *in that horizontal direction*, or they can be staggered 90 degrees apart as they go up the pole for 6 dbd *omni* horizontal gain. Actually, this is a crummy antenna, and Cushcraft is always optimistic in their gain figures. A Comet stacked antenna is a better comparison.

Advertised antenna gain figures are generally measured by the marketing department, not the engineering department. That's why QST refuses to print them.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1133. Licence Recieve times...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 18:01:17 UTC
From: ijordan@freenet2.scri.fsu.edu
Message-ID: <2j3b9d$e2s@mailer.fsu.edu>
Source record: 271571

For all of you waiting for your licences, I and a friend of mine got our licences (no code tech) yesterday, exactly 8 weeks after taking the test, and we live in AZ. So it looks like the FCC is starting to get their act together, since during the last eight weeks there was the break for the cold storm and the winter holiday in the east. Good luck to the rest of ya.

--
Ian Jordan
KC7ANP

--
* * Ian Jordan * *

1134. Re: "Flexible" 9913 (Was - Re: Coaxial cable)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 18:05:58 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb6.180558.1229@ke4zv.atl.ga.us>
Source record: 271572

In article <CKpy6n.4F7@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>Steve Bunis SE Southwest Chicago (doc@webrider.central.sun.com) wrote:
>: > Some other things to keep in mind about 9913. Remember that you'll need
>: > special UHF N connectors if you plan on using the cable for UHF
>: > applications.
>
>: Also, regarding the N connectors, at what point do they start making
>: a discernible difference? I thought that NMO was supposed to do well
>: at least past the 70cm. band. -- Steve Bunis
>
>My dual-band 2x4MAX Comet has an so239 connector on it. Just how bad
>is a pl259 connection on UHF? Should I use an N to so239 adapter? I
>use 9913 on HF with pl259s and some copper tape.

The problem with SO239, and the mating PL259, connectors is that they aren't 50 ohm impedance connectors. Therefore they represent an impedance bump on the coax that can affect VSWR. *However*, their impedance mismatch can be *absorbed* into radio or antenna matching networks by competent designers. Therefore, the coax sees a match even though the connector in isolation would present a mismatch. So it's OK to have them at the endpoints of a line *if the equipment is designed for them*. Having them in the middle of a line (like with jumpers) is bad news. Same thing with NMO, the antenna is *designed* to use this connector/mount and absorbs it's impedance into the network. Don't worry, be happy, these connectors are OK in good designs. However, beware, there are companies who try to pass off CB mounts for VHF/UHF. Those will kill your signal due to excessive capacitance between inner and outer conductors. I bought one "70cm groundplane" antenna that was an effective dead short at 70 cm due to the 1/4 inch stud whip mount having only 1/16 inch insulated sleeve between the stud and the plate mount.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1135. Re: PK-232 vs 1278 ??

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 18:08:34 UTC
From: slay@netcom.com
Message-ID: <slayCKtEEB.EMz@netcom.com>
Source record: 271455
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

: Why do the cognoscenti here prefer the KAM, anyway?

Well, I've used (or rather - TRIED to use) the PK-232 and was totally frustrated by it. I do OWN and USE the MFJ-1278, a TNC-2, and a KAM. I bought all the machines but was given the KAM by another ham. My favorite machine is definitely the KAM for a simple reason. I am a DXer and Contester. Of the machines mentioned, only the KAM is dual-port meaning that I can operate V/UHF packet (i.e. PacketCluster) at the SAME TIME that I am operating HF digital modes. For me, that is the primary reason why I prefer the KAM. If the MFJ-1278 was a dual-port machine, I would probably prefer that one.

Cheers de Sandy WA6BXH/7J1ABV WA6BXH@N0ARY slay@netcom.com

1136. WARNING: Potential Satellite Anomaly Warning

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 18:54:37 UTC
From: oler@rho.uleth.ca
Message-ID: <9402061854.AA01709@rho.uleth.ca>
Source record: 271573
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

POT

ISSUED: 17:00 UT, 06 FEBRUARY

/\

ATTENTION:

Geosynchronous satellites may experience magnetopause crossings over the
next 12 to 24 hours. A filament-related disturbance has resulted in brief
magnetopause crossings for the GOES-6 satellite. GOES-6 experienced
crossings between 17:11 and 17:13 UTC, and again between 16:22 and 16:29 UTC.
GOES-7 has not experienced any crossings at this time.

In addition, there is a possibility for the recurrence of high-energy
electrons at greater than 2 MeV. If this event recurs as it did last solar
rotation, it should begin later this UTC day or on 07 February. At the
present time, electrons at greater than 2 MeV are running at near-normal
levels. They are not enhanced at the present time. Two solar rotations ago,
the electrons at this energy level were enhanced to relatively high levels,
but the duration of the enhancement was much shorter than the enhancement
observed last rotation (where the enhanced high-energy electrons lasted
almost 10 days).

Although electrons at these energies are correlated with recurrent
coronal holes, it is impossible to determine whether the slight increase in
size of the current coronal hole will produce a similar long-duration
high-energy electron enhancement as was observed last rotation. We will
monitor the situation on a daily basis and advise as necessary.

** End of Warning **

1137. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 19:01:03 UTC
From: cravit@world.std.com
Message-ID: <CKtGtt.6G2@world.std.com>
Source record: 271457
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

In article <2j39od$k0a@tribune.usask.ca>,
Peter Hardie,4805,, <hardie@herald.usask.ca> wrote:
>From article <06FEB94.12030322.0075@UNBVM1.CSD.UNB.CA>, by NADO000 <NADO@UNB.CA>:
>> In article <CKsGp5.2KF@world.std.com> drt@world.std.com (David R Tucker) writes:
>>>According to that government official I talked to, as well as the
>>>rules near as I can tell, you are NOT, repeat NOT, restricted to your
>>>US amateur privileges while in Canada, contrary to what the ARRL rule
>>>book says. That means that it is perfectly legal for a General, while
>>>in Canada, to use phone on 14.110, or CW on 7.010. It's somewhat
>>>frustrating, because others have reported being told otherwise. But
>>
>> I disagree. You are stuck with US limits when you visit Canada
>You can disagree, but he's right. The regs clearly state that a U.S. amateur
>who is a U.S. citizen AND resident and who is qualified to send and receive

This is what the Canadian regs say. But the US regs say that an
amateur operating abroad under a US license and reciprocal treaty must
not exceed what their US license allows, even if permitted by the
foreign regulations.

/Matthew

--
Matthew Cravit, N9VWG | All opinions expressed here are
Michigan State University | my own. I don't speak for The World,
East Lansing, MI 48825 | and they don't speak for me (luckily
E-Mail: cravit@world.std.com | for both of us).

1138. starting campus radio club faq, need info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 19:38:36 UTC
From: jrl2@cornell.edu
Message-ID: <jrl2-060294144057@cu-dialup-0423.cit.cornell.edu>
Source record: 271575

Hello,
I would like to start a FAQ for Collage Amateur Radio Clubs. If you know
of a radio club on campus could you send me some info about it. I'm looking
for
-Name of the Club
-School
-Address
-Club Officers and email addresses if possible
-Repeaters
-Club station (Y/N) Callsign and what type of equipment
-Organizations the club belongs to (ARRL, 10-10, etc)
-Year started
-#members
-bands members can be found on
-email address (if possible) of the club's listserver
-a short history of the club

Even if you can't answer all the questions, oh well, its a start. I will
put the
info on a ftp site and/or post if people are interested.
Thanks,

```
-Jeff Luszcz N2TIQ
jrl2@cornell.edu
Cornell Amateur Radio Club W2CXM
```

1139. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 20:28:25 UTC
From: drt@world.std.com
Message-ID: <CKtKvE.M1@world.std.com>
Source record: 271576
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

NADO000 (NADO@UNB.CA) wrote:
: In article <CKsGp5.2KF@world.std.com> drt@world.std.com (David R Tucker) writes:
: Two things you should know folks: If you ask one question to 4
: Canadian officials, you will get at least 2 or 3 different answers.

I had noticed that.

: Also, there is no such thing as a Rule exam. There is a Basic exam
: and an Advanced exam. The Basic has 100 questions, with multiple
: choices, and covers rules, basic theory, propagation, interference,
: etc. You need 60% to pass. This gives you access to a max. of 250
: Watts and frequencies (all mode) over 30 mhz. The Advanced exam has
: 50 questions and if you pass you can go to a full kilowatt, have
: your own club, your own repeater, and you can fix and modify your
: ham gear.

Well, all I can say is that one American told me he was able to get a
Canadian license after answering the 25 rules questions on the Basic
test with a passing grade. Like you say, that may not happen in every
case. YMMV, but it *has* happened. For those who care, the code exam
in Canada is 12 or 5 wpm, 3 minutes, 6 or more errors fails.

: >Novices and Technicians WITH code (and anyone with a licence carrying
: >a code requirement of less than 12 wpm) are considered Basic
: >operators above 30 MHz (all bands, all modes), plus below 30 MHz they
: >can use CW and CW only on all amateur frequencies.

: Impossible! There is no such thing in Canada now that allows you to
: use code only on certain bands. You either have access to a band or
: you don't. The 5 wpm gives you access to both 160 m and 80 m. On 80
: m, legally, you could use SSB everywhere, but in practice Canadians
: (in Canada) will be between 3690 and above. Most Canadian nets are
: around 3735 and 3780 mhz

It's quite true. Else how do you explain General Rules 2, 45, 3:

"A foreign amateur who is qualified to sent and receive Morse code at
a speed of at least 5 w.p.m. may

"(a) operate an amateur station in Canada with the provisions
applicable to the holder of an Amateur Operator's Certificate
with Basic Qualification [NOT Basic + 5 wpm!]; and

"(b) transmit radiotelegraphy signals using on-off keying in all
frequency bands below 30 MHz as set out in Schedule II
[which lists the bands]."

We are NOT talking "Basic + 5" privileges here. They are NOT the same. Unlike a "Basic + 5", a Novice operating in Canada CANNOT use phone on 80, but CAN use CW on 20. If you know of a contrary authority, I'd love to hear about it, if you can cite it, but that's what it says.

: >
: >(Basic operators cannot put up a or posess a repeater, or be the
: >trustee of a club station, or use or posess homebrew. They also
: >cannot use full power: for example, while an Advanced is allowed 1000
: >watts input, the Basic is limited to 250. Complete power regulations
: >are found in the rules.)

: I also understand that the way Power is measured is different than
: it is in the US. I heard someone explain that 1000 Watts in Canada
: is around 2.5 kw in the US.

Well, Canadians (with Advanced qualification) are limited to 1000 w in, or 2250 w out PEP on SSB, or 750 watts out non-SSB. In the US the power limit is 1500 w PEP all modes.

I forgot to mention that Basic operators cannot use auxiliary links.

: >According to that government official I talked to, as well as the
: >rules near as I can tell, you are NOT, repeat NOT, restricted to your
: >US amateur privileges while in Canada, contrary to what the ARRL rule
: >book says. That means that it is perfectly legal for a General, while
: >in Canada, to use phone on 14.110, or CW on 7.010. It's somewhat
: >frustrating, because others have reported being told otherwise. But

errata: the rule book says nothing of the sort. The ARRL operating manual does, on page 3-10. Dead wrong.

: I disagree. You are stuck with US limits when you visit Canada
: *unless you have obtained a Canadian licence _and_ a Canadian
: Callsign*, in which case you have full Canadian privileges *while
: operating in Canada* When Canadians are say, Mobile W4 in Florida
: they are restricted by the US bandplan and cannot use voice to talk
: to their friends on say 14,140 nets.

Says who?

Canadians (in fact, all reciprocal licensees) are limited by 97.107 to whatever they can do at home, not to exceed what an Extra can do. But that's a US regulation.

There is *no* analogous regulation in Canada.

You sort of ignored my source:

: >Source, GR2: 45(1)-(4), in RIC-25.

This causes so much confusion, I'm going to explain once why I believe this to be so in gory detail:

1. An official of the Government of Canada told me so. (Who could be more reliable?)

2. The Canadian rules, GR2: 45., clearly state that a person with a foreign licence requiring 12 wpm or higher is entitled to operate amateur stations in Canada "with the provisions applicable to the holder of an Amateur Operator's Certificate with Basic, Morse Code (12 w.p.m.) and Advanced Qualifications." That's all they say. Nowhere do they limit US or other foreign operators to the privileges they can exercise at home. Like I said, this is confusing stuff. BUT - Anyone who cares to dispute this *again* is welcome to quote the relevant Canadian regulation rather than merely asserting the contrary. Otherwise, I find that pretty authoritative.

At this point many people bring up the FCC, which is irrelevant for 2 reasons:

1. The FCC has no jurisdiction over amateur stations located in Canada, or the operators of those stations. If the Canadian government gives Generals the "Advanced + 12" privileges, that's their business. [If the Canadian government wanted to give those same privileges to anyone possessing a valid US passport regardless of whether a licence is held in the US, they could do that too!]

It is no good to say FCC rules bind Americans in Canada, because they don't: According to 97.5a, a licence is required by the FCC "where the amateur service is regulated by the FCC." A list of such places is in Appendix 2 of the "FCC Rule Book." Canada, not surprisingly, is *not* listed. Those who would like to dispute this are invited to cite their authority.

2. Even if that were possible, there is the small matter of the reciprocity treaty, TIAS 2508. It details procedures for ID, and then says:

Article III (d): "In other respects the amateur station shall be operated in accordance with the laws and regulations of the country IN WHICH THE STATION IS TEMPORARILY LOCATED" (emphasis added).

Treaties, of course, supersede FCC regulations and even statutes passed by Congress. (You can find the treaty on page 250 of the Rule Book. I went and looked up the entire thing in the library, and none of the rest of that treaty is at all germane to amateur radio.)

This should end it, but it won't.

-drt

|David R. Tucker KG2S drt@world.std.com|

1140. Dominican Republic / Haitti

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 20:33:52 UTC
From: dick@kanga.demon.co.uk
Message-ID: <760566832snz@kanga.demon.co.uk>
Source record: 271577

Hi, I am planning a vacation in HI & HH during may of 94
Looking for hints and tips about getting licence, and any
problems encountered when operating, first trip to caribean.
All help welcome...
73 de Dick G0BPS

1141. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 20:34:33 UTC
From: drt@world.std.com
Message-ID: <CKtL5M.271@world.std.com>
Source record: 271428
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

Matthew Cravit N9VWG (cravit@world.std.com) wrote:
: In article <2j39od$k0a@tribune.usask.ca>,
: Peter Hardie,4805,, <hardie@herald.usask.ca> wrote:
: >From article <06FEB94.12030322.0075@UNBVM1.CSD.UNB.CA>, by NADO000 <NADO@UNB.CA>:
: >> In article <CKsGp5.2KF@world.std.com> drt@world.std.com (David R Tucker) writes:
: >>>According to that government official I talked to, as well as the
: >>>rules near as I can tell, you are NOT, repeat NOT, restricted to your
: >>>US amateur privileges while in Canada, contrary to what the ARRL rule
: >>>book says. That means that it is perfectly legal for a General, while
: >>>in Canada, to use phone on 14.110, or CW on 7.010. It's somewhat
: >>>frustrating, because others have reported being told otherwise. But
: >>
: >> I disagree. You are stuck with US limits when you visit Canada
: >You can disagree, but he's right. The regs clearly state that a U.S. amateur
: >who is a U.S. citizen AND resident and who is qualified to send and receive

: This is what the Canadian regs say. But the US regs say that an
: amateur operating abroad under a US license and reciprocal treaty must
: not exceed what their US license allows, even if permitted by the
: foreign regulations.

: /Matthew

Where do they say this?

-drt

|David R. Tucker KG2S drt@world.std.com|

1142. Re: htx-202 or dj-162 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 20:52:43 UTC
From: psc@colmiks.com
Message-ID: <1994Feb6.205243.10434@colmiks.com>
Source record: 271430
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Joel B Levin (levin@bbn.com) wrote:
: In article <2ire53$o2g@explorer.clark.net> robocop@clark.net (matt roberts) writes:
: In article <CKM79r.45H@sunsrvr6.cci.com>, James D. Cronin <jdc@cci.com> wrote:
: >In article <2i8rnf$o5n@explorer.clark.net>,
: >matt roberts <robocop@clark.net> wrote:
: >>The HTX202 is a good radio. It comes with the CTCSS, DTMF squelch, and
: >>it can store telephone numbers. It has 14 memories, I think.

: >I'll second the motion. The HTX-202 is also more sensitive on receive
: >than my ICOM-27H, of a late 70's or early 80's vintage. And the price
: >is right when Radio Shack runs one of their periodic "sales".

: The radio is also free of intermod. I hear a lot of complaints on the
: air about intermod, but I never hear these from HTX202 owners.

: On the other hand you hear complaints here about the inability to
: expand the receive capabilities of the HTX-202 so one can monitor the
: NOAA weather or public service agencies. It is because you can't that
: the receiver is so clean. If expanded VHF reception is important to
: you, the Alinco would be the correct choice (of the two mentioned
: here).

: /JBL KD1ON
: =
: Nets: levin@bbn.com | "Earn more sessions by sleeving."
: pots: (617)873-3463 |
: ARS: KD1ON | -- Roxanne Kowalski

--
+---+
: Philip Cook : Sysop of Dragon's World BBS : Amateur Radio Operator :
: psc@colmiks. : 203-294-1813 : N1OKM :
: colmiks.com : A Commodore C*Base BBS : ARRL member :

1143. Yaesu FT-2400 mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 21:30:17 UTC
From: erik@csn.org
Message-ID: <CKtnqH.KvL@csn.org>
Source record: 271431

I am looking at getting the Yaesu FT-2400 2m mobile to replace an old radio
that has finally died. I noticed from the ads that the TX range is
144-148 MHz. Can this radio be modified to transmit just outside the band
for use on MARS frequencies?

TNX
Erik
--
Erik Mugele * erik@csn.org * "Strip mining prevents
Colo. Springs, Colorado * mugele@sil.org * forest fires."
Amateur Radio: N5XYX * No NeXTMail yet! *
DoD #: 1030 * Phone: 719.550.6188 *

1144. Re: Shuttle STS-60 Ground Communications retransmission

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 21:35:29 UTC
From: bwilkins@iat.holonet.net
Message-ID: <CKtnz7.BoK@iat.holonet.net>
Source record: 271432

dbraun@scdtintel.com (Doug Braun) writes:
:
: Didn't the NASA Ames Radio Club (?) in the bay area also do this?
: Will they be doing it this time? Waht freq?
:
: Doug Braun Intel Design Technology
: 408 765-4279
: dbraun@scdt.intel.com

Try the 145.585 MHz frequency for the Ames re-transmissions in the Bay Area.

Bob

--
Bob Wilkins n6fri voice 440.250+ 100pl san francisco bay area
bwilkins@cave.org packet n6fri @ n6eeg.#nocal.ca.usa.na

1145. Re: Robert is back (?) (w

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 22:02:19 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2j3pdb$imm@news.acns.nwu.edu>
Source record: 271433

In article <14.14558.822.0NAC3E6B@mystis.wariat.org>,
<dan@mystis.wariat.org> wrote:
<snip>

>>
>> It appears that "Robert" Robert Coyle WA3J is back, this time
>> attempting to hide behind some "Great X-ray technician" moniker.
>> The mention of "Dianne" is the attribution of a quote in his
>> ".signature", though we know Robert would rather be anonymous
>> and just stir up trouble, like most jammers. So, just like
>> the way jammers should be dealt with, ignore Robert's pathetic
>> attempts at attention.
>
>You are SO right! With the salvo fired right at me, I should have seen
>it. My appologies to the Net. (Not to Robert!)
>

Why do not both of you give us all a break and carry out your
endless and exceeding boring and repetitive discussions in private
using e-mail?

Hint: If you have to apologise for a post, do not make the post and
save time and money. Ours and yours.

Rajiv
aa9ch
r-dewan@nwu.edu

1146. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-06 22:52:36 UTC
From: NADO000 <NADO@UNB.CA>
Message-ID: <06FEB94.20386891.0152@UNBVM1.CSD.UNB.CA>
Source record: 271436
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

In article <CKtGtt.6G2@world.std.com> cravit@world.std.com (Matthew Cravit N9VWG) writes:
>In article <2j39od$k0a@tribune.usask.ca>,
>Peter Hardie,4805,, <hardie@herald.usask.ca> wrote:
>>> In article <CKsGp5.2KF@world.std.com> drt@world.std.com (David R Tucker) writes:
>>>>According to that government official I talked to, as well as the
>>>>rules near as I can tell, you are NOT, repeat NOT, restricted to your
>>>>US amateur privileges while in Canada, contrary to what the ARRL rule
>>>>book says. That means that it is perfectly legal for a General, while
>>>>in Canada, to use phone on 14.110, or CW on 7.010. It's somewhat
>>>>frustrating, because others have reported being told otherwise. But
>>>
>>> I disagree. You are stuck with US limits when you visit Canada
>>You can disagree, but he's right. The regs clearly state that a U.S. amateur
>>who is a U.S. citizen AND resident and who is qualified to send and receive
>
>This is what the Canadian regs say. But the US regs say that an
>amateur operating abroad under a US license and reciprocal treaty must
>not exceed what their US license allows, even if permitted by the
>foreign regulations.
>
>/Matthew
>Matthew Cravit, N9VWG | All opinions expressed here are

Right on Matthew. I know of an American ham who was visiting Canada
and who checked into a net on 3750 LSB. On LSB part of your signal
is *below* 3750 and even visiting Canada, he ended up receiving a
nasty letter from the FCC. If the same American had had a Canadian
callsign, of course, he would have been ok.

Luis Nadeau VE9LN

1147. Another antenna question...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 00:43:27 UTC
From: segigot@students.wisc.EDU
Message-ID: <199402070043.SAA08617@audumla.students.wisc.edu>
Source record: 271440

The other night I was sandbagging on someone's conversation about antennas, and he mentioned that it was possible to turn a bed frame into a directional antenna. I'd love more antenna power, and I do have a metal bed frame, so I was wondering if anyone had any idea or a plan how to do this. The only difficulty I see would be rotating it, but that's my problem. Thanks for your help.

Scott Gigot, N9VOM
segigot@students.wisc.edu

1148. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 02:09:14 UTC
From: kg7bk@indirect.com
Message-ID: <CKu0nF.C4J@news.direct.net>
Source record: 271441
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Terry Burge (t1terryb@cascade.ens.tek.com) wrote:

: >>A quarter wave ground plane has a gain of some-
: >>where around 6 db over isotropic where a dipole has a gain of 2.14 db over
: >>isotropic at it's theoritical best. Terry Burge KI7M

I can't always tell who said what but whoever said a dipole has a gain of 2.14db over isotropic has to remember that that is in free space. A half-wave horizontal dipole over ground has somewhere around 7dbi gain depending on the ground. A half-wave horizontal dipole at a reasonable height has more gain than a quarter-wave vertical. A half-wave vertical has more gain than a quarter-wave vertical.

73, Cecil, kg7bk@indirect.com

1149. Re: "Flexible" 9913 (Was - Re: Coaxial cable)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 02:17:16 UTC
From: kg7bk@indirect.com
Message-ID: <CKu10s.CCJ@news.direct.net>
Source record: 271442

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: bump on the coax that can affect VSWR. *However*, their impedance mismatch
: can be *absorbed* into radio or antenna matching networks by competent
: designers. Therefore, the coax sees a match even though the connector in
: isolation would present a mismatch. So it's OK to have them at the endpoints
: of a line *if the equipment is designed for them*. Having them in the middle
: Gary Coffman KE4ZV

Gary, would you say my Alinco DR-570 with it's so239 and my Comet 2x4MAX with
it's so239 are "absorbed...by competent designers"?

thanks and 73, Cecil, kg7bk@indirect.com

1150. SAREX Update 2/7 at 1:30 UTC

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 02:40:13 UTC
From: ABFHB@STDVAX.GSFC.NASA.GOV
Message-ID: <940206214013.21c25388@STDVAX.GSFC.NASA.GOV>
Source record: 271443

SB SAREX @ AMSAT $STS-60.008
SAREX Update 2/7 at 01:30 UTC

Since the last update, SAREX has successfully completed another first. At 10:42 UTC on February 6, Sergei Krikalev, U5MIR, initiated contact with a school group at the House of Science and Technology for Youth in Moscow, Russia. This represents the first time a cosmonaut on a U.S. space shuttle has communicated with a group in Russia. Leo Lebutin, UA3CR and Valery Agabekov, UA6HZ were the prime school group coordinators for this contact. During the contact Aleksandr Kaleri, U8MIR, gave Sergei greetings from Russia. Six students were able to ask their questions to the crew on the Space Shuttle DIscovery. In addition, several cosmonauts were on hand to hear the communications. The SAREX contact was also broadcast live throughout Russia on HF (80 meters, 40 meters and 20 meters) as well as VHF.

The packet robot on the Space Shuttle Discovery has been quite busy today. At last report, the QSO sequence number was nearing the 2000 mark. Many hams from around the world have reported booming packet radio signals from the Shuttle Discovery.

Those of you who have heard or worked the STS-60 crew and wish to receive a QSL card need to send your signal report and an SASE or an envelope and IRCs to the following address:

STS-60 QSL
Education Activities Division
ARRL
225 Main St
Newington, CT 06111

The official SAREX element set for today will be GSFC-005. This element sent was generated by Ron Parise, WA4SIR of the Goddard Space Flight Center. Gil Carman, WA5NOM reports that the predictions using GSFC-005 differed from GSFC-003 by approximately 2 seconds during orbit 50.

STS-60
1 22977U 94006A 94 36.28433526 0.00000141 00000-0 54171-5 0 58
2 22977 56.9879 208.1294 0009042 265.9751 94.0283 15.72161107 297

Satellite: STS-60
Catalog number: 22977
Epoch time: 94036.28433526 (05 FEB 94 06:49:26.57 UTC)
Element set: GSFC-005
Inclination: 56.9879 deg
RA of node: 208.1294 deg Space Shuttle Flight STS-60

Eccentricity: 0.0009042 Keplerian Elements
Arg of perigee: 265.9751 deg
Mean anomaly: 94.0283 deg
Mean motion: 15.72161107 rev/day Semi-major Axis: 6730.8539 Km
Decay rate: 0.14E-05 rev/day*2 Apogee Alt: 358.55 Km
Epoch rev: 29 Perigee Alt: 346.38 Km

NOTE - This element set is based on NORAD element set # 005.
The spacecraft has been propagated to the next ascending
node, and the orbit number has been adjusted to bring it
into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO, for the SAREX Working Group

/EX

1151. Re: Field Day Logging Program

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 12:39:41 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-070294073549@136.141.220.39>
Source record: 271446

In article <CKo1r7.InH@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) wrote:

> The problem with logging programs for Field Day is that most of the
> operators will be "learning on the job." I have found that I can keep
> the log and dupe sheets on paper much faster than most operators can
> work the computer, at least until they have a few hours of practice
> under their belts.
>
> If most of your operators already are familiar with one of the popular
> loging programs, then use that one. If not, then pick the program that
> is easiest/fastest to learn to use and have a training session some
> evening before Field Day starts.
>

At Penn Wireless Association, we've been using logging software at Field Day for about four years now. At first only about three stations used it, but their performance was so much superior to the paper loggers that we shifted universally. Despite sagging attendance at Field Day, we're still fielding eight to ten stations primarily because the computer eliminates the need for a human logger.

As far as we're concerned, any learning problems are worth suffering through, because of the ultimate gains.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1152. Hamblaster update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 14:33:04 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb7.143304.26291@tellab5.tellabs.com>
Source record: 271451

The Hamblaster Update

Over the past several months I posted updates about a
DSP "The Hamblaster" that Will Torgrim (N9PEA) and myself
are developing.

We are focusing our efforts on a packet modem that allows
the user to improve H.F. reception by interfacing the Ham-
blaster (a PC compatable DSP sound board) to a transceiver
and a packet or all mode TNC. Modems/filters for RTTY,
Packtor, Amtor are also under developement and are compatable
with the same control panal software.

Here are the latest developements
1-31-94

1) External Power supply

I think one feature that separates the Hamblaster
from other sound boards is it's ability to run on
an external 12 volt supply. When a filter or modem
is loaded, You can turn off the computer and
Hamblaster keeps on going and going and going!

When it's connected to a PK-232, there's no need
to keep the computer on in order to keep the DSP
alive. Right now, my PK232/Hamblaster is runing
and it's been operating for about 5 days

2) Adaptive (LMS) filter

There's ongoing developement in this area. We are
planing (I don't think this has been done before)
to add controls to the LMS algorithm.

3) Fast autotune

We have a fast autotune routine that locks a packet
modem to the received signal in few milliseconds.
Tuning is a big problem on H.F. packet. Some stations
are so far off frequency, the tnc can't receive the packets.
The auto tune (or AFC) locks the DSP modem to the FSK
center frequency.

Jack Albert Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-4590

1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440
*
* *
* * *
* * * * * * *
* * *
* *
*
THE BOWTIE FILTER

1153. Hamblaster Update II

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 14:46:31 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb7.144631.27271@tellab5.tellabs.com>
Source record: 271452

The Hamblaster Update

Over the past several months I posted updates about a
DSP "The Hamblaster" that Will Torgrim (N9PEA) and myself
are developing.

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blaster (a PC compatable DSP sound board) to a transceiver
and a packet or all mode TNC. Modems/filters for RTTY,
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to keep the computer on in order to keep the DSP
alive. Right now, my PK232/Hamblaster is runing
and it's been operating for about 5 days

2) Adaptive (LMS) filter

There's ongoing developement in this area. We are
planing (I don't think this has been done before)
to add controls to the LMS algorithm.

3) Soundblaster compatibility

The Hamblaster IS NOT soundblaster compatible.
It was designed that way so that it will run
independant of other sound boards. I can still
use my Soundblater to record sound, play music,
load software from the CD or use the midi interface.
At the same time, I can receive packets or use
a DSP filter with my Ham equipment.

Jack Albert Fellow Radio Hacker
Tele (708) 378-6201

Tellabs Operations, Inc. FAX (708) 378-4590
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440
*
* *
* * *
* * * * * * *
* * *
* *
*
THE BOWTIE FILTER

1154. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 16:32:09 UTC
From: zlau@arrl.org
Message-ID: <1994Feb7.163209.8159@arrl.org>
Source record: 271454

Ted Trost (tedtrost@delphi.com) wrote:
: I just got mine after almost 75 days.

: Sit tight, as hard as it is.

I wonder if the new computer system has anything to do with it.
They might be busy learning how to use it.

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

1155. Daily Summary of Solar Geophysical Activity for 06 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 18:22:09 UTC
From: oler@rho.uleth.ca
Message-ID: <9402071822.AA07562@rho.uleth.ca>
Source record: 271456
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

06 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 037, 02/06/94
10.7 FLUX=095 90-AVG=106 SSN=071 BKI=4435 6655 BAI=046
BGND-XRAY=A9.6 FLU1=1.2E+06 FLU10=1.1E+04 PKI=4436 6755 PAI=057
BOU-DEV=065,049,029,092,160,135,080,070 DEV-AVG=085 NT SWF=00:000
XRAY-MAX= B7.9 @ 1314UT XRAY-MIN= A7.3 @ 0149UT XRAY-AVG= B1.3
NEUTN-MAX= +000% @ 1435UT NEUTN-MIN= -006% @ 0700UT NEUTN-AVG= -2.8%
PCA-MAX= +0.2DB @ 0355UT PCA-MIN= -0.4DB @ 0425UT PCA-AVG= +0.0DB
BOUTF-MAX=55353NT @ 0040UT BOUTF-MIN=55248NT @ 1624UT BOUTF-AVG=55315NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+043,+000,+000
GOES6-MAX=P:+149NT@ 1844UT GOES6-MIN=N:-120NT@ 1047UT G6-AVG=+071,+035,-047
FLUXFCST=STD:094,090,090;SESC:094,090,090 BAI/PAI-FCST=025,025,020/035,025,020
KFCST=4445 6523 3345 4443 27DAY-AP=004,015 27DAY-KP=2111 2111 2133 2543
WARNINGS=*GSTRM
ALERTS=**MINSTRM;**FORBUSH;**MAGPAUSE:GOES6:1711-1713,1622-1629UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 05 FEB 94 was 50.8.
The Full Kp Indices for 05 FEB 94 are: 3- 2- 3+ 5+ 4+ 4- 3o 4+
The 3-Hr Ap Indices for 05 FEB 94 are: 13 7 17 59 31 22 16 34

SYNOPSIS OF ACT

Solar activity continued very low. Region 7664 (S11W34)
grew at a moderate pace and produced two mid level B-class
subflares. A strong arch filament system was observed here.

Solar activity forecast: solar activity should continue
at a very low level. Continued growth in Region 7664 could
result in an isolated C-class flare.

STD: A Yohkoh x-ray image showing the large size and spatial
extent of the below-mentioned coronal hole has been appended
to this report.

The geomagnetic field was mostly active until a major disturbance began near 06/1000Z. Major storm conditions ensued at mid latitudes and major to severe storm levels were detected at high latitudes. A Forbush decrease of approximately 5 percent was observed near 06/0600Z. The GOES 6 spacecraft at 85W experienced magnetopause crossings at 06/1620-1632Z and 06/1709-1713Z. The only source for this disturbance is a filament disruption on 01 Feb near S35E01. The forbush decrease and the severity of this disturbance argue against the early arrival of the coronal hole effects.

Geophysical activity forecast: the geomagnetic field should continue at minor to major storm levels for early 07 Feb. The coronal hole stream should establish itself in the Earth's vicinity during 07 Feb and geomagnetic conditions should moderate somewhat. Active to minor storm conditions are forecast for 08-09 Feb. Isolated periods at major storm are possible during that period for mid latitudes and high latitudes could experience periods at severe storm.

Event probabilities 07 feb-09 feb

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 07 feb-09 feb

A. Middle Latitudes
Active 35/35/35
Minor Storm 35/35/35
Major-Severe Storm 20/20/20

B. High Latitudes
Active 30/30/30
Minor Storm 40/40/40
Major-Severe Storm 20/20/20

HF propagation conditions were well below normal over most regions. The geomagnetic and auroral storming which has taken place over the last 24 hours has resulted in very poor to near useless propagation for transpolar and transauroral circuits. Even lower middle latitude regions (and some low-latitude stations) experienced fair to poor propagation. Conditions are expected to remain below-normal over the next 24 to 48 hours before gradual improvements set in, and no substantial improvements are expected until after the coronal hole related disturbance passes, which may not be for another week.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

LISTING OF SOLAR ENERGETIC EVENTS FOR 06 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 06 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
06/A2135 B2205 N05W32 DSF

INFERRED CORONAL HOLES. LOCATIONS VALID AT 06/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
05 Feb: 0503 0506 0509 B1.4
0759 0802 0804 B1.6
1931 1935 1937 B1.5
2342 2343 2346 B1.3

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
Uncorrellated: 0 0 0 0 0 0 0 0 004 (100.0)

Total Events: 004 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep

V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

SPECIAL INSERT: CURRENT X-RAY EMISSIONS FROM THE JAPANESE YOHKOH SPACECRAFT
==========

05 February 1994, 15:20 UTC

North

South

KEY: East and west limbs are to the left and right respectively. Emission strength, from minimum to maximum are coded in the following way:

[space] . , : ; - + | ! 1 2 3 4 * # @

Units used are arbitrary, for illustrative purposes. Get "showasc.zip"
from "pub/solar/Software" at the anonymous FTP site: ftp.uleth.ca
(IP # 142.66.3.29) to view these images on VGA screens. Remove
all but the image data before typing "showasc filename".

** End of Daily Report **

1156. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 19:25:57 UTC
From: greg@netcom.com
Message-ID: <gregCKvCnA.5u8@netcom.com>
Source record: 271458

In article <1994Feb4.144026.7005@arrl.org> ehare@arrl.org (Ed Hare (KA1CV)) writes:
>Greg Bullough (greg@netcom.com) wrote:
>
>: In article <1994Jan28.171743.483@arrl.org> ehare@arrl.org
>(Ed Hare (KA1CV)) writes:
>
>: >For starters, I am not sure that few ever build projects from
>: >magazines.
>
>: Why? Haven't you polled your readers, in order to make intelligent
>: editorial decisions? Haven't you asked 'if not, why not?' '73' has
>: an article-by article reader feedback form, every issue. If you
>: don't have the information, you really aren't in much of a position
>: to either support or refute my assertion, are you?
>
>As a matter of fact we have. Please see Jon Bloom's follow-up post
>for information. You really do detract a lot from your effectiveness
>by shooting from the hip with erroneous information.

Read your own quote. You said that you didn't know. Apparently you
did know. If you give out false information, then it would seem
somewhat disingenuous of you to make accusations based on the response,
would it not?

>: >Some of the authors that have offered a kit have reported
>: >large sales
>
>: And god bless 'em if they do, for they are the ones who recognize
>: that parts procurement is 90% of the problem and 200% of the
>: expense of home-brewing. Someone who take the time to write an article,
>: and then offer a kit, with no intention of profiting by either is,
>: IMHO, entitled to some sort of sainthood.
>
>Perhaps so, but I don't have the least amount of problem with an
>author making a profit for writing an article and marketing his
>design, either.

Nor do I. However I think it unlikely that anyone will EVER get
rich by writing construction articles for QST. Unless they can
build a full-function HF transceiver for $100 :-)

> Our editorial policy is not driven by the
>author's profit level, or the amount a company advertises with
>us. But profit is not a bad word; I am sure that you expect to profit
>from your work; there is no reason someone else can't profit from

>theirs. There is a big difference between profit and profiteering.

Again, you seem to be responding to something which was un-said.
Why so defensive?

>I will not take your suggestion that we don't understand the real
>world as an insult,

Methinks you protest too much. Clearly you are responding as if you'd been
insulted, and your attribution...

> ...although it looks like you meant it that way.

...of intent indicates that you are once again projecting something un-said.

>You clearly don't have any personal knowledge of what any of
>us understand and which ones of us have our feet firmly planted
>on the ground and which have our heads in the clouds. I am forever
>amazed how some can see a problem, imagine what *must* be the
>only cause, and offer it to the world as gospel truth.

I have been reading QST (in current issues) since 1973. In back-issues,
since 1960. Is it still the official journal of the ARRL? Was it then?
I think I'm in a fairly good position to judge, as an 'average ham,'
just how in- or out-of-sync the League has been over the years.

>Greg, I just can't imagine how you could miss the ways the ARRL does
>do exactly what you are saying we NEED to do.

I'm sure you believe what you say.

> ...I don't know why you would make some of the
>unfounded claims about us that you do, but I won't make something
>up and offer it to rram readers as the reason.

Perhaps if you were, again, more in touch with the reality of it,
as opposed to the rarified atmosphere of ARRL HQ, of being a
staffer, and of the Field Organization, you would see the world
differently. But that won't happen. You've labeled it all as 'unfounded
claims,' so I guess you are safe in the Shrine of St. Hiram.

>After QST, we have books designed to help the ham get on the air and
>get started, ranging from the information in Now You're Talking,
>to our Companion series to the Operating Manual to some of the
>stuff in the ARRL Handbook. Sure, we actually sell the stuff, but
>if you compare the costs of our books to the technical books
>for sale in a "real-world" bookstore, you will see that, though
>we may be generating some revenue, we are not profiteering by
>any stretch of the imagination.

Ed, it is virtually impossible to have a rational discussion with someone
who persists in placing words like 'profiteering' in my mouth. It is
really offensive, and I wish you'd stop doing it. I am baffled as to
why you would think I've accused the League of 'profiteering.' The

ARRL is not out for profit. It is out to control Amateur Radio.

>: The no-code ticket was instituted to reduce discouragement. The
>: League fought it tooth-and-nail, until it was clear that the League
>: had lost.
>
>Where did this one come from? It just kinda' jumped out.

It demonstrates that the League is truly out of step, historically, with
the population which counts.... ....the sum of the sets EXISTING
radio amateurs and POTENTIAL radio amateurs.

>We were not the first on the bandwagon;

Now *there's* the understatement of the year!

>It was a tough call, and I can't speak with great authority about
>every detail. But I can tell you that it was not as simple as fighting
>until we lost.

I'm sure you believe this.

>No, I was correct; it is determined about our perceptions of what
>hams WANT to see. Imagining nefarious motives for our Directors
>doesn't make them so. And, point of order, the Board specifically
>does NOT influence editorial content; that is determined by the
>staff.

Uh huh. Isn't QST the 'official journal?' I don't recall ever seeing
a viewpoint which opposed the board presented. I don't really ever
recall a balanced presentation of an issue. What I do recall are
presentations of and justifications of the Board's position. Again,
I think it is a bit disningenuous to claim that QST is in any way
editorially independent of the Board. That, from my reading of some 30
years worth of QST, just won't fly.

>In summary, Greg, I suggest that you learn more about the ARRL before
>you rip us to pieces.

Yeah, I guess I'm just one of the rabble who doesn't know nuthin' 'bout
it. Never mind my membership. I'm apparently one of the 'them' to your
'us' 'cuz I dare to suggest that there might be REASON why there is
no clear majority of hams as members.

Gee, maybe I ought to call HQ and tell 'em to forget that 3-year renewal
I just sent in (thought about a lifer, but couldn't find the info anywhere).
After all, Ed, you've convinced me that there's NO WAY I'll ever be
competant to vote.

> There is enough real things to call us to task
>for; pulling things out of a hat

Are you looking for a list?

> will usually result in you embarassing
>yourself, as you have done here.

Funny, Ed. I don't feel embarassed. After all, I stated my position, and I stand by it. I wasn't the one arguing about points that the other guy didn't make.

> But we need dissenters who
>are willing to work at it,

As a member, I prefer *my* ARRL staff to refrain from labeling me either 'dissenter,' or 'supporter.'

>and pointing out better ways. We have a few on this forum, and
>I count some of them as friends. But those who jump to fast conclusions
>with little facts and less thought are not useful; they just take up
>our time and confuse the issues.

Oh. I see. Not only do I not know what I'm talking about, I'm 'not useful.' I lack facts (apparently because I disagree with your 'world view') and I don't think.

And I'm wasting 'your' time.

Well, I guess it's better than the 'You Are the ARRL' lecture.

I'll send the membership kit back by return post.

Greg

1157. Yaesu 990 HF Tranceiver For Sale

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 19:48:02 UTC
From: frede@microsoft.com
Message-ID: <CKvDoq.AIp@microsoft.com>
Source record: 271459

I have a slightly used, 5 month old Yaesu 990 HF rig. It
contains all manuals (including the optional service manual),
the original box, and original stock accessories.

I have performed the factory modification for general
coverage transmit (easily reversable). The radio is in new condition.

Reason for sale: I find I need the operating features of the
Yaesu 1000 rig, so I need to upgrade.

Price: $1600 including U.P.S. ground shipping.
Phone: 206-936-2520 (Office)
206-725-1207 (Home)

Fredric Einstein
frede@microsoft.com

1158. Anyone Hear from Space Shuttle?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 19:56:02 UTC
From: blood@austin.ibm.com
Message-ID: <CKvE1n.3IEI@austin.ibm.com>
Source record: 271460

Has anyone heard the shuttle on 2mtrs? With 3 hams out there and
a broken satellite, perhaps they have some time on their hands.
Or just too busy trying to fix it. Where Do I listen? 145.55?

1159. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 20:05:58 UTC
From: llake1@services.DEse.state.mo.US
Message-ID: <Pine.3.07.9402071458.A12956-5100000@services>
Source record: 271461

ADD
HELP

1160. Parking at the Dayton Hamvention

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 20:35:29 UTC
From: mdesimio@afit.af.mil
Message-ID: <1994Feb7.203529.21211@afit.af.mil>
Source record: 271462

i live in Dayton and have gotten word from
some Hamvention committee types that a change
has been made in the free buses this year.

there will no longer be service available from
individual hotels to hara arena. however, free
shuttle service will be provided from the usual
satellite parking areas: salem mall, forest park
plaza, air force museum, meijers in englewood,
mendelson's, and so on.

i believe that this information is accurate, but
am not associated with the transportation committee
of the dayton hamvention.

73,
marty

Martin P. DeSimio
mdesimio@afit.af.mil

AFIT/ENG
2950 P Street
Wright-Patterson AFB, OH 45433-7765

1161. Re: Tech No-Code computer test - is there a Macintosh version?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 21:22:45 UTC
From: jrl2@crux1.cit.cornell.edu
Message-ID: <jrl2.760656165@crux1.cit.cornell.edu>
Source record: 271463

<hberg@sun.sws.uiuc.edu> writes:
Hi Steve,
Check out world.std.com
They have the ham stacks online there via anon ftp.
I think the path is
\pub\hamradio

Hope this helps
-Jeff Luszcz N2TIQ
> Is there a Macintosh version of the Novice/Tech No-Code question pool
>available via FTP? I am part of a group studying for the Tech No-Code, and
>most of us have been using a DOS program that generates sample tests from
>the current question pool to practice. One of our group has access only to
>a Macintosh, and he would like to have something similar to practice with.

> Thanks in advance.

>-Steve-
>shooting for the March 20 test date

1162. Re: HTX202 belt clip

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-07 22:47:13 UTC
From: psc@colmiks.com
Message-ID: <1994Feb7.224713.3701@colmiks.com>
Source record: 271464

```
hlb (hlb@li.loral.com) wrote:
: Is the belt clip of the HTX202 used as a heat sink or can it be operated
: without the belt clip attached?

: Thank you.
: hlb@li.loral.com

: --
: hlb@li.loral.com
--
+---------------------------------------------------------------------------+
: Philip Cook : Sysop of Dragon's World BBS : Amateur Radio Operator :
: psc@colmiks. : 203-294-1813 : N1OKM :
: colmiks.com : A Commodore C*Base BBS : ARRL member :
```

1163. Trip to Belize (on list Nov-DEC?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 00:11:56 UTC
From: pmarsh@metro.mccneb.EDU
Message-ID: <9402080011.AA24520@metro.mccneb.edu>
Source record: 271465

There was a note from someone who was going to Belize for rain-forest studies this Spring. I believe the note appeared here in November or December. I am unable to locate the note in Archives. Does anyone remember the note, the person, or how I can contact her?

Paul Marsh N0ZAU pmarsh@metro.mccneb.edu

1164. Re: Illegal Activities of Dominique Corman

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 00:14:29 UTC
From: myers@cypress.West.Sun.COM
Message-ID: <2j6lh5INNeto@abyss.West.Sun.COM>
Source record: 271466

In article J8v@news.Hawaii.Edu, jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>
>Before I left for vacation in December, Dana and I went round and round
>concerning a self-proclaimed lawbreaker who stated he was going to place
>a 5kw broadcast band xmtr on the ham bands. Dana's stance: give the guy
>a break - he'll change his ways. You all know my opinion of the matter...

I'm flattered that Jeff sees fit to mention me, but he's grossly misrepresented
my views. For anyone who cares, they can go peruse the mail archives on
ucsd.edu and re-read the entire discussion, but I'll save anyone who cares
a few minutes by quoting a note that I wrote, that more accurately expresses
my views that Jeff Herman.

Begin included news posting:

Date: 21 Dec 1993 18:01:28 GMT
From: news.service.uci.edu!usc.edu!elroy.jpl.nasa.gov!swrinde!sgiblab!sgigate.sgi.com!olivea!koriel!newscast.West.Sun.COM!abyss.West.Sun.COM!sunspot!myers@network.ucsd.edu
To: ham-policy@ucsd.edu

References <CICs5C.Gy5@news.Hawaii.Edu>, <2f5hjgINN36l@abyss.West.Sun.COM>,
<CIDnwy.4yC@news.Hawaii.Edu>i.c
Subject : Re: Question about radio pirating...

In article <CIDnwy.4yC@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman)
writes:
>In article <2f5hjgINN36l@abyss.West.Sun.COM> myers@cypress.West.Sun.COM writes:
>>
>>Well, #1, Mike Shoupe is not an outlaw.
>> ....
>>As far as I can tell, Shoupe said "I've got a 5KW transmitter I've
>>converted to the ham bands". He did not suggest that he will run
>>excessive power, he did not suggest he would engage in broadcasting,
>>he did not say which frequencies he plans to operate, and you started
>>calling him an outlaw!
>
>Geez, it's no wonder why 2 meters in Southern California is such a
>mess; I guess the blind ultra-liberal type of thinking Californians
>are so proud of has found its way to the ham bands.

Well, since you want to make it personal, Jeff:
Hmmm... I didn't know the blind-ultra-fascist-hang-em-without-a-trial
type of thinking dictators are so proud of has found its way to Hawaii.
Maybe you ought to study civil rights and due process before you
start calling people outlaws.

>Shoupe is an admitted law breaker - he stated he ran a pirate radio
>station - thus he broke federal law - that's why I've referred to
>him as an outlaw. Has the statute of limitations run out for him?
>Probably not. Therefore, the feds could come knocking on his door
>tomorrow and arrest him for his crimes. But in your eyes he's done
>no wrong.

Don't be a dolt. You can't see through my eyes, you don't know how
I think, and you refuse to understand. Shoupe *says* he once ran a
pirate radio station; without other evidence, I'd have a hard time
convicting him of a crime. Do you get it, Jeff? In my eyes, I haven't
seen the evidence required to declare Shoupe a criminal. Can you see
that Jeff? I'm not the ultra-liberal you accuse me of; I consider myself
a moderate, and I try to see the big picture before I convict people.
But, no, Jeff is ready to through due process out the window and be a
complete fascist amateur radio weenie. Wonderful.

By the way, you seem to know nothing but what you've been told about
Southern California radio. I use 2m in Southern California, and it
is not the mess you would like to portray it as. Yes, there are repeaters
that are largely populated by controversial types, Yes, there are people
that break the rules, yes, in an area with 10 million people 2m is
congested in some places. However, I have 12 amateur channels programmed
in my Motorola that are *not* congested or jammed, so what the heck is
your point?

>Dana, do the criminals in your state a favor: become a judge! :)

Since you want to make it personal, Jeff, and since you are unable
to discuss things intellectually before you launch into personal
attacks, etc., chew on this:

Jeff, do the innocent people on Usenet a favor: don't become a judge!
Leave the "outlaw" rhetoric alone! Just go back to posting yet more
QRP transmitters to rec.radio.amateur.homebrew.

>Alright Gang, I'm on my way to the airport for 3 weeks of snow
>(we never see that stuff here in Hawaii except up on Mauna Kea
>at the 15,000 foot level); I hope you all have a very very
>wonderful Christmas or Hanukkah; please drive safely.

Enjoy yourself in Tahoe; I'll be a couple of hours drive away,
in case you want to get together and call me ultra-liberal to
my face :-) Leave me a voice mail note at (310) 348-6043 with
a number to reach you.

Dana
--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

End of included news posting.

>I guess it is all a matter of interpretation: Does self-policing mean
>I just police myself, or does it mean we police, in addition to ourselves,
>each other? I believe it means the latter.

Maybe you ought to start policing people by policing yourself, how about
starting by not mis-quoting people? Hmmmm?

---
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1165. Licence Recieve times...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 00:20:16 UTC
From: jangus@skyld.tele.com
Message-ID: <760648072snx@skyld.tele.com>
Source record: 271467

In article <2j3b9d$e2s@mailer.fsu.edu> ijordan@freenet2.scri.fsu.edu writes:

> For all of you waiting for your licences, I and a friend of mine got our
> licences (no code tech) yesterday, exactly 8 weeks after taking the test,
> and we live in AZ. So it looks like the FCC is starting to get their act
> together, since during the last eight weeks there was the break for the
> cold storm and the winter holiday in the east. Good luck to the rest of ya.

Good thing they weren't checking spelling proficiency

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

1166. Re: PK-232 vs 1278 ??

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 00:24:07 UTC
From: slay@netcom.com
Message-ID: <slayCKvqG8.8xs@netcom.com>
Source record: 271468
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

Just for fun, here is a bulletin I received a little over a year ago from KH2D@KH2D in Guam entitled *The Ultimate PK-232*:

After reading a bulletin about modifying the PK232 to perform better on AMTOR, which was a reprint of an article from QST magazine, I thought it would be a good time to distribute one more mod for the PK232. The above mentioned article stated that the "PK232 performed BETTER than COMMERCIAL AMTOR equipment". As we say on the ham bands, "hi hi ..... "

The following MOD will make the PK232 work MUCH better in these areas:

1. Improve SENSITIVITY on HF and VHF.
2. Greatly improve the TUNING BAR GRAPH DISPLAY.
3. Get rid of the common RF PROBLEM in the PK232.
(symptoms of this very common problem are: your PK232 sounds like a duck call on HF).
4. Make the PBBS more compatable with full service BBS's.
5. Add remote control of TNC parameters.
6. Add NODE capability.
7. Allow simultaneous use of VHF and HF ports.
8. Add AMTOR mailbox capability.
9. Add FULL DUPLEX capability.
10. Operate PROPERLY in the KISS mode.
11. Add GATEWAY capability.
12. Add SOFTWARE CARRIER DETECT.

This mod can be performed by the average ham very easily with no soldering required and a minimum number of tools.

Please follow these instructions CAREFULLY:

1. Power OFF the PK232.
2. Remove ALL cables connected to the PK232.
3. Grasp the PK232 FIRMLY in your RIGHT HAND (left hand is OK if you are LEFT-HANDED).
4. Carry the PK232 to the nearest trash can and hold it directly above the aforementioned trash can.
5. Drop the PK232 into the trash can.
6. In the space the PK232 used to occupy, install a KANTRONICS KAM with 5.02 (or later) firmware. (After completing this step, you will notice you have MORE SPACE on your shelf or tabletop).

CONGRATULATIONS !! You have just modified your PK232 so that it is now the BEST ALL MODE DATA CONTROLLER available.

An option to steps 3 thru 5 in the modification instructions would be to sell the PK232 to another ham (preferably someone who doesn't know where you live, a new novice operator, or someone you don't like).

For those hams who don't have a PK232 installed at their station, skip steps 1 thru 5 in the above instructions.

The above mod has been thoroughly tested at KH2D BBS and has performed FLAWLESSLY for the last 7 months (multi-user, multi-port).

KH2D assumes no liability for hams who make this mod and can't hit the trash can. CAUTION: the PK232 is so BIG and CLUNKY that it can cause broken bones in your foot. Children should NOT try this modification without the assistance of a responsible adult.

KH2D grants full permission to the ARRL to reprint this modification in QST.

I would also like to express my sincerest thanks to the gentleman who spent his time retyping the article from QST magazine so that hams everywhere who don't receive their very own copy could enjoy it. But I would ask that for his next bulletin he chose a magazine where the technical findings are not based on the amount of advertising dollars spent by the equipment manufacturer.

73, Enjoy the DIGITAL MODES,
Jim KH2D @ KH2D.GUAM.USA.OC

1167. Re: Spark Gap Transmitter

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 01:27:36 UTC
From: tomb@lsid.hp.com
Message-ID: <CKvtE1.Bw@hpcvsnz.cv.hp.com>
Source record: 271469

Jeff Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:

: TSB xmitter

with a spark gap in the antenna circuit, driven by a power oscillator at
RF, with the implication that the spark will generate a significant
amount of energy away from that already produced by the oscillator.

I'd like to point out that this goes counter to the way spark transmitters
work--that is the ones folk actually used for communications. There was
a good article a month or two ago in "Wireless World", part of a continuing
series on radio history, on the age of spark transmission. The spark
should be thought of as a switch, which simply connected the circuit in
a way that let it resonate and feed that resonant energy to an
antenna. While the tank was ringing down, the plasma of the spark
offered a very low impedance path for the tank current. At RF, the
plasma is continuous and offers a very low dynamic impedance to current
flowing in it. Maybe someone will actually build the suggested
circuit and check it out with a spectrum analyzer; it should be
trivial to short the spark gap (while the power is switched off,
of course ;-) and retest to see if there is any significant change in
the spectrum. Scott?? ;-) ;-)

73, K7ITM

1168. Shuttle Rise & Set Times

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 02:51:45 UTC
From: ABFHB@STDVAX.GSFC.NASA.GOV
Message-ID: <940207215145.21c1de3e@STDVAX.GSFC.NASA.GOV>
Source record: 271470

SB SAREX @ AMSAT $STS-60.010
STS-60 Eastern R/S Times 02/08

Below are the rise and set times for STS-60 for selected US cities over the next four days. This data was generated to help hams without orbit programs to participate in the SAREX activities. Please note that the times shown are UTC and NOT LOCAL TIME. This listing includes only those passes with an elevation greater than 5 degrees. For information regarding SAREX frequencies and operations procedures, check your local PBBS, or bulletins from W1AW, W5RRR, W6VIO or WA3NAN.

STS-60 will be visible from far northern latitudes for the next several mornings. If a shuttle pass occurs less than one hour before your local sunrise time, but before the morning twilight is too bright, the shuttle will appear as a bright star moving across the sky. If a pass occurs exactly one hour before sunrise, the orbiter may enter daylight while overhead, appearing suddenly out of the darkness.

Symbol key: rise = time that shuttle appears above horizon
tca = time of closest approach to observer
set = time that shuttle disappears below horizon
el = maximium elevation above horizon
geo = geometry: A = Ascending orbit, moving south to north
D = Descending orbit, moving north to south
E = passes east of observer
W = passes west of observer

New York City STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 09:42:36 09:46:50 09:50 13 A-E 78
08Feb94 11:16:32 11:21:26 11:25 40 A-W 79
08Feb94 12:53:17 12:57:02 13:00 8 A-W 80
08Feb94 16:06:05 16:09:52 16:13 7 D-E 82
08Feb94 17:40:32 17:45:31 17:50 38 D-E 83
08Feb94 19:15:45 19:20:07 19:24 14 D-W 84

09Feb94 10:08:20 10:13:15 10:17 50 A-E 94
09Feb94 11:43:53 11:48:20 11:52 15 A-W 95
09Feb94 16:32:32 16:37:03 16:41 15 D-E 98
09Feb94 18:07:10 18:12:11 18:16 51 D-W 99

10Feb94 09:01:01 09:05:17 09:09 14 A-E 109
10Feb94 10:35:00 10:39:54 10:44 38 A-W 110
10Feb94 12:11:46 12:15:30 12:18 7 A-W 111
10Feb94 15:24:32 15:28:21 15:31 8 D-E 113

10Feb94 16:58:59 17:03:59 17:08 39 D-E 114
10Feb94 18:34:13 18:38:34 18:42 14 D-W 115

11Feb94 09:26:47 09:31:42 09:36 53 A-E 125
11Feb94 11:02:23 11:06:48 11:10 15 A-W 126
11Feb94 15:50:59 15:55:31 15:59 16 D-E 129
11Feb94 17:25:38 17:30:38 17:35 49 D-W 130

Washington D.C. STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 09:42:03 09:46:07 09:49 11 A-E 78
08Feb94 11:15:47 11:20:41 11:25 42 A-W 79
08Feb94 12:52:43 12:56:16 12:59 6 A-W 80
08Feb94 17:40:35 17:45:22 17:49 22 D-E 83
08Feb94 19:15:27 19:20:11 19:24 23 D-W 84

09Feb94 10:07:38 10:12:31 10:16 44 A-E 94
09Feb94 11:43:10 11:47:34 11:51 15 A-W 95
09Feb94 16:32:42 16:36:47 16:40 10 D-E 98
09Feb94 18:07:04 18:12:09 18:16 83 D-E 99
09Feb94 19:43:09 19:46:27 19:49 5 D-W 100

10Feb94 09:00:28 09:04:34 09:08 12 A-E 109
10Feb94 10:34:15 10:39:09 10:43 40 A-W 110
10Feb94 12:11:12 12:14:45 12:17 6 A-W 111
10Feb94 16:59:01 17:03:49 17:08 23 D-E 114
10Feb94 18:33:55 18:38:38 18:42 22 D-W 115

11Feb94 09:26:04 09:30:58 09:35 46 A-E 125
11Feb94 11:01:40 11:06:02 11:09 14 A-W 126
11Feb94 15:51:08 15:55:15 15:58 10 D-E 129
11Feb94 17:25:32 17:30:36 17:35 86 D-E 130
11Feb94 19:01:41 19:04:53 19:07 5 D-W 131

Atlanta, GA STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 09:40:35 09:44:05 09:47 7 A-E 78
08Feb94 11:13:38 11:18:32 11:22 49 A-W 79
08Feb94 17:41:32 17:44:52 17:47 5 D-E 83
08Feb94 19:15:17 19:20:20 19:24 63 D-E 84
08Feb94 20:51:29 20:54:41 20:57 5 D-W 85

09Feb94 10:05:40 10:10:25 10:14 30 A-E 94
09Feb94 11:41:03 11:45:22 11:49 13 A-W 95
09Feb94 18:07:24 18:11:59 18:16 16 D-E 99
09Feb94 19:42:06 19:46:50 19:51 23 D-W 100

10Feb94 08:58:59 09:02:31 09:05 7 A-E 109
10Feb94 10:32:06 10:37:00 10:41 46 A-W 110
10Feb94 16:59:57 17:03:21 17:06 5 D-E 114

10Feb94 18:33:44 18:38:47 18:43 67 D-E 115

11Feb94 09:24:06 09:28:52 09:33 32 A-E 125
11Feb94 10:59:35 11:03:50 11:07 13 A-W 126
11Feb94 17:25:50 17:30:26 17:34 17 D-E 130
11Feb94 19:00:35 19:05:17 19:09 22 D-W 131

Miami, FL STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 09:38:08 09:42:46 09:46 23 A-E 78
08Feb94 11:13:30 11:17:36 11:21 11 A-W 79
08Feb94 19:17:35 19:22:32 19:26 39 D-E 84
08Feb94 20:53:44 20:56:59 20:59 5 D-W 85

09Feb94 10:04:25 10:09:18 10:13 49 A-W 94
09Feb94 18:10:07 18:14:10 18:17 10 D-E 99
09Feb94 19:44:17 19:49:05 19:53 28 D-W 100

10Feb94 08:56:34 09:01:13 09:05 25 A-E 109
10Feb94 10:31:59 10:36:04 10:39 11 A-W 110
10Feb94 18:36:02 18:41:00 18:45 42 D-E 115
10Feb94 20:12:14 20:15:26 20:18 5 D-W 116

11Feb94 09:22:53 09:27:45 09:32 46 A-W 125
11Feb94 17:28:31 17:32:38 17:36 10 D-E 130
11Feb94 19:02:46 19:07:32 19:11 27 D-W 131

Compiled by Dan Schultz, N8FGV
Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group
Send comments to n8fgv@amsat.org
/EX

SB SAREX @ AMSAT $STS-60.011
STS-60 Central R/S Times 02/08

Below are the rise and set times for STS-60 for selected US cities
over the next four days. This data was generated to help hams without
orbit programs to participate in the SAREX activities. Please note that
the times shown are UTC and NOT LOCAL TIME. This listing includes only
those passes with an elevation greater than 5 degrees. For information
regarding SAREX frequencies and operations procedures, check your
local PBBS, or bulletins from W1AW, W5RRR, W6VIO or WA3NAN.

STS-60 will be visible from far northern latitudes for the next several
mornings. If a shuttle pass occurs less than one hour before your local
sunrise time, but before the morning twilight is too bright, the shuttle
will appear as a bright star moving across the sky. If a pass occurs
exactly one hour before sunrise, the orbiter may enter daylight while
overhead, appearing suddenly out of the darkness.

Symbol key: rise = time that shuttle appears above horizon
tca = time of closest approach to observer

set = time that shuttle disappears below horizon
el = maximium elevation above horizon
geo = geometry:B A = Ascending orbit, moving south to north
D = Descending orbit, moving north to south
E = passes east of observer
W = passes west of observer

Chicago, IL STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 11:14:56 11:19:45 11:24 33 A-E 79
08Feb94 12:50:02 12:54:41 12:58 21 A-W 80
08Feb94 14:27:08 14:30:36 14:33 6 A-W 81
08Feb94 16:03:43 16:07:01 16:09 5 D-E 82
08Feb94 17:38:34 17:43:06 17:47 15 D-E 83
08Feb94 19:13:13 19:18:16 19:22 59 D-W 84

09Feb94 10:07:56 10:11:51 10:15 10 A-E 94
09Feb94 11:41:22 11:46:20 11:50 59 A-W 95
09Feb94 13:17:41 13:21:46 13:25 10 A-W 96
09Feb94 16:30:29 16:34:23 16:37 8 D-E 98
09Feb94 18:05:03 18:10:02 18:14 37 D-E 99
09Feb94 19:40:12 19:44:40 19:48 16 D-W 100

10Feb94 10:33:23 10:38:12 10:42 34 A-E 110
10Feb94 12:08:30 12:13:09 12:17 20 A-W 111
10Feb94 13:45:37 13:49:04 13:52 6 A-W 112
10Feb94 15:22:10 15:25:30 15:28 5 D-E 113
10Feb94 16:57:01 17:01:34 17:05 16 D-E 114
10Feb94 18:31:40 18:36:43 18:41 56 D-W 115

11Feb94 09:26:18 09:30:17 09:33 10 A-E 125
11Feb94 10:59:50 11:04:48 11:09 56 A-W 126
11Feb94 12:36:12 12:40:15 12:43 10 A-W 127
11Feb94 15:48:57 15:52:52 15:56 8 D-E 129
11Feb94 17:23:30 17:28:30 17:33 38 D-E 130
11Feb94 18:58:41 19:03:07 19:07 15 D-W 131

Huntsville, AL STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 11:13:29 11:18:26 11:22 79 A-W 79
08Feb94 12:50:14 12:53:46 12:56 7 A-W 80
08Feb94 17:40:59 17:44:17 17:47 5 D-E 83
08Feb94 19:14:46 19:19:48 19:24 53 D-E 84
08Feb94 20:50:41 20:54:13 20:57 6 D-W 85

09Feb94 10:05:48 10:10:22 10:14 21 A-E 94
09Feb94 11:40:37 11:45:10 11:49 19 A-W 95
09Feb94 18:06:55 18:11:25 18:15 15 D-E 99
09Feb94 19:41:31 19:46:21 19:50 28 D-W 100

10Feb94 10:31:56 10:36:53 10:41 74 A-W 110
10Feb94 12:08:44 12:12:14 12:15 6 A-W 111
10Feb94 16:59:25 17:02:46 17:05 5 D-E 114
10Feb94 18:33:13 18:38:16 18:42 56 D-E 115
10Feb94 20:09:10 20:12:39 20:15 6 D-W 116

11Feb94 09:24:13 09:28:49 09:32 22 A-E 125
11Feb94 10:59:07 11:03:38 11:07 18 A-W 126
11Feb94 17:25:21 17:29:53 17:33 16 D-E 130
11Feb94 19:00:00 19:04:48 19:09 27 D-W 131

Houston, TX STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 11:11:20 11:16:14 11:20 52 A-E 79
08Feb94 12:47:39 12:51:19 12:54 7 A-W 80
08Feb94 19:15:11 19:19:22 19:23 11 D-E 84
08Feb94 20:49:28 20:54:20 20:58 32 D-W 85

09Feb94 10:04:14 10:08:15 10:11 11 A-E 94
09Feb94 11:38:09 11:42:52 11:47 26 A-W 95
09Feb94 19:41:15 19:46:13 19:50 41 D-E 100
09Feb94 21:17:09 21:20:41 21:23 6 D-W 101

10Feb94 10:29:47 10:34:41 10:39 56 A-E 110
10Feb94 12:06:09 12:09:48 12:12 7 A-W 111
10Feb94 18:33:37 18:37:50 18:41 11 D-E 115
10Feb94 20:07:56 20:12:47 20:17 31 D-W 116

11Feb94 09:22:37 09:26:42 09:30 11 A-E 125
11Feb94 10:56:38 11:01:19 11:05 25 A-W 126
11Feb94 18:59:42 19:04:41 19:09 43 D-E 131
11Feb94 20:35:42 20:39:07 20:42 6 D-W 132

Denver, CO (Seattle has been moved to the west coast bulletin)
STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 11:14:07 11:17:21 11:20 5 A-E 79
08Feb94 12:46:43 12:51:41 12:56 86 A-W 80
08Feb94 14:22:54 14:26:59 14:30 10 A-W 81
08Feb94 19:11:22 19:15:59 19:20 17 D-E 84
08Feb94 20:46:04 20:51:00 20:55 37 D-W 85

09Feb94 11:39:00 11:43:37 11:47 22 A-E 95
09Feb94 13:13:42 13:18:26 13:22 24 A-W 96
09Feb94 14:51:05 14:54:17 14:56 5 A-W 97
09Feb94 18:03:28 18:07:19 18:10 8 D-E 99
09Feb94 19:37:49 19:42:52 19:47 50 D-E 100
09Feb94 21:13:19 21:17:20 21:20 10 D-W 101

10Feb94 10:32:31 10:35:47 10:38 6 A-E 110
10Feb94 12:05:10 12:10:09 12:14 82 A-W 111

10Feb94 13:41:23 13:45:28 13:49 10 A-W 112
10Feb94 18:29:49 18:34:27 18:38 17 D-E 115
10Feb94 20:04:31 20:09:27 20:13 35 D-W 116

11Feb94 10:57:25 11:02:04 11:06 23 A-E 126
11Feb94 12:32:12 12:36:53 12:41 23 A-W 127
11Feb94 14:09:37 14:12:46 14:15 5 A-W 128
11Feb94 17:21:54 17:25:47 17:29 8 D-E 130
11Feb94 18:56:16 19:01:19 19:05 52 D-E 131
11Feb94 20:31:49 20:35:46 20:39 9 D-W 132

Compiled by Dan Schultz, N8FGV
Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group
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/EX

SB SAREX @ AMSAT $STS-60.012
STS-60 Western R/S Times 02/08

Below are the rise and set times for STS-60 for selected US cities
over the next four days. This data was generated to help hams without
orbit programs to participate in the SAREX activities. Please note that
the times shown are UTC and NOT LOCAL TIME. This listing includes only
those passes with an elevation greater than 5 degrees. For information
regarding SAREX frequencies and operations procedures, check your
local PBBS, or bulletins from W1AW, W5RRR, W6VIO or WA3NAN.

STS-60 will be visible from far northern latitudes for the next several
mornings. If a shuttle pass occurs less than one hour before your local
sunrise time, but before the morning twilight is too bright, the shuttle
will appear as a bright star moving across the sky. If a pass occurs
exactly one hour before sunrise, the orbiter may enter daylight while
overhead, appearing suddenly out of the darkness.

Symbol key: rise = time that shuttle appears above horizon
tca = time of closest approach to observer
set = time that shuttle disappears below horizon
el = maximium elevation above horizon
geo = geometry: A = Ascending orbit, moving south to north
D = Descending orbit, moving north to south
E = passes east of observer
W = passes west of observer

Seattle, WA (Denver has been moved to the central US bulletin)
STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 12:48:07 12:51:18 12:54 5 A-E 80
08Feb94 14:20:33 14:25:30 14:29 52 A-E 81
08Feb94 15:55:45 16:00:33 16:04 25 A-W 82
08Feb94 17:31:47 17:36:14 17:40 14 D-W 83
08Feb94 19:07:15 19:12:00 19:16 21 D-E 84

08Feb94 20:42:08 20:47:13 20:51 80 D-W 85
08Feb94 22:17:38 22:21:32 22:24 9 D-W 86

09Feb94 13:13:01 13:17:30 13:21 18 A-E 96
09Feb94 14:47:10 14:52:10 14:56 52 A-W 97
09Feb94 16:23:00 16:27:34 16:31 17 A-W 98
09Feb94 17:58:51 18:03:23 18:07 15 D-E 99
09Feb94 19:33:56 19:38:56 19:43 38 D-E 100
09Feb94 21:08:55 21:13:43 21:18 25 D-W 101

10Feb94 12:06:31 12:09:45 12:12 5 A-E 111
10Feb94 13:39:00 13:43:58 13:48 54 A-E 112
10Feb94 15:14:13 15:19:01 15:23 25 A-W 113
10Feb94 16:50:15 16:54:42 16:58 14 D-W 114
10Feb94 18:25:42 18:30:28 18:34 21 D-E 115
10Feb94 20:00:35 20:05:41 20:10 77 D-W 116
10Feb94 21:36:07 21:39:59 21:43 8 D-W 117

11Feb94 12:31:26 12:35:57 12:39 18 A-E 127
11Feb94 14:05:39 14:10:37 14:15 50 A-W 128
11Feb94 15:41:30 15:46:02 15:50 17 A-W 129
11Feb94 17:17:20 17:21:52 17:25 16 D-E 130
11Feb94 18:52:23 18:57:24 19:01 40 D-E 131
11Feb94 20:27:23 20:32:09 20:36 24 D-W 132

Albuquerque, NM STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 11:12:34 11:16:05 11:19 7 A-E 79
08Feb94 12:45:37 12:50:32 12:54 52 A-W 80
08Feb94 14:22:48 14:26:01 14:28 5 A-W 81
08Feb94 19:12:37 19:16:25 19:19 7 D-E 84
08Feb94 20:46:42 20:51:45 20:56 88 D-E 85

09Feb94 11:37:40 11:42:25 11:46 30 A-E 95
09Feb94 13:12:58 13:17:21 13:21 15 A-W 96
09Feb94 19:38:42 19:43:27 19:47 22 D-E 100
09Feb94 21:13:38 21:18:12 21:22 18 D-W 101

10Feb94 10:30:58 10:34:31 10:37 7 A-E 110
10Feb94 12:04:04 12:08:59 12:13 49 A-W 111
10Feb94 13:41:18 13:44:30 13:47 5 A-W 112
10Feb94 18:31:03 18:34:53 18:38 8 D-E 115
10Feb94 20:05:09 20:10:13 20:14 85 D-W 116

11Feb94 10:56:05 11:00:52 11:05 32 A-E 126
11Feb94 12:31:29 12:35:49 12:39 14 A-W 127
11Feb94 18:57:09 19:01:55 19:06 22 D-E 131
11Feb94 20:32:07 20:36:39 20:40 17 D-W 132

Los Angeles, CA STS-60 Element Set GSFC-005

date rise tca set el geo orbit

```
08Feb94 12:43:58 12:48:45 12:53 33 A-E 80
08Feb94 14:19:27 14:23:43 14:27 13 A-W 81
08Feb94 20:45:31 20:50:11 20:54 19 D-E 85
08Feb94 22:20:21 22:24:59 22:29 20 D-W 86

09Feb94 11:37:12 11:40:51 11:44 8 A-E 95
09Feb94 13:10:27 13:15:21 13:19 43 A-W 96
09Feb94 19:37:59 19:41:35 19:44 6 D-E 100
09Feb94 21:11:54 21:16:58 21:21 80 D-E 101

10Feb94 12:02:25 12:07:13 12:11 34 A-E 111
10Feb94 13:37:56 13:42:11 13:45 13 A-W 112
10Feb94 20:03:58 20:08:39 20:12 19 D-E 116
10Feb94 21:38:49 21:43:26 21:47 19 D-W 117

11Feb94 10:55:33 10:59:18 11:02 8 A-E 126
11Feb94 12:28:56 12:33:48 12:38 41 A-W 127
11Feb94 18:56:24 19:00:04 19:03 7 D-E 131
11Feb94 20:30:22 20:35:25 20:39 85 D-E 132

Honolulu, HI STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 01:00:19 01:05:15 01:09 39 D-E 72
08Feb94 14:11:23 14:15:28 14:19 11 A-E 81
08Feb94 15:45:38 15:50:06 15:54 18 A-W 82
08Feb94 23:53:00 23:56:55 00:00 9 D-E 87

09Feb94 01:27:02 01:31:47 01:36 26 D-W 88
09Feb94 14:37:02 14:41:57 14:46 73 A-E 97

10Feb94 00:18:46 00:23:43 00:28 42 D-E 103
10Feb94 13:29:48 13:33:55 13:37 12 A-E 112
10Feb94 15:04:07 15:08:34 15:12 17 A-W 113
10Feb94 23:11:25 23:15:23 23:18 9 D-E 118

11Feb94 00:45:31 00:50:14 00:54 24 D-W 119
11Feb94 13:55:29 14:00:24 14:04 78 A-E 128
11Feb94 23:37:12 23:42:10 23:46 45 D-E 134

Compiled by Dan Schultz, N8FGV
Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group
Send comments to n8fgv@amsat.org
/EX

SB SAREX @ AMSAT $STS-60.013
STS-60 World R/S Times 02/08

Below are the rise and set times for STS-60 for selected worldwide cities
over the next four days. This data was generated to help hams without
orbit programs to participate in the SAREX activities. Please note that
the times shown are UTC and NOT LOCAL TIME. This listing includes only
those passes with an elevation greater than 5 degrees. For information
regarding SAREX frequencies and operations procedures, check your
```

local PBBS, or bulletins from W1AW, W5RRR, W6VIO or WA3NAN.

STS-60 will be visible from far northern latitudes for the next several mornings. If a shuttle pass occurs less than one hour before your local sunrise time, but before the morning twilight is too bright, the shuttle will appear as a bright star moving across the sky. If a pass occurs exactly one hour before sunrise, the orbiter may enter daylight while overhead, appearing suddenly out of the darkness.

Symbol key: rise = time that shuttle appears above horizon
tca = time of closest approach to observer
set = time that shuttle disappears below horizon
el = maximium elevation above horizon
geo = geometry: A = Ascending orbit, moving south to north
D = Descending orbit, moving north to south
E = passes east of observer
W = passes west of observer

London, England STS-60 Element Set GSFC-005

date rise tca set el geo orbit
08Feb94 05:11:22 05:14:57 05:18 7 A-E 75
08Feb94 06:44:13 06:49:10 06:53 48 A-E 76
08Feb94 08:19:09 08:24:07 08:28 38 A-W 77
08Feb94 09:54:38 09:59:31 10:03 27 D-E 78
08Feb94 11:29:45 11:34:50 11:39 57 D-E 79
08Feb94 13:04:44 13:09:32 13:13 25 D-W 80

09Feb94 05:36:36 05:41:10 05:45 19 A-E 91
09Feb94 07:10:46 07:15:48 07:20 70 A-W 92
09Feb94 08:46:08 08:51:01 08:55 28 D-W 93
09Feb94 10:21:29 10:26:27 10:30 34 D-E 94
09Feb94 11:56:26 12:01:31 12:06 63 D-W 95
09Feb94 13:31:47 13:35:48 13:39 10 D-W 96

10Feb94 04:29:47 04:33:23 04:36 7 A-E 106
10Feb94 06:02:39 06:07:37 06:12 49 A-E 107
10Feb94 07:37:37 07:42:35 07:47 38 A-W 108
10Feb94 09:13:06 09:17:59 09:22 28 D-E 109
10Feb94 10:48:13 10:53:18 10:57 58 D-E 110
10Feb94 12:23:12 12:27:59 12:32 24 D-W 111

11Feb94 04:55:01 04:59:37 05:03 20 A-E 122
11Feb94 06:29:14 06:34:15 06:38 68 A-W 123
11Feb94 08:04:37 08:09:29 08:13 28 D-W 124
11Feb94 09:39:57 09:44:55 09:49 35 D-E 125
11Feb94 11:14:54 11:19:58 11:24 61 D-W 126
11Feb94 12:50:16 12:54:15 12:57 9 D-W 127

Paris, France STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 05:11:00 05:14:59 05:18 10 A-E 75
08Feb94 06:44:21 06:49:21 06:53 71 A-E 76
08Feb94 08:19:34 08:24:27 08:28 29 A-W 77
08Feb94 09:55:09 09:59:57 10:04 24 D-E 78
08Feb94 11:30:15 11:35:19 11:39 54 D-E 79
08Feb94 13:05:15 13:10:00 13:14 23 D-W 80

09Feb94 05:36:32 05:41:17 05:45 26 A-E 91
09Feb94 07:11:03 07:16:03 07:20 49 A-W 92
09Feb94 08:46:37 08:51:25 08:55 23 D-W 93
09Feb94 10:21:59 10:26:56 10:31 31 D-E 94
09Feb94 11:56:56 12:02:00 12:06 61 D-W 95
09Feb94 13:32:23 13:36:16 13:39 9 D-W 96

10Feb94 04:29:25 04:33:25 04:36 10 A-E 106
10Feb94 06:02:48 06:07:49 06:12 73 A-E 107
10Feb94 07:38:02 07:42:55 07:47 29 A-W 108
10Feb94 09:13:36 09:18:25 09:22 24 D-E 109
10Feb94 10:48:42 10:53:47 10:58 56 D-E 110
10Feb94 12:23:42 12:28:27 12:32 22 D-W 111

11Feb94 04:54:58 04:59:44 05:03 27 A-E 122
11Feb94 06:29:31 06:34:31 06:39 48 A-W 123
11Feb94 08:05:06 08:09:53 08:14 23 D-W 124
11Feb94 09:40:27 09:45:23 09:49 31 D-E 125
11Feb94 11:15:23 11:20:27 11:25 59 D-W 126
11Feb94 12:50:53 12:54:42 12:58 8 D-W 127

Tokyo, Japan STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 03:58:11 04:03:04 04:07 28 D-E 74
08Feb94 05:33:22 05:37:42 05:41 14 D-W 75
08Feb94 18:50:25 18:54:16 18:57 9 A-E 84
08Feb94 20:23:54 20:28:47 20:33 41 A-W 85

09Feb94 02:50:26 02:54:34 02:58 10 D-E 89
09Feb94 04:24:44 04:29:45 04:34 59 D-W 90
09Feb94 19:15:48 19:20:38 19:24 38 A-E 100
09Feb94 20:51:23 20:55:39 20:59 13 A-W 101

10Feb94 03:16:38 03:21:32 03:25 29 D-E 105
10Feb94 04:51:50 04:56:09 04:59 13 D-W 106
10Feb94 18:08:50 18:12:42 18:16 9 A-E 115
10Feb94 19:42:22 19:47:15 19:51 39 A-W 116

11Feb94 02:08:52 02:13:02 02:16 10 D-E 120
11Feb94 03:43:11 03:48:12 03:52 56 D-W 121
11Feb94 18:34:14 18:39:05 18:43 41 A-E 131
11Feb94 20:09:54 20:14:07 20:17 12 A-W 132

Sydney, Australia STS-60 Element Set GSFC-005

date rise tca set el geo orbit

08Feb94 07:24:27 07:29:22 07:33 73 D-W 76
08Feb94 09:01:23 09:04:43 09:07 6 D-W 77
08Feb94 15:26:04 15:30:58 15:35 44 A-E 81
08Feb94 17:01:48 17:05:25 17:08 7 A-W 82

09Feb94 06:16:45 06:21:18 06:25 21 D-E 91
09Feb94 07:51:38 07:56:07 08:00 17 D-W 92
09Feb94 14:18:17 14:22:34 14:26 13 A-E 96
09Feb94 15:52:45 15:57:32 16:01 31 A-W 97

10Feb94 06:42:54 06:47:50 06:52 69 D-W 107
10Feb94 08:19:53 08:23:12 08:26 5 D-W 108
10Feb94 14:44:31 14:49:26 14:53 47 A-E 112
10Feb94 16:20:18 16:23:51 16:26 7 A-W 113

11Feb94 05:35:09 05:39:45 05:43 22 D-E 122
11Feb94 07:10:09 07:14:35 07:18 16 D-W 123
11Feb94 13:36:43 13:41:03 13:44 13 A-E 127
11Feb94 15:11:14 15:15:59 15:20 29 A-W 128

Compiled by Dan Schultz, N8FGV
Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group
Send comments to n8fgv@amsat.org
/EX

1169. Skywarn Spotting Frequency List Updated

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 02:59:02 UTC
From: capskb@alliant.backbone.uoknor.edu
Message-ID: <2j6v5m$6pg@romulus.ucs.uoknor.edu>
Source record: 271471

I've completed the latest round of revisions to the frequency lists
and Chris Novy has posted the updated lists at the usual source.

1) Storm Spotting Frequencies: SPOTFREQ.DOC
Ham radio and Civil Defense frequencies which have carried useful info
during severe weather are listed, primarily in the 2m band. The list
focuses on the Plains States where most of the mobile spotting is done.
The area is roughly within a line from E. Wyoming to Indiana to
Alabama to SW Texas to Wyoming.
Join your local Skywarn group and serve -- your reports are valuable.*

2) TV radar info: CHASE-TV.DOC
VHF TV stations and UHF repeaters are listed, along with comments
about radar and weather warning display capabilities (where known).
The Plains States are covered. The area is roughly within a line from
E. Wyoming to Indiana to Alabama to SW Texas to E. Wyoming.

The lists are available via ftp:
ftp vmd.cso.uiuc.edu
login: anonymous
password: your email address
cd WX
get SPOTFREQ.DOC
get CHASE-TV.DOC

A recent IP number for vmd.cso.uiuc.edu: 128.174.5.98

University of Oklahoma users can obtain a copy via metgem or
geohub at users:[kbrews]spotfreq.doc and chase-tv.doc.

Any further additions or corrections are welcome. E-mail to me
at the address below. To keep the work load to a finite size,
the area restriction will be maintained.

***This year we are particulary interested in getting up-to-date
information in the area of a field project:
North and West Texas, Oklahoma, Southern Kansas, and the Texas
and Oklahoma panhandles.***

Keith

Keith Brewster N0IAW
Internet: kbrewster@uoknor.edu BITNET: kbrews@UOKGCN.BITNET
University of Oklahoma - CAPS (405) 325-6020 fax:325-7689
EC 1110, Norman, OK, 73019

1170. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 06:44:13 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <760827041.F00002@ocitor.fidonet>
Source record: 271477

```
The following files were processed Tuesday 02-08-94:

HAMMODS [ HAM: Radio and equip modifications ]
---------------------------------------------------------------------
FT11R.ZIP ( 2268 bytes) Extend Frequency Coverage of Yaesu
Ft-11R
FT530.ZIP ( 1004 bytes) Extend Frequency Coverage of Yaesu
FT530

---------------------------------------------------------------------
3272 bytes in 2 file(s)

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
ANART793.ZIP ( 5478 bytes) ANART Bulletin #793 01/23/93
ARLB016.ZIP ( 774 bytes) 02/024/94 Georgia bill introduced
ARLB017.ZIP ( 968 bytes) 02/04/94 RF standards opposed
ARLD008.ZIP ( 1973 bytes) ARRL Dx Bulletin 02/03/94
ARLP005.ZIP ( 982 bytes) ARRL Propagation Bulletin 02/04/94
ARRL0126.ZIP ( 9796 bytes) ARRL News Letter 01/26/94
NEWS0129.ZIP ( 6840 bytes) NewsLine 01/29/94
OPDX145.ZIP ( 4685 bytes) Oh/Pa DX Bulletin 01/31/94
RACES311.ZIP ( 1167 bytes) RACES Bulletin #311 01/31/94
RTDX0204.ZIP ( 1589 bytes) RTTY Dx Bulletin 02/04/94

---------------------------------------------------------------------
34252 bytes in 10 file(s)

HAMSAT [ HAM: Satellite tracking and finding programs ]
---------------------------------------------------------------------
AMSAT028.ZIP ( 1649 bytes) Amsat Bulletin #028 01/29/94
ARLK004.ZIP ( 2027 bytes) ARRLKeplerian Bulletin 01/29/94
ARLS005.ZIP ( 1537 bytes) ARRL Space Bulletin 02/02/94
Shuttle to carry Amatuer Radio Expe
riment
ARLS006.ZIP ( 971 bytes) ARRL Space Bulletin 02/03/94
Shuttle carries U5MIR
OBS028.ZIP ( 5092 bytes) Orbital Elements #028 01/28/93
OBS035.ZIP ( 5021 bytes) Orbital Elements #035 02/04/94
SPC0131.ZIP ( 2705 bytes) Space Bulletin 01/31/94
SPC0207.ZIP ( 3448 bytes) Space Bulletin 02/07/94

---------------------------------------------------------------------
22450 bytes in 8 file(s)
```

HAMSWL [Shortwave Schedules and programs]

RFE.ZIP (5783 bytes) Radio Free Europe SWBC Sked
01/27/94 to 03/27/94
VOA.ZIP (5795 bytes) Voice of America SWBC Sked Updated
02/02/94

11578 bytes in 2 file(s)

Total of 71552 bytes in 22 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcycon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - wa5eha
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

1171. Re: starting campus radio club faq, need info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 10:00:47 UTC
From: h8821863@hkuxb.hku.hk
Message-ID: <CKwH5C.KMA@hkuxb.hku.hk>
Source record: 271472

Jeff,
I am interested about the info. you collected. Please post or email
a summary after you have got enough info.
Good Luck for your faq.
BYE.
Antony Ho, lkho@hkueee.hku.hk

1172. Re: 3Y0PI route

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 12:56:29 UTC
From: k2ph@cbnewsj.cb.att.com
Message-ID: <CKwpA9.17w@cbnewsj.cb.att.com>
Source record: 271473

From article <slayCKvEz6.CKp@netcom.com>, by slay@netcom.com (Sandy Lynch):
> Brian J. Pennebaker (bjp@icd.ab.com) wrote:
> : Made my contact on Saturday and would like to know where to send my
> : QSL card to. Please E-Mail me at the this address.
>
> For SSB contacts: QSL to AA6BB; For CW contacts: KA6V
> This is a husband/wife team at the same address.
>
> 93787 Dorsey Ln
> Junction City, OR 97448
>

Do RTTY QSLs go to the same place?

73,
Bob K2PH

--

Bob Schreibmaier K2PH | UUCP: ...!att!mtdcr!bob
AT&T Bell Laboratories | Internet: bob@mtdcr.att.com
Middletown, N.J. 07748 | ICBM: 40o21'N, 74o8'W

1173. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 12:57:08 UTC
From: barnaby@world.std.com
Message-ID: <CKwpB9.C1p@world.std.com>
Source record: 271474

t1terryb@cascade.ens.tek.com (Terry Burge) writes:

> Talking about morse code copying, I had a friend of mine in the Army Security Agenc
[Stuff deleted about copying fast]

I've often wondered about copying with a typewriter. Had a cousin in the
Navy, could copy 60-65 WPM with a typewriter. I've tried but the noise
of the machine (key clicks) interferes. If I use a headphone that elimnates
the keyclicks, the "feedback" (auditory) goes down, and accuracy suffers.
If I make a mistake, hearing an "J" instead of a "1" for example, its not
so easy to correct, as by hand.
BTW, I'm not listing to 65, only 30, but its too tough to take by hand, and
word recognition is extremely limited. Perhaps I'm in a sort of speed-
twilight-zone. Any suggestions?
Richard Barnaby (AA1IB) barnaby@world.std.com

1174. Yaesu FT-5100 <-> MFJ-1270B

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 13:32:25 UTC
From: plymale@myhost.subdomain.domain
Message-ID: <2j8499$i8p@solaris.cc.vt.edu>
Source record: 271475

I'm trying to interface a Yaesu FT-5100 to a MFJ-1270B TNC via
the 5100's DATA IN/OUT jack. I constructed a connector based on
the instructions in the 5100 manual. The problem is that the
transmit audio level out of the TNC is way too low. Adjusting
trimpot R76 during the 1270B recalibration procedure does not help.
Any suggestions for increasing transmit audio level are appreciated.

Thanks...

Bill - KD4CIY

--

Bill Plymale plymale@mousetrap.es.vt.edu 703-231-9530
Virginia Tech (Enrollment Services Information Systems)

1175. 1974 Fox Tango Newsletters needed (Yaesu)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 13:53:05 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Feb8135305@mipgsun.mipg.upenn.edu>
Source record: 271507
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.misc

I have ordered (as part of a group purchase) the Yaesu FoxTango newsletters from IRC. Unfortunately, the 1974 newsletters are no longer available. I would like to obtain copies of the 1974 newsletters. Does anyone have them? I would be more than happy to pay for copying charges.

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

1176. MICOWAVE OVENS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 14:17:00 UTC
From: bob.hilton@chaos.lrk.ar.us
Message-ID: <39301.85.uupcb@chaos.lrk.ar.us>
Source record: 271476

to:all@rec.radio.amateur.misc
This may not be exactly the right group to ask, but I figure somebody here has the answer. My employer just bought a new microwave oven for the breakroom; it's a home-style (not commercial grade) Magic Chef. I was surprised to see this warning on the front cover of the "Use and Care" booklet:
"YOU MUST REGISTER YOUR MICROWAVE OVEN
The Federal Government requires that records be filed on the location of all microwave ovens. A registration card, packed inside this oven, is used to track the location of our micro-wave ovens. ... If you bought this oven from a previous owner, please establish your ownership by writing to: [address]."

The address given matches that of the Magic Chef company, not some Gov't office. So my questions are:
1. Is this a real law?
2. What if I don't register? Will OSHA, if they EVER visit, slap our hands?
3. If we worked in New Jersey, could we be fined for tax evasion (not registering an RF emitter)?
4. Is this for safety recall purposes?
5. Or is this a sneaky way to add our name to somebody's mailing list?

Bob

1177. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 15:09:38 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb8.150938.9763@ke4zv.atl.ga.us>
Source record: 271478
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <CKvGDJ.GFv@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>If you compare a vertical over an infinite ground plane to a dipole
>(or any other antenna) in free space, you are comparing apples to oranges.

True.

>When thinking about antenna gain, it helps immensely to remember the
>principle of conservation of energy. Nearly all full-sized antennas are
>essentially 100% efficent. That means that a dipole, a vertical, a
>rhombic, a Yagi beam, etc. all radiate 1 watt for every watt applied
>through the feedline. To obtain gain, the antenna directs more of its
>signal in one direction and less in another.

I'd argue that a quarterwave vertical over real lossy ground doesn't
fit the idea of 100% efficiency very well. It expends quite a bit of
it's energy warming the earthworms in the lossy soil making up it's
current mirror. (IE half the "full size" antenna in this case is really
a current reflection in the lossy ground.)

>Any antenna over an infinite ground plane has a 3 dB (2x power) advantage
^^^ emphasis added
>over an antenna in free space. That's because it only has 1/2 of all
>possible directions in which to send its signal.

Over an infinite *perfectly reflective* ground plane. Over lossy ground,
that 3 db is reduced by ground losses, though some gain remains. The
more you can improve the ground plane, the closer to the ideal 3 db
you'll approach.

>Consider a vertical dipole in free space. You could insert a horizontal
>infinite ground plane at the feedpoint without changing the radiation
>pattern. Now you have two verticals, one pointing up, one pointing down.
>Each vertical radiates half the power of the original dipole.

True because each has half the current that flows in the entire dipole.

>Note
>that the upper vertical (over a groundplane) can generate the same
>field strength as the dipole (in free space), but with only 1/2 the power.

No, I disagree with the way you're saying this. The upper vertical in
this thought experiment has half the current of the dipole and so generates
half the field. The ground mirror is supplying a 3 db reflection gain that
makes up for the lower field produced by the current in the upper vertical.

>So a 1/4-wave vertical over an infinite ground plane has 3 dB power "gain"
>over a dipole in free space.

True only *if* it has the same current flowing in it as the dipole. IE
the current flowing in the quarterwave vertical is 2 times the current
flowing in *half* of the free space dipole. (True for constant power input
to both antennas since the base impedance of the vertical is half that of
the dipole.) That, with the phantom mirror current in the ground plane,
has the same effect as would doubling the current fed into a dipole in free
space, thus the 3 db gain.

I think we're trying to say the same thing, but looking at it from a
slightly different perspective.

>Now consider a dipole suspended a half wavelength or more over an infinite
>ground plane. In some directions, it will have 6 dB gain over a dipole
>in free space, which gives 3 dB gain over the vertical. In other directions,
>the field will be zero. If you averaged the radiated power over all
>directions (half sphere), you would find it sums to the same power as the
>1/4-wave vertical (also averaged over all directions.)

True, but gain in the main lobe (what we normally mean when we talk about
gain) is 2X that of the vertical. And in the real world of lossy ground
planes that make poor current mirrors, the horizontal dipole has a greater
efficiency. A vertical halfwave, that doesn't need the current mirror,
will also have greater efficiency than the quarterwave over real ground.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1178. Re: N connectors (was Re: "Flexible" 9913 (Was - Re: Coaxial cab

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 15:39:19 UTC
From: Anthony_Pelliccio@brown.edu
Message-ID: <Anthony_Pelliccio-080294103950@138.16.64.8>
Source record: 271479

In article <2j6rtmINNf0s@abyss.West.Sun.COM>, myers@cypress.West.Sun.COM (Dana Myers) wrote:

> >Actually, most equipment for dual-band use is sold with so-239 and pl-259
> >connectors. The loss isn't that much so you'd actually notice it. You'll
> >find N used in applications where every bit of loss counts like repeaters
> >etc.
>
> N connectors also make an effort to be weather resistant where PL-259/SO-239
> do not. Land mobile radios seem to use SO-239 up to UHF (512MHZ max), then
> N connectors (800/900, etc.).
>

I had forgotten the weather resistance issue. But you're right in that most land-mobile radios tend to use SO-239 instead of N. But buy a UHF repeater and guess what, N connectors. By the way, I've finally met an N connector that I like. It's for the 9913 and it's GREAT! You don't have to comb out braid, you don't have to go nuts with 9 different parts, etc. This one is two pieces, you strip the coax down a bit, screw it in, use a bit of solder and you're in business.

Tony
--
== Anthony_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)
== Brown University Alumni & Development Computing Services
== Box 1908, Providence, RI 02912 Tel. (401) 863-1880
== I speak for myself, and not for Brown University. Remember that!

1179. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 15:53:16 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb8.155316.10036@ke4zv.atl.ga.us>
Source record: 271480

In article <CKwpB9.C1p@world.std.com> barnaby@world.std.com (Richard L Barnaby) writes:
>t1terryb@cascade.ens.tek.com (Terry Burge) writes:
>
>> Talking about morse code copying, I had a friend of mine in the Army Security Agenc
>[Stuff deleted about copying fast]
>
>I've often wondered about copying with a typewriter. Had a cousin in the
>Navy, could copy 60-65 WPM with a typewriter. I've tried but the noise
>of the machine (key clicks) interferes. If I use a headphone that elimnates
>the keyclicks, the "feedback" (auditory) goes down, and accuracy suffers.
>If I make a mistake, hearing an "J" instead of a "1" for example, its not
>so easy to correct, as by hand.
>BTW, I'm not listing to 65, only 30, but its too tough to take by hand, and
>word recognition is extremely limited. Perhaps I'm in a sort of speed-
>twilight-zone. Any suggestions?

I also have a friend who was a Navy radio intercept operator in WWII.
There's no such thing as copying behind in this sort of work. It's all
five letter groups of encrypted text. He was trained to associate a
letter sound directly with a finger action on the keyboard, a form
of Pavlovian conditioning. His conscious mind isn't involved at all.
He can carry on a conversation with you while copying. When the code
stops, he has to roll up the paper and read what he typed to see what
the other operator sent. He's a remarkable code copying machine.

He says that if you try to copy plaintext behind with a typewriter,
it's much harder than copying in real time because the actions of
auditory recognition, conscious evaluation, and mechanical reproduction
are divorced from each other enough by that intermediate step to cause
you to make errors if your mind wanders, in the slightest, to thinking
about what's being sent. He says you should train yourself to *not*
try to interpret what's being sent as you copy if you want maximum
speed and accuracy of copy. Try thinking about *anything* but the
code you're hearing while you practice copying. Let the conditioned
reflex do the work.

That's *not* the way most hams do Morse. Most try to force the
decoding into resembling spoken language, (which it's not, who
speaks by spelling out each word?) and attempt to copy in their
heads. At best they write down what they *think* they understood
of the decoded message rather than just accurately copying the
characters as received without trying to understand the message
until it's down on paper. Naturally that impairs the speed and
accuracy of their copy, but since accurate copy isn't really
their goal, that's a moot point except for message handling and

taking tests where accuracy of copy is the critical issue.

I wish I'd known this when I was learning Morse. I kept futilely trying to make sense of what I was hearing, and got nowhere. I finally hit on a shorthand method of writing down the Code that works for me, and which I can sight read nearly as well as ordinary text, but I wish I'd conditioned myself to type the text instead since it would be much faster.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1180. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 16:02:25 UTC
From: richw@mks.com
Message-ID: <1994Feb8.160225.18607@mks.com>
Source record: 271481
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

David Tucker wrote:

Well, your US licence is good in Canada indefinitely, as
long as it is valid, as far as I know. If you become a
landed immigrant, and wish to obtain a Canadian licence,
I have been told by a government official that you must
pass all the exams. I have also been told by Rich, who
went through the process, that you can get credit for
code and theory and will only have to pass the rules exam.

I'll assume "Rich" in the above refers to me. I can confirm from personal experience that when I applied for a Canadian amateur license last year, I was given full credit for the Canadian "Basic", "Advanced", and "12 WPM" qualifications on the basis of my US "Advanced" license. I was required to pass a 26-question exam on Canadian amateur rules and regulations, but that was all.

Canadian rules also require that reciprocal operators from
the US be not only US citizens but US residents, too.

This is indeed the way the rules read. I was told by Canadian officials that no one would really mind if I operated up here for a while using my US call -- but that since I was a landed immigrant, I "should" eventually get a Canadian license.

Incidentally, I've retained my US amateur license even though I now live in Canada. Since the FCC won't accept a non-US address, I sent in a Form 610 and changed my address to that of my parents in California. If anything ever gets sent there, they'll forward it to me up here.

Unlike US rules, Canadian rules do not explicitly void
reciprocal privileges upon taking out Canadian citizenship.
You could therefore make a case that that means, as long
as you retain US citizenship, your US licence is valid in
Canada.

Please be careful here not to fall into the fallacy of assuming that US and Canadian citizenship are mutually exclusive. Contrary to popular belief, US law does =not= ban dual citizenship; and, for that matter, neither does Canadian law. Lots of people are citizens (by birth or by naturalization) of both the US and Canada; the US State Department knows about them and explicitly doesn't mind. If anyone is interested in more info on this subject, I'll be glad to oblige.

--
Rich Wales (VE3HKZ, WA6SGA/VE3) // Mortice Kern Systems Inc.

richw@mks.com // 35 King Street North
+1 (519) 884-2251 // Waterloo, Ontario, Canada N2J 2W9

1181. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 16:15:17 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2j8dql$7ul@news.acns.nwu.edu>
Source record: 271482

In article <2j63p1$jlp@slinky.cs.nyu.edu>,
Steven Jackson <jackson@longlast.cs.nyu.edu> wrote:
>|> so I retyped the copy before sending it in to ARRL!)
>
>Question: I use SuperMorse 4.04 and I love the "Group" training under Learn.
>It looks like my first Amateur test is going to be at 20 WPM.
>
>How many people use typewriters or computers for copying code? Having learned
>to type a decade ago, I can now type at ~70 WPM. If I ever thought I was going
>to copy code at an obnoxious (;-) rate, I would definitely prefer to have a
>typewriter next to my radio. You don't even need an IBM Selectric.. even one
>from Naked Lunch will do.. it's a lot easier than writing, once you learn how
>to type.
>
>You can always practice with the "Solid" function on SuperMorse. It lets you
>type to code until you get a character wrong.

I think that there is one down side to this approach. Apparently, visual code,
aural code copied in head and aural code copied on typewriter involve
different parts of the brain and do not transfer well from one to another.
I recall a story, firsthand, from a signal corpsman in Korean PA who
copied code directly onto a typewriter but did *not* know what he had
received till he read the copy. To make short of a long story, the skills
for typewirter copy may be different from that for head copy. The latter
skill is useful, especially for mobile cw.

Rajiv
aa9ch/m ts50, j45 leg clamp st key, mini bug catcher in a toyota tercel ez
r-dewan@nwu.edu

1182. RF? problem with TS-440...need advice

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 16:29:23 UTC
From: mebly@eng.umd.edu
Message-ID: <2j8el3$2hd@mojo.eng.umd.edu>
Source record: 271483

A local ham is having an odd problem with a TS-440. Usually, when the transmitter is keyed on 15 meters, the radio IMMEDIATELY shuts itself off. It is necessary to turn off the power supply to the radio for several seconds before the radio will turn back on. On occasion, the radio will work fine on 15 meters.

This happens on SSB also, and at low output power levels. The shutdown when using SSB is not immediate...it takes several seconds. It does not occur when the radio is connected to a dummy load...just when it is connected to a dipole in the attic. The SWR on 15 meters is reasonable.

The symptoms do not occur on 10, 17, 13 or 10 meters, even when the SWR on the coax is very high.

I've seen RF problems cause transmitters to lock up, but I've never seen them immediately cause the radio to turn off. Can anyone offer any insight?

If it is RF, I hope to be dealing with the MIC cable, the KEY line or the power supply. My first brilliant idea is to try a 15-meter counterpoise connected to radio ground.

Thanks in advance for your advice. 73.

--
Mark Bailey KD4D Motto: Life's too short to drink cheap beer.
mebly@glue.umd.edu Disclaimer: I didn't really say this.

1183. Antenna Erection Aids

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 16:30:11 UTC
From: jangus@skyld.tele.com
Message-ID: <760725011snx@skyld.tele.com>
Source record: 271484

In article <9402072116.AA02094@opus.xyplex.com> sasminkey@xap.xyplex.com writes:

> it from moving. Now tape a small rock to the end of the monofilament
> fishing line and fire away! Wait for the rock to drop then attach your
> wire or rope and reel in the monofilament line. Remember that a hunting
> slingshot can send a small stone a long ways so practice in a safe place.

Nothing like explaining to the neighbors when they notice that the new
hole in their window has a string leading right back to your hands...

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

1184. Radar Detector Detectors

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 16:33:38 UTC
From: jangus@skyld.tele.com
Message-ID: <760725218snx@skyld.tele.com>
Source record: 271485

In article <CKvFH9.FuC@srgenprp.sr.hp.com> alanb@sr.hp.com writes:

> It is certainly possible. Inexpensive radar detectors inject the
> unit's local oscillator signal directly into mixer located right in the
> waveguide antenna -- the "detector detector" operates by receiving the
> L.O. signal that leaks out the waveguide.

This is exactly what the Z-channel cops were doing to locate un-paid
"suscribers"

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

1185. 40 Meter Loop Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 17:23:02 UTC
From: irvse.EGert@dg-rtp.dg.COM
Message-ID: <9402081723.AA08416@irvsde>
Source record: 271486

I live in a condo that has a lot that is just too short to put up a 40 meter dipole (and the homeowner's association made me take down the vertical). Does anyone have any plans for a 40 meter transmitting loop? I've seen some that are compact, made of copper pipe and are capable of multiband operation. I've also read that they tend to cancel out atmospheric noise.

Any input would be appreciated.

==========
Steve Egert Home:(714) 562-8583
Systems Engineer Work:(714) 724-3597
Data General Corporation - Irvine, CA
Internet: steve_egert@dgc.ceo.dg.com AX.25: KE0KD@WB6YMH
==========

1186. Re: N connectors (was Re: "Flexible" 9913 (Was - Re: Coaxial cab

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 17:29:29 UTC
From: chuck@eng.umd.edu
Message-ID: <2j8i5p$49j@mojo.eng.umd.edu>
Source record: 271487

In article <Anthony_Pelliccio-080294103950@138.16.64.8> Anthony_Pelliccio@brown.edu (Tony Pelliccio) writes:
>
>I had forgotten the weather resistance issue. But you're right in that most
>land-mobile radios tend to use SO-239 instead of N. But buy a UHF repeater
>and guess what, N connectors. By the way, I've finally met an N connector
>that I like. It's for the 9913 and it's GREAT! You don't have to comb out
>braid, you don't have to go nuts with 9 different parts, etc. This one is
>two pieces, you strip the coax down a bit, screw it in, use a bit of solder
>and you're in business.

Yep, with this bastardized "N" connector, you get all of the bad characteristics of a PL-259, and none of the good characteristics of the N connecter. A really fine connector!

(Hint, the worst things about the PL are soldering the braid, and lack of weather resistance. The best things about the N are the solderless braid connection, the physical strength, and the weather resistance.)

Chuck Harris - WA3UQV

1187. soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 17:36:52 UTC
From: junger@rsg1.er.usgs.gov
Message-ID: <1994Feb8.173652.8765@rsg1.er.usgs.gov>
Source record: 271488

Has anyone had any experience (either good or bad) using one of
the small butane torch/soldering irons to solder PL-259 connectors
to RG-8U coax. Do they work as well as or better than a big
(>100W) soldering iron?

Thanks - John, W3GOI

1188. Re: Illegal Activities of Dominique Cormann

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:11:17 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <mJxLjGG8yHMJ053yn@dorsai.dorsai.org>
Source record: 271489

I'll admit to not having followed this thread, (not really my fault, the host was down all weekend and some postings got lost to the cyberspace bit bucket).

I've seen Ms. Cormann's posting on every net I get here, and I get 5 of them. While I really didn't pay attention to it, I did notice the 11 meter linear, (if there was anything else that was illegal on the list, I don't remember or care).

It seems that the only place where some selfrighteous individual took offense to the linear offer was here on the infamous Usenet. Well to that person I say, put your money where your mouth is! If you don't want such an illegal device sold to an CBer, then outbid for it yourself and modify the circut back to 10 meter capabilities. What would it take? Snapping off the extenting loops from the coils and reattaching the lead wires?

I get sick and tired of some of the god playing, government enforcing a--holes around here who think they have to police the spectrum and save other hams from the temptation of using illegal equipment.

Actually it makes me feel good that a few repliers had the good sense of satire when replying what looked like surportive statements. It sort of makes me remember when back on Prodigy we had a guy who would deliberately bait those radio-cops with requests for 80Kw linears and dishes large enough to direct a 2m signal to Europe. We all knew Scott was puting out a parody, but we all got reals laughs at the replies he would get from members who took him seriously.

Now what was this other micro byte of history about a 5kw AM transmitter for use on the ham bands? Hell if he keeps the power down below 900 watts or 2.2Kw P.E.P. on sideband, he's still legal no matter what kind of transmitter he's got. Hell, with that modulation transformer, he'd really sound good on AM, provided he wants to foot the electric bill, (broadcast transmitters are notoriously inefficient, especially at low power).

< ^^^

1189. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:14:28 UTC
From: richw@mks.com
Message-ID: <1994Feb8.181428.1521@mks.com>
Source record: 271490
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

David Tucker wrote:

I have also been told by Rich, who went through the process,
that you can get credit for code and theory and will only
have to pass the rules exam.

to which NADO@UNB.CA replied:

. . . there is no such thing as a Rule exam. There is a Basic
exam and an Advanced exam. The Basic has 100 questions, with
multiple choices, and covers rules, basic theory, propagation,
interference, etc. You need 60% to pass.

Yes and no. (I was the "Rich" referred to in David's article, BTW.)

When I applied for my Canadian amateur license last spring, I was
required to pass a 26-question subset of the Canadian "Basic" exam,
consisting only of questions on rules, regulations, and operating
procedures.

I was =not= required to do the entire 100-question Basic exam, because
I had a US Advanced-class license. I received credit for the Canadian
"Basic", "Advanced", and "12 WPM" qualifications on the basis of my US
license.

--
Rich Wales (VE3HKZ, WA6SGA/VE3) // Mortice Kern Systems Inc.
richw@mks.com // 35 King Street North
+1 (519) 884-2251 // Waterloo, Ontario, Canada N2J 2W9

1190. Re: Law changing?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:17:51 UTC
From: mike@garfield.csuohio.edu
Message-ID: <1994Feb8.181751.1405@news.csuohio.edu>
Source record: 271491

mgb@crl.com (Michael G. Beck) writes:
: When I was perusing the HRO catalog, on the top of a page that was
: advertising Receivers it said "Get Them before the Law changes!"
:
: My question is - What Law, and how is it going to change?
:
Probably referring to the fact that after April (26th.?) 1994
scanners with cellular reception or that are easily cellular-modifiable
will no longer be approved for manufacture by the FCC, and will no
longer be allowed to be imported from outside the US. Manufacturers
and Retail stores (like Radio Shock) WILL still be allowed to sell their
remaining stock of those scanners after that date, they just cannot
manufacture them. Also, it is (as I understand it) still NOT illegal
to own such a scanner, or to modify an existing scanner. It is however
illegal to listen in on cellular phone conversations with such
a scanner. Beware of the marketing hype as we approach April. Plenty
of electronics hucksters are more than willing to scare you into
buying a "pre-Law" scanner. There will be plenty around for some
time after April, I am sure, not to mention used ones for sale.
It will in my opinion be a while till they become a rarity.

Mike

--
^v^v^v

1191. Re: N connectors (was Re: "Flexible" 9913 (Was - Re: Coaxial cab

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:19:03 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2j8l2nINNfom@abyss.West.Sun.COM>
Source record: 271492

In article <Anthony_Pelliccio-080294103950@138.16.64.8> Anthony_Pelliccio@brown.edu (Tony Pelliccio) writes:
>In article <2j6rtmINNf0s@abyss.West.Sun.COM>, myers@cypress.West.Sun.COM
>(Dana Myers) wrote:
>
>> >Actually, most equipment for dual-band use is sold with so-239 and pl-259
>> >connectors. The loss isn't that much so you'd actually notice it. You'll
>> >find N used in applications where every bit of loss counts like repeaters
>> >etc.
>>
>> N connectors also make an effort to be weather resistant where PL-259/SO-239
>> do not. Land mobile radios seem to use SO-239 up to UHF (512MHZ max), then
>> N connectors (800/900, etc.).
>>
>
>I had forgotten the weather resistance issue. But you're right in that most
>land-mobile radios tend to use SO-239 instead of N. But buy a UHF repeater
>and guess what, N connectors. By the way, I've finally met an N connector
>that I like. It's for the 9913 and it's GREAT! You don't have to comb out
>braid, you don't have to go nuts with 9 different parts, etc. This one is
>two pieces, you strip the coax down a bit, screw it in, use a bit of solder
>and you're in business.

The crimp-on connectors are quite cool, too. Just be sure to leave
the center conductor long enough :-).

Dana

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1192. Re: exit

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:19:07 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1994Feb8.181907.10068@rsg1.er.usgs.gov>
Source record: 271493

In article <1994Feb6.004704.10186@nicad3.nic.bc.ca>, mcphail@nicad3.nic.bc.ca writes:
|> help... I think I'm in but ??? Bob, VE7ZP
^^^
Bobbit?

1193. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:36:08 UTC
From: richw@mks.com
Message-ID: <1994Feb8.183608.3422@mks.com>
Source record: 271494
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

David Tucker and Luis Nadeau disagreed as to whether a US ham licensee is required to follow US (FCC) rules while operating in Canada under Canadian reciprocal permissions.

Peter Hardie wrote:

> The regs clearly state that a U.S. amateur who is a U.S.
> citizen AND resident and who is qualified to send and
> receive Morse code at a speed of at least 12 wpm has all
> the privileges of the Basic, 12wpm, and Advanced quali-
> fications. Which means they can operate all modes on
> all bands, just like I can.

Those are the Canadian regulations. But what about the US regulations? Do the US regulations permit a US amateur, operating under his US call outside the US, to operate in any mode or band permitted by the country he is operating in, even if such operation would be illegal in the US? Or, is there some specific provision in the FCC regulations that permits such extra privileges specifically for US hams in Canada?

To take a simple example, Canadian rules require station ID's every 30 minutes, and the ID can be in either English or French. US rules demand a station ID every 10 minutes, and it must be in English. If a US ham in Canada were to ID himself every half hour, and only in French, this is perfectly OK as far as Canada is concerned, but is it OK as far as the FCC rules go?

Even without bringing up issues of extraterritorial jurisdiction, the FCC could presumably sanction an American amateur operating abroad in violation of US rules -- e.g., by revoking his US ham license. So this question is hardly moot.

--
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+1 (519) 884-2251 // Waterloo, Ontario, Canada N2J 2W9

1194. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:36:19 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2j8m33$apn@news.acns.nwu.edu>
Source record: 271495

In article <1994Feb8.155316.10036@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:

>I also have a friend who was a Navy radio intercept operator in WWII.
>There's no such thing as copying behind in this sort of work. It's all
>five letter groups of encrypted text. He was trained to associate a
>letter sound directly with a finger action on the keyboard, a form
>of Pavlovian conditioning. His conscious mind isn't involved at all.
>He can carry on a conversation with you while copying. When the code
>stops, he has to roll up the paper and read what he typed to see what
>the other operator sent. He's a remarkable code copying machine.
>
>He says that if you try to copy plaintext behind with a typewriter,
>it's much harder than copying in real time because the actions of
>auditory recognition, conscious evaluation, and mechanical reproduction
>are divorced from each other enough by that intermediate step to cause
>you to make errors if your mind wanders, in the slightest, to thinking
>about what's being sent. He says you should train yourself to *not*
>try to interpret what's being sent as you copy if you want maximum
>speed and accuracy of copy. Try thinking about *anything* but the
>code you're hearing while you practice copying. Let the conditioned
>reflex do the work.

I have heard this first-hand from a signal corpsman.

>That's *not* the way most hams do Morse. Most try to force the
>decoding into resembling spoken language, (which it's not, who
>speaks by spelling out each word?) and attempt to copy in their
>heads. At best they write down what they *think* they understood
>of the decoded message rather than just accurately copying the
>characters as received without trying to understand the message
>until it's down on paper. Naturally that impairs the speed and
>accuracy of their copy, but since accurate copy isn't really
>their goal, that's a moot point except for message handling and
>taking tests where accuracy of copy is the critical issue.

<snip>

I think that you have this backwards Gary. All hams use plaintext
(by law) and you can copy at higher speeds if you can use your
vocabulary information to speed up. In all QRQ tests that I have heard/read
about, the limit for ramdom group copy is always lower than that
for *correct* plain text copy.

>
>I wish I'd known this when I was learning Morse. I kept futilely

>trying to make sense of what I was hearing, and got nowhere. I

Now this is a difficult task at best of times. :)

>finally hit on a shorthand method of writing down the Code that
>works for me, and which I can sight read nearly as well as ordinary
>text, but I wish I'd conditioned myself to type the text instead
>since it would be much faster.

Rajiv dit l dit
aa9ch l
r-dewan@nwu.edu ********** =
* rajiv aa9ch/m * =
* r-dewan @nwu.edu * l
* j45 str key on knee * l
********* kwd ts50 tx bugcatcher * l
* *l
* *** *** *H
* * * * * *H
base* *kenwd850*vert*80mloop* *kent**
*** ***

1195. Re: 3Y0PI route

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:39:35 UTC
From: slay@netcom.com
Message-ID: <slayCKx55z.53M@netcom.com>
Source record: 271496

: > For SSB contacts: QSL to AA6BB; For CW contacts: KA6V
: > This is a husband/wife team at the same address.
: >
: > 93787 Dorsey Ln
: > Junction City, OR 97448
: >

: Do RTTY QSLs go to the same place?

SSB ONLY to AA6BB; CW, Satellite and all other digital to KA6V.

According to Chod VP2ML/WB2CHO in an article in the January/February 1994 issue of his The DX Magazine:

Quote: With a donation of $50 or more, you will receive a copy of WHERE DO WE GO NEXT? by Martti Laine OH2BH. Unquote.

Lastly, there is this info taken from January 24th issue of the Ohio/Pennsylvania DX Bulletin (#144):

3Y0PI, PETER I ISLAND DXPEDITION. As the countdown continues for the start of this DXpedition, here is some important information: KA6V and AA6BB, are the QSLManagers and they ask that you put "ALL" your cards into the same envelope or put all your QSO labels into one card. "DO NOT" (repeat DO NOT) mix VP8BZL and VP8BZL/MM cards with the 3Y0PI cards (send them separately). Mixing operations in the same envelope will cause a delay in processing your QSL cards. Include a SASE or SAE and enough to cover at least the return postage. The 3Y QSLs will be printed in Belgium and have the same layout as the AH1A and VP8SS I cards (folding type with colored pictures). There is room for 5 QSO's per 3Y-card. If you have more than 5 QSOs, more cards will be needed, and the cost of postage will increase (So, remember send enough to cover this!).

NOTE: There is a DX reflector available on Internet. Simply send your email request to: DX-request@unbc.edu

The one and ONLY word in the text/message field should be:

SUBSCRIBE

Please note that the DX reflector is NOT where you ask for QSL route information. They are highly discouraged there. QSL route requests are probably best handled here on rec.radio.amateur.misc

1196. Re: N connectors (was Re: "Flexible" 9913 (Was - Re: Coaxial cab

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:48:58 UTC
From: tomb@lsid.hp.com
Message-ID: <CKx5LM.B5o@hpcvsnz.cv.hp.com>
Source record: 271497

Chuck Harris - WA3UQV (chuck@eng.umd.edu) wrote:

: (Hint, the worst things about the PL are soldering the braid, and lack of
: weather resistance. The best things about the N are the solderless braid
: connection, the physical strength, and the weather resistance.)

I've seen folk curse at N connectors on 9913. It appears to me that the
9913 doesn't provide very good support for the compression gland in N
connectors, since the line is essentially hollow and made from (soft)
polyethelene. The N connectors I've seen sold for it are what I'd
call "short-barrel." You can get longer barrel ones that offer better
support for the line, and I find they stay on much more securely. You
have to do the center pin mod yourself to get them to accept the
larger center conductor of the 9913. (Sorry, I don't have the UG numbers
in front of me...)

1197. Re: RF? problem with TS-440...need advice

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:50:33 UTC
From: jholly@cup.hp.com
Message-ID: <CKx5oA.Coz@cup.hp.com>
Source record: 271498

Mark E. Bailey (mebly@eng.umd.edu) wrote:
: A local ham is having an odd problem with a TS-440. Usually, when the
: transmitter is keyed on 15 meters, the radio IMMEDIATELY shuts itself off.
: It is necessary to turn off the power supply to the radio for several
: seconds before the radio will turn back on. On occasion, the radio will
: work fine on 15 meters.

: This happens on SSB also, and at low output power levels. The shutdown
: when using SSB is not immediate...it takes several seconds. It does not
: occur when the radio is connected to a dummy load...just when it is
: connected to a dipole in the attic. The SWR on 15 meters is reasonable.

: The symptoms do not occur on 10, 17, 13 or 10 meters, even when the SWR on
: the coax is very high.

: I've seen RF problems cause transmitters to lock up, but I've never seen
: them immediately cause the radio to turn off. Can anyone offer any insight?

: If it is RF, I hope to be dealing with the MIC cable, the KEY line or the
: power supply. My first brilliant idea is to try a 15-meter counterpoise
: connected to radio ground.

: Thanks in advance for your advice. 73.

No problem into the dummy load is a good check...the transmitter is probably
good. Your first brilliant idea is probably a GOOD idea. The problem soulnds
like a resonant ground ... I had a problem with bad audio on 20m, fine on
other bands. Since I was not operating much at the time, I just didn't
operate 15m. Once I got around to thinking about the problem I found my
ground wire to be around 16 foot long...oh, well, win some lose some.

I don't think the problem is the mike or key lead...I favor the ground more
at this point.

Jim, WA6SDM
jholly@cup.hp.com

: --
: Mark Bailey KD4D Motto: Life's too short to drink cheap beer.
: mebly@glue.umd.edu Disclaimer: I didn't really say this.

1198. Re: Radar Detector Detectors

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:52:09 UTC
From: garhow@hpubmaa.esr.HP.COM
Message-ID: <2j8n0p$2jb@hpscit.sc.hp.com>
Source record: 271499

In article <hamilton.760464153@BIX.com>, hamilton@BIX.com (hamilton on BIX) writes:
|> tskloss@zeus.tamu.edu (SKLOSS, TIMOTHY WILLIAM) writes:
|>
|> >In article <CKo1pB.MBJ@nrtpa22.bnr.ca>, billag@b4pphff.bnr.ca (Bill Gutknecht)
writes...
|> >> Since this group contains all the RF types ... I was wondering
|> >> if anyone here knows where I can find out about radar detector
|> >> "detectors" ... specifically something published ... I have
|> >> a friend who is quite the sceptic and doesn't believe me that
|> >> they exist ...
|>
|>
|> >Tell your friend to drive around Canada, or a state which outlaws radar
|> >detectors, with a powered up radar detector in the glove box and see what
|> >happens. They will probably even show the detector to him.
|>
|> >-tim
|> But no sooner have radar detector detectors arrived, than I see ads now
|> for "undetectable" radar detectors. Right here in front of me, I have
|> one in a Herrington catalog (Ph 800-622-5221/FAX 603-437-3492) for a
|> Bel SuperWideband "Undetectable" Radar/LaserDetector for $339. Do you
|> know if in fact these "undetectable" detectors are really undetectable?
|>
|> Regards,
|> Doug Hamilton hamilton@bix.com Ph 508-358-5715

Unless they have an Undetectable Radar Detector Detector.

Garry
KE0SH

--
Garry Howard - Cambridge, MA - garhow@a4450gh.esr.hp.com

1199. Re: Anyone Hear from Space Shuttle?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 18:55:41 UTC
From: levin@bbn.com
Message-ID: <LEVIN.94Feb8135543@powell.bbn.com>
Source record: 271500

In article <CKvE1n.3IEI@austin.ibm.com> blood@austin.ibm.com () writes:

Has anyone heard the shuttle on 2mtrs? With 3 hams out there and
a broken satellite, perhaps they have some time on their hands.
Or just too busy trying to fix it. Where Do I listen? 145.55?

I've heard them transmitting packet Saturday and Sunday (I'm pretty
sure it was them -- I don't copy 1200 wpm in my head that well -- but
they came in and faded out at the right times). I didn't hear anything
yesterday or this morning, though.

Listen on 145.55. Do NOT transmit on that frequency. If you hear
them on voice, call on one of
144.91 144.97
144.93 144.99
144.95
but you'll have to guess which one. If you hear them on packet, call
W5RRR-1 on 144.49. Again, do NOT transmit on .55.

(On the other hand, Russian space station MIR is still up and the hams
on board do use 145.55 for both voice and packet, and they operate
simplex. Confusing, isn't it?)

Hope this helped

/JBL KD1ON
=
Nets: levin@bbn.com |
pots: (617)873-3463 | "I gotta go."
ARS: KD1ON | -- I. Shoales

1200. Re: soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 19:08:44 UTC
From: dbraun@scdtintel.com
Message-ID: <2j8nvs$44o@inews.intel.com>
Source record: 271501

In article <1994Feb8.173652.8765@rsg1.er.usgs.gov>, junger@rsg1.er.usgs.gov (John Unger) writes:
|> Has anyone had any experience (either good or bad) using one of
|> the small butane torch/soldering irons to solder PL-259 connectors
|> to RG-8U coax. Do they work as well as or better than a big
|> (>100W) soldering iron?

I tried one, and it tended to melt down everything. You need more concentrated heat.

By the way, be careful when comparing soldering irons and soldering guns. A 100 watt soldering iron is turning all 100 watts into useful heat. But a 100 watt soldering gun is losing maybe 20-30% of that power in its transformer. Also, if you have even slightly imperfect connections from the element to the gun, you lose even more power.

I ended up my gun and a 40-watt iron at the same time. Also remember that the cheap nickel-plated connectors are harder to solder than the silver-plated ones.

Doug Braun Intel Design Technology
N1OWU 408 765-4279

dbraun@scdt.intel.com

/ decwrl \
| hplabs |
or maybe: -| oliveb |- !intelca!mipos3!cadev6!dbraun
| amd |
\ qantel /

"There is no human problem which could not be solved if people would simply do as I advise." -- Gore Vidal

1201. ANS Bulletin 039.01

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 19:27:54 UTC
From: 70323.2750@CompuServe.COM
Message-ID: <940208192753_70323.2750_CHV67-1@CompuServe.COM>
Source record: 271502

SB SAT @ AMSAT $ANS-039.01
AO-13 OPERATIONS NET SCHEDS

HR AMSAT NEWS SERVICE BULLETIN 039.01 FROM AMSAT HQ
SILVER SPRING, MD FEBRUARY 8, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-039.01

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date UTC Mode Phs NCS Alt NCS

12-Feb-94 2200 B 063 W9ODI VE2LVC
20-Feb-94 0200 B 070 WA5ZIB W5IU
28-Feb-94 0430 B 068 WB6LLO W9ODI

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. If neither of the Net Control Stations show up, any participant is invited to act as the NCS.

/EX

1202. Re: Antenna Erection Aids

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 19:42:32 UTC
From: jcw@kd4dts.dixie.com
Message-ID: <1994Feb8.194232.3507@kd4dts.dixie.com>
Source record: 271503

sas@opus.xyplex.COM (Scott Sminkey - Sustaining Eng Group) writes:

>Julian Macassey N6ARE recommended the use of slingshot and fishing reel
>combination for putting up antenna wires and ropes. I second Julian's
>advice on that method! I've tried lots of ways to put up antennas wires
>and ropes over the last twenty years and the slingshot/reel method is
>definitely the best.
>...

I personally prefer a crossbow. I drill out the end of an aluminum
bolt with a 1/64 bit, tie off some 20-30lb fishing line (using the
Zebco 202 spinning reel), sight over the limb (bow has a scope mounted
on it), and *twang*, over it goes. Bolt has enough weight to cause
it to drop to the ground.

A couple of notes, in addition. I prefer a heavy nut to a stone, as it's
easy to tie to, and seems to have reasonable ballistics. It's also heavier
than a size for size stone. You have to select a weight fairly carefully.
Too heavy, and the slingshot can't throw it far enough, too light, and it
won't drop over the limb. Pine tree are especially a problem because the
line will hang in the bark flakes.

- John Wren
KD4DTS
--

John C. Wren (kd4dts) | "The UNIX operating system has a command, NICE,
jcw@kd4dts.atl.ga.us | which allows a user to voluntarily reduce the
..!emory!wa4mei!kd4dts!jcw | priority of his process, in order to be nice to

1203. Re: N connectors (was Re: "Flexible" 9913 (Was - Re: Coaxial cab

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 20:09:17 UTC
From: reichrt@rtsg.mot.com
Message-ID: <2j8rhd$h92@delphinium.cig.mot.com>
Source record: 271504

In article <Anthony_Pelliccio-080294103950@138.16.64.8>, Anthony_Pelliccio@brown.edu (Tony Pelliccio) writes:
|> In article <2j6rtmINNf0s@abyss.West.Sun.COM>, myers@cypress.West.Sun.COM
|> (Dana Myers) wrote:
|>
|> > >Actually, most equipment for dual-band use is sold with so-239 and pl-259
|> > >connectors. The loss isn't that much so you'd actually notice it. You'll
|> > >find N used in applications where every bit of loss counts like repeaters
|> > >etc.
|> >
|> > N connectors also make an effort to be weather resistant where PL-259/SO-239
|> > do not. Land mobile radios seem to use SO-239 up to UHF (512MHZ max), then
|> > N connectors (800/900, etc.).
|> >
|>
|> I had forgotten the weather resistance issue. But you're right in that most
|> land-mobile radios tend to use SO-239 instead of N. But buy a UHF repeater
|> and guess what, N connectors. By the way, I've finally met an N connector
|> that I like. It's for the 9913 and it's GREAT! You don't have to comb out
|> braid, you don't have to go nuts with 9 different parts, etc. This one is
|> two pieces, you strip the coax down a bit, screw it in, use a bit of solder
|> and you're in business.
|>
|>
|> Tony
|> --
|> == Anthony_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)
|> == Brown University Alumni & Development Computing Services
|> == Box 1908, Providence, RI 02912 Tel. (401) 863-1880
|> == I speak for myself, and not for Brown University. Remember that!

SO-239, PL-259 provide a loss of approximately .5dB per connection at 145Mhz and a poor 50 ohm connection. Time Domain Reflectometer measurements indicate over 2:1 VSWR (Impedance Bump!) at the connection.

Whereas N connector's have appr'x .042dB Insertion Loss and an excellent 50 ohm connection.

Basically use SO-239, PL-259 below 30Mhz. I still wish manufacturers would use N connectors on all gear. I find them mechanically and electrically better all around.

--
==
| Charles H. Reichert 708-632-6669 Work - MOTOROLA, INC Cellular |
| KD9JQ 708-358-3827 HOME - after 8PM CST weekdays |
| reichrt@rtsg.mot.com 955 Concord Ln. Hoffman Ests., IL. 60195 |

==========

1204. Re: which is better qrp band--30 or 40?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 20:09:53 UTC
From: slay@netcom.com
Message-ID: <slayCKx9CH.CFp@netcom.com>
Source record: 271505

mtrail@violet.berkeley.edu wrote:
: The title says it all. Which band do you qrp'ers
: prefer?

For questions on QRP - I suggest a good source of info is the QRP reflector.
To subscribe to the mailing list, simply send an e-mail msg to:

qrp-request@think.com

I can't recall if you should only enter SUBSCRIBE or also include info
on yourself (e.g. name, call, qrp rig, etc).
Cheers de Sandy WA6BXH/7J1ABV

1205. Re: soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 21:33:41 UTC
From: kg7bk@indirect.com
Message-ID: <CKxD86.E81@news.direct.net>
Source record: 271506

John Unger (junger@rsg1.er.usgs.gov) wrote:
: Has anyone had any experience (either good or bad) using one of
: the small butane torch/soldering irons to solder PL-259 connectors
: to RG-8U coax. Do they work as well as or better than a big
: (>100W) soldering iron? Thanks - John, W3GOI

I found the butane torch to be overkill... exploding the solder into a vapor. What I favor is the use of copper tape... fan back the braid, wrap copper tape between the inner insulator and the braid and then solder the braid to the copper tape. Then solder the copper tape to the coax connector. This may change the impedence slightly (could be for the better :-)) but the soldering is extremely easy as the copper tape can be used for a snug fit inside the coax connector, and the coax connector can also be soldered to the copper tape at the base of the connector. This works well on 9913 and pl259s.

73, Cecil, kg7bk@indirect.com

1206. Re: soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 22:07:20 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb8.220720.12006@ke4zv.atl.ga.us>
Source record: 271508

In article <1994Feb8.173652.8765@rsg1.er.usgs.gov> junger@rsg1.er.usgs.gov (John Unger) writes:
>Has anyone had any experience (either good or bad) using one of
>the small butane torch/soldering irons to solder PL-259 connectors
>to RG-8U coax. Do they work as well as or better than a big
>(>100W) soldering iron?

The small ones, like the Pyropen Jr. and the Portasol don't work as well as a large iron. The Pyropen Sr. works fine, even in the wind. When AC is available, however, I use a 300 watt American Beauty.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1207. Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 22:25:06 UTC
From: t1terryb@cascade.ens.tek.com
Message-ID: <2j93g2$9j8@cascade.ens.tek.com>
Source record: 271509

To Mark Curran,
Sorry about the way I have to reply to your Email. I can't directly
replay out of my account to the Internet at Tek so when someone sends me
mail I have a time sending directly to them. I have to start up 'read
news' and then read in the message. Probably a way around this but I have
not figured it out yet. Then there is the problem of remembering not to
make my lines in the post too long...I'm learning.

Terry

To: t1terryb@cascade.ENS.TEK.COM (Terry Burge)
In-Reply-To: t1terryb@cascade.ens.tek.com's message of 4 Feb 1994 14:29:13 -0800
Subject: Re: Vertical Antennas
Content-Length: 523

Hello Terry,

Hope you don't mind radion mail cluttering your disk.
I noticed in your post on verticals that you have had some
experience with homebrew groundplanes. I'm considering
one for either 20 or 40 (thought I'd start small) to try and
get a lower radiation angle than my centerfed ant.

I'm mostly curious as to materials for the vertical member,
and what your experience has been. I'm condidering either
cooper tube or aluminum conduit.

Most height I can get is about 25' on top of my roof top.

Tnx,

Mark C.

Hi Mark,
My vertical is a Butternutt HF6V made of aluminum and trapped for 10-160 meters. It
is approximately 26 feet high. If you are going to build a single band vertical for 20 or
40 meters it isn't too hard. I suggest either aluminum tubing or possably(sp) slip together
TV mast like you can buy at Radio Shack (Rohn, I believe). For 20 meters you can easily
make
a quarter or 1/2, or even 5/8 wavelength ground plane. Quarter I believe is somewhere
around
16 feet. A true ground plane antenna, one that is over 1/2 wavelength above ground, is
suppose
to need only five or so radials. My installation is on a mobile home so I try to improve
things
by adding 8-12 radials for 10,12,15,17,20 meters, 8 on 40 meters. A quarterwave on 40
meters is

about 32 feet so that may need to be loaded with a coil to give you the resonance. If I were you I
would definately look into buying a Butternut HF2V(think that is what they call it. It is for 80, 40 and 20 meters and can have 160 meters added.) But like I said, a 20 or 40 meter quarterwave vertical is fairly easy to build.
The ground plane on my antenna is made of galvanized electric fence wire. A spool of that stuff is one of the best investments a Ham can make. Only cost about 8-10 dollars for a
quarter mile roll at your local farm store or Bi-Mart, whatever. Cut the radials for 1/4 wavelength at the lowest frequency on each band. Some people say 5 % longer than the 1/4 wave
radiator. Either will do. Just lay your radials out as evenly as possible deviding up 360 degrees
so that you get as clean, semetrical a pattern as possible.
Depending on weather you make a 1/4 wave or 1/2 or 5/8 wave, you will need to come up with a matching system. The ARRL Antenna Handbook is the place to go and find that info. I believe
for 1/2 wavelength you will have a high impedance input and may not be able to feed it directly
with coax without some sort of impedance matching device. 1/4 wavelength verticals have somewhere
between 36 and 52 ohms. Feeding them with coax is no problem usally. Your radial system has a significant effect on feed point so you will probably want to read chapters 2 and 3 in the
antenna handbook. That book is also a good investment.
Good luck and let me know what you decide and how it works out. When I first got into Ham radio back in 76 I put up a 1/4 wave groundplane for 20 meters on a mast of that slip together
TV mast I told you about. The antenna was very similar to a CB supper maggy or whatever they call
them. Worked very well getting out but like all radials, it was subject to static interference.
The neat thing about it was that I was easily able to get approximately 60 feet of height using
a dual set of guide wires. The radials were the guyed wires cut for the bottom of 20 meters with
insulator and slopeing down.

Terry Burge
KI7M

1208. Re: soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 22:28:17 UTC
From: reid@ucs.indiana.edu
Message-ID: <reid.616.760746497@ucs.indiana.edu>
Source record: 271510

In article <2j8nvs$44o@inews.intel.com> dbraun@scdtintel.com (Doug Braun) writes:
>In article <1994Feb8.173652.8765@rsg1.er.usgs.gov>, junger@rsg1.er.usgs.gov (John Unger) writes:
>|> Has anyone had any experience (either good or bad) using one of
>|> the small butane torch/soldering irons to solder PL-259 connectors
>|> to RG-8U coax. Do they work as well as or better than a big
>|> (>100W) soldering iron?
>
>I tried one, and it tended to melt down everything. You need more
>concentrated heat.
>
>By the way, be careful when comparing soldering irons and soldering guns.
>A 100 watt soldering iron is turning all 100 watts into useful heat.
>But a 100 watt soldering gun is losing maybe 20-30% of that power
>in its transformer. Also, if you have even slightly imperfect
>connections from the element to the gun, you lose even more power.
>...

Butane irons are not big enough for soldering PL-259, even with the largest available tip. Soldering guns are utterly worthless! I use a 200-watt iron (WW-II surplus) that has a massive copper tip. The THERMAL MASS of the tip is more important than the wattage: With a soldering gun, for example, the tip is so small that even though it's high-powered, the PL-259 body soaks up the heat faster than it can be produced. A large mass of copper stays hot long enough to bring the PL-259 to solder-melting temperature, and does it quickly enough that the plastic insulation of the coax doesn't melt.

I haven't tried soldering PL-259s with a propane torch (Bernz-O-Matic, et al.) with copper-tipped soldering attachment, but that should work well. Old-fashioned "soldering coppers" (big bar of copper on steel/wood handle, to be heated over gas or gasoline stove) should also work well. You can buy them at flea markets.

--

Frank reid@ucs.indiana.edu W9MKV

1209. RF exposure and cancer risks

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 23:29:20 UTC
From: RWH@CCCS.UMN.EDU
Message-ID: <RWH.66.00117DA2@CCCS.UMN.EDU>
Source record: 271511

I'm in the process of reviewing a questionnaire that is going to be used in a case-control study of brain cancers in rural areas. While the preliminary survey does contain questions regarding ham/cb/cellular/radar exposure, I would like to make sure that those areas are expanded a bit.

I would appreciate it if someone could point me towards some of the relevant literature.

Thanks.

--rick

+---+
| Richard Hoffbeck, Sr Analyst e-mail: rwh@cccs.umn.edu |
| Prostate, Lung, Colorectal & Ovarian cis: 72406,521 |
| Cancer Screening Trial voice: (612) 627-4151 |
| University of Minnesota fax: (612) 627-4158 |
| 212 Ontario St SE, Suite 202 |
| Minneapolis, MN 55414 |
+---+

1210. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 23:31:08 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb8.233108.12446@ke4zv.atl.ga.us>
Source record: 271512

In article <2j8m33$apn@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:
>In article <1994Feb8.155316.10036@ke4zv.atl.ga.us>,
>Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
[deleted description of an intercept operator's methods]
>>That's *not* the way most hams do Morse. Most try to force the
>>decoding into resembling spoken language, (which it's not, who
>>speaks by spelling out each word?) and attempt to copy in their
>>heads. At best they write down what they *think* they understood
>>of the decoded message rather than just accurately copying the
>>characters as received without trying to understand the message
>>until it's down on paper. Naturally that impairs the speed and
>>accuracy of their copy, but since accurate copy isn't really
>>their goal, that's a moot point except for message handling and
>>taking tests where accuracy of copy is the critical issue.
>
><snip>
>
>I think that you have this backwards Gary. All hams use plaintext
>(by law) and you can copy at higher speeds if you can use your
>vocabulary information to speed up. In all QRQ tests that I have heard/read
>about, the limit for ramdom group copy is always lower than that
>for *correct* plain text copy.

Copying plaintext by filling in holes from context obviously works for
some people with some words/phrases, especially the highly stylized
typical ham contact, however, try copying unfamiliar words that way,
or a word you *think* is mispelled. If you are copying *correctly*,
you'll copy the word as sent, not as you would spell it. But as I
noted, that's not really important if you're just trying to follow
the flow of a conversation rather than striving for perfect copy.

Max says he could copy 60 WPM for an entire watch without his error rate
increasing. Many of the circuits he was intercepting were apparently paper
tape driven. I don't think you can do that trying to consciously understand
words as sent. Your mind would wander for a moment even under the best of
conditions. Only an automatic reflex can keep up that kind of pace for hours
on end.

He says the worst thing about copying on a typewriter is when a right hand
character comes in while you're returning the carriage. He used a manual
typewriter in the Navy of course. He says that with a computer, he uses an
old VIC-20 now, wordwrap has increased his speed noticably over his old best
because he doesn't have to carry a character in his head while the carriage
returns. Though he said it took him several months to break himself of
swatting for the non-existant return lever every 60 characters.

It's remarkable to me that someone 70 years old can beat his own records set as a 20 year old. I wonder what he could have done if he'd had a computer then. Note I consider Max something of a prodigy, like a classical guitarist, or other musician. He has a "gift" as well as having spent, by now, many tens of thousands of hours of practicing. He said about 10% of the recruits in his class washed out at less than 20 WPM, about 60% were gone at 40 WPM, and only a very few ever got to 60 WPM despite having worked at it for 12 hours a day for the 6 weeks of their training. Obviously Max was in that elite group. I know I'd be in that initial 10%. My personal best has been 18 WPM after several hundred hours of practice. OTOH, I don't have the incentive of being stationed where I'm unlikely to be shot at if my speed were higher. And I know there are better ways of communicating without all that drill. That's got to have some effect. Still, I don't have the "gift" and will be at best only a hacker for the rest of my life no matter how much I practice. I can't play a guitar worth a damn either, even though I worked my fingers bloody practicing. At best I can mechanically reproduce the notes. I just don't have the "ear" for the music. Max has the "ear" for code. That has nothing much to do with his actual hearing ability, he's nearly deaf now. It has to do with a certain wiring of the brain centers I think.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1211. FT980/FTV250.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-08 23:50:53 UTC
From: t1terryb@cascade.ens.tek.com
Message-ID: <2j98gt$ath@cascade.ens.tek.com>
Source record: 271513

Has any of the netters used an FTV-250 2 meter transverter with an FT-980 or similar solid state rig? I have never used a transverter and would like to try this if I could figure out how to hook it up to a rig it was never designed for and how to not transmit on 10 meters without having a switch to turn off the heaters like on the FT-101EE. The FT-101 connects into the transverter thru an accessory cable but the FT-980 dosen't have the same connector and I am not certain as to what exactly is being switched in the transceiver.

Terry Burge
KI7M

1212. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 00:10:53 UTC
From: barnaby@world.std.com
Message-ID: <CKxKI7.1IJ@world.std.com>
Source record: 271514

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>He says that if you try to copy plaintext behind with a typewriter,
>it's much harder than copying in real time because the actions of
>auditory recognition, conscious evaluation, and mechanical reproduction
>are divorced from each other enough by that intermediate step to cause
>you to make errors if your mind wanders, in the slightest, to thinking
>about what's being sent. He says you should train yourself to *not*
>try to interpret what's being sent as you copy if you want maximum
>speed and accuracy of copy. Try thinking about *anything* but the
>code you're hearing while you practice copying. Let the conditioned
>reflex do the work.

>That's *not* the way most hams do Morse. Most try to force the
>decoding into resembling spoken language, (which it's not, who
>speaks by spelling out each word?) and attempt to copy in their
>heads. At best they write down what they *think* they understood
>of the decoded message rather than just accurately copying the
>characters as received without trying to understand the message
>until it's down on paper. Naturally that impairs the speed and
>accuracy of their copy, but since accurate copy isn't really
>their goal, that's a moot point except for message handling and
>taking tests where accuracy of copy is the critical issue.

Well, Gary, you've verbalized nicely what I've sort-of-felt.
My question then is "Where to go from here?"
I cant write fast enough to go faster than say 25 WPM, I can't hear
words yet (a few only). I'd like to break the barrier and be able to
(as some buddys do) lean back in the chair and comfortably copy 35+
without writing or tying a thing.
Sounds like I should forget the typewriter, as it appears only good for
code groups, not QSOs.
Any advice for cracking the morse-as-characters to morse-as-words barrier?
Richard Barnaby
AA1IB WOrcester, Vermont

A
A
TIA

1213. Re: comments on RS SWR/Power meter

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 00:34:17 UTC
From: ijordan@freenet2.scri.fsu.edu
Message-ID: <2j9b29$muj@mailer.fsu.edu>
Source record: 271515
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

We own a Radio shack 144/440 Mhz SWR/PWR meter and it seems to work great. We've tried it from .3watts to 60 watts (its full range) and from 1-4 on the swr range. I would reccomend it, but I haven't shopped around for one, we just picked it up to test an old radio we have. Only disadvantage on the 144 Mhz band is that it uses PL-259 connectors, so you might need BNC converters to use it with a handheld.

--
* * Ian Jordan * *
KC7ANP

--
* * Ian Jordan * *
KC7ANP

1214. Re: Law changing?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 01:29:31 UTC
From: linley@netcom.com
Message-ID: <linleyCKxo57.16n@netcom.com>
Source record: 271516

In ye olden post mike@garfield.csuohio.edu (mike mayer) spake...
>mgb@crl.com (Michael G. Beck) writes:
>: When I was perusing the HRO catalog, on the top of a page that was
>: advertising Receivers it said "Get Them before the Law changes!"
>:
>: My question is - What Law, and how is it going to change?
>:
>Probably referring to the fact that after April (26th.?) 1994
>scanners with cellular reception or that are easily cellular-modifiable
>will no longer be approved for manufacture by the FCC, and will no

Does this law only apply to receivers? Plenty of transceivers can be
"easily modified" (whatever that means) to pick up cellular. Heck, some
of the HTs in there like the Icom W2A and 2SRA tune cellular without
modifications. I'd hate to see prices go up because manufacturers are
being made to re-design all their US equipment to comply with a stupid law
bought by cellular carriers. Build a (869-894MHz) radio, go to jail. Sheesh.

--
Bruce James Robert Linley | ___________, ,-----/^\-----. | "I never wanted to
linley@netcom.com KE6EQZ | _NCC-1701_) `-..--_/-----' | be anything but
------------------------- | _______//_ | an engineer."
main(){while(fork()>=0);} | (____________) | - Montgomery Scott

1215. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 02:00:41 UTC
From: alanb@sr.hp.com
Message-ID: <CKxpL6.LKB@srgenprp.sr.hp.com>
Source record: 271517
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <CKvGDJ.GFv@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
: >Consider a vertical dipole in free space. You could insert a horizontal
: >infinite ground plane at the feedpoint without changing the radiation
: >pattern. Now you have two verticals, one pointing up, one pointing down.
: >Each vertical radiates half the power of the original dipole.

: True because each has half the current that flows in the entire dipole.

No, the current is the same, but the power is halved. There are (at least)
two ways to see this: 1) Only 1/2 the voltage is applied to each 1/4-wave
element. Since power = voltage times current, the power is 1/2.
2) The element is only 1/2 as long. So the same current results in
only 1/2 as much power radiated.

Actually, 2) can be derived from 1). (Left as an exercise for the reader :=)

: >Note
: >that the upper vertical (over a groundplane) can generate the same
: >field strength as the dipole (in free space), but with only 1/2 the power.

: No, I disagree with the way you're saying this. The upper vertical in
: this thought experiment has half the current of the dipole and so generates
: half the field. The ground mirror is supplying a 3 db reflection gain that
: makes up for the lower field produced by the current in the upper vertical.

Nope, see above.

: >Now consider a dipole suspended a half wavelength or more over an infinite
: >ground plane. In some directions, it will have 6 dB gain over a dipole
: >in free space, which gives 3 dB gain over the vertical. In other directions,
: >the field will be zero. If you averaged the radiated power over all
: >directions (half sphere), you would find it sums to the same power as the
: >1/4-wave vertical (also averaged over all directions.)

: True, but gain in the main lobe (what we normally mean when we talk about
: gain) is 2X that of the vertical. And in the real world of lossy ground
: planes that make poor current mirrors, the horizontal dipole has a greater
: efficiency.

But to get the 6 dB gain, the dipole depends on ground reflections, just
as the vertical does. It gets very complex trying to compare ground losses
of ground-mounted verticals versus horizontal dipoles because of the many
variables involved (type of earth, number of radials, height above ground,
vertical radiation angle, etc. etc.). That's why assuming a perfect ground
gives a much more usable standard of comparison.

AL N1AL

1216. Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 02:10:14 UTC
From: alanb@sr.hp.com
Message-ID: <CKxq14.LvA@srgenprp.sr.hp.com>
Source record: 271518

I heard a report on the (radio) network news last night to the effect that the national association of golf course managers funded a study to investigate the death rates of golf course managers. The study found that golf course managers have death rates from several kinds of cancer that are significantly higher than the national norm. The study tabulated cause of death from death certificates.

Sounds exactly like the famous Milham study of amateur radio operators which implied that exposure to RF radiation causes cancer. I wonder what the cause is for the golf course managers: too much fresh air?

:=)

AL N1AL

1217. Do NiMH Batteries Dev. Memories?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 02:38:47 UTC
From: f_riskph@ccsvax.sfasu.edu
Message-ID: <1994Feb8.203847.1@ccsvax.sfasu.edu>
Source record: 271519

Do NiMH batteries develop a *memory* like NiCads do if they are recharged too often before they're fully discharged?

TNX
Paul N1DJD

1218. Opinions on ARRL Tech Videos (for Kids)?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 02:57:43 UTC
From: miles@mbs.telesys.utexas.edu
Message-ID: <miles-080294205422@slip-2-91.ots.utexas.edu>
Source record: 271520

Does anyone out in Greater Netland have any experience with the ARRL videos, designed to help you get your no-code Tech license? The $99 set is advertised on pages 20 & 21 of the February QST.

Would they be suitable for use as a study aid for 8 to 10 year old children?

= = = = = = = = = = = = = = = = = = = =
_ Miles Abernathy, N5KOB =
| |__ miles@mbs.telesys.utexas.edu =
_| | POB 7580, Austin TX 78713 =
\ * / University of Texas @ Austin =
\/ tel. (512) 471-6521 U.S.A. =
= = = = = = = = = = = = = = = = = = = =

1219. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 03:10:17 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb9.031017.13806@ke4zv.atl.ga.us>
Source record: 271521

In article <CKxKI7.1IJ@world.std.com> barnaby@world.std.com (Richard L Barnaby) writes:
>Any advice for cracking the morse-as-characters to morse-as-words barrier?

No. I've been a ham 30 years and I still can't do it. If I don't write
it down, I have no idea what's being sent.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1220. Re: BP-8S battery for HTX-202 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 03:41:17 UTC
From: hellman@cbnewsm.cb.att.com
Message-ID: <CKxu8x.4p6@cbnewsm.cb.att.com>
Source record: 271522

In article <PARTOS.94Feb5232328@larry.larc.nasa.gov>, partos@larry.larc.nasa.gov (Dick Partos) writes:
> Does anyone know if the RS HTX-202 can accept the Icom BP-8S battery?
> The battery is rated at 9.6v. Is this too high for the 202 ? I know
> there is a limit to the voltage of the batteries the 202 can
> accomodate, even though it will accept 13.8v via the input on top of
> the radio. Apparently there is a circuitry difference in the two
> inputs, but I don't know what the maximum battery voltage is. Any help
> or experiences appreciated. Dick KE4AZJ
> --
> |---|
> | Richard D. Partos KE4AZJ Norfolk, VA |
> | Internet: r.d.partos@larc.nasa.gov |
> |---|

Please explain to me why you think that is the case. My schemetic
shows no difference between the ext dc input and the battery input.
Shel Darack WA2UBK dara@physics.att.com

1221. SAREX Update for Feb 9 at 3:30 UTC

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 04:04:45 UTC
From: ABFHB@STDVAX.GSFC.NASA.GOV
Message-ID: <940208230445.21c2fb3d@STDVAX.GSFC.NASA.GOV>
Source record: 271523

SB SAREX @ AMSAT $STS-60.014
SAREX Update Feb. 9 at 03:30 UTC

Three of the five school groups slated for STS-60 have now made successful contacts. The most recent success was with the Mars Middle School, in Mars, Pennsylvania. They contacted the Discovery astronauts through a Telebridge in Texas on orbit number 85. The contact was initiated by Cosmonaut/Shuttle Mission Specialist Sergei Krikalev, U5MIR. Jan Davis then joined in on the school group discussion. A total of 9 students were able to ask questions.

Please note one correction from SAREX bulletin, SB008, regarding the SAREX contact between Sergei, U5MIR, and the school group at the House of Science and Technology for Youth in Moscow, Russia. The Cosmonaut who initiated the contact with Sergei was Musa Manarov, U2MIR. Sorry about the error.

School groups interested in communicating with the Shuttle astronauts are reminded to submit an application and proposal to the ARRL to be considered for a future contact. Final SAREX school group selections are decided approximately 6 months prior to the mission launch date. For more information, please write:

Educational Activities Division
ARRL
225 Main St
Newington, CT 06111

School groups are always welcome to listen into a school group contact when a telebridge contact occurs. We had several schools listening to the Mars, PA contact. For more details on how to listen in through the telebridge, please contact the ARRL at the above address or Frank Bauer, KA3HDO of AMSAT. His e-mail address is ka3hdo@amsat.org

The official SAREX element set for today will be GSFC-011. This element sent was generated by Ron Parise, WA4SIR of the Goddard Space Flight Center. Gil Carman, WA5NOM reports that the predictions using GSFC-011 differed from GSFC-009 by approximately 2 seconds.

STS-60
1 22977U 94006A 94 39.59046866 0.00000351 00000-0 69389-5 0 119
2 22977 56.9887 193.2605 0009224 272.9504 87.0508 15.72376812 813

Satellite: STS-60
Catalog number: 22977
Epoch time: 94039.59046866 (08 FEB 94 14:10:16.49 UTC)
Element set: GSFC-011

Inclination: 56.9887 deg
RA of node: 193.2605 deg Space Shuttle Flight STS-60
Eccentricity: 0.0009224 Keplerian Elements
Arg of perigee: 272.9504 deg
Mean anomaly: 87.0508 deg
Mean motion: 15.72376812 rev/day Semi-major Axis: 6730.2383 Km
Decay rate: 0.35E-05 rev/day*2 Apogee Alt: 358.06 Km
Epoch rev: 81 Perigee Alt: 345.64 Km

NOTE - This element set is based on NORAD element set # 011.
The spacecraft has been propagated to the next ascending
node, and the orbit number has been adjusted to bring it
into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO, for the SAREX Working Group

/EX

1222. Re: soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 04:28:31 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseCKxwFJ.Mnt@netcom.com>
Source record: 271524

In article <2j8nvs$44o@inews.intel.com> dbraun@iil.intel.com writes:
>I ended up my gun and a 40-watt iron at the same time. Also remember
>that the cheap nickel-plated connectors are harder to solder than
>the silver-plated ones.

I found that I had to file off the nickel plating around the solder
holes down to the brass, so I could get the solder to "wet" the metal.
Once I learned that trick, I could solder the connector much quicker
and avoid ruining the dielectric of the coax.

1223. Re: Securing VXO coils, what glue?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 05:20:00 UTC
From: tgm@netcom.com
Message-ID: <tgmCKxytD.3sD@netcom.com>
Source record: 271525
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

asirene@ntuvax.ntu.ac.sg wrote:
: I am winding some coils for a VXO and want to know if
: the "glue-gun" melted plastic is suitable for securing the coil
: or if it is too lossy?

The classic solution is Q-dope made by dissolving polystyrene
in a solvent. Polystyrene is plentiful but I can't remember
the proper solvent. I made a gooey useless mess once when I
used a less than optimal solvent. Acetone should work.

Thomas

1224. FCC.GOV on-line

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 05:57:01 UTC
From: bruce@pixar.com
Message-ID: <1994Feb9.055701.25426@pixar.com>
Source record: 271526

[I think it bounced the first time I posted this message. Sorry if it repeats.]

I was able to get e-mail through to the system manager at FCC.GOV today.
FCC now has their own system on the Internet. Expect them to be listening,
too :-) .

Since it takes a lot of work to configure a new system on the net,
I suggest we not flood their system manager with mail, but wait a month
or two until he announces what services are available.

Bruce Perens
--

--
Bruce Perens AB6YM Bruce@Pixar.com 510-215-3502

1225. QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 06:22:59 UTC
From: dab@kaiwan.com
Message-ID: <CKy1qC.GzC@kaiwan.com>
Source record: 271527

I worked YX0AI on Aves Island in Feb/Mar 1992. The QSL info was via YV5A
and I've sent three requests over the past two years with no response.
Has anybody received cards via this route, or is there an alternate/better
route?

Does anybody know if F6FNU QSLs via the bureau?

Does anybody know the current rate (number of cards per dollar) of N7RO's
DX QSLing service?

Thanks for any responses,

73 de Doug - NF6H
--
/*---*/
Doug Brandon [NF6H] Placentia, California dab@kaiwan.com

1226. FCC Daily Digests for the last two weeks or so

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 06:24:29 UTC
From: bruce@pixar.com
Message-ID: <1994Feb9.062429.26976@pixar.com>
Source record: 271378

[Here are all of the FCC daily digests for the last two weeks or so.]
[I had trouble getting to the FCC's system for a while. Fortunately they]
[are going on the net and I won't have to do this for much longer. - Bruce]

Vol. 13, No. 12 January 19, 1994

NEWS RELEASES

CORRECTED TO LIST REPORT NUMBER: HEARNE INDEPENDENT SCHOOL DISTRICT GRANTED ITFS CHANNELS G1-G4 IN BRYAN, TX (Report MM-796, Mass Media Action)
The Commission has granted the application of Hearne Independent School district for a construction permit and license in the Instructional Television Fixed Service on channels G1-G4 in the area of Bryan, TX, and denied the competing application of Leon Independent School District in the area of Bremond, TX.
Action by the Commission January 11 by MO&O (FCC 94-4).
News Media contact: Patricia A. Chew at (202) 632-5050; Mass Media Bureau contact: Marsha Evans at (202) 632-9356.

CORRECTED TO LIST REPORT NUMBER: FCC GRANTS LIMITED WAIVER OF SECTION 99.204 OF ITS RULES TO PACIFIC TELESIS GROUP AND PACTEL CORPORATION (Report GN-152, General Action)
The Commission has granted a request by Pacific Telesis Group , on behalf of its subsidiaries Pacific Bell and Nevada Bell, and PacTel Corporation for a limited waiver of Section 99.204 of its rules.
Action by the Commission January 14 by Order (FCC 94-8).
News Media contact: Audrey Spivack at (202) 632-5050; Office of Plans and Policy contact: Jonathan Cohen at (202) 653-5940.

PUBLIC NOTICES

ADVISORY COMMITTEE ON ADVANCED TELEVISION SERVICE - Schedule of Meetings

Report 15719 - BROADCAST APPLICATIONS

Report 21806 - BROADCAST ACTIONS

Report PMS-94-17-A - COMMON CARRIER PUBLIC MOBILE RADIO SERVICE INFORMATION

Report CL-94-29 - COMMON CARRIER PUBLIC CELLULAR RADIO SERVICE INFORMATION - CELLULAR TRANSFER/ASSIGNMENT APPLICATIONS ACCEPTED FOR FILING

Report CL-94-30 - COMMON CARRIER PUBLIC CELLULAR RADIO SERVICE INFORMATION
Report DS-1387 - COMMON CARRIER SERVICES INFORMATION RE: SATELLITE RADIO APPLICATIONS ACCEPTED FOR FILING

Report 1066 - PRIVATE RADIO BUREAU - PART 21 RECEIPTS AND DISPOSALS: Week of January 4 thru January 11

TEXTS

AT&T COMMUNICATIONS. Denied applications for review of six Common Carrier Bureau orders denying petitions to reject or to suspend and investigate various transmittals which introduced, or revised rates for, various AT&T services. (By MO&O [FCC 93-540] adopted December 9 by the Commission)

AT&T COMMUNICATIONS. Denied applications by MCI Telecommunications Corp. for review of ten 1991 and 1992 Common Carrier Bureau orders that allowed various AT&T tariff transmittals relating to AT&T's 800 service to become effective. (By MO&O [FCC 93-541] adopted December 9 by the Commission)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY. Denied applications by U.S. Sprint Communications Company Limited Partnership and MCI Telecommunications Corp. for review of six November 1990 Common Carrier Bureau orders that allowed various AT&T transmittals which introduced AT&T's Virtual Telecommunications Network Service to become effective. (By MO&O [FCC 93-542] adopted December 9 by the Commission)

AT&T COMMUNICATIONS. Denied applications by MCI Telecommunications Corp. for review of 12 Common Carrier Bureau orders issued from February 25 to July 15, 1992, that allowed various AT&T contract tariffs to become effective. (By MO&O [FCC 93-537] adopted December 9 by the Commission)

LCI INTERNATIONAL vs. BELLSOUTH TELECOMMUNICATIONS, INC. Dismissed, with prejudice, complaint filed by LCI

International against BellSouth Telecommunications, Inc. seeking damages resulting from BellSouth's alleged violations of the Commission's rate of return prescription. (By Order [DA 94-36] adopted January 6 by the Chief, Formal Complaints and Investigations Branch, Enforcement Division, Common Carrier Bureau)

US WEST. Upheld six Common Carrier Bureau orders allowing the following transmittals to become effective: US West, Tariff F.C.C. No. 1, Transmittal Nos. 6 and 30; New York Telephone Company, Tariff F.C.C. No. 41; Transmittal No. 909; Communications Satellite Corp. (Comsat), Tariff F.C.C. No. 103, Transmittal No. 723; New York Telephone Co., Tariff F.C.C. No. 41, Transmittal Nos. 1035 and 1059; New England Telephone Co., Tariff F.C.C. No. 40, Transmittal Nos. 1048 and 1071; Bell Atlantic Telephone Cos., Tariff F.C.C. No. 1, Transmittal Nos. 359 and 375; Western Union Corporation, Tariff F.C.C. No. 286, 287, 288, and 289 Transmittal No. 8740. (By MO&O [FCC 93-539] adopted December 9 by the Commission)

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ADDENDUM: The following items, released January 14 were not listed on Digest 10:

TEXTS

AT&T COMMUNICATIONS. Denied petition filed by The Furst Group, Inc. and Winback and Conserve Program, Inc. to reject AT&T Communications Tariff F.C.C. No. 2 Transmittal No. 6282 which introduced an 800 Customer Specific Term Plan II (CSTP II) promotion in which AT&T offers a usage credit to existing or new term plan customers who subscribe to a new or upgraded CSTP II. Effective date January 15, 1994. (By Order [DA 94-60] adopted January 14 by the Chief, Tariff Division, Common Carrier Bureau)

CINCINNATI BELL TELEPHONE COMPANY. Denied petitions filed by American Telephone and Telegraph, MCI Telecommunications Corporation and Allnet Communications Services, Inc. to reject Cincinnati Bell Telephone Company Tariffs F.C.C. Nos. 35 and 40 Transmittal No. 636 implementing its own optional incentive regulation plan permitted in the Commission's Regulatory Reform Order. Effective date January 15, 1994. (By Order [DA 94-53] adopted January 13 by the Acting Chief, Common Carrier Bureau)

Vol. 13, No. 15 January 25, 1994

PUBLIC NOTICES

REQUEST BY WAVEPHORE, INC. FOR A CLARIFICATION OF THE TELEVISION RULES TO ALLOW DIGITAL DATA TRANSMISSION WITHIN THE VIDEO PORTION OF TELEVISION STATION TRANSMISSIONS - Comments are due March 14; replies March 29 - Contact: David O. Bennett at (202) 632-6495 (DA 94-67)

Report 94-1 - FM TRANSLATOR-BOOSTER APPLICATIONS CUT-OFF FEBRUARY 25 READY AND AVAILABLE FOR PROCESSING

TEXTS

TITUSVILLE, FL. Effective March 10, substituted Channel 251C1 for Channel 251C2 at Titusville and modified the license of WGNE(FM) accordingly. (By R&O [DA 93-1546] adopted December 30 by the Acting Chief, Allocations Branch, Mass Media Bureau)

TAYLORVILLE, IL. Effective March 10, allotted Channel 232A at Taylorville as that community's second local service and terminated proceeding. Window opens March 11; closes April 11. (By R&O [DA 93-1582] adopted December 30 by the Acting Chief, Allocations Branch)

HERMANTOWN, MN. Effective March 10, allotted Channel 221A at Hermantown as that community's first local service and terminated proceeding. Window opens March 11; closes April 11. (By R&O [DA 93-1547] adopted December 30 by the Acting Chief, Allocations Branch)

MINETTO, NY. Effective March 10, allotted Channel 293A at Minetto as that community's first local service and terminated proceeding. Window opens March 11; closes April 11. (By R&O [DA 93-1585] adopted December 30 by the Acting Chief, Allocations Branch)

OCEAN ISLE BEACH, NC. Proposed allottment of Channel 228A at Ocean Isle Beach as that community's first local service. Comments are due March 17; replies April 1. (By NPRM [DA 93-1535] adopted December 21 by the Acting Chief, Allocations Branch)

ATHENS, OH. Effective March 10, allotted Channel 240A at Athens as that community's second local service and terminated proceeding. Window opens March 11; closes April 11. (By R&O [DA 93-1584] adopted December 30 by

the Acting Chief, Allocations Branch)

QUINCY, WA. Effective March 10, allotted Channel 240C3 at Quincy as that community's second local service and terminated proceeding. Window opens March 11; replies April 11. (By R&O [DA 93-1583] adopted December 30 by the Acting Chief, Allocations Branch)

REQUEST FOR CARRIAGE. Granted request by Greater Dayton Public Television, licensee of educational television station WPTO-TV, Channel 14, Oxford, OH, and ordered TCI Cablevision of Indiana, Inc. to commence carriage of WPTO-TV on its cable television system serving Dublin, IN. (By MO&O [DA 93-1561] adopted December 8 by the Chief, Mass Media Bureau)

REQUEST FOR CARRIAGE. Granted request by Central Missouri State University, licensee of educational television station KMOS-TV, Channel 6, Sedalia, MO, and ordered Friendship Cable of Missouri to commence carriage of KMOS-TV on its cable television system serving Greenview, MO. (By MO&O [DA 93-1571] adopted December 13 by the Chief, Mass Media Bureau)

REQUEST FOR CARRIAGE. Granted request by Michigan State University, licensee of educational television station WKAR-TV, East Lansing, MI, and ordered Crystal Cable TV, Inc. to commence carriage of WKAR-TV on its cable television system serving Crystal, MI. (By MO&O [DA 93-1572] adopted December 15 by the Chief, Mass Media Bureau)

US WEST COMMUNICATIONS, INC., ET AL. Granted petitions filed by US West Communications, Inc.; Nemont Telephone Cooperative, Inc., Project Telephone Company, and Valley Telecommunications, Inc. seeking waiver of the definition of "study area" which would allow the parties to reflect the changes in their study area boundaries that would result from the sale from US West to Nemont and its wholly owned subsidiaries Project and Valley; also granted waiver request filed by Nemont Telephone Cooperative, Inc., Project Telephone Company, and Valley Telecommunications, Inc. seeking exemption from the price cap "all or nothing" rule and to allow Valley to operate as a cost company in the NECA common line and traffic sensitive pools. (By MO&O [DA 94-54] adopted January 13 by the Deputy Chief (Operations), Common Carrier Bureau)

DANN OCEAN TOWING, INC. Notified Dann Ocean Towing, Inc. of its apparent liability of forfeiture in the reduced amount of $600 for using an unauthorized

frequency by a marine station. (By Order [DA 94-41] adopted January 6 by the Chief, Field Operations Bureau)

PACIFIC BELL. Granted waiver request filed by Pacific Bell requesting approval to reallocate certain equipment from nonregulated cost pools to regulated cost pools. (By MO&O [DA 94-55] adopted January 13 by the Acting Chief, Common Carrier Bureau)

ERRATUM to MO&O on Reconsideration released December 13 In re Applications Metro Mobile CTS, Inc., McElroy Electronics, Inc. and JAJ Cellular. (DA 94-62)

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ADDENDUM: The following items, released January 19, were not listed on Digest 12:

PUBLIC NOTICES

Report PMS-94-16 - COMMON CARRIER PUBLIC MOBILE SERVICES INFORMATION RE: APPLICATIONS ACCEPTED FOR FILING

Report DS-1388 - DOMESTIC FIXED SATELLITE SERVICE

Report 1998 - PETITIONS FOR RECONSIDERATION OF ACTIONS IN RULEMAKING PROCEEDINGS

SPEECH

REMARKS OF COMMISSIONER ERVIN S. DUGGAN BEFORE THE FEDERAL COMMUNICATIONS BAR ASSOCIATION, WASHINGTON, D.C., JANUARY 19, 1994

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ADDENDA: The following items, released January 21, were not listed on Digest 13:

PUBLIC NOTICES

Report 15721 - BROADCAST APPLICATIONS

Report 21808 - BROADCAST ACTIONS

Report D-731 - COMMON CARRIER BUREAU DOMESTIC FACILITIES APPLICATIONS RE: APPLICATIONS ACCEPTED FOR FILING

Report D-731-A - COMMON CARRIER BUREAU DOMESTIC FACILITIES APPLICATIONS

Report 1727 - PRIVATE RADIO BUREAU: Week of January 17
thru January 14

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ADDENDUM: The following items, released January 24, were
not listed on Digest 14:

NEWS RELEASE

MAUREEN O'CONNELL NAMED LEGAL ADVISOR TO COMMISSIONER
QUELLO

SPEECH

REMARKS OF CHAIRMAN REED E. HUNDT, CHAIRMAN, FEDERAL
COMMUNICATIONS COMMISSION, NATPE/INTV CONVENTION, MIAMI,
FL, JANUARY 24, 1994

DAILY DIGESTVol. 13, No. 16 January 26, 1994

NEWS RELEASES

COMMISSION REMANDS PROCEEDING
CONCERNING AM STATION WCBM, 680 KHZ,
BALTIMORE, MD - MM DOCKET 90-125 (Report DC-
2560, Action in Docket Case)
Remanded the proceeding involving application of Bennett
Gilbert Gaines for renewal of the license for AM station
WCBM, 680 kHz, Baltimore, MD, and for assignment of
the license from Gaines to WCBM Maryland, Inc.
Action by the Commission January 24 by MO&O (FCC
94-14)
News Media contact: Patricia A. Chew at (202) 632-
5050.

HAVE YOU HEARD THE NEWS - EBS ACTIVATIONS

BARBARA S. ESBIN NAMED ASSISTANT CHIEF,
TARIFF DIVISION

PUBLIC NOTICES

ADVISORY COMMITTEE ON ADVANCED
TELEVISION SERVICE - SCHEDULE OF MEETINGS

TARIFF TRANSMITTAL PUBLIC REFERENCE LOGS -
JAN. 19, JAN. 24, JAN. 25

COMMENTS INVITED ON FLORIDA PUBLIC SAFETY
PLAN AMENDMENT - Comments March 4, replies March
21; contact: Betty Woolford at (202) 632-6497 or Ray La
Forge at (202) 653-8112.

PUBLIC INFORMATION COLLECTION
REQUIREMENT SUBMITTED TO OMB FOR REVIEW
- Contact: Judy Boley at (202) 632-0276

Reports 15720, 15722 - BROADCAST APPLICATIONS

Reports 21807, 21809 - BROADCAST ACTIONS

Report 978 - CABLE TELEVISION SERVICE
REGISTRATIONS; SPECIAL RELIEF AND SHOW
CAUSE PETITIONS

Report 1143 - CABLE TV RELAY SERVICE (CARS)
APPLICATIONS ACCEPTED FOR FILING

Report 3482 - CABLE TELEVISION ACTIONS

Report PMS-94-17 - COMMON CARRIER PUBLIC
SERVICES INFORMATION

Report PMS-94-18-A - COMMON CARRIER PUBLIC
MOBILE RADIO SERVICE INFORMATION

Reports D-732, 732-A - COMMON CARRIER BUREAU
DOMESTIC FACILITIES APPLICATIONS

Reports DS-1389, 1390 - COMMON CARRIER SERVICES
INFORMATION

Report I-6919 - OVERSEAS SECTION 214
APPLICATIONS ACCEPTED FOR FILING

TEXT

GENERAL SALES EQUIPMENT, SANTA MONICA, CA.
Cancelled forfeiture order. (By Order [DA 94-39] adopted
January 7 by the Chief, Field Operations Bureau)

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ADDENDUM: The following item, released January 25,
was not listed on Digest 15:

PUBLIC NOTICE

BELL ATLANTIC PETITIONS FOR WAIVER OF
SECTION 69.40(B); comments due February 24, replies
March 11; contact: Wanda M. Harris at (202) 632-6917.

Report No. DC-2560 ACTION IN DOCKET CASE January 26, 1994

COMMISSION REMANDS PROCEEDING CONCERNING AM STATION
WCBM, 680 KHZ, BALTIMORE, MD
(MM DOCKET NO. 90-125)

The FCC, on its own motion, has remanded the proceeding regarding the application of Bennett Gilbert Gaines for renewal of the license for AM station WCBM, 680 kHz, Baltimore, MD, and for assignment of the license from Gaines to WCBM Maryland, Inc. The Commission remanded the proceeding for further hearing with respect to the candor of WCMB Maryland's principal, Nicholas B. Mangione.

The Commission affirmed all other aspects of the Board's decision thereby denying an application for review filed by Mount Vernon Broadcasting.

Station WCBM was licensed to Magic 680, Inc. Gaines was appointed Interlocutory Receiver for the benefit of Magic 680's creditors and the Commission approved the assignment of license for WCBM to Gaines. Gaines agreed to transfer the license to WCBM Maryland and negotiated a consulting agreement with WCBM Maryland to operate the station on his behalf. Mount Vernon, a mutually exclusive applicant, argued that the Board erred in finding that it financially unqualified to be a licensee, and in failing to find that Gaines made an unauthorized transfer of control of the station to WCBM Maryland, and that Mangione gave false testimony.

The Commission remanded the proceeding to the presiding judge for expedited hearing and preparation of a Supplemental Initial Decision to determine whether Mangione made material misrepresentations with respect to his involvement in the management of WCBM and the proposed management of WCBM Maryland; and to determine whether WCBM Maryland possesses the basic qualifications to be a licensee.

Action by the Commission January 24, 1994, by Memorandum Opinion and Order (FCC 94-14). Chairman Hundt, Commissioners Quello, Barrett, and Duggan.

-FCC-

News Media contact: Patricia A. Chew at (202) 632-5050.

DAILY DIGESTVol. 13, No. 17 January 27, 1994

PUBLIC NOTICES

Report 15723 - BROADCAST APPLICATIONS

CORRECTION to BROADCAST APPLICATION, Report 15722, released January 26

Report 21810 - BROADCAST ACTIONS

SUNSHINE AGENDA

FCC TO HOLD OPEN MEETING, THURSDAY, FEB.
3, 10 AM, 1919 M St., NW, Washington, DC, Room 856

SPEECH

STATEMENT OF FCC CHAIRMAN REED E. HUNDT
BEFORE THE SUBCOMMITTEE ON
TELECOMMUNICATIONS AND FINANCE,
COMMITTEE ON ENERGY AND COMMERCE,
UNITED STATES HOUSE OF REPRESENTATIVES, on
H.R. 3636, the "National Communications competition and
Information Infrastructure Act of 1993" and H.R. 3626, the
"Antitrust Reform Act of 1993" and the "Communications
Reform Act of 1993," January 27

TEXTS

The Chief, Mass Media Bureau, by Letters adopted January
24 admonished the following media for violation of the
Commission's political programming rules:

Storer Cable, Louisville, KY (DA 94-82);

KORO(TV), Corpus Christi, TX (DA 94-80);

KFAB(AM), Omaha, NE (DA 94-81);

KZTV(TV), Corpus Christi, TX (DA 94-83)

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ADDENDUM: The following items, released January 26,
were not listed on Digest 16:

NEWS RELEASE

SUPPLEMENT TO FCC CALENDAR OF EVENTS FOR
THE WEEK OF JANUARY 24

PUBLIC NOTICES

Report I-6917 - OVERSEAS COMMON CARRIER
SECTION 214 APPLICATIONS - ACTIONS TAKEN

Report I-6918 - INTERNATIONAL AND SATELLITE
APPLICATIONS ACCEPTED FOR FILING

Report I-6919 - OVERSEAS SECTION 214
APPLICATIONS ACCEPTED FOR FILING

Report 1067 - PRIVATE RADIO BUREAU, PART 21
RECEIPTS AND DISPOSALS, WEEK OF JAN. 8 - 15

DAILY DIGESTVol. 13, No. 18 January 28, 1994

NEWS RELEASES

DEPRECIATION RATES PRESCRIBED FOR ELEVEN
LECS (Report CC-560 , Common Carrier Action)
The Commission has prescribed depreciation rates
and amortizations for 11 local exchange carriers (LECs) that
filed requests for such changes in 1993.
News Media contact: Rosemary Kimball at (202)
632-5050; Common Carrier Bureau contact: Fatina K.
Franklin at (202) 632-7500.

AMATEUR RADIO CALL SIGNS

FCC FILINGS

FCC CALENDAR OF EVENTS FOR THE WEEK OF
JANUARY 31

PUBLIC NOTICES

TARIFF TRANSMITTAL PUBLIC REFERENCE LOG:
January 27

TARIFF TRANSMITTAL PUBLIC REFERENCE LOG:
January 26

EX PARTE PRESENTATIONS AND POST-REPLY
COMMENT PERIOD FILINGS IN NON-RESTRICTED
PROCEEDINGS - Contact: Barbara Lowe at (202) 632-
4178

GUIDELINES FOR UNIFORM FILINGS

GOVERNMENT AND NONGOVERNMENT
PUBLICATIONS SOURCES

Report CL-94-31 - COMMON CARRIER PUBLIC
CELLULAR RADIO SERVICE INFORMATION

Report 1997 - ASSOCIATE MANAGING DIRECTOR
PUBLIC INFORMATION AND REFERENCE SERVICES
PETITIONS FOR RULEMAKING FILED

Report 1995 - PETITION FOR RECONSIDERATION OF
ACTION IN RULEMAKING PROCEEDING

TEXTS

RICHARD BOTT II AND WESTERN
COMMUNICATIONS, INC. Granted motion for summary
decision filed by Richard Bott II and resolved Issues (a),
(b), and (c) is his favor; granted the application for
assignment of construction permit of station KCVI(FM), at
Blackfoot, ID, from Richard Bott II to Western
Communications, Inc. (By Summary Decision [FCC 94D-
1] adopted January 19 by ALJ Arthur I. Steinberg)

MOBILCOM PITTSBURG, INC. Denied Mobilcom
Pittsburg, Inc.'s application for review of a Private Radio
Bureau decision renewing two of five channels previously
authorized to Mobilcom's Specialzed Mobile Radio system,
WNGC-453.; cancelled the other three channels because
they were not timely loaded by Mobilcom. (By Order [FCC
94-7] adopted January 11 by the Commission)

AMERICAN PUBLIC COMMUNICATIONS. Granted
motion to dismiss petition for declaratory ruling seeking
waiver or suspension of the Commission's rules which
require call aggregators to unblock equal access codes; and
terminated proceeding. (By Order [DA 94-64] adopted
January 21 by the Chief, Formal Complaints and
Investigations Branch, Enforcement Division, Common
Carrier Bureau)

TIMOTHY J. PUGH. Notified Timothy J. Pugh of his
notice of apparent liability of forfeiture in the reduced
amount of $50 for operation of an unlicensed station on a
taxicab frequency from his boat. (By Order [DA 94-73]
adopted January 24 by the Chief, Field Operations Bureau)

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ADDENDA: The following items, released January 27,
1994, were not listed on Digest 17:

NEWS RELEASE

DEFINITION OF "USE" IN POLITICAL
BROADCASTING RULES AMENDED - MM DOCKET
91-168 (Report DC-2561, Action in Docket Case)
The Commission has returned to its original,
broader, definition "use" for purposes of the political
broadcasting rules that was in effect prior to the adoption of
the Report and Order in this proceeding.

Action by the Commission January 3 by MO&O
(FCC 94-1).
News Media contact: Rosemary Kimball at (202)
632-5050; Mass Media Bureau contact: Milton O. Gross or
Robert L. Baker at (202) 632-7586.

TEXTS

POLITICAL PROGRAMMING RULES. See first item
under Addenda "News Release."

BELLSOUTH TELECOMMUNICATIONS. Denied
petition filed by MFS Communications Company to reject
BellSouth Telecommunications Tariff F.C.C. No. 1
transmittal Nos. 149 and 184 which introduced Smartpath,
a shared high capacity netrwork which provides a 1.544
Mbps transport link. (By Order [DA 94-41] adopted January
27 by the Acting Chief, Common Carrier Bureau)

DAILY DIGESTVol. 13, No. 19 January 31, 1994

PUBLIC NOTICES

Report No. 222 - MASS MEDIA BUREAU CALL SIGN
ACTIONS

Report No. 15725 - BROADCAST APPLICATIONS

Report No. 21812 - BROADCAST ACTIONS

TEXTS

SOCIETY HILL AND MONTGOMERY, AL. Granted
the application of the Autauga County Public School System
for a construction permit and license in the Instructional
Television Fixed Service (ITFS) on Channels G1, G2, G3
and G4 to serve Montgomery, AL; denied the competing
application of Pike County Board of Education for ITFS
facilities at Society Hill, AL. (By MO&O [FCC 94-6]
adopted January 11 by the Commission)

BALTIMORE, MD. Remanded the proceeding involving
application of Bennett Gilbert Gains for renewal of the
license for AM station WCBM, 680 kHz, Baltimore, MD,
and for assignment of the license from Gaines to WCBM
Maryland, Inc. (MM Docket 90-125 by MO&O [FCC 94-
14] adopted January 24 by the Commission)

WOODWARD, OK. Granted the application of Mooreland Public Schools for a construction permit and license in the Instructional Television Fixed Service (ITFS) on Channels D1-D4 in the area of Woodward, OK; denied the mutually exclusive application of Woodward Hospital and Health Center for an ITFS service to serve the same community. (By MO&O [FCC 94-5] adopted January 11 by the Commission)

BRYAN AND BREMOND, TX. Granted the application of Bryan Independent School District for a construction permit and license in the Instructional Television Fixed Service (ITFS) on Channels A1-A4 in Bryan, TX; denied the competing application of Franklin Independent School ITFS channels at Bremond. (By MO&O [FCC 94-3] adopted January 11 by the Commission)

BRYAN AND BREMOND, TX. Granted the application of Hearne Independent School District for a construction permit and license in the Instructional Television Fixed Service on Channels G1-G4 in the area of Bryan, TX; denied the application of Leon Independent School District for the area of Bremond, TX. (By MO&O [FCC 94-4] adopted January 11 by the Commission)

ALLNET COMMUNICATIONS SERVICE, INC. V. CENTRAL TELEPHONE COMPANY OF NEVADA, ET AL. Granted joint motion and dismissed with prejudice Allnet's complaint against Central Telephone, et al., seeking damages resulting from the alleged violations of the Commission's rate of return prescription for the period January 1, 1989 through December 31, 1990. (By Order [DA 94-75] adopted January 21 by the Chief, Formal Complaints and Investigations Branch, Common Carrier Bureau)

CHARTER NETWORK COMPANY V. UNITED TELEPHONE COMPANY OF OHIO, ET AL. Granted joint motion and dismissed with prejudice Charter Network and LCI International's complaint against United Telephone, et al., seeking damages resulting from United's alleged violations of the Commission's rate of return prescription for the period January 1, 1989 through December 31, 1990. (By Order [DA 94-76] adopted January 21 by the Chief, Formal Complaints and Investigations Branch)

DEPRECIATION RATES PRESCRIBED FOR 11 LECS. The Commission has prescribed depreciation rates and amortization for 11 local exchanges carriers (LECS) that filed requests for such charges in 1993. (By MO&O [FCC 94-13] adopted January 24 by the Commission)

TRANSPORT RATE STRUCTURE AND PRICING.
Modified certain features of the price cap regulatory system
applicable to LECs transport rates. (CC Docket 91-213 by
Second R&O [FCC 94-9] adopted January 19 by the
Commission)

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ADDENDA: The following items released January 28 were
not listed on Digest 18:

NEWS RELEASE

SUPPLEMENT TO FCC CALENDAR OF EVENTS FOR
THE WEEK OF JANUARY 31

PUBLIC NOTICES

Report No. 15724 - BROADCAST APPLICATIONS

Report No. 21811 - BROADCAST ACTIONS

Report 1728 - PRIVATE RADIO BUREAU ACTIONS -
January 18 through January 21

TEXT

PIONEER'S PREFERENCE RULES. Completed review
of the pioneer's preference rules with respect to the
applicability of any changes in those rules to proceedings in
which Tentative Decisions have been issued. (ET Docket
No. 93-266 by First R&O [FCC 93-551] adopted December
23 by the Commission)

DAILY DIGESTVol. 13, No. 20 February 1, 1994

PUBLIC NOTICES

THE OFFICE OF ENGINEERING AND TECHNOLOGY
PRESENTS A TUTORIAL ON "WIRELESS
COMMUNICATIONS AND ENHANCED 911
SERVICES," March 24, 1 PM, Room 856, 1919 M St.,
NW, Washington, DC - Contact: Jack Linthicum at (202)
653-8160

PUBLIC INFORMATION COLLECTION
REQUIREMENTS SUBMITTED TO OMB FOR REVIEW
- Contact: Judy Boley at (202) 632-0276 (two items)

Report 15726 - BROADCAST APPLICATIONS

Report 21813 - BROADCAST ACTIONS

Report CL-94-32 - COMMON CARRIER PUBLIC
MOBILE SERVICES INFORMATION

Report CL-94-33 - COMMON CARRIER PUBLIC
CELLULAR RADIO SERVICE INFORMATION

TEXTS

ITT FEDERAL SERVICES CORP. Authorized to establish channels of communication between the U.S. and INTELSAT Atlantic Ocean Region Satellites for the provision of INTELSAT Business Service. (By O&A [DA 94-68] adopted January 13 by the Chief, International Facilities Division, Common Carrier Bureau)

MARIGA COMMUNICATIONS CORP. Authorized to transfer control of Mariga Communications Corp. and subsequently assign its Section 214 authorization. (By MO, O&A [DA 94-69] adopted January 13 by the Chief, International Facilities Division)

NATIONAL BROADCASTING CO. Authorized to modify the licenses of six temporary-fixed KU-band earth stations to add the INTELSAT System for the transmission of TV signals to points within the continental U.S. from U.S. territories and possessions. (By MO,O&A [DA 94-70] adopted January 21 by the Chief, International Facilities Division)

JOHN H. MARKLEY. Cancelled $500 forfeiture for unlicensed transmission on a maritime frequency. (By Order [DA 94-65] adopted January 13 by the Chief, Field Operations Bureau)

PRECISION ENGINEERING INDUSTRIES, SUN VALLEY, CA. Ordered to forfeit $4,000 for failing to supply a sample of a transmitter and receiver as requested by the FCC's Authorization and Evaluation Division. (By Forfeiture Order [DA 94-86] adopted January 13 by the Chief, Enforcement Division, Field Operations Bureau)

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ADDENDUM: The following items, released January 31, were not listed on Digest 19:

PUBLIC NOTICE

FCC REVISES APPLICATION FOR AMATEUR
OPERATOR/PRIMARY STATION LICENSE - Contact:
(717) 337-1212

TEXTS

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800 DATA BASE ACCESS TARIFFS AND THE 800
SERVICE MANAGEMENT SYSTEM TARIFF. Denied
petitions for waiver of the Designation Order's requirement
to disclose 800 database cost support filed by the
participating BOCs, US West and GTE. (CC Docket 93-
129, by Order [DA 93-129] adopted January 31 by the
Acting Chief, Common Carrier Bureau)

GUAM TELEPHONE CO. Allowed to become effective
Guam Telephone Co's Transmittal Nos. 5 and 6 to
implement one of several steps to comply with the
requirements of the Commission's 1992 Show Cause Order.
(By Order [DA 94-98] adopted January 31 by the Chief,
Tariff Division, Common Carrier Bureau)

DAILY DIGESTVol. 13, No. 21 February 2, 1994

PUBLIC NOTICES

PLEADING CYCLE ESTABLISHED FOR COMMENTS
ON NECA'S 1994 PROPOSED MODIFICATIONS TO
THE INTERSTATE AVERAGE SCHEDULE FORMULA;
comments due March 1, replies March 15; contact: Kent
Nilsson at (202) 634-1861. (DA 94-89)

NON-VOICE, NON-GEOSTATIONARY MOBILE
SATELLITE SERVICE - ORBITAL COMMUNICATIONS
CORP. APPLICATION - Comments due March 4, replies
March 21; contact: Kristi Kendall at (202) 634-7058 (DA
94-110).

TELECOMMUNICATION RELAY SERVICES (TRS)
FUND - TRS FUND ADMINISTRATOR FILES FUND
REQUIREMENTS FOR THE PERIOD OF APRIL 1994
THROUGH MARCH 1995; contact: Linda Dubroof at
(202) 634-1808 or Jim Lande at (202) 632-1371.

PUBLIC INFORMATION COLLECTION
REQUIREMENTS SUBMITTED TO OMB FOR REVIEW
- Contact: Judy Boley at (202) 632-0276

NOTICE OF PROHIBITED PRESENTATION RECEIVED
DURING SUNSHINE PERIOD -- CC DOCKET 92-297

Report 15727 - BROADCAST APPLICATIONS

Report 21814 - BROADCAST ACTIONS

Report 1144 - CABLE TV RELAY SERVICE (CARS)
APPLICATIONS ACCEPTED FOR FILING

Report 3484 - CABLE TELEVISION ACTIONS

Report PMS-94-18 - COMMON CARRIER PUBLIC
MOBILE SERVICES INFORMATION

Report PMS-94-19-A - COMMON CARRIER PUBLIC
MOBILE RADIO SERVICE INFORMATION

Reports D-733, 733-A - COMMON CARRIER BUREAU
DOMESTIC FACILITIES APPLICATIONS

Reports DS-1391-2 - COMMON CARRIER SERVICES
INFORMATION

Report CL-94-34 - COMMON CARRIER PUBLIC
CELLULAR RADIO SERVICE INFORMATION

Report I-6920 - OVERSEAS COMMON CARRIER
SECTION 214 APPLICATIONS ACTIONS TAKEN

Report I-6921 - INTERNATIONAL AND SATELLITE
APPLICATIONS ACCEPTED FOR FILING

Report I-6922 - OVERSEAS SECTION 214
APPLICATIONS ACCEPTED FOR FILING

Report 1068 - PRIVATE RADIO BUREAU - PART 21
RECEIPTS AND DISPOSALS - WEEK OF JANUARY 17
THROUGH 24

TEXTS

BATON ROUGE MSA LIMITED PARTNERSHIP.
Notified of apparent liability for forfeiture of $20,000 for
violation of the cellular telephone ownership rules in
connection with its system in Market 80, Baton Rouge (LA)
MSA. (By MO&O and NAL [DA 94-87] adopted January
26 by the Acting Chief, Common Carrier Bureau)

FAMILY ENTERTAINMENT NETWORK, INC. Denied
reconsideration of dismissal of its MMDS application for
Sioux Falls, SD. (By Order [DA 94-92] adopted January 27
by the Chief, Domestic Facilities Division, Common Carrier
Bureau)

BOYD B. HOPKINS, SR. Denied reconsideration of
dismissal of MMDS applications for Sioux Falls, SD. (By
Order [DA 94-93] adopted January 27 by the Chief,
Domestic Facilities Division)

SIOUX VALLEY RURAL TELEVISION, INC. Denied
petitions to deny Sioux Valley's application for renewal of
its conditional MMDS license for channels at Colman, SD.
(By MO&O [DA 94-94] adopted January 27 by the Chief,
Domestic Facilities Division)

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ADDENDUM: The following items, released February 1,
were not listed on Digest 20:

NEWS RELEASES

FCC RELEASES POLICY STATEMENT ON EEO
BROADCAST RULES ENFORCEMENT AND
ANNOUNCES EEO SANCTIONS AGAINST CABLE
AND BROADCAST OUTLETS
The FCC announced today several actions which
reaffirm its commitment to effective enforcement of its
broadcast Equal Employment Opportunity (EEO) rules. The
Commission released a Policy Statement establishing
guidelines for assessing forfeitures for violations of the
Commission's broadcast EEO rules and also announced a
number of EEO enforcement actions. The Policy Statement
re-establishes the base forfeiture amount for violations of the
broadcast EEO rules at $12,500. It also provides guidance
on which situations may lead to such a forfeiture, and
describes circumstances in which the base forfeiture amount
may be adjusted upward or downward.
Action by the Commission January 31 by Policy Statement
(FCC 94-27)
News Media contact: Susan Lewis Sallet at (202) 632-
5050; Mass Media Bureau contact: Roderick Porter at (202)
632-6460.

SIX TEXAS STATIONS GRANTED SHORT TERM
LICENSE RENEWALS SUBJECT TO FORFEITURES
AND REPORTING CONDITIONS (Report MM-803, Mass
Media Action)
Granted, subject to sanctions, the renewal applications of
Stauffer Communications, Inc., for stations KBNC/KGNC-
FM; Waller Broadcasting, Inc., for stations
KEBE/KOOI(FM), and First Greenville Corp. for stations
KGVL/KIKT(FM).
Action by the Commission January 31 by MO&O and
NAL (FCC 94-20).
News Media contact: Susan Lewis Sallet at (202) 632-
5050; Mass Media Bureau contact: Roderick Porter at (202)
632-6460.

ADELPHIA COMMUNICATIONS, PALM BEACH COUNTY, FL, FOUND IN VIOLATION OF THE EEO RULE; NOTIFIED OF FORFEITURE IN THE AMOUNT OF $121,500 (Report MM-798, Mass Media Action)
The Commission has denied cable certification for Adelphia Communications Corporation for Unit 305, Palm Beach County, FL and notified Adelphia of an apparent liability for forfeiture in the amount of $121,500 for violating the Commission's Equal Employment Opportunity rules.
Action by the Commission January 31 by MO&O and NAL (FCC 94-22).
News Media contact: Susan Lewis Sallet at (202) 632-5050; Mass Media Bureau contact: Roderick Porter at (202) 632-6460.

KKCB/KSLY-FM, SAN LUIS OBISPO, KTMS/KHTY-FM, SANTA BARBARA, GRANTED SHORT-TERM RENEWALS SUBJECT TO FORFEITURES AND REPORTING CONDITIONS (Report MM-799, Mass Media Action)
Following review of their respective EEO (Equal Employment Opportunity) programs, the Commission has granted, subject to sanctions, the license renewal applications for the following licensees: San Luis Obispo Limited Partnership for stations KKCB/KSLY-FM and Pinnacle Communications, Inc. for stations KTMS/KHTY-FM. The National Association for the Advancement of Colored People (NAACP) and the National Black Media Coalition (NBMC) petitioned the applications of both licensees.
Action by the Commission January 31 by MO&O and NAL (FCC 94-21).
News Media contact: Susan Lewis Sallet at (202) 632-5050; Mass Media Bureau contact: Roderick Porter at (202) 632-6460.

KSPA(AM)/KOWF(FM), ESCONDIDO, CA GRANTED LICENSE RENEWALS SUBJECT TO REPORTING CONDITIONS (Report MM-800,, Mass Media Action)
The Commission has granted the applications of North County Broadcasting Corporation for renewal of its licenses for Stations KSPA(AM)/KOWF(FM), Escondido, California, subject to reporting conditions. The Commission denied a petition filed by the National Association for the Advancement of Colored People and the National Black Media Coalition.
Action by the Commission January 31 by MO&O (FCC 94-19).
News Media Contact: Susan Lewis Sallet at (202) 632-5050; Mass Media Bureau Contact: Roderick Porter at (202) 632-6460.

RENEWAL APPLICATIONS OF KFUO/KFUO-FM, CLAYTON, MO, DESIGNATED FOR HEARING -- MM DOCKET 94-10 (Report DC-2562, Action in Docket Case)
The Commission has designated for hearing the applications of The Lutheran Church/Missouri Synod for renewal of the licenses for its stations KFUO/KFUO-FM, Clayton, MO, to determine whether the licensee violated the Commission's EEO rule and submitted untrue statements to the Commission.
Action by the Commission January 31 by Hearing Designation Order (FCC 94-23).
News Media contact: Susan Lewis Sallet at (202) 632-5050; Mass Media Bureau contact: Roderick Porter at (202) 632-6460.

EIGHT TEXAS RADIO STATIONS GRANTED SHORT-TERM LICENSE RENEWALS, SUBJECT TO FORFEITURES AND REPORTING CONDITIONS (Report MM-801, Mass Media Action)
The Commission has granted short term license renewals for eight Texas radio stations, along with additional sanctions, based on violations of FCC EEO broadcast rules. The short term licenses were granted to: Eagle Radio, Inc., for station KEGL(FM); Dennis Elam, Trustee for Bakcor Broadcasting, Inc., Debtor, for station KMND/KNFM(FM); KTEM Radio, Inc., for stations KTEM/KPLE(FM); Walker County Communications, Inc., for stations KSAM/KSAM-FM; and Radio Sungroup of Texas, Inc., for station KYKX(FM). The National Association for the Advancement of Colored People (NAACP) and the National Black Media Coalition (NBMC) each petitioned the applications of some of the licensees.
Action by the Commission January 31 by MO&O and NAL (FCC 94-17).
News Media contact: Susan Lewis Sallet at (202) 632-5050; Mass Media Bureau contact: Roderick Porter (202) 632-6460.

FOUR SEATTLE, WASHINGTON RADIO STATIONS GRANTED LICENSE RENEWALS,SUBJECT TO FORFEITURES AND REPORTING CONDITIONS (Report MM-802, Mass Media Action)
Following review of their respective EEO (Equal Employment Opportunity) programs, the Commission has granted, subject to sanctions, the license renewal applications for the following licensees: Roy H. Park Broadcasting of Washington, Inc., for stations KEZX(AM)/KEZX-FM; KVI, Inc., for station KVI(AM); and KPLZ, Inc., for station KPLZ(FM). The National Association for the Advancement of Colored People (NAACP) petitioned the applications of the licensees.
Action by the Commission January 31 by MO&O and

NAL (FCC 94-18).
News Media contact: Susan Lewis Sallet at (202) 632-5050; Mass Media Bureau contact: Roderick K. Porter at (202) 632-6460.

FCC ISSUES NALS FOR $400,000 TO INFINITY LICENSEES FOR BROADCAST OF INDECENT MATERIAL DURING HOWARD STERN SHOW (Report MM-796, Mass Media Action)
Issued NALs to Infinity Broadcasting Corp. and its subsidiaries, licensees of WJFK(AM), Baltimore, MD; WXRK(FM), New York, NY; WYSP(FM), Philadelphia, PA; and WJFK(FM), Manassas, VA, in the aggregate amount of $400,000 for broadcasting apparently indecent material during the Howard Stern Show on four separate days in August, September and October 1993 between approximately 6 AM and 10 AM.
Action by the Commission January 31 by Direction Letter (FCC 94-26).
News Media contact: Audrey Spivack at (202) 632-5050; Mass Media Bureau contact: Robert Ratcliffe at (202) 632-6460.

FCC ISSUES NAL FOR $37,500 FOR BROADCAST OF INDECENT MATERIAL DURING THE HOWARD STERN SHOW ON KFBI(FM), PAHRUMP, NV (Report MM-805, Mass Media Action)
Issued NAL of $37,000 to Americom Las Vegas Ltd., Partnership, licensee of radio station KFBI(FM), Pahrump, NV, for broadcasting allegedly indecent material during "The Howard Stern Show" on September 30, October 6 and October 12, 1993, between approximately 6 AM and 11 AM.
Action by the Commission January 31 by Direction Letter (FCC 94-25).
News Media contact: Audrey Spivack at (202) 632-5050; Mass Media Bureau contact: Robert Ratcliffe at (202) 632-6460.

FCC GRANTS ASSIGNMENT OF LICENSE OF KRTH(FM), LOS ANGELES, TO INFINITY BROADCASTING CORP. (Report MM-804, Mass Media Action)
Granted application for consent to assign license of KRTH(FM), Los Angeles, from Beasley FM Acquisition Corp. to Infinity Broadcasting Corp. of California.
Action by the Commission January 31 by Direction Letter (FCC 94-24).
News Media contact: Audrey Spivack at (202) 632-5050; Mass Media Bureau contact: Robert Ratcliffe at (202) 632-6460.

SPEECH

REMARKS BY COMMISSIONERS JAMES H. QUELLO
BEFORE THE NATIONAL RELIGIOUS
BROADCASTERS ASSOCIATION, WASHINGTON, DC,
FEBRUARY 1, 1994.

TEXTS

KRTH(FM), LOS ANGELES. See item under "News
Releases"

INFINITY BROADCASTING. See item under "News
Releases"

KFBI(FM), PAHRUMP, NV. See item under "News
Releases"

STANDARDS FOR ASSESSING FORFEITURES FOR
VIOLATIONS OF THE BROADCAST EEO RULES. See
item under "News Releases"

SAN LUIS OBISPO, ETC. See item under "News
Releases"

ESCONDIDO, CA. See item under "News Releases"

ADELPHIA COMMUNICATIONS. See item under "News
Releases

CLAYTON, MO. See item under "News Releases"

KGNC-AM-FM, AMARILLO, TX, ET AL. See item
under "News Releases"

KEGL(FM), FORT WORTH, TX, ET AL. See item under
"News Releases"

SEATTLE, WA. See item under "News Release"

TELEPHONE AND DATA SYSTEMS. Acted on two
applications for review of the Common Carrier Bureau's
decision in Telephone and Data Systems, Inc. These
applications for review were filed by a group of applicants
which comprised a partial settlement group in the Wisconsin
8 (Vernon) RSA, and by Telephone and Data Systems, Inc.
(TDS). The Commission granted in part the application for
review filed by TDS and denied the other. It additionally
designated for hearing character issues concerning a TDS
subsidiary's conduct before the Commission and whether
this calls in question TDS's qualifications as a Commission
licensee. (CC Docket 94-11, by MO&O and HDO [FCC

94-29] adopted February 1 by the Commission).

Report No. DC-2562 ACTION IN DOCKET CASE February 1, 1994

RENEWAL APPLICATIONS OF KFUO/KFUO-FM, CLAYTON, MO,
DESIGNATED FOR HEARING
(MM DOCKET 94-10)

The Commission has designated for hearing the applications of The Lutheran Church/Missouri Synod for renewal of the licenses for its stations KFUO/KFUO-FM, Clayton, MO, to determine whether the licensee violated the Commission's EEO rule and submitted untrue statements to the Commission.

The Commission said the stations' renewal applications, as well as the licensee's responses to FCC letters of inquiry established that substantial and material questions of fact existed regarding the licensee's compliance with the Commission's EEO and candor rules.

The Commission said the record revealed that the licensee did not actively recruit for the majority of its positions. It gave several reasons for its failure -- its vacancies required religious training and classical music expertise that few area minorities possessed, and that it had a reciprocal arrangement with Concordia Seminary, on which its studios are located, whereby the stations did not pay rent in exchange for providing broadcast training or other employment to seminary students or their spouses.

The Commission said it appeared that these policies raised substantial and material questions of fact as to whether the licensee's employment practices are discriminatory in violation of our EEO rule.

Further, review of the renewal applications and subsequent submissions raised questions as to lack of candor due to discrepancies in numbers reported.

The Commission noted that should the hearing result in a finding that denial of license renewal is not appropriate, a forfeiture of up to $250,000 may be assessed against the licensee for the violations.

(over)

Action by the Commission January 31, 1994, by Hearing Designation Order (FCC 94-23). Chairman Hundt, Commissioners Barrett and Duggan with Commissioner Quello concurring in the result and issuing a statement.

- FCC -

News Media contact: Susan Lewis Sallet at (202) 632-5050.
Mass Media Bureau contact: Roderick Porter at (202) 632-6460.

February 1, 1994

FCC RELEASES POLICY STATEMENT ON EEO BROADCAST RULES ENFORCEMENT AND ANNOUNCES EEO SANCTIONS AGAINST CABLE AND BROADCAST OUTLETS

The FCC announced today several actions which reaffirm its commitment to effective enforcement of its broadcast Equal Employment Opportunity (EEO) rules. The Commission released a Policy Statement establishing guidelines for assessing forfeitures for violations of the Commission's broadcast EEO rules and also announced a number of EEO enforcement actions. The Policy Statement re-establishes the base forfeiture amount for violations of the broadcast EEO rules at $12,500. It also provides guidance on which situations may lead to such a forfeiture, and describes circumstances in which the base forfeiture amount may be adjusted upward or downward.

"The Policy Statement we release today is the result of a strong collaborative effort by Commissioners Ervin Duggan, Andrew Barrett, Jim Quello and myself," Chairman Reed Hundt said today. "This Policy Statement will provide the Commission, licensees and the public with comprehensive guidance on the application of broadcast EEO rules. It also reaffirms the Commission's commitment to tough but fair enforcement of these rules. Combatting discrimination and other harmful barriers to employment enhances access to broadcast employment. This in turn promotes the development of a diverse workforce which contributes to the diversity of broadcast programming and further development of the broader communications infrastructure."

The Policy Statement released today outlines the guidelines by which the Commission will assess and sanction violations of its broadcast EEO rules. The Commission stressed that these guidelines are non-binding and its staff will continue to evaluate each case on its particular merits. However, the overall guidelines will give licensees and the public a better understanding of how EEO rules will be enforced.

The Policy Statement sets a base forfeiture amount of $12,500 for violations of EEO broadcast rules and provides guidance on situations that would increase or decrease this fine. In addition to forfeitures, the Commission can issue short term license renewals. The Policy Statement also provides guidance on these situations.

(over)

The Commission also announced today a number of EEO actions that concern employment access to mass media and cable facilities

for women and minorities, including Blacks, Hispanics and Asians. First, the Commission is imposing a $121,500 forfeiture on and denying cable certification to Adelphia Communications Corporation for its failure to comply with the Commission's Cable EEO requirements at the company's Unit 305 in Palm Beach County, Florida. The Commission found that both women and minorities were adversely affected by Adelphia's lack of compliance.

Second, the Commission is designating for hearing the renewal applications for stations KFUO-AM and KFUO-FM, Clayton, MO. This action is being taken because of, among other things, substantial and material questions of fact that exist as to whether the licensee's employment practices are discriminatory in violation of our EEO rules.

Third, the Commission is assessing sanctions of short term renewals, forfeitures ranging from $18,750 to $37,500 and reporting conditions on the following stations for violations of our EEO rules: KEGL-FM, Fort Worth, Texas; KMND-AM and FM, Midland, Texas; KTEM-AM and KPLE-FM, Temple, Texas; KSAM-AM and FM, Huntsville, Texas; KYKX-FM, Longview, Texas; KGNC-AM and FM, Amarillo, Texas; KEBE-AM and KOOI-FM, Jacksonville, Texas; KGVL-AM and KIKT-FM, Greenville, Texas; KEZX-AM and FM, Seattle, Washington; KKCB-AM and KSLY-FM, San Luis Obispo, California; and KTMS-AM and KHTY-FM, Santa Barbara, California. Forfeiture and reporting conditions are imposed on stations KVI-AM and KPLZ-FM, Seattle, Washington, and reporting conditions are imposed on stations KSPA-AM and KOWF-FM, Escondido, CA.

Action by the Commission January 31, 1994, by Policy Statement (FCC 94-27). Chairman Hundt, Commissioners Quello, Barrett and Duggan.

-FCC-

News Media contact: Susan Lewis Sallet at (202) 632-5050. Mass Media Bureau contact: Roderick Porter at (202) 632-6460.

Report MM-800 MASS MEDIA ACTION February 1, 1994

KSPA(AM)/KOWF(FM), ESCONDIDO, CA GRANTED LICENSE RENEWALS SUBJECT TO REPORTING CONDITIONS

The Commission has granted the applications of North County Broadcasting Corporation for renewal of its licenses for Stations KSPA(AM)/KOWF(FM), Escondido, California, subject to reporting conditions. The Commission denied a petition filed by the National Association for the Advancement of Colored People and the National Black Media Coalition.

The Commission said that based on its review of the record, it found that grant of the renewals would be in the public interest.

It said that the licensee of KSPA(AM)/KOWF(FM) made efforts to recruit minorities and attracted and hired minority applicants during the license term. However, the licensee failed to self-assess its program adequately. Despite having few minorities in the applicant pools during its tenure as licensee, the licensee did not significantly expand its list of recruitment sources prior to the renewal year.

Action by the Commission January 31, 1994, by Memorandum Opinion and Order (FCC 94-19). Chairman Hundt, Commissioners Quello, Barrett and Duggan.

- FCC -

News Media Contact: Susan Lewis Sallet at (202) 632-5050
Mass Media Bureau Contact: Roderick Porter at (202) 632-6460

Report No. MM-799 MASS MEDIA ACTION February 1, 1994

KKCB/KSLY-FM, SAN LUIS OBISPO, KTMS/KHTY-FM, SANTA BARBARA, GRANTED SHORT-TERM RENEWALS SUBJECT TO FORFEITURES AND REPORTING CONDITIONS

Following review of their respective EEO (Equal Employment Opportunity) programs, the Commission has granted, subject to sanctions, the license renewal applications for the following licensees: San Luis Obispo Limited Partnership for stations KKCB/KSLY-FM and Pinnacle Communications, Inc. for stations KTMS/KHTY-FM. The National Association for the Advancement of Colored People (NAACP) and the National Black Media Coalition (NBMC) petitioned the applications of both licensees.

The Commission has renewed the licenses for KKCB/KSLY(FM) for a short term subject to reporting conditions and a Notice of Apparent Liability (NAL) for $25,000 due to deficient recruitment efforts. The sanctions are based on the licensee's failure to engage in recruiting efforts so as to attract an adequate pool of minority applicants for a substantial number of its 72 full-time jobs. Further EEO conduct indicating particular types of deficiencies also contributed to the imposed sanctions. In this regard, specific deficiencies include the licensee's failure to recruit for at least a third of its vacancies, and inadequate efforts given the substantial number of hiring opportunities. However, in evaluating the overall sanction, the Commission did give the licensee credit for recruitment efforts which resulted in minority hires.

The Commission has renewed the licenses for KTMS/KHTY-FM for a short term subject to reporting conditions and a NAL for $31,250 due to deficient recruitment efforts. The sanctions are based on the licensee's failure to engage in recruiting efforts so as to attract an adequate pool of minority applicants for a substantial number of its 56 full-time positions. Further EEO conduct indicating particular types of deficiencies also contributed to the

imposed sanctions. In this regard, specific deficiencies include the licensee's failure to recruit for at least a third of its positions, inadequate efforts given the large number of hiring vacancies, and the large minority labor force.

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Action by the Commission January 31, 1994, by Memorandum Opinion and Order (FCC 94-21). Chairman Hundt, Commissioners Quello, Barrett and Duggan.

- FCC -

News Media contact: Susan Lewis Sallet at (202) 632-5050.
Mass Media Bureau contact: Roderick Porter at (202) 632-6460.

Report No. MM-798 MASS MEDIA ACTION February 1, 1994

ADELPHIA COMMUNICATIONS, PALM BEACH COUNTY, FL,
FOUND IN VIOLATION OF THE EEO RULE;
NOTIFIED OF FORFEITURE IN THE AMOUNT OF $121,500

The Commission has denied cable certification for Adelphia Communications Corporation for Unit 305, Palm Beach County, FL and notified Adelphia of an apparent liability for forfeiture in the amount of $121,500 for violating the Commission's Equal Employment Opportunity rules.

An EEO audit of Adelphia's Unit 305 revealed that Adelphia had failed to comply with the EEO rule provisions for the years covered by the 1991-1993 Cable Annual Employment Reports. The Commission found that: the unit had few minorities in the applicant pool for upper-level positions, especially in the area of sales; the unit hired few minorities for upper-level positions; almost all of the African Americans employed in upper-level positions were among the lowest paid upper-level employees at the unit; the unit interviewed and hired no minorities for certain groups of jobs and minorities were absent from various departments and facilities; and, for a significant number of lower-level positions, the unit failed to hire minorities despite their overwhelming majority in the applicant pool. Also, the unit had no program to ensure that promotions were made in a non-discriminatory manner thereby adversely affecting both women and minorities; did not encourage minority and female entrepreneurs to conduct business with all parts of its operation; and failed to keep complete and accurate records of its EEO efforts.

Consequently, the Commission concluded that Adelphia had engaged in employment practices that had an adverse effect on minorities, and that a forfeiture of $121,500 was appropriate.

Action by the Commission January 31, 1994, by Memorandum Opinion and Order and Notice of Apparent Liability (FCC 94-22). Chairman Hundt, Commissioners Barrett and Duggan with Commissioner Quello concurring in the result and Commissioners Quello, Duggan and Barrett issuing separate statements.

-FCC-

News Media contact: Susan Lewis Sallet at (202) 632-5050. Mass Media Bureau contact: Roderick Porter at (202) 632-6460.

Report No. MM-802 MASS MEDIA ACTION February 1, 1994

FOUR SEATTLE, WASHINGTON RADIO STATIONS GRANTED LICENSE RENEWALS, SUBJECT TO FORFEITURES AND REPORTING CONDITIONS

Following review of their respective EEO (Equal Employment Opportunity) programs, the Commission has granted, subject to sanctions, the license renewal applications for the following licensees: Roy H. Park Broadcasting of Washington, Inc., for stations KEZX(AM)/KEZX-FM; KVI, Inc., for station KVI(AM); and KPLZ, Inc., for station KPLZ(FM). The National Association for the Advancement of Colored People (NAACP) petitioned the applications of the licensees.

The Commission has renewed the licenses of KEZX(AM)/KEZX-FM for a short term subject to reporting conditions and a Notice of Apparent Liability (NAL) for $18,750. The sanctions are based on the licensee's failure to engage in recruiting efforts so as to attract an adequate pool of minority applicants for a substantial number of its 53 full-time jobs. Further EEO conduct indicating particular types of deficiencies also contributed to the imposed sanctions. In this regard, specific deficiencies include the licensee's failure to recruit for at least a third of its positions, and inadequate efforts given the large number of hiring vacancies. However, in evaluating the overall sanction, the Commission did give the licensee credit for recruitment efforts which resulted in minority hires.

The Commission has renewed the licenses of KVI(AM) and KPLZ(FM) subject to reporting conditions and a Notice of Apparent Liability (NAL) for $18,750. The sanctions are based on the licensees' failure to engage in recruiting efforts so as to attract an adequate pool of minority applicants for a substantial number of their 35 full-time jobs. Further EEO conduct indicating a particular type of deficiency also contributed to the imposed sanctions. In this regard, the specific deficiency was the licensees' failure to recruit for at least a third of their positions.

(over)

Action by the Commission January 31, 1994, by Memorandum Opinion and Order and Notice of Apparent Liability (FCC 94-18). Chairman Hundt, Commissioners Quello, Barrett and Duggan.

- FCC -

News Media contact: Susan Lewis Sallet at (202) 632-5050. Mass Media Bureau contact: Roderick K. Porter at (202) 632-6460.

Report MM-801 MASS MEDIA ACTION February 1, 1994

EIGHT TEXAS RADIO STATIONS GRANTED SHORT-TERM LICENSE RENEWALS, SUBJECT TO FORFEITURES AND REPORTING CONDITIONS

The Commission has granted short term license renewals for eight Texas radio stations, along with additional sanctions, based on violations of FCC EEO broadcast rules. The short term licenses were granted to: Eagle Radio, Inc., for station KEGL(FM); Dennis Elam, Trustee for Bakcor Broadcasting, Inc., Debtor, for station KMND/KNFM(FM); KTEM Radio, Inc., for stations KTEM/KPLE(FM); Walker County Communications, Inc., for stations KSAM/KSAM-FM; and Radio Sungroup of Texas, Inc., for station KYKX(FM). The National Association for the Advancement of Colored People (NAACP) and the National Black Media Coalition (NBMC) each petitioned the applications of some of the licensees.

The Commission has renewed the license for KEGL(FM) for a short term subject to reporting conditions and a Notice of Apparent Liability (NAL) for $18,750. The sanctions are based on the licensee's failure to engage in recruiting efforts so as to attract an adequate pool of minority applicants for a substantial number of its 47 full-time jobs. Further EEO conduct indicating particular types of deficiencies also contributed to the imposed sanctions. In this regard, specific deficiencies include the licensee's failure to recruit for at least a third of its positions, and inadequate efforts given the large number of hiring vacancies. However, in evaluating the overall sanction, the Commission did give the licensee credit for recruitment efforts which resulted in minority hires.

The Commission has renewed the licenses for KMND/KNFM(FM) for a short term subject to reporting conditions and a NAL for $25,000. The sanctions are based on the licensee's failure to engage in recruiting efforts so as to attract an adequate pool of minority applicants for a substantial number of its 29 full-time jobs. Further EEO conduct indicating particular types of deficiencies also contributed to the imposed sanctions. In this regard, specific deficiencies include the licensee's failure to recruit for at least a third of its positions, inadequate efforts given the large number of hiring vacancies, and the large minority labor force. However, in evaluating the overall sanction, the Commission did give the licensee credit for recruitment efforts

which resulted in minority hires.

(over)

- 2 -

The Commission has renewed the licenses for KTEM/KPLE(FM) for a short term subject to reporting conditions and a NAL for $25,000. The sanctions are based on the licensee's failure to engage in recruiting efforts so as to attract an adequate pool of minority applicants for a substantial number of its 35 full-time positions. Further EEO conduct indicating particular types of deficiencies also contributed to the imposed sanctions. In this regard, specific deficiencies include the licensee's failure to recruit for at least a third of its positions, inadequate efforts given the large number of hiring vacancies, and the large minority labor force. However, in evaluating the overall sanction, the Commission did give the licensee credit for recruitment efforts which resulted in minority hires.

The Commission has renewed the licenses for KSAM/KSAM(FM) for a short term subject to reporting conditions and a NAL for $31,250. The sanctions are based on the licensee's failure to engage in recruiting efforts so as to attract an adequate pool of minority applicants for a substantial number of its 38 full-time vacancies. Further EEO conduct indicating particular types of deficiencies also contributed to the imposed sanctions. In this regard, specific deficiencies include the licensee's failure to recruit for at least a third of its hires, inadequate efforts given the large number of hiring vacancies, and the large minority labor force.

The Commission has renewed the licenses for KYKX(FM) for a short term subject to reporting conditions and a NAL for $31,250. The sanctions are based on the licensee's failure to engage in recruiting efforts so as to attract an adequate pool of minority applicants for a substantial number of its 34 full-time hires. Further EEO conduct indicating particular types of deficiencies also contributed to the imposed sanctions. In this regard, specific deficiencies include the licensee's failure to recruit for at least a third of its hires, inadequate efforts given the large number of hiring vacancies, and the large minority labor force.

Action by the Commission January 31, 1994, by Memorandum Opinion and Order and Notice of Apparent Liability (FCC 94-17). Chairman Hundt, Commissioners Quello, Barrett and Duggan.

- FCC -

News Media contact: Susan Lewis Sallet at (202) 632-5050.
Mass Media Bureau contact: Roderick Porter (202) 632-6460.

DAILY DIGESTVol. 13, No.22 February 3, 1994

NEWS RELEASE

LINDA L. OLIVER DEPARTING FCC TO JOIN HOGAN
& HARTSON

PUBLIC NOTICES

MAINE TELECOMMUNICATIONS GROUP, INC., WFT
ACQUISITION CO., AND MCTA, INC., SEEK WAIVER
OF SECTIONS 61.41(C) AND 69.3(E)(11) OF THE
COMMISSION'S RULES - Comments March 7, replies
March 21; contact: Andrew Mulitz at (202) 632-6917. (DA
94-112)

Report 15728 - BROADCAST APPLICATIONS

Report 21815 - BROADCAST ACTIONS

EX PARTE PRESENTATIONS AND POST-REPLY
COMMENT PERIOD FILINGS IN NON-RESTRICTED
PROCEEDINGS

Report 82 - CERTIFICATION/NOTIFICATION
ACTIONS

Report 82 - TYPE ACCEPTANCE/NOTIFICATION
ACTIONS

TEXTS

POPLAR BLUFF, MO. Ordered Calvary Educational
Broadcasting Network, Inc., applicant for renewal of
KOKS(FM), Poplar Bluff, to submit certain specified
information to the Commission within 20 days. (MM
Docket 92-122, by MO&O [FCC 94R-11] adopted January
24 by the Review Board)

MCI, WUI AND TELECOM*USA V. CENTRAL
TELEPHONE COMPANY OF OHIO. Dismissed
complaint concerning alleged rate of return violations. (By
Order [DA 94-88] adopted January 25 by the Chief, Formal
Complaints and Investigations Branch, Enforcement
Division, Common Carrier Bureau)

DAILY DIGESTVol. 13, No. 23

The following items were adopted at the Commission
meeting on February 3 and released later that day:

NEWS RELEASES

FCC CLEARS THE WAY FOR LICENSING OF PCS;
PROVIDES FRAMEWORK FOR COMPETITIVE
MOBILE COMMUNICATIONS MARKET - GN DOCKET
93-252 (Report DC-2564, Action in Docket Case)
The Commission has amended its mobile service
rules to implement amendments to the Communications Act
made by section 6002(b) of the Omnibus Budget
Reconciliation Act of 1993, signed into law last August 10.
Action by the Commission February 3 by SR&O
(FCC 94-31).
News Media contact: Rosemary Kimball at (202)
632-5050; Common Carrier Bureau contact: Nancy Boocker
at (202) 632-6450 or Judy Argentieri at (202) 632-6917;
Private Radio Bureau contact: David Furth at (202) 634-
2443.

COMMISSION FINALIZES RULES FOR NEW
NARROWBAND PERSONAL COMMUNICATIONS
SERVICES - GEN. DOCKET 90-314 AND ET DOCKET
92-100 (Report DC-2563, Action in Docket Case)
The Commission today finalized the spectrum
allocation, service rules, and pioneer's preference decisions
for the narrowband personal communications service (PCS).
Action by the Commission February 3 by MO&O
(FCC 94-30).
News Media contact: Patricia A. Chew at (202)
632-5050; Office of Engineering and Technology contact:
Tom Mooring at (202) 653-8114 and David Siddall at (202)
653-8110.

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The following items were dated for release February 4:

NEWS RELEASES

METHOD OF ACCOUNTING FOR DEFERRED
INCOME TAX BY COMMON CARRIERS CHANGES -
CC DOCKET 89-360 (Report DC-2565, Action in Docket
Case)
The Commission has changed the method by which
it requires carriers to account for income taxes.
Action by the Commission January 31 by R&O
(FCC 94-28).
News Media contact: Rosemary Kimball at (202)
632-5050; Common Carrier Bureau contact: Thaddeus
Machcinski at (202) 634-1861.

FCC ADOPTS RULES TO DETER UNJUST ENRICHMENT BY LOTTERY WINNERS - PP DOCKET 93-253 (Report DC-2566, Action in Docket Case)
The Commission has adopted a First Report and Order in the Competitive bidding rulemaking proceeding to implement a statutory provision contained in the Omnibus Budget Reconciliation Act of 1993 to require the Commission to deter unjust enrichment of licensees that obtain their licenses through a Commission lottery.
Action by the Commission February 3 by FR&O (FCC 94-32).
News Media contact: Rosemary Kimball at (202) 632-5050; Office of Plans and Policy contact: Marc Martin or Kent Nakamura at (202) 653-5940.

FCC FILINGS

FCC CALENDAR OF EVENTS FOR THE WEEK OF FEBRUARY 7

PUBLIC NOTICES

TARIFF TRANSMITTAL PUBLIC REFERENCE LOG - NON-DOMINANT CARRIERS: February 2

TARIFF TRANSMITTAL PUBLIC REFERENCE LOG: February 3

SHIP INSPECTION SCHEDULE - Contact: Leonard Langley at (202) 632-6345

PRIVATE OPERATIONAL-FIXED SERVICE FREQUENCIES TO BE AVAILABLE FOR REASSIGNMENT - Contact: Microwave Branch at (717) 337-1421

PUBLIC INFORMATION COLLECTION REQUIREMENT SUBMITTED TO OFFICE OF MANAGEMENT AND BUDGET FOR REVIEW - Contact: Judy Boley at (202) 632-0276

PUBLIC INFORMATION COLLECTION REQUIREMENT SUBMITTED TO OFFICE OF MANAGEMENT AND BUDGET FOR REVIEW - Contact: Judy Boley at (202) 632-0276

Report A-33 - ITFS APPLICATION ACCEPTED FOR FILING AND NOTIFICATION OF APRIL 5 CUT-OFF DATE

Report 979 - CABLE TELEVISION SERVICE REGISTRATIONS; SPECIAL RELIEF AND SHOW CAUSE PETITIONS

Report 15729 - BROADCAST APPLICATIONS

Report 21816 - BROADCAST ACTIONS

Report LM08 - PRIVATE RADIO BUREAU
BROADCAST AUXILIARY

Report 1729 - PRIVATE RADIO BUREAU: Week of
January 24 thru January 28

TEXTS

1992 CABLE TELEVISION ACT - COMPATIBILITY
BETWEEN CABLE SYSTEMS AND CONSUMER
ELECTRONICS EQUIPMENT. Granted request filed by
the Consumer Electronics Group of the Electronics
Industries Association and extended the reply comment date
in ET Docket 93-7, Compatibility Between Cable Systems
and Consumer Electronics Equipment to February 16, 1994.
(By Order Extending Time for Reply Comments [DA 94-
120] adopted February 3 by the Chief Engineer)

SANTA BARBARA, CA. On remand, ordered that
Mission Broadcasting Corporation is not financially qualified
to be a Commission licensee. (By SID [FCC 94D-2] adopted
January 26 by ALJ Edward Luton)

REQUEST FOR CARRIAGE. Granted request by Central
Missouri State University, licensee of educational television
KMOS-TV, Channel 6, Sedalia, MO, and ordered Cass
County Cable to commence carriage of KMOS-TV on its
cable television system serving Cass County, MO. (By
MO&O [DA 93-1567] adopted December 8 by the Chief,
Mass Media Bureau)

REQUEST FOR CARRIAGE. Granted request by Coast
Community College District, licensee of educational
television station KOCE-TV, Channel 50, Huntington
Beach, CA, and ordered Century Southwest Cable Cable
Television to commence carriage of KOCE-TV on its cable
television system serving Santa Monica, et al., CA. (By
MO&O [DA 93-1602] adopted December 23 by the Chief,
Mass Media Bureau)

REQUEST FOR CARRIAGE. Granted request by Greater
Dayton Public Television, licensee of educational television
station WPTO, Channel 14, Oxford, OH, and ordered
KENS Cable to commence carriage of WPTO on its cable
television system serving Harveysburg, OH. A. (By MO&O
[DA 93-1600] adopted December 23 by the Chief, Mass
Media Bureau)

REQUEST FOR CARRIAGE. Granted request by Greater Dayton Public Television, licensee of educational television station WPTO, Channel 14, Oxford, OH, and ordered KENS Cable to commence carriage of WPTO on its cable television system serving Clarsville, OH. (By MO&O [DA 93-1601] adopted December 23 by the Chief, Mass Media Bureau)

REQUEST FOR CARRIAGE. Granted request by Greater Dayton Public Television, licensee of educational television station WPTO, Channel 14, Oxford, OH, and ordered KAS Cable to commence carriage of WPTO on its cable television system serving Wright Patterson AFB, OH. (By MO&O [DA 93-1604] adopted December 23 by the Chief, Mass Media Bureau)

D.D. Cable Partners, L.P. Granted request for waiver filed by D.D. Cable Partners, L.P. of the Commission's anti-trafficking rule, for five cable systems in Wisconsin, Illinois, Minnesota, and Iowa. (By MO&O [DA 93-1605] adopted December 23 by the chief, Mass Media Bureau)

COMPETITIVE BIDDING. See second item under "News Releases" released February 4.

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ADDENDA: The following items, released February 3, were not listed on Digest 22:

NEWS RELEASES

JORGE REINA SCHEMENT NAMED TO DIRECT FCC INFORMATION POLICY PROJECT

CHRISTOPHER J. WRIGHT NAMED DEPUTY GENERAL COUNSEL

COMMISSION INVITES FILING OF NARROWBAND PERSONAL COMMUNICATIONS SERVICE PIONEER'S PREFERENCE APPLICATION - Contact: James Bennett at (202) 632-0914.

TEXT

LOCAL EXCHANGE CARRIERS. Suspended for one day and instituted an investigation of Pacific Bell Tariff F.C.C. No. 128 - Transmittal No. 1673 to add low speed service to the special access cross connection service provided under its expanded interconnection tariff. (By MO&O [DA 94-123] adopted February 3 by the Chief, Tariff Division,

Common Carrier Bureau)

February, 4, 1994

FCC CALENDAR OF EVENTS FOR THE WEEK OF FEBRUARY 7

Monday, February 7

Thomas P. Stanley, Chief Engineer, Office of Engineering and Technology, will address the Energy Telecommunications
and Electrical Association's Technical Symposium and Equipment Exposition (ENTELEC '94), San Antonio Convention Center,
San Antonio, TX, 9:30 a. m.

Wednesday, February 9

Kathleen Levitz, Acting Chief, Common Carrier Bureau, will participate on a panel, "Responding to Competition II,"
United States Telephone Association's 1994 National Issues Conference, Loew's L'Enfant Plaza Hotel, 480 L'Enfant Plaza, SW,
Washington, DC, 11:00 a. m.

Friday, February 11

William E. Kennard, General Counsel, Office of General Counsel, will address the Communications Task Force
Luncheon, Planet Hollywood, 1101 Pennsylvania Avenue, NW, Washington, DC, 1:00 p. m.

-FCC-

February 4, 1994

FCC FILINGS

The following is a list of filings of more than routine interest received at the Commission on dates shown and AVAILABLE FOR
INSPECTION for one week in the Office of Public Affairs, Room 200:

January 21

Amendment of the Commission's Rules Regarding Cable Television Wiring (RM-8380). Reply - NYNEX; Time Warner
Entertainment Company, L.P.; United States Telephone Association; Ameritech; Cablevision Systems Corporation; BellSouth
Telecommunications, Inc.

Amendment of the Commission's Rules Concerning Operator Service Access and Pay Telephone Compensation (CC Docket
91-35). Reply - MCI Telecommunications Corporation; Allnet Communications Services, Inc.; LDDS Metromedia
Communications

Amendment of the Commission's Rules to Provide for Notification by Common Carriers of Service Disruption (CC Docket
91-273). Comments - NYNEX; Bell Atlantic Telephone Companies; BellSouth

Telecommunications, Inc.; American Telephone
and Telegraph Company; Sprint Corporation; Pacific Bell and Nevada Bell; General Services Administration; United States
Telephone Association; New York City Department of Telecommunications and Energy; Bell Atlantic

January 24

Amendment of the Commission's Rules Regarding Cable Television Wiring (RM-8380). Reply - National Cable Television
Association, Inc.; Media Access Project; Pacific Bell and Nevada Bell

Implementation of Section 309(j) of the Communications Act - Competitive Bidding (PP Docket 93-253). Comments -
Firstcom, Inc.

In the Matter of Policies and Rules Concerning Toll Fraud (CC Docket 93-292). Comments - Communications Fraud Control
Association
In the Matter of Simplification of the Depreciation Prescription Process (CC Docket 92-296). Opposition - California Cable
Television Association; Minnesota Department of Public Service

(over)
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January 25

Amendment of the Amateur Service Rules to Implement a Vanity Call Sign System (PR Docket 93-305). Comments - Ron
Martin; Glenn R. Johnson Barden Cablevision; Greater Media, Inc.;

Implementation of the Cable Television Consumer Protection and Competition Act of 1992 - Compatibility Between Cable
Systems and Consumer Electronics Equipment (ET Docket 93-7). Comments - Hewlett-Packard Company; Zenith Electronics
Corporation; Interactive Multimedia Association; Christopher M. Catotti; News Datacom; Tele-Communications, Inc.; Cable-
Consumer Electronics Compatibility Advisory Group; Mitsubishi Electronics America, Inc.; Circuit City Stores, Inc.; New York
City Department of Telecommunications and Energy; Time Warner Entertainment Company, L.P.; Cox Cable Communications
and Newhouse Broadcasting Corporation; Cablevision Industries Corporation; Cablevision Systems Corporation; The Titan
Corporation; Pacific Telesis Group, et al.; Media General Cable of Fairfax County, Inc.; BellSouth Telecommunications, Inc.;
United States Telephone Association; Bell Atlantic; Cable Telecommunications Association, Inc.; American Telephone and
Telegraph Company; Home Box Office; Sharp Electronics Corporation

In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation (ET Docket 93-62).
Comments - United States Telephone Association; Pacific Bell and Nevada Bell; du Treil, Lundin and Rackley, Inc.; Electronic

Industries Association, Consumer Electronics Group; New Jersey Broadcasters Association; Apple Computer, Inc.; Cohen,
Dippell and Everist, P.C.; Land Mobile Communications Council; Association of Federal Communications Consulting Engineers;
Association for Maximum
Service Television, Inc. and the National Broadcasting Company, Inc.; CBS Inc., et al.; American Telephone and Telegraph
Company; McCaw Cellular Communications, Inc.; Telecommunications Industry Association; National Association of
Broadcasters; Electromagnetic Energy Policy Alliance; Wizard Broadcasting Company; Cellular Telecommunications Industry
Association; Ford Motor Company; Ericsson Corporation; American Radio Relay League, Incorporated; Telocator, the Personal
Communications Industry Association; National Public Radio; TRW Inc.; Paging Network, Inc.; AMSC Subsidiary Corporation;
PacTel Corporation

January 26

Policies and Rules Concerning Operator Services Access and Pay Telephone Compensation (CC Docket 91-35). Petition -
Allnet Communications Services, Inc.

(over)
-3-

January 27

In the Matter of Open Network Architecture Tariffs of Bell Operating Companies (CC Docket 92-91). Comments - Allnet
Communication Services, Inc.; Opposition - BellSouth Telecommunications, Inc.; U S West Communications, Inc.; NYNEX;
Ameritech Operating Companies; Sprint Communications Company, L.P.;
Amendment of the Commission's Rules Regarding Amateur Rules to Extend Operating Authority to New Amateur
Operators (PR Docket 93-267). Comments - Helen J. Marsh

Amendment of the Commission's Rules to Implement a Vanity Call Sign System (PR Docket 93-305). Comments - Ralph
C. Luellen

January 31

In the Matter of NYNEX Transition Plan to Preserve Universal Service in a Competitive Environment (RM-8388).
Comments - Pacific Bell and Nevada Bell

Amendment of the Commission's Rules for Rulemaking on Universal Service Fund (RM-8408). Reply - United States
Telephone Association; Telefonica Larga Distancia de Puerto Rico, Inc.; Sprint Communications Company, L.P.; Pacific Bell
and Nevada Bell

Amendment of the Commission's Rules and Establishment of a Joint Board (CC Docket 80-286). Petition - United States
Telephone Association;

In the Matter of Policies and Rules Concerning Toll Fraud (CC Docket 93-292). Comments - Emerson Electric Company

Amendment of the Commission's Rules Regarding Amateur Service Rules to Implement Vanity Call Sign System (PR
Docket 93-305). Comments - R. W. Lemassena

February 2

Amendment of the Commission's Rules Concerning the Administration of Accounting Authorities in the Maritime Mobile
and the Maritime Mobile-Satellite Radio Service Except for Distress and Safety Communications (PR Docket 93-297).
Comments - Mackay Communications

Amendment of the Commission's Rules Regarding Amateur Service Rules to Implement Vanity Call Sign System (PR
Docket 93-305). Comments -Richard A. Stalls

-FCC-

DAILY DIGESTVol. 13, No. 24 February 7, 1994

PUBLIC NOTICES

SEVERAL SMALL TELCOS PETITION FOR WAIVER
OF SMALL COMPANY TARIFF FILING RULES -
Comments are due March 10, replies March 24 - Contact:
Andrew Mulitz or Wanda M. Harris at (202) 632-6917 [DA
94-127]

AGENDA FOR 38TH PART 68 INDUSTRY MEETING
AT THE BELLEVUE MIDO HOTEL IN CLEARWATER,
FL, MARCH 4 - Contact: William von Alven at (202) 634-
1833

FCC TO HOLD LOW POWER TELEVISION LOTTERY
WEDNESDAY, FEBRUARY 16, 10:00 A.M., ROOM 856,
1919 M ST., NW, WASHINGTON, D.C. - Contact:
Margie Hinebaugh at (202) 632-7698

TARIFF TRANSMITTAL PUBLIC REFERENCE LOG:
February 4

TARIFF TRANSMITTAL PUBLIC REFERENCE LOG
INFORMATIONAL TARIFFS: February 4

Reports 3481 and 3485 - CABLE TELEVISION ACTIONS
[Two Public Notices]

Reports 15730 and 15733 - BROADCAST
APPLICATIONS [Two Public Notices]

Report 21817 - BROADCAST ACTIONS

Report No. CL-94-35 - COMMON CARRIER PUBLIC
CELLULAR RADIO SERVICE INFORMATION
CELLULAR TRANSFER/ASSIGNMENT APPLICATIONS
ACCEPTED FOR FILING

Report CL-94-36 - COMMON CARRIER PUBLIC
MOBILE SERVICES INFORMATION
ANNOUNCEMENT OF ACCEPTANCE OF
APPLICATIONS AND TENTATIVE SELECTEES FOR
UNSERVED AREAS

Report CL-94-37 - COMMON CARRIER PUBLIC
CELLULAR RADIO SERVICE INFORMATION

Report No. DS-1395 - REQUEST FOR DECLARATORY
RULING OR WAIVER FILED BY SATELLITE CD
RADIO, INC. - Comments or Oppositions are due February
18, replies February 28 - Contact: Rosalee Chiara at (202)
634-1781 [DA 94-128]

Report No. IS-0043 - INTERNATIONAL FIXED POINT-
TO-POINT MICROWAVE SERVICE/INTERNATIONAL
FIXED SATELLITE SERVICE: INTELSAT

TEXTS

WICKENBURG AND LAKE HAVASU CITY, AZ.
Dismissed Interstate Broadcasting System Of Arizona, Inc.'s
petition for reconsideration of Report and Order upgrading
the facilities of KRDS-FM, Wickenburg, AZ, to specify
operation on Channel 287C1. (MM Docket No. 90-468 by
MO&O [DA 94-28] adopted January 13 by the Chief,
Policy and Rules Division, Mass Media Bureau)

OAKHURST, FIREBAUGH AND JUNE LAKE, CA.
Effective March 24, substituted Channel 276A for Channel
296A at Oakhurst, CA; and Channel 234A for Channel
276A at Firebaugh, CA, and conditionally modified the
license of KAAT(FM) accordingly. (MM Docket 93-33 by
First R&O [DA 94-43] adopted January 11 by the Acting
Chief, Allocations Branch, Mass Media Bureau)

OAKHURST, FIREBAUGH AND JUNE LAKE, CA.
Proposed allotting Channel 226A to June Lake, CA, as its
first broadcast service. Comments are due March 31,
replies April 15. (MM Docket No. 93-33 by Further
NPRM [DA 94-48] adopted January 11 by the Acting Chief,

Allocations Branch)

MARATHON AND STEVENS POINT, WI. Dismissed request by Eagle of Wisconsin, Inc. to substitute Channel 285A for Channel 285C3 at Marathon, WI, and reallot the channel from Marathon to Stevens Point, WI. (MM Docket 93-227 by R&O [DA 94-56] adopted January 14 by the Acting Chief, Allocations Branch)

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ADDENDA: The following items released February 3 and 4 were not listed on Digests 22 and 23:

NEWS RELEASE

BUREAU FINDING THAT TDS VIOLATED CROSS-OWNERSHIP RULE REVERSED (Report No. CC-561, Common Carrier Action)
The Commission denied an application for review filed by Century Cellunet, Inc., and others and granted in part the contingent application for review filed by Telephone and Data Systems (TDS)
Action by the Commission February 1 by MO&O (FCC 94-29).
News Media contact: Rosemary Kimball at (202) 632-5050; Common Carrier Bureau contacts: Joseph Weber and Carmen Borkowski at (202) 632-6450; Geraldine Matise, Moron Peck and John Cimko at (202) 632-6400.

PUBLIC NOTICES

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CORRECTION - BROADCAST APPLICATION Report No. 15728, released February 3

PRIVATE RADIO BUREAU TO OBSOLETE FORMS -
Contact: Consumer Assistance Branch at (717) 337-1212
(Released February 3)

DAILY DIGESTVol. 13, No. 25 February 8, 1994

PUBLIC NOTICES

Report 15732 - BROADCAST APPLICATIONS

Report 21818 - BROADCAST ACTIONS

Report I-6925 - PLEADING CYCLE ESTABLISHED FOR COMMENTS ON BT NORTH AMERICA'S REQUEST FOR EXPEDITED COMMISSION ACTION ON THOSE ASPECTS OF ITS INTERNATIONAL RESALE APPLICATION WHICH DO NOT REQUIRE AN EQUIVALENCY FINDING - FILE NUMBER I-T-C-93-126 - Comments are due February 22; replies February 28 - Common Carrier Bureau contact: Jennifer A. Warren at (202) 632-3214

Report LM09 - PRIVATE RADIO BUREAU BROADCAST AUXILIARY

TEXTS

SILVERTON, CO. Proposed substitution of Channel 224A for Channel 257A at Silverton and modification of KWXA(FM) accordingly. Comments are due April 1; replies April 18. (By NPRM [DA 94-58] adopted January 14 by the Acting Chief, Allocations Branch, Mass Media Bureau)

WALKER, MN. Proposed allotment of Channel 270A at Walker as that community's second local service. Comments are due April 1; replies April 18. (By NPRM [DA 94-57] adopted January 14 by the Acting Chief, Allocations Branch)

HAZLEHURST, MS. Proposed allotment of Channel 282A at Hazlehurst as that community's second local service. Comments are due April 1; replies April 18. (By NPRM [DA 94-59] adopted January 14 by the Acting Chief, Allocations Branch)

FINANCIAL ACCOUNTING STANDARDS. The Commission changed the method by which it requires carriers to account for income taxes. (By R&O [FCC 94-28] adopted January 31 by the Commission)

COMSAT CORPORATION. Granted application filed by Comsat Corporation for authority to provide Inmarsat M and Inmarsat B mobile-satellite communications services in the Indian Ocean Region through land earth station facilities in Malaysia and to acquire and operate associated leased line facilities. (By OA&C [DA 94-108] adopted January 21 by the Chief, International Facilities Division, Common Carrier Bureau)

EMI COMMUNICATIONS CORPORATION. Granted application filed by EMI Communications Corporation for amendment of EMI Communications Corporation's certificate of public convenience and necessity to provide

International Private Line Services between the United States and Canada on a resale basis. (By O&A [DA 94-111] adopted January 13 by the Chief, International Facilities Division)

PACIFIC GATEWAY EXCHANGE, INC. Granted application filed by Pacific Gateway Exchange, Inc. for authority to resell international private line services to Canada. (By O&C [DA 94-107] adopted January 18 by the Chief, International Facilities Division)

PANAMSAT, L. P. AND PANAMSAT LICENSEE CORP. Granted application filed by PanAmSat L.P. and PanAmSat Licensee Corp. for consent to pro forma assignment of international space station licensees and domestic and international earth station licenses. (By MO&O [DA 94-109] adopted January 28 by the Chief, Common Carrier Bureau)

ERRATUM to MO&O (FCC 94-1) MM Docket 91-168 released January 27, 1994 in the Matter of Codification of the Commission's Political Programming Policies

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ADDENDUM: The following items, released February 7, were not listed on Digest 24:

NEWS RELEASES

FCC POSTPONES REGIONAL CABLE SEMINARS
The FCC has postponed its regional educational seminars on cable television regulation.
Cable Services Bureau contact: Cynthia Ward Jeffries at (202) 416-0902; News Media contact: Maureen Peratino and Susan Sallet at (202) 632-5050.

OFFICE OF ASSOCIATE MANAGING DIRECTOR - PIRS - MASS MEDIA BUREAU AND ADJUDICATION BRANCH - FCC REFERENCE CENTER - WILL OPEN AT 11:00 A. M. ON FEBRUARY 9, 1994

--

--
Bruce Perens AB6YM Bruce@Pixar.com 510-215-3502

1227. Amateur radio astronauts

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 06:40:19 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseCKy2J7.GL4@netcom.com>
Source record: 271379
Cross-posted to: sci.space.shuttle,rec.radio.amateur.misc

copied from amateur radio packet radio:
Subject: Ham Astronaut/Cosmonaut Listing 2/94
From: KG5U@KA5KTH.#SETX.TX.USA.NA

==========
The following is compilation of data from a variety of
sources (ARRL, AMSAT, Shuttle Amateur Radio Experiment
Working Group, and Motorola, Goddard Space Flight Center and
Johnson Space Center Amateur Radio Clubs.
==========

U.S. Space Shuttle Astronaut/Hams:

Amateur Radio operations onboard U.S. Space Shuttles began
November 1983, wih Owenarrtt's STS-9 flight. Since
then, the SAREX (Shuttle Amateur Radio Experiment) has
matured and developed to include formal, scheduled contacts
with school groups, amateur television (ATV) uplinks, family
contacts, robot packet and slow-scan television (SSTV)
operations, and general voice QSO's.
The number of hams in the astronaut corps has also
increased dramatically over time. As SAREX activities
develop, and astronaut's exposure to it has increased,
interest is piqued and licensing generally follows. The
concept of communicating directly with hams (read: non-NASA
civilians) while flying in space is a tantalizing concept to
many of the astronauts; certainly, the idea of bringing the
adventure, thrill, and technology of spaceflight to school
children on a personal basis through SAREX plays a large
part in the astronaut's incentive to become licensed.

Space Shuttle
Mission Orbiter Flight Date
Callsign Astronaut No.
------- ------- ------------ --------------- ----
STS-9 Columbia 28Nov83-08Dec83
W5LFL Owen Garriott (01)

STS-51F Challenger 29Jul85-06Aug85
W0ORE Tony England (02)
W4NYZ John David Bartoe (03)
(didn't operate)
(Gordon Fullerton)
(W0ORE control op)

STS-61A Challenger 30Oct85-06Nov85
DP0SL (Call sign used) (04)
DD6CF Reinhard Furrer (05)
PE1LFO Wubbo Ockels (06)
DG2KM Ernst Messrschmid (07)

STS-35 Columbia 02Dec90-10Dec90
WA4SIR Ron Parise (08)

STS-37 Atlantis 05Apr91-11Apr91
N5RAW Steve Nagel (09)
KB5AWP Ken Cameron (10)
N5SC Jerry Ross (11)
N5QWL Jay Apt (12)
N5RAX Linda Godwin (13)

STS-45 Atlantis 24Mar93-02Apr92
N5WQW Brian Duffy (14)
N5YYV Kathy Sullivan (15)
N5WQC Dave Leestma (16)
ON1AFD Dirk Frimount (17)

STS-50 Columbia 25Jun92-09Jul92
KB5SIW Dick Richards (18)
KB5SIX Ellen Baker (19)

STS-47 Endeavour 12Sep92-20Sep92
N5QWL Jay Apt
7L2NJY Mamoru Mohri (20)

STS-56 Discovery 08Apr93-17Apr93
KB5AWP Ken Cameron
KB5YSR Steve Oswald (21)
KB5UAH Ken Cockrell (22)
KB5UAC Mike Foale (23)
KB5TZ Elle Ochoa (24)

STS-55 Columbia 26Apr93-06May93
N5RAW Steve Nagel
N5SCW Jerry Ross
KB5YSQ Charlie PRecourt (25)
DG1KIH Hans Schlegel (26)
DG1KIM Ulrich Walter (27)

STS-57 Endeavour 03Jun93 (7 days)
N5WQW Brian Duffy
ncy Janice Voss
STS-58 Columbia 02Sep93 (14 days)
KC5ACR Bill McArthur (28)
KC5AXA Marty Fettman (29)
ncy Rick Searfoss (30)
STS-60 Discovery 03Feb94 (8 days)
KE4IQB Charlie Bolden (31)
KC5ETH Ron Sega (32)

U5MIR Serge Krikalev (33)

STS-59 Endeavour 07Apr94 (9 days)
N5RAX Linda Godwin
N5QWL ay Apt

ST-65 Columbia 08Jul94 (14 days)

STS-68 Endeavour 18Aug94 (9 days)

STS-67 Columbia 01Dec94 (14 days)

STS-63 Discovery 26Jan95 (8 days)
KB5UAC Mike Foale
Janice Voss

STS-71 Atlantis 30May95 (14 days)

(updated Feb 03, 1994)
==========
Russian Space Orbital Complex Mir Cosmonaut/Hams:

Amateur radio on the Russian Space Orbital Complex MIR began November 1988. The callsign format used is U#MIR (U-USSR, #-HAM number cosmonaut, MIR- space station "Mir"); U0MIR is the collective station callsign. Data was provided by UA3CR and RV3DR (RV3DR@RK3KP.SUN.EU Serge Samburov) via AMSAT by W5DID.

Crew
No. Call Name No. DATE (day.mo.yr)
---
01 U1MIR VLADIMIR TITOV 3 21Dec87-21Dec88
02 U2MIR MUSA MANAROV 3 1Dec8711Dec88
03 U3MIR VALERY POLYAKOV 3/4 29Aug88-27Apr89
04 U4MIR ALEKSANDR VOLKOV 4 26Nov88-27Apr89
05 U5MIR SERGE KRIKALEV 4 26Nov88-27Apr89
06 U6MIR ALEKSANDR VIKTORENKO 5 06Sep89-19Feb90
07 U7MIR ALEKSANDR SEREBROV 5 06Sep89-19Feb90
08 U6MIR ANATOLY SOLOVEYV 6 11Feb90-09Aug90
09 U7MIR ALEKSANDR BALANDIN 6 11Feb90-09Aug90
10 U8MIR GENNADY STREKALOV 7 01Aug90-10Dec90
11 U9MIR GENNADY MANAKOV 7 01Aug90-10Dec90
12 U9MIR VIKTOR AFANASIEV 8 02Dec90-26May91
13 U2MIR MUSA MANAROV 8 02Dec90-26May91
14 U7MIR ANATOLY ARTSEBARSKY 9 18May91-10Oct91
15 U5MIR SERGE KRIKALEV 9/10 18May91-25Mar92
16 GB1MIR HELEN SHARMAN (ENGLAND) 18May91-26May91
17 U4MIR ALEKSANDR VOLKOV 10 02Oct91-25Mar92
18 OE0MIR FRANZ VIEHBOECK (AUSTRIA) 02Oct91-10Oct91
19 U6MIR ALEKSANDR VIKTORENKO 11 17Mar92-10Aug92
20 U8MIR ALEKSANDR KALEI 11 17Mar92-10Aug92
21 DL1MIR KLAUS FLADE (GERMANY) 17Mar92-25Mar92

22 U6MIR ALEKSANDR SOLOVEYV 12 26Jul92-01Feb93
23 U3MIR SERGE AVDEYV 12 26Jul92-01Feb93
24 F5MIR MICHEL TOGNINI (FRANCE) 26Jul92-10Aug92

Since January 1, 1993, cosmonauts were issued a new callsign series: R#MIR. The old callsign series, U#MIR, is still valid. R#MIR = (R-RUSSIA, #-HAM number cosmonaut, Mir-Space Orbital Complex "Mir"). R0MIR is the collective station callsign.

CALL NAME HAM CREW DATE
---
25 U9MIR GENNADY MANAKOV 13 24Jan93-22Jul93
26 R2MIR ALEKSANDR POLESCHUK 13 24Jan93-22Jul93

PLANNING LIST FOR FUTURE MISSIONS

27 R3MIR VASILY ZIBLYIV 14 01Jul93-08.01.94
28 R4MIR ALEKSANDR SEREBROV 14 01Jul93-08.01.94
29 ?????* JEAN-PIERRE HAIGNERE(FRANCE) 01Jul93-22Jul93
30 U9MIR VIKTOR AFANASIEV 15 08.01.94-04.07.94
31 MIR YUIJ USACHEV 15 08.01.94-04.07.94
32 U3MIR VALERIJ POLYAKOV 15/16/1708.01.94-April 95
33 U6MIR GENNADY STREKALOV 16 06May94-
34 R6MIR or R0MIR op. ? 16 06May94-
35 ???? ALEKSANDR VIKTORENKO 17 30Sep94-
36 ???? ?????? 17 30Sep94-

#29 COSMONAUT (France) - still not clear if he will use HAM Radio.

Additonal Notes:
Starting 01.01.93, the new QSL manager for cosmonauts is RV3DR. RV3DR confirms all QSO's with station MIR from 1988.

RV3DR - Serge Samburov, Space "MIR" QSL Manager
Chief of Cosmonaut Amateur Radio Department
NPO "Energia"
P.O. Box 73, Kaliningrad-10 City,
Moscow Area, 141070, Russia

Packet address: RV3DR#R#MIR or RV3DR@RK3KP.#MSK.RUS.EU

Current MIR crew #15 Packet Callisgn: R0MIR
PMS "MIR" Call: R0MIR-1
Voice Callsigns: U3MIR, U9MIR, R3MIR, R0MIR
Viktor Valerij Yur MIR
==========

Updated by KG5U 02Feb94.

1228. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 07:22:30 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <760827041.F00004@ocitor.fidonet>
Source record: 271396

```
The following files were processed Wednesday 02-09-94:

HAMPACK [ HAM: Packet Communications programs ]
---------------------------------------------------------------------
PTM530-1.ZIP ( 175053 bytes) PTM v5.30 Packet Terminal Prog and
Mailbox Prog and English Lan
guage Files
PTM530-2.ZIP ( 112837 bytes) PTM 5.30 Packet Terminal Program
and Mailbox English & French D
oc + Language Files
PTM530-3.ZIP ( 57044 bytes) PTM v5.30 Packet Terminal Program
and Mailbox Danish Doc & Langua
ge File
PTM530-4.ZIP ( 116911 bytes) PTM v5.30 Packet Terminal Program
and Mailbox Norwegian & Swedish
Doc + Language Files
PTM530-5.ZIP ( 106854 bytes) PTM v5.30 Packet Terminal Program
and Mailbox Italian & Spanish D
oc + Language File
PTM530-6.ZIP ( 45913 bytes) PTM v5.30 Packet Terminal Program
and Mailbox German,Greece,Dutch
& Russian Language Files

---------------------------------------------------------------------
614612 bytes in 6 file(s)

Total of 614612 bytes in 6 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
```

/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

1229. ZA1A

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 08:30:26 UTC
From: cfm1471@ucs.usl.edu
Message-ID: <1994Feb9.083026.3876@usl.edu>
Source record: 271380

I know this might sound kinda strange, but I just got an envelope from the W5 buro, and guess what, a ZA1A card from July 7, 1992. Hey, it took 2 years to get here, but it made it! Guess it shows that patience really works if you let it.

Charlie


```
*******************************************************************************
* KI5XP@K5ARH.LFT.LA.USA.NA * U.S.L.A.R.C - U. of S'Western La *
* ki5xp@usl.edu * A.A.R.A - Acadiana Am. Radio. A. *
* ki5xp@w5ddl.aara.org * *
* * *
* "Life is too short for QRP!"-- ??? * "Hams do it with a spark!"-- ??? *
*******************************************************************************
```

1230. Opinions wanted on mobile dual-banders

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 09:47:19 UTC
From: dev@armory.com
Message-ID: <CKyB6w.4Fp@armory.com>
Source record: 271381
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

i posted this a little while ago just to the equipmet group, but
seeing as i got little response, i'm widening my audience a bit. :-)

anyways, i'm looking to get a mobile dual-bander for my car. and of
course i'm interested in finding out what other people have and
why the like or dis-like it. i'm interested in what sort of
features they have, what features they do or don't need on it,
what's really good to have (expanded recieve? backlit DTMF mic?).
tell me your experiences, etc.

i've noticed that most of the units only do tx from 440 to 450
in the 70cm band. that seems a little weird to me. only the
Yaseu seems to do 430 to 450. these sorts of oddities is what
is confusing me as to what to buy.

any help on this would be really appreciated.
--
David Vangerov, KD6WXQ
dev@deeptht.armory.com

1231. Re: BP-8S battery for HTX-202 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 09:56:46 UTC
From: partos@larry.larc.nasa.gov
Message-ID: <PARTOS.94Feb9095646@larry.larc.nasa.gov>
Source record: 271411

Shel: I am relying on what others have told me and what I have read previously in this group. Perhaps others can comment? 73 Dick

--

|---|
| Richard D. Partos KE4AZJ Norfolk, VA |
Internet: r.d.partos@larc.nasa.gov

1232. GB2ATG (February 1994)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 10:59:00 UTC
From: IKENDALL@UNIVERSITY-OF-HUMBERSIDE.AC.UK
Message-ID: <94Feb9.050552-0700.18567@scapa.cs.ualberta.ca>
Source record: 271382
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

BARTG * GB2ATG * NEWS * BARTG * NEWS * GB2ATG * BARTG
This is the - British Amateur Radio Teledata Group - News Broadcast Service for all Amateurs and Short Wave Listeners interested in RTTY Amtor, Pactor and Packet Radio.

This news is broadcast during the first full week commencing Monday each month, to the following schedule..

Evening transmissions at 1930 GMT. on 3.584 MHz. Mark. +/- for QRM.
RTTY on Monday-AFSK, Wednesday-AFSK, and Friday-FSK.
Pactor-FEC on Tuesday.
Amtor-FEC on Thursday and Saturday.

Morning transmission at 1000 GMT. on 7.041 MHz. Mark. +/- for QRM.
RTTY on Sunday-AFSK.

An edited version of this bulletin is available on the Packet network as a BARTG @ GBR. file thanks to: Andy (G3ZYP) @ GB7MXM.#36.GBR.EU.

It is also posted on the "INTERNET" system via the INFO-HAMS list on UCSD.EDU. thanks to Iain (G6ARO) who is available on the "JANET" network as Iain@HUMBER.AC.UK

News for February 1994. Bulletin No. 014. (all times are GMT).

RTTY DX Activity.
3.5 MHz.
4U1ITU 1830, OH0MFP 2200,

7 MHz.
GI4SRQ

14 MHz.
ZL2JON 0800, LU8DGS 0900, PJ2MI 1000, ZL1AMO and T91ENS 1130, LI30OWG 1400, RA2FB 1430, OD5PL and SV5AZP 1500, 4U1ITU and A45ZX 1600, 5R8DG 1700, PJ0/N9FTC 2000,

21 MHz.
TZ6FIC 1030, KG4HG and CU1AC 1330, VP5/WA0VQR, KP4GC and 4O9S 1400, 4U1ITU and PJ0/N9FTC 1430, KP4GC, C6A/AA5AU and HK1LAQ 1500, YV5KWS 1530, VE2MP 1600, CP1FF and VE9NC 1630, CU1AZ 1700.

Pactor DX.

3.5 MHz.
US5WV 1930.

14 MHz.
VS6FN 1200, 1B1AD 1400, VQ9TN 1530, ZB2FU/MM 1630.

21MHz.
LU1DO 1500.

QSL Information.
KG4HG was asking for cards via the Guantanamo Bay ARC listed as KG4AN in the callbook.
4O9S via YU7KMN.
PJ0/N9FTC via home call.
4U1ITU via DK7UY.
VP5/WA0VQR via home call.
OH0MFP via OH3MFP.
1B1AD via DK7ZZ.
TZ6FIC via F6KEQ.

Contests.

The BARTG HF RTTY contest starts 0200 Saturday March 19 until 0200 Monday March 21 on all 5 HF bands 80 through 10 meters. Single operator and SWL stations permitted a maximum 30 hours operating. Rest periods in blocks not less than 3 hours.
Multi-operator stations may work the full 48 hour contest period.

Categories:
1. Single operator all band.
2. Single operator single band.
3. Multi-operator all band.
4. Multi-operator Multi-transmitter.
5. Short Wave Listener.

Categories 1, 2, and 3 may not transmit on 2 or more bands at the same time. No station may enter more than one category.

Exchange message to consist of:
RST plus a 3 figure group serial number starting with 001

QSO points:
Each completed QSO scores one (1) point. Stations may be contacted again on other bands for QSO credit. All duplicate contacts on the same band must be clearly marked in the log.

Multipliers:
All DXCC countries (including W, VE and VK) and all W, VE and VK call areas count as multipliers on each band.
Note:: Any country or W/K, VE/VO or VK area may be counted again if worked on a different band but continents are counted once only.

Scoring:
QSO points times multipliers times continents (max 6).

Logs:
Use separate log sheets for each band. Logs must show band, date, time GMT, callsign, message sent and received, countries and points claimed.

SWL logs must contain date and time GMT of logging, callsign of station heard, report sent by that station and callsign of station being worked.

Summary sheet.
To show full scoring, times of operation and address for correspondence. In the case of multi-operator stations, the names and callsigns of all operators involved with the station operation during the contest.
All logs must be received by May 31 1994 to qualify. Sample log and summary sheets are available from the contest manager. UK entrants send large (A4) S.A.E. outside UK please send 6 IRC'S to cover postage. Computer generated logs containing all specified information are welcomed.

Please send your contest or check logs to:
Contest Manager
John Barber G4SKA
PO. Box 8.
Tiverton, Devon EX16 5YU, England.

Certificates will be awarded to the top 3 stations in each category, the top 5 single operators in each continent and the top single operator in each W/K, VE/VO and VK area.

Contestants contacting 25 or more DXCC countries on two-way RTTY during the contest may claim the Quarter Century Award (QCA) issued by B.A.R.T.G. for which a charge of 6 US. dollars or 30 IRC's is made. Existing QCA holders may add new countries to their existing records.
A separate sheet showing bands, callsign and countries claimed must be included with the contest log.

Comments on the contest would be much appreciated.

Notes of interest.
1B1AD is Northern Cyprus which does not carry DXCC status at present.
US5WV is a special call for CIS Europe.
LI30OWG is a special call being used from Gjovik for the Olympic winter games in Norway. There is also LI20OWG and LI40OWG.

Changes affecting the Russian CIS prefix allocation from January 1 1994 as follows:

Republic. Old prefix. New prefix.

European Russia (UA1,3,4,6) RAA-RIZ, UAA-UIZ.
Ukraine (UB,UT,UY) EMA-EOZ, URZ-UZZ.
Byelorussia. (UC) EUA-EWZ.
Azerbaijan. (UD) 4JA-4JZ, 4KA-4KZ.
Georgia. (UF) 4LA-4LZ.
Armenia. (UG) EKA-EKZ.
Turkmenistan. (UH) EZA-EZZ.
Uzbekistan. (UI) UJA-UMZ.
Tadzhikistan. (UJ) EYA-EYZ.
Kazakhstan. (UL) UNA-UQZ.
Kirghizia. (UM) EXA-EXZ.

Moldavia. (UO) ERA-ERZ.

For Russian stations;

UW => RU - UV => RX - UZ => RK

Previous changes to other USSR prefixes include:

Lithuania. (UP,RP) LY. SINCE 1990
Latvia. (UQ,RQ) YL. SINCE 1990
Estonia. (UR,RR) ES. SINCE 1990

To complete the list the following prefixes remain in force, (as far as I am aware):

Franz Josef Land. 4K2, EK, UA1O
Kaliningrad. UA2F,RA2F
Asiatic Russia. UA7-UA0, UZ7-UZ0.

During the ARRL Roundup contest a number of strange new CIS prefixes were being used. There is no doubt this will make the job of the contest manager more difficult until we can be sure which Republic the prefix in use represents. Some stations were informing contacts during the exchange. For instance RU3AT (ex UW3AT) avoided and doubt but others are going to be difficult to pin down. I can only suggest you add a note with your submitted log indicating areas of doubt. This should help the committee to locate and correct any misunderstandings.

Thanks this month to:.
G3ZYP, GW3LYF, DXNS.

BARTG caters for all DATA interests with information-components-kits -ready built units and software from experts. Members receive a 120 page quarterly journal devoted to data modes. Beginners guides for most data modes are available. The group sponsors HF and VHF RTTY contests, administers its own DX and members award scheme and runs an annual rally.

This copy of BARTG News is posted by Iain Kendall (G6ARO) who can be contacted via Internet e-mail at.. iain@humber.ac.uk Items for inclusion in the broadcast may also be mailed to this address, as well as any queries regarding membership or services offered by BARTG.

Copy of the news bulletin as distributed by G0ARF 940201.

1233. Amateur Radio Newsline

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 11:17:32 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <lP7MjGG8yTR9053yn@dorsai.dorsai.org>
Source record: 271383
Cross-posted to: rec.radio.info,rec.radio.amateur.misc

We are sorry to say that the transcribed version of Newsline was not
available to us this week. We hope to have this week's report posted
sometime before Friday.

```
< ^^^
```

1234. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 11:17:35 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <OZ7MjGG8yHDE053yn@dorsai.dorsai.org>
Source record: 271384

In article <CKxq14.LvA@srgenprp.sr.hp.com>, Alan Bloom wrote:
> to investigate the death rates of golf course managers. The study
> found that golf course managers have death rates from several kinds
> of cancer that are significantly higher than the national norm. The
>
> Sounds exactly like the famous Milham study of amateur radio operators
> which implied that exposure to RF radiation causes cancer. I wonder
> what the cause is for the golf course managers: too much fresh air?

I'd venture a guess that the death rate is probably due to the exposure to chemicals and insecticides used in grounds keeping. This is also the theoretical reason why Long Island, NY has the highest incident of breast and testiclar cancer. Except in L.I.'s case, it is believed to be residue of chemicals, (DDT the most likely culpret), used decades ago that has seeped into the aquafer. Most L.I. residents get their drinking water from wells.

There is also the possability that some golf courses may be near high tension lines or broadcast towers.

< ^^^

1235. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 11:37:00 UTC
From: CSMSCST@MVS.OAC.UCLA.EDU
Message-ID: <19940209113743CSMSCST@MVS.OAC.UCLA.EDU>
Source record: 271421

>In article <CKy1qC.GzC@kaiwan.com>, Doug Brandon <dab@kaiwan.com> wrote:
>>I worked YX0AI on Aves Island in Feb/Mar 1992. The QSL info was via YV5A
>>and I've sent three requests over the past two years with no response.
>>Has anybody received cards via this route, or is there an alternate/better
>>route?

There were major problems with getting this card, but they eventually
trickled out. The only routes that worked were to US addresses, then
hand carried into Vensuela. That was how I got my cards.

>>Does anybody know if F6FNU QSLs via the bureau?

Ha! Try $3 to $5, per card, plus SAE.

-- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)

1236. Yaesu FT-5100 <-> MFJ-1270B

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 13:03:05 UTC
From: plymale@mousetrap.es.vt.edu
Message-ID: <2jamu9$j4e@solaris.cc.vt.edu>
Source record: 271385
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

My original posting of this question contained header errors which may have affected people's efforts to respond...So one more time...

I'm trying to interface a Yaesu FT-5100 to a MFJ-1270B TNC via the 5100's DATA IN/OUT jack. I constructed a connector based on the instructions in the 5100 manual. The problem is that the transmit audio level out of the TNC is way too low. Adjusting trimpot R76 during the 1270B recalibration procedure does not help. Any suggestions from those who have this connection working are appreciated.

Thanks...

Bill - KD4CIY

--

Bill Plymale plymale@mousetrap.es.vt.edu 703-231-9530
Virginia Tech (Enrollment Services Information Systems)

1237. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 13:26:53 UTC
From: mellis@ramcad.pica.army.mil
Message-ID: <CKyLCt.2zI@pica.army.mil>
Source record: 271386

I can think of two things: Skin cancer (they are out in the sun a lot),
and cancer caused by excessive exposure
to pesticides used on the greens and fairways.

I wonder when the groundskeeper death rate study will be released.

------Mark n2wzb

>I heard a report on the (radio) network news last night to the effect
>that the national association of golf course managers funded a study
>to investigate the death rates of golf course managers. The study
>found that golf course managers have death rates from several kinds
>of cancer that are significantly higher than the national norm. The
>study tabulated cause of death from death certificates.
>
>Sounds exactly like the famous Milham study of amateur radio operators
>which implied that exposure to RF radiation causes cancer. I wonder
>what the cause is for the golf course managers: too much fresh air?
>
>:=)
>
>AL N1AL

1238. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 13:47:22 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-090294083450@136.141.220.39>
Source record: 271387

In article <2j8dql$7ul@news.acns.nwu.edu>, rdewan@casbah.acns.nwu.edu
(Rajiv Dewan) wrote, in part:

> >How many people use typewriters or computers for copying code?
>
> I think that there is one down side to this approach. Apparently, visual code,
> aural code copied in head and aural code copied on typewriter involve
> different parts of the brain and do not transfer well from one to another.
> I recall a story, firsthand, from a signal corpsman in Korean PA who
> copied code directly onto a typewriter but did *not* know what he had
> received till he read the copy. To make short of a long story, the skills
> for typewirter copy may be different from that for head copy.

I think that's true. At the higher speeds, there's sort of a direct
connection from the ear to the fingers, and definitely the neural
connections are different when the fingers move in a pattern for writing
letters and when they go up and down in the proper places on the keyboard.

I mentioned earlier my inability to copy on paper beyond about 30
wpm...I've tried typewriter copy, and don't do quite that well...maybe 25
wpm. Part of it is that I still have to think a bit about typing. As with
learning the code in the first place, practice helps.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1239. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 13:55:02 UTC
From: lhurder@arrl.org
Message-ID: <1994Feb9.135502.6681@arrl.org>
Source record: 271388

Sandy Lynch (slay@netcom.com) wrote:

: 2) Learn to use a keyboard (typewriter or PC). If you use this method,
: after awhile, you may learn that you don't really know what you've
: copied and will actually need to read it off the typewriter/PC display.

I completely agree on both counts. My present code speed is 55 wpm,
and I'd be REAL hard pressed to do it without a keyboard.

Although, I did just that at an ARRL convention out at Glacier
National Park a year and a half ago -- with a pencil.

There we were -- in a TENT, no less -- with all contenders having
long ago given up (at around the 40-45 wpm mark), except for myself
and one feller from Western Canada. We gave each other the evil
eye across the table, and asked each other if we were gonna try
60 wpm, to which we agreed, dull pencils and all.

We walked out of the tent not knowing who had "won" the little
contest, until I stuck my ear up against the tent walls (neat trick)
and overheard the examiners saying something along the lines of
"geez, I can't read EITHER guys scrawling, can YOU?" "Nope". "well,
which guy won?" "Whelp, how about THIS feller; I see what looks
like a couple correct characters there that I can actually read."

I still didn't know who had won.

Got a check in the mail one day a few weeks later, claiming that
I had won both that and the QLF (sending with your left foot)
contest. I returned the check, suggesting that they might
consider using the money to help a newcomer get rolling nicely.

Luck Hurder, KY1T

1240. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 14:01:42 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb9.140142.15543@ke4zv.atl.ga.us>
Source record: 271389
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <CKxpL6.LKB@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: In article <CKvGDJ.GFv@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>: >Consider a vertical dipole in free space. You could insert a horizontal
>: >infinite ground plane at the feedpoint without changing the radiation
>: >pattern. Now you have two verticals, one pointing up, one pointing down.
>: >Each vertical radiates half the power of the original dipole.
>
>: True because each has half the current that flows in the entire dipole.
>
>No, the current is the same, but the power is halved. There are (at least)
>two ways to see this: 1) Only 1/2 the voltage is applied to each 1/4-wave
>element. Since power = voltage times current, the power is 1/2.
>2) The element is only 1/2 as long. So the same current results in
>only 1/2 as much power radiated.

Ok, apparently I'm not analyzing this case properly. Here's the way
I see it.

Dipole split by infinite ground plane.

```
|
|
-------/\/\/\/\---o | o---/\/\/\/\-------
E1 | E2
|
|
```

If we apply drive to E1-E2, equal currents are driven into each element's
impedance. So the halves of the dipole have equal currents flowing in them,
but 180 degrees out of phase. With the infinite ground plane isolating the
halves, one half has half the total current flow.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1241. HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 14:09:32 UTC
From: n4hy@harder.ccr-p.ida.org
Message-ID: <N4HY.94Feb9140932@harder.ccr-p.ida.org>
Source record: 271334

Howdy:

In a recent spate of messages, we have been told of the capabilities
of the hamblaster. It sounds rudimentary so far but I am sure that
over time the capabilities (new software development) will proceed
and its capabilities will be enhanced and it will make a very
interesting tool for amateur radio communications, experimentation,
and learning DSP. There will be alternatives as you will now be told.

In other messages, John Alberts has told us of the lack of capabilities
of the Sound Blaster 16 with ASP. He is WRONG. I received my Sound
Blaster developers kit via UPS yesterday at last. It is easy to see
how John could have made the mistake he made. The manuals received
in the kit describe two distinct pieces of processing hardware.
One is called the DSP and the other is the ASP. The DSP has all
the limitations mentioned by John in his statements concerning
the capabilities of the Sound Blaster card (or lack thereof). It is
a proprietary gate array surrounding masks from other chip developers
to do stuff like DMA blocks of samples in and out, to convert PCM
to u-LAW, 2 or 4 bit ADPCM, CVSD, etc. It directs the flow of
MIDI commands, etc. It is a pretty neat thing in and of itself
but it is NOT what we want. We want a full blown DSP chip, with
a modified Harvard architecture and at least 16 by 16 bit -> 32 multiply,
accumulate, read new coefficient and data in one instruction time.
THE ASP is a real DSP chip and has all this. It is 512 words of off
chip program memory, 512 words of off chip data ram, 192 words of X RAM
on chip,128 words of Y ram on chip. X ram is program and sample
data, Y RAM would be used for filter coefficients. THIS IS A FULL
BLOWN DSP CHIP. It does NOT have the limitations John has told us
the hamblaster overcomes. Indeed, on the A/D, D/A front, it is quite
clear that the under $300 SB16-ASP is quite a bit MORE CAPABLE than
hamblaster. It has two channels (16 bits each), D/A, and A/D. The
sample rate is completely controllable by uploading a divisor to
the control register. The lowest available rate is 5 Khz and the
highest is 44.1 Khz. The processor runs at 12 MIPS so filters would
execute at around 25 MIPS. This is because it has the typical
DSP feature of multiply two numbers, read the next two, and accumulate
the last result while shifting the pointers in two instruction times.
That is plenty fast. I will be able to do dual channel modems for this
card. Since the thing does not also have a UART, or SIO, we will have
to the HDLC and UART functions on the chip when required. Other DSP
developers have done this all on chip (Finland DSP development group
on the Motorola DSP56001). We will be able to do a lot.

John should be more careful when he makes flat statements about commercially available products. If he were a `real competitor' of Creative Labs, he could get into a bit of a hassle. I am following the philosophy of my dear friend, Phil Karn, in attributing to ignorance when possible, that which could be attributed to malice (in this case, competition). I told John in a reply to his mail that I doubted the accuracy of his statements on the Sound Blaster16 with ASP. I was correct. The Sound Blaster 16 with ASP is available from many places for under $300. The developers kit is $99, available only from Creative Labs. In addition to this, you must have a dsp assembler. The developer's kit provides COMPLETE tools for uploading and downloading programs to the ASP chip.

I will be writing programs for the ASP and giving them away on your favorite ftp sites and through the ARRL download request service. These programs will be the basis of articles for QEX describing the algorithms and the operation of the sound blaster card in amateur radio applications. Phil Karn has devised a new link layer for packet, with FEC, etc. and I will be providing modems that use the ASP. I believe I can provide what the latest hamblaster announcements state and more in short order after I get the assembler for the ASP. I will do this as quickly as possible. I am a bit miffed that I stopped developing the Windows and DOS front ends and display stuff for the SB16 ASP after John's note because I thought the SB16 was too limited. Now it is full steam ahead.

Bob
--
Robert W. McGwier | n4hy@ccr-p.ida.org Interests: ham radio,
Center for Communications Research | scouts, astronomy, golf (o yea, & math!)
Princeton, N.J. 08520 | ASM Troop 5700, ACM Pack 53 Hightstown
(609)-279-6240(v) (609)-924-3061(f)| I used to be a Buffalo . . . NE III-120

1242. Bosnia Health and Welfare traffic question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 14:17:51 UTC
From: sbaker@umassmed.UMMED.EDU
Message-ID: <9402091417.AA18180@umassmed.UMMED.EDU>
Source record: 271390

I was contacted by a friend who has helped a group of Bosnian refugees into the US. Now they would like to try to find out about the health and welfare of friends and relatives back in Bosnia, including one who is a ham (don't yet have his call). Can anyone suggest an approach that might work?

My on HF station is limping along, my G5RV has come partially down due to an ice storm, so what I plan to do is get on our 2m info net tonight and see if I can find some one with a decent antenna and linear who would be willing to try to work Bosnia, and possibly someone who can check the DX cluster to find someone on the air, but this sounds a bit _ad_hoc_ and I suspect there is probably some route better established for this kind of traffic. I also don't know the 3rd party status of Bosnia.

Any help/suggestions much appreciated.
KD1PF
--

Stephen P. Baker phone: (508) 856-2625
Lecturer in Biostatistics (508) 856-3131 fax
Department of Academic Computing (413) 253-3923 home
University of Massachusetts Medical School e-mail: sbaker@umassmed.ummed.edu
55 Lake Avenue North -.- -.. .---- .--. ..-.
Worcester, MA 01655

1243. Re: ZA1A

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 14:23:37 UTC
From: ham@wam.umd.edu
Message-ID: <2jarl9$qtk@cville-srv.wam.umd.edu>
Source record: 271391

>I know this might sound kinda strange, but I just got an envelope from the
>W5 buro, and guess what, a ZA1A card from July 7, 1992. Hey, it took 2
>years to get here, but it made it! Guess it shows that patience really
>works if you let it.
>
>Charlie

Wow, only two years? Mine took 10 months by direct mail to Italy! Even
my card from Pitcairn Is. (only three ships a year?) took just 4 months.

Of course, I'm still getting cards from the USSR via the bureau. In
December, I got a card through the bureau from UL7LWF. I worked this
QSO in 1988! Yes, FIVE years!

Scott NF3I

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 123 QSLed on dipoles __________| Dipoles! Antenna!

1244. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 14:28:03 UTC
From: ham@wam.umd.edu
Message-ID: <2jartj$qua@cville-srv.wam.umd.edu>
Source record: 271392

In article <CKy1qC.GzC@kaiwan.com>, Doug Brandon <dab@kaiwan.com> wrote:
>I worked YX0AI on Aves Island in Feb/Mar 1992. The QSL info was via YV5A
>and I've sent three requests over the past two years with no response.
>Has anybody received cards via this route, or is there an alternate/better
>route?
>
>Does anybody know if F6FNU QSLs via the bureau?
>
>Does anybody know the current rate (number of cards per dollar) of N7RO's
>DX QSLing service?
>
>Thanks for any responses,
>
> 73 de Doug - NF6H

F6FNU almosty certainly does NOT go through the bureau. From what I've heard, he makes quite a business of running QSL cards. Although it's hearsay, I have been told it's quite hard to get a card from him unless there's a SIZABLE amount of return postage inside (payment for his trouble?).

N7RO, if I remember correctly, does 7 cards for a dollar, or for 2 irc's.

Scott NF3I

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 123 QSLed on dipoles __________| Dipoles! Antenna!

1245. Re: Antenna Erection Aids

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 14:50:53 UTC
From: waco@cbnewst.cb.att.com
Message-ID: <CKyp8z.8uG@cbnewst.cb.att.com>
Source record: 271393

>>Julian Macassey N6ARE recommended the use of slingshot and fishing reel
>>combination for putting up antenna wires and ropes. I second Julian's
>>advice on that method! I've tried lots of ways to put up antennas wires
>>and ropes over the last twenty years and the slingshot/reel method is
>>definitely the best.
>>...
>
>I personally prefer a crossbow. I drill out the end of an aluminum
>bolt with a 1/64 bit, tie off some 20-30lb fishing line (using the
>Zebco 202 spinning reel), sight over the limb (bow has a scope mounted
>on it), and *twang*, over it goes. Bolt has enough weight to cause
>it to drop to the ground.
>
>A couple of notes, in addition. I prefer a heavy nut to a stone, as it's
>easy to tie to, and seems to have reasonable ballistics. It's also heavier
>than a size for size stone. You have to select a weight fairly carefully.
>Too heavy, and the slingshot can't throw it far enough, too light, and it
>won't drop over the limb. Pine tree are especially a problem because the
>line will hang in the bark flakes.
>
> - John Wren
> KD4DTS
>--
>---
>John C. Wren (kd4dts) | "The UNIX operating system has a command, NICE,
>jcw@kd4dts.atl.ga.us | which allows a user to voluntarily reduce the
>..!emory!wa4mei!kd4dts!jcw | priority of his process, in order to be nice to

A similar method works well (at least for me). I use a regular bow and
arrow for doing the same thing. However, one wants to use a fiberglass
fishing arrow for the weight. Depending on the style of the arrow, either
cut of the barb or tape it against the arrow (may need to pull it back over
a limb to reshoot). Tie strong fish line to the arrow (low weight and
drag), shoot over the appropriate limb, tie the fish line to whatever is
going to hold up the antenna and pull it back across the limb. Don't
try to actually pull up the antenna using the fish line. Another advantage
of the fish arrow is it has a hole through which you tie the fish line.

Even with the weight of the arrow, sometimes it is difficult to get it
lowered to the ground. The advantage of using a bow or crossbow is that
how close you stand to the limb being shot over regulates the distance
from the other side where the arrow will land.

For our club's field day, we have used both my bow and arrow and another
member's fishing pole. Both work equally well in some situations, and

in others, one might work a little better than the other.

73,

John, WB9VGJ

==
John L. Broughton | snail mail: Room 1K-322
AT&T | 1200 E. Warrenville Rd.
| P.O. Box 3045
| Naperville, IL 60566-7045
| (708) 713-4319
| e-mail: john.l.broughton@att.com
| att!john.l.broughton
| air mail: WB9VGJ
==

1246. Re: ZA1A

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 14:56:28 UTC
From: junger@rsg1.er.usgs.gov
Message-ID: <1994Feb9.145628.12980@rsg1.er.usgs.gov>
Source record: 271394

>>years to get here, but it made it! Guess it shows that patience really
>>works if you let it.
>>
>
>Wow, only two years? Mine took 10 months by direct mail to Italy! Even
>my card from Pitcairn Is. (only three ships a year?) took just 4 months.
>

I guess I shouldn't tell stories on myself, but... For three glorious
years in the early 70's I was KH6IJX on the Big Island. It was great
being semi-DX and even causing some mini-pilups with Asian stations
calling me. Anyway, about two months ago I came across some misc boxes
of ham-related stuff that had been packed away when I left Hawaii and
buried since then. Among the other items were about a dozen QSL's
that I had filled out but not mailed evidently because I couldn't find
the address or something. Well, I found valid current address for a
number of these and sent them off 20 years late!! I've been getting
some interesting responses.....

73's - John, W3GOI

p.s. If you work me now and want a QSL, I guarantee that you'll get
a more timely reply.

1247. Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 15:00:20 UTC
From: drt@world.std.com
Message-ID: <CKypoL.MqJ@world.std.com>
Source record: 271395

[Article crossposted from rec.radio.amateur.policy]
[Author was David R Tucker]
[Posted on Tue, 8 Feb 1994 01:29:30 GMT]

Today I called the FCC in Washington and spoke to Tom FitzGibbon, who works in the Amateur Radio section of the Private Radio Bureau. He told me that the FCC exercises no jurisdiction over radio stations in Canada, that a US-licensed amateur operating there under the reciprocal agreement was free to use any frequency or mode authorized by the Government of Canada, and that the same was true for all other foreign countries as well.

-drt

|David R. Tucker KG2S drt@world.std.com|

1248. Coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 15:30:10 UTC
From: jangus@skyld.tele.com
Message-ID: <760807810snx@skyld.tele.com>
Source record: 271397

In article <2j8rhd$h92@delphinium.cig.mot.com> reichrt@rtsg.mot.com writes:

> SO-239, PL-259 provide a loss of approximately .5dB per connection at 145Mhz > and a poor 50 ohm connection. Time Domain Reflectometer measurements indicate > over 2:1 VSWR (Impedance Bump!) at the connection.
>
> Whereas N connector's have appr'x .042dB Insertion Loss and an excellent 50 ohm > connection.
>
> Basically use SO-239, PL-259 below 30Mhz. I still wish manufacturers would use > N connectors on all gear. I find them mechanically and electrically better > all around.

OK, now while you're busy making these nifty tests, how about taking a 50 foot piece of RG-213 and putting a pair of UHF and then N connectors on it. Test it again, and tell me just how much difference it really makes. Run the tests at 146 and 450 MHz.

When you get finished with this, come back and tell us just how much RF is lost by that "terrible" UHF connector. And just how bad it makes a known 50 ohm load look at the other end of the cable.

73 es GM from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

1249. soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 15:36:37 UTC
From: jangus@skyld.tele.com
Message-ID: <760808197snx@skyld.tele.com>
Source record: 271398

In article <1994Feb8.173652.8765@rsg1.er.usgs.gov> junger@rsg1.er.usgs.gov writes:

> Has anyone had any experience (either good or bad) using one of
> the small butane torch/soldering irons to solder PL-259 connectors
> to RG-8U coax. Do they work as well as or better than a big
> (>100W) soldering iron?

Best luck has been had with a Weller 140 Watt soldering gun with the tips removed. Grease the braid with rosin flux, pre-tin lightly and re-flux Install into connector, and straddle the hole in the side with the weller tips. (This is resistance soldering technique) Feed solder into the hole. Rotate connector and do the other 3 holes.

I usually solder the center conductor first to hold things stable. Take it easy with pretinning the braid, if you make it too thick, it will not fit in the connector shell. Also, for the connector to be "properly assembled" the cable jacket is supposed to "screw" into the shell body.

Wonder of wonders, when the braid is properly soldered to the connector, and the jacket is threaded into the shell, the connector is weather proof. Or at least it is if you use Amphenol connectors instead of whatever cheap piece of crap you can buy for 25 cents at the swapmeet.

73 es GM from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

1250. RCLUS...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 15:49:45 UTC
From: klf@ecdcsvr.tredydev.unisys.com
Message-ID: <1994Feb9.154945.28304@ecdcsvr.tredydev.unisys.com>
Source record: 271399

Anyone know where I can FTP a program called RCLUS? It is a program which lets you receive PacketCluster stuff without being connected. It is written by an Hb9 I believe. I know its out there but I don't hv Archie or Gopher to look. Thanks.

DE KA3PLS... Ken...

1251. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 15:56:13 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2jb12t$5cn@news.acns.nwu.edu>
Source record: 271400

In article <CKy1qC.GzC@kaiwan.com>, Doug Brandon <dab@kaiwan.com> wrote:
<snip>

>Does anybody know if F6FNU QSLs via the bureau?

My guess is no. When I sent a card to N7RO for a station that has
F6FNU as a mgr, N7RO sent it back to me with a note saying that F6FNU
requires direct qsl. I bet N7RO knows about this. :)

BTW, I have a 100% QSL return rate from F6FNU. I only include cards of
one station in an envelope, include a euro size SAE and two crisp dollar
bills.

BTW, I read in the CQ Almanac that F6FNU is a manager for over 450 stations.
The largest number of all managers.

>Does anybody know the current rate (number of cards per dollar) of N7RO's
>DX QSLing service?

Seven outgoing qsls to a dollar. Sorted by prefix. No more than 6 months
old. CBA ok.

Rajiv dit l dit
aa9ch l
r-dewan@nwu.edu ********** =
* rajiv aa9ch/m * =
* r-dewan @nwu.edu * l
* j45 str key on knee * l
********* kwd ts50 tx bugcatcher * l
* *l
* *** *** *H
* * * * * *H
base* *kenwd850*vert*80mloop* *kent**
*** ***

1252. Power Supply Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 16:06:21 UTC
From: jrh@owlnet.rice.edu
Message-ID: <CKysqn.LsG@rice.edu>
Source record: 271401

I am in the process of designing a dedicated power supply for a homebrew HF amplifier. The power supply will be used for nothing but the amplifier. The problem is, I can't seem to find any specifications in amateur publications for power supply parameters. So, I have the following questions:

1) What ripple requirement should I try to meet for a 13.8V power supply? Is 10mV too stringent or not stringent enough?
2) What kind of dynamic load regulation should I shoot for? I currently have a design that will operate at 15.5 volts with no load and 13.8 volts with full load. Is this good enough? What potential problems are they with such poor load regulation?

Thanks in advance!

Yehuda/KB5CTQ

1253. Re: Field Day Logging Program

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 16:27:24 UTC
From: derry@NeXTwork.Rose-Hulman.Edu
Message-ID: <2jb2tc$mq8@master.cs.rose-hulman.edu>
Source record: 271402

> As far as we're concerned, any learning problems are worth suffering
> through, because of the ultimate gains.

Why not use WD9EYB's H-P 48 program for logging AND duping?

73 de Jack, K9CUN

1254. Dayton Parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 16:42:41 UTC
From: derry@NeXTwork.Rose-Hulman.Edu
Message-ID: <2jb3q1$mud@master.cs.rose-hulman.edu>
Source record: 271403

Howdy,

Our ham club, Wabash Valley Amateur Radio Assn., goes to Dayton (~200 mi) in a chartered bus (one-day stay). Costs us 25$ per person.

The bus drives right up to the front door and lets us out. Then it stays in the parking lot where we can go to it and "take a load off" or get food from our coolers. (Dayton HF food ain't too good.)

If one buys stuff, (s)he can stash it on the bus instead of lugging it around all day.

Our bus stops for breakfast in the morning and for dinner in the evening on the way back to Terre Haute.

Why don't YOUR club look into this scheme? It's the ONLY way to fly.

73 de Jack, K9CUN

1255. Microwave oven shielding

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 16:54:50 UTC
From: horak@convex.com
Message-ID: <horak.760812890@convex.com>
Source record: 271404

I have a question to ask. While playing with my new Tropez 90 MHz phone the other day, I tried putting it into both of my microwaves (no I didn't nuke the phone :') and I guess I expected the shielding to cut off the signal, thereby causing the out of range indicator to beep. The phone was still able to communicate with the base. If the microwave cannot attenuate 900 MHz, is it really attenuating the GHz stuff? Would someone care to comment on the type shielding used in these ovens?

David

1256. Re: which is better qrp band--30 or 40?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 16:57:37 UTC
From: groverc@gvgadg.gvg.tek.com
Message-ID: <8279@gold.gvg.tek.com>
Source record: 271405

In article <2j6k20$ci3@agate.berkeley.edu>, <mtrail@violet.berkeley.edu>
writes:
> Path:
> The title says it all. Which band do you qrp'ers
> prefer? I've listened to both, and haven't formed an
> opinion one way or the other. 30 is much smaller...but
> half of 40 (i.e, the novice band) is pretty much unusable
> at night. 40 seems to be open a little more often, or is
> this not true?? I've read the arguments in some of the books,
> but am curious about actual operating experience...
> Thanks, Matt KN6CR

My experience is that there is far more activity on 40 and
much less on 30. This makes operating on 30m a lot easier.
One of the problems at the moment is that the muf is often
hovering around 10MHz so the 30m is not useable much of time.

I just sold my 30m MFJ rig and am getting a Norcal 40 to replace it
if that's any indication.

73

Grover
WT6P
qrparci#3795

1257. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 17:10:02 UTC
From: jbloom@arrl.org
Message-ID: <1994Feb9.171002.8986@arrl.org>
Source record: 271406

Greg Bullough (greg@netcom.com) wrote:
: In article <1994Feb4.144026.7005@arrl.org> ehare@arrl.org (Ed Hare (KA1CV)) writes:
: >Greg Bullough (greg@netcom.com) wrote:
: >
: >: In article <1994Jan28.171743.483@arrl.org> ehare@arrl.org
: >(Ed Hare (KA1CV)) writes:
: >
: >: >For starters, I am not sure that few ever build projects from
: >: >magazines.
: >
: >: Why? Haven't you polled your readers, in order to make intelligent
: >: editorial decisions? Haven't you asked 'if not, why not?' '73' has
: >: an article-by article reader feedback form, every issue. If you
: >: don't have the information, you really aren't in much of a position
: >: to either support or refute my assertion, are you?
: >
: >As a matter of fact we have. Please see Jon Bloom's follow-up post
: >for information. You really do detract a lot from your effectiveness
: >by shooting from the hip with erroneous information.

: Read your own quote. You said that you didn't know. Apparently you
: *did* know. If you give out false information, then it would seem
: somewhat disingenuous of you to make accusations based on the response,
: would it not?

Well, I read the quote. It says "*I* am not sure..." And that was
true when Ed wrote it, because Ed doesn't have a copy of the
information. It doesn't say "*we* are not sure..." It would have been
better if Ed had searched out the information before posting, even busy
as he is, but he certainly isn't a liar.
Once again, you are jumping to a conclusion (that Ed knew one thing
and said something different) without benefit of supporting facts.

[deleted]

: Nor do I. However I think it unlikely that anyone will EVER get
: rich by writing construction articles for QST. Unless they can
: build a full-function HF transceiver for $100 :-)

The day, or close to it, will come. All-digital (well, *almost*
all-digital) receivers that take advantage of the enormous economic
benefits of VLSI will soon drive the cost down. (According to my
crystal ball.) The technology isn't quite there yet, but it's getting
close, fast. Not that that will make QST authors rich, though. :-)

: >You clearly don't have any personal knowledge of what any of
: >us understand and which ones of us have our feet firmly planted
: >on the ground and which have our heads in the clouds. I am forever
: >amazed how some can see a problem, imagine what *must* be the
: >only cause, and offer it to the world as gospel truth.

: I have been reading QST (in current issues) since 1973. In back-issues,
: since 1960. Is it still the official journal of the ARRL? Was it then?
: I think I'm in a fairly good position to judge, as an 'average ham,'
: just how in- or out-of-sync the League has been over the years.

That you think reading QST gives you great insight into the personal abilities and views of each HQ staffer amazes me. In the 17 years I read QST before I came to work at HQ, *I* never was able to draw such conclusions. But then, maybe you're just an incredibly perceptive fellow.

[deleted]

: >: The no-code ticket was instituted to reduce discouragement. The
: >: League fought it tooth-and-nail, until it was clear that the League
: >: had lost.
: >
: >Where did this one come from? It just kinda' jumped out.

: It demonstrates that the League is truly out of step, historically, with
: the population which counts.... ....the sum of the sets EXISTING
: radio amateurs and POTENTIAL radio amateurs.

As Ronald Reagan said, "There you go again." Please quote the research that shows precisely when and how ARRL policy was out of step with what these sets of people wanted.

[deleted]

: Uh huh. Isn't QST the 'official journal?' I don't recall ever seeing
: a viewpoint which opposed the board presented. I don't really ever
: recall a balanced presentation of an issue. What I do recall are
: presentations of and justifications of the Board's position. Again,
: I think it is a bit disningenuous to claim that QST is in any way
: editorially independent of the Board. That, from my reading of some 30
: years worth of QST, just won't fly.

You are confusing technical matter (which is what this thread was about, at one time) with non-technical matter. The Directors are not consulted about technical articles before they are published, nor do they set the technical direction of the magazine.

: >In summary, Greg, I suggest that you learn more about the ARRL before
: >you rip us to pieces.

: Yeah, I guess I'm just one of the rabble who doesn't know nuthin' 'bout
: it. Never mind my membership. I'm apparently one of the 'them' to your
: 'us' 'cuz I dare to suggest that there might be REASON why there is
: no clear majority of hams as members.

I've yet to see anything that could be characterized as a reason.
Just a number of broad, sweeping statements that are unsupported by any
presented facts. Greg, I don't in the least mind people criticizing
ARRL, and neither does Ed. But when the criticism rests on unfounded
assertions and leapt-to conclusions, we do get annoyed. So, don't be
surprised when we put forth the factual evidence that shows your
statements to be false.

: > There is enough real things to call us to task
: >for; pulling things out of a hat

: Are you looking for a list?

Ed and I each have our own lists. :-) We're always willing to add
to them, though!

[deleted]

: Oh. I see. Not only do I not know what I'm talking about, I'm 'not
: useful.' I lack facts (apparently because I disagree with your
: 'world view') and I don't think.

Well, those who don't know what they are talking about really
aren't contributing anything useful to the discussion. That's not to
say that *you* aren't useful, Greg. I'm sure you're very useful. But
you could be a lot more useful to the discussions on this medium if you
would reason from facts. If you feel that charge is unfair, there is a
simple solution: simply present facts to back up your statements. If
you don't, you open yourself to the charge of leaping to conclusions.

: I'll send the membership kit back by return post.

Too bad. Not only will you deprive yourself of the benefits of ARRL
membership, you'll miss opportunities to influence the course of
events. But, as always, it's your choice. Ain't freedom wonderful?
--
Jon Bloom KE3Z jbloom@arrl.org

1258. Re: Microwave oven shielding

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 17:14:24 UTC
From: swirsky@adobe.com
Message-ID: <1994Feb9.171424.374@adobe.com>
Source record: 271407

In article <horak.760812890@convex.com> horak@convex.com (David Horak) writes:
>If the microwave cannot
>attenuate 900 MHz, is it really attenuating the GHz stuff? Would
>someone care to comment on the type shielding used in these ovens?
>

I did a similar experiment with my Motorola pager, which operates in the
900MHz band. I was looking for locations in my house where the pager would
indicate it had no signal (little antenna icons appear on the display!) and
tried inside the microwave. Sure enough, the pager couldn't hear anything
in there.

I don't know why it wasn't a suitable Faraday shield for your phone!

--
Robert "AF2M" S-W.
"Yet another FCC-tested pre-Bash extra who supports No-Code licensing! :) "

1259. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 17:32:45 UTC
From: greg@netcom.com
Message-ID: <gregCKywqn.2D0@netcom.com>
Source record: 271408

(excuse inclusion of a lot of text, but since Messrs. Hare and Bloom can't
be relied upon to quote in context and fairly, and to limit attributions
to what was *said* rather than what would be convenient for their attacks,
it would seem necessary)
In article <1994Feb3.190229.8136@arrl.org> jbloom@arrl.org (Jon Bloom (KE3Z)) writes:
>Greg Bullough (greg@netcom.com) wrote:
>: In article <1994Jan28.171743.483@arrl.org> ehare@arrl.org (Ed Hare (KA1CV)) writes:
>: >Greg Bullough (greg@netcom.com) wrote:
>: >
>: >: Steven has hit it on the head. As hams, we have for years said "can't
>: >: afford a commercial rig? Home-brew or build a simple kit." Then
>: >: QST and all the other magazines which bang this drum (which quite
>: >: handily fills up magazine pages with circuits that few ever
>: >: build) reap big advertising dollars from kit companies.
>: >
>: >For starters, I am not sure that few ever build projects from
>: >magazines.
>
>: Why? Haven't you polled your readers, in order to make intelligent
>: editorial decisions? Haven't you asked 'if not, why not?' '73' has
>: an article-by article reader feedback form, every issue. If you
>: don't have the information, you really aren't in much of a position
>: to either support or refute my assertion, are you?

> Well, at least Ed doesn't make "assertions" that he can't support
>with data. If he doesn't have the data at hand, he doesn't make
>statements as though they were facts.

As I have stated before, and as even someone with a sixth-grade level of
literacy ought to be able to glean from the above exchange, it was
Mr. Hare who initially indicated that he was 'unsure' of his facts.
I responded that such a thing suprised me, having assumed that some
survey would have been made and its results disseminated to the staffers.
Since the issue in question was one of being in or out of touch with
the ham population at large, this was very pertinent.

He apparently mis-represented that; he indeed does believe that he has
facts at hand.

> But I *do* have the data at hand. Our recent (1992) market survey
>shows that 35% of amateurs "enjoy building equipment or kits." 42%
>enjoy "experimenting with equipment or antennas." So the statement that
>few ever build circuits is clearly unsupportable.
> Now, where's *your* data?

I guess I consider almost 20 years as an active ham a pretty good basis
for what my fellows do and don't do.

But let's look at these "facts" with a critical eye, shall we?

1. 35% is not exactly a clear majority, now is it?
2. The 42% includes 'or antennas.' Considering that
antennas are generally NOT plug-and-play items,
I'd expect MOST hams have to do it. Does this
mean the other 58% hate it?
3. The phrasing of the question begs for a higher
number. They 'enjoy' it. I 'enjoy' sunning on
the beach on a tropical isle. Doesn't mean I
do it, or get to do it, very often. But I would
submit that there are some vested interests in
asking the question that way. Such as the advertising
dollar. And such as justifying the existance of QEX.
4. The very existence of QEX can be taken to mean two
things; there is sufficient interest to support a
whole distinct publication; or there is insufficient
interest to put the material into the mainstream.

And that it really doesn't support conclusions any more than the average
Joe Ham's experience. Of course, Joe Ham spends his money based on his
experience, more than Mr. Bloom's data. And it is also that experience
which leads him to stay in the hobby rather than take up snowmobiling.

>: >Some of the authors that have offered a kit have reported
>: >large sales
>
>: And god bless 'em if they do, for they are the ones who recognize
>: that parts procurement is 90% of the problem and 200% of the
>: expense of home-brewing. Someone who take the time to write an article,
>: and then offer a kit, with no intention of profiting by either is,
>: IMHO, entitled to some sort of sainthood.
>
>But, according to you, QST shouldn't publish such articles. Isn't that
>just a bit, well, inconsistent?

Yes, and that should have been your first hint that you were, well,
not correct in your interpretation of my position. Perhaps if you
took the time to read and understand, you might gain insight
outside of the boundaries of greater Newington.

>: >something else. Go to any hamfest, note the rows upon rows of
>: >vendors offering components. Hams are buying them, putting them
>: >in bags and taking them home. They must be doing something with
>: >the parts.
>
>: In my experience, they're gathering bits for something they'll
>: 'get around to someday,' and or looking for a specific component
>: for some simple use.
>

>So, hams are hoarding basements full of parts without ever using any of
>them? *That's* your experience? Wierd!

Aw c'mon. You mean to say you don't know bunches of hams with garages/
basements full of stuff that they're going to assemble when they get
'a round tuit' along with some half-finished projects, and most of
the parts for this or that? Where have you been?

>Well, I did an informal poll of the technical editors and lab staff
>here at HQ. Of the 10 people I talked to, one (count 'em) received his
>license after the age of 20. So we've *all* had experience outside the
>environment of ARRL HQ. We weren't born here in the ARRL Lab, you know!
>And only a few of these people have EE degrees. (Just enought to keep
>the other ones on the straight and narrow!) So, once again, the
>available evidence shows your "assertion" to be in error.

'Had experience' and where you work every day are two different things.
You get used to things. After five or more years, for example, it would
seem strange for me to work somewhere that had no internet access, even
though I know most people don't have it, and can remember what it was
like when it was a challenge to move data to a system four miles away.
That's normal. It really doesn't hurt anything, unless you *forget*
that you're in a different situation from most people, and fail to
accept that you have to do some different things to allow for it.

>I'm not going to rehash no-code, but I'll note in passing that this
>statement has all the accuracy of your other ones.

We must agree to disagree on this one. I, also, was opposed to no-code.
The difference between myself and the ARRL on this one is that I now
admit that I was being stupid, and club-ish, and elitist.

>: way, the League and QST have flirted with this policy from time to
>: time, but they can't seem to get away from the 'all home-built' ideal.
>
> Do you *read* QST? Have you seen the "New Ham Companion" section? I
>challenge you to find *one place* in the ARRL literature where it says
>a new ham should homebrew his station in order to get on the air. Just
>one place.

It was all over the older League publications.

Perhaps, if I have some time, I'll look up some citations.

Perhaps, Jon, you can fill us in on when the League and the editorial
staff thereof, conciously chose to change to a editorial policy where
home-brew was presented as an ancillary activity, rather than as an
ideal?

>full-page ads in *other* magazines. (Hey, maybe that's it... maybe all
>your complaints are really about another magazine, and you've just
>confused it with QST! At least that would explain why all of your
>"assertions" are 180 degrees out.)

Gee, wouldn't it be useful if we had an ARRL staff which, instead of attacking *MEMBERS* whose perceptions disturb them, claiming that 'all of your "assertions" are 180 degrees out' took the time to figure out what's wrong? Why do some people look at the ARRL this way? Why aren't a mojority of the hams members? Why do memberships lapse?

>: More correctly stated: 'by what the Directors want hams (particularly
>: new hams) to see.'
>
>Really? On what basis do you supply this correction? Facts, please,
>because all the information *I* have (from sitting in the editorial
>review meeting every week) shows that what the editors discuss is what
>we think the *members* want to read. And on the rare occasions I've
>heard a Director comment on the content of QST, it's invariably been to
>relay a *member* complaint or concern.

I guess that means that the content is pretty well in tune with the Directors' desires, then. Again, I base this on the facts that:

1. QST is an official journal
2. QST seems to be as good at covering opinions which dissent from the League line as the National Review is at covering liberal politics; conversely, the League's positions are about as well covered in QST as conservatives are in the National Review. I rarely see something in QST which would help a member make up his mind on an issue.

Perhaps it should be that way. I know I'd rather see it that way, and see it honestly admitted, than see it denied.

>: And good it was. QST Product Reviews are the ONLY ones I would ever
>: trust. Mostly because I've seen gushing, press-release quality *articles*
>: in 73 and CQ, masquerading as product reviews. It only begs the question
>: of why, when this landmark kit has been on the market for several years
>: already, it was just recently the subject of a review in QST. Lots of
>: stuff of much lesser interest has appeared before this one. I mean,
>
>Uh, lesser interest to who? Got any support for that, Greg?

The first thing that springs to mind was the review of the SWL receiver which was in the PR section a couple months back. Did it really deserve a full-blown review? It was a piece of equipment of only secondary (and to give due credit, by the time the review was perused, I understood it to be more like 'teriary') interest to hams. The question is, was a full review necessary to establish that?

>: I bought one of the close-outs of the first Ramsay 146 kits on sale
>: a good two years ago! Haven't got around to assembling it yet, but
>: I wish I'd known what to watch for before plunking even the bargain-basement
>: price on the counter.
>

> Since you ask...we originally bought one of the Ramsey units in the
>summer of 1991.

...that would have been a good time.

> This was the earlier version (the FTR-146). We built
>it and were in the process of reviewing it when we received a call
>(unsolicited) from one of the folks at Ramsey, saying that they had
>noticed we bought one and thought we'd be interested in knowing that
>they were about to release a new design, and perhaps we would want to
>hold off our review of what was about to become an obsolete unit. (At
>the same time, I reported to Ramsey that the radio failed to meet
>harmonic spectral purity requirements.) They promised to send us one of
>the new units as soon as it became available. (Normally, we only
>*purchase* Product Review items, but we decided that it would be hard
>for them to fine-tune a kit :-)
> We waited a couple of months, then called Ramsey. To make a long
>story short, we called *every* couple of months, but we never received
>the promised radio. Finally, we just bought one (through a third
>party). This is the unit we reviewed. In March of 1993, we contacted
>Ramsey to report that the radio we built didn't meet FCC specs. They
>offered to send us one of their built radios, so we could check it
>against ours. We did so, and found that *their* radio didn't meet
>specs. In fact, it worked just like the one we built. We reported
>that to them and asked that they provide a fix to the spectral purity
>problems. They did so, and we implemented the fixes (as described in
>the review article).
> This entire process took just about two years, the bulk of which was
>our waiting for Ramsey to deliver a promised radio--that we never got.

This is interesting information indeed! Certainly, there is some 'fault'
with Ramsey. It may even be that they knew what the likely results would
be. We'll never know.

However, the option to purchase existed all along. And, it seems to me,
that:
1. There was *some* responsibility to somehow inform the
readership of the problems seen with the first kit. After
all, these kits are probably one of the most appealing
items, especially to new hams, on the market today. QST
was very accomodating to Ramsey. Would that they would hve
been so to us! Again, this goes to an issue of being 'in
touch' with what hams need.
2. It is quite possible to 'tune' a kit. You can make sure that
all the components are within design tolerances, you can
take a very careful parts inventory, you can look at the
PC board with a very good magnifier, and you can generally
make sure that it's in the highest percentile of what you
turn out.

I wish, and I suspect some others do, that QST had pushed harder on this
one, and been more out front with those of us that pay the bills. Especially

when, as in this case, the initial work pointed to the possibility of a serious problem.

It's a much higher calling to point out problems for the ham-consumer, than it is to review the Conglomerate 1001D 8-band transceiver with DSP; of course the 1001D is a more fun toy to play with, but 95% of the time it works pretty much as advertised (across three color pages of QST, I might point out).
What it comes down to is, you guys knew, or at least had an inkling, that there might have been a problem. And you didn't tell us! I guess I'd expect that either you'd find a way to tell us, or push to get the Review done, to settle the matter.

And *THAT* is the kind of thing that I'm talking about when I claim that there is a divergence between what the ham radio population needs from the League's publications, and what they get.

I can think of no better example. And the 'facts' are Mr. Bloom's.

Greg

1260. Re: Antenna Erection Aids - Thor's socks

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 17:54:36 UTC
From: lbrunson@rodgers.rain.COM
Message-ID: <9402091910.AA23952@rodgers.rain.com>
Source record: 271409

I just have to put in my two cents here. I have used a bow and arrow, and a sling shot too. I have come up with another method I like for certain applications. I use an old sock. I seem to have plenty of them with holes in the heals. I prefer them when I am back packing and don't want to carry the weight of a sling shot. Also, if they get lost or stuck in a tree, it is no big deal (although I suppose one should use old brown wool socks filled with bird seed to be environmently correct... they sure are hard to spot when you loose them though).

When it is time to put up the antenna I scoop up some heavy material (dirt, sand, rocks, etc) and dump it in the toe of the sock. Then I either tie a line to it or sometimes I will tie the antenna to it and throw it like Thor's hammer.

I have sometimes put soft material (like sand) in it and thrown it on a roof. There is enough friction to hold it on many types of roofs and you just pull to get it back down.

So, if you go out in the forest and see socks hanging in the trees up about 30 feet, you know I was probably there on one of my (kc7)DXpeditions.

73 Lowell (kc7DX)

Lowell Brunson (503) 681-0417
Rosenet: lbrunson@roland.co.jp
Internet: lbrunson@rodgers.rain.com (prefered)
lowell@techbook.com
Packet Radio: KC7DX@K7IQI.OR.USA.NA

1261. QSLing via F6FNU

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 17:55:06 UTC
From: sas@opus.xyplex.COM
Message-ID: <9402091755.AA12482@opus.xyplex.com>
Source record: 271410

Doug Brandon asked...

>Does anybody know if F6FNU QSLs via the bureau?

The answer is a resounding *NO*! F6FNU has some easy-to-follow but strict rules if you want a card from a station he handles. Here are the rules, posted some time ago by Barrie K0WWG:

>"DX World" in the April [1993] issue of Worldradio points out the following
>rules which F6FNU has established:
>
> 1) You must QSL within 6 months of the activity.
>
> 2) You must include a self-addressed envelope (SAE) and $2 U.S.
>
> 3) No I.R.C.s or bureau cards will be accepted.
>
>Also, the article says that the 1993 Callbook address for F6FNU is
>wrong. Use the following:
>
> P.O. Box 14
> F-91291 Arpajon Cedex
> FRANCE

F6FNU has been dumped on by many hams regarding his QSL practices, but if you follow his rules, he is 100 percent reliable and quick, too. Don't waste your time using the bureau with F6FNU, and don't waste your time complaining about his rules if you want a card from him! :-) If it's been more than six months and you want a card, try anyway. Others have gotten cards from him beyond the six month period. The SAE/US$2/no IRC/no buro is hard and fast with him, though.

73,
Scott WO1G
==========
Scott Sminkey email: sasminkey@eng.xyplex.com
Software Sustaining Engineering voice: 508 952-4792
Xyplex, Inc. fax: 508 952-4887
295 Foster St. (Opinions, comments, etc. are mine,
Littleton, MA 01460 not Xyplex's...)

1262. Internet id or address for CARF, RAC

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 18:20:00 UTC
From: salhany@bmerha9e.bnr.ca
Message-ID: <2jb9gg$e7l@bmerha64.bnr.ca>
Source record: 271412
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Anybody know if RAC (or CARF) has an internet id?

If so, could they post it here?

If not, how about posting their address?

Thanks,

Wayne VE3WQS

1263. Re: HTX202 belt clip

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 18:27:09 UTC
From: drenze@icaen.uiowa.edu
Message-ID: <1994Feb9.182709.13380@icaen.uiowa.edu>
Source record: 271413

psc@colmiks.com (Philip Cook (Halgren)) writes:

>hlb (hlb@li.loral.com) wrote:
>: Is the belt clip of the HTX202 used as a heat sink or can it be operated
>: without the belt clip attached?

>: Thank you.
>: hlb@li.loral.com

>: --
>: hlb@li.loral.com
>--
>+---+
>: Philip Cook : Sysop of Dragon's World BBS : Amateur Radio Operator :
>: psc@colmiks. : 203-294-1813 : N1OKM :
>: colmiks.com : A Commodore C*Base BBS : ARRL member :

the belt-clip on the htx-202 is its heatsink.

You have been warned.

--
__ /| | Doug Renze, N0YVW | Don't believe what your eyes are telling
\'o.O' | +1 319 339 7814 | you! All they show is limitation. Look
=(___)= | drenze@icaen.uiowa.edu | with your understanding, find out what you
U | Douglas-Renze@uiowa.edu | already know, and you'll see the way to fly.

1264. Re: QSLing via F6FNU

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 18:41:47 UTC
From: eckman@eos1.larc.nasa.gov
Message-ID: <2jbapb$f7@reznor.larc.nasa.gov>
Source record: 271414

In article <9402091755.AA12482@opus.xyplex.com> sasminkey@xap.xyplex.com writes:
>
>F6FNU has been dumped on by many hams regarding his QSL practices, but if
>you follow his rules, he is 100 percent reliable and quick, too. Don't waste
>your time using the bureau with F6FNU, and don't waste your time complaining
>about his rules if you want a card from him! :-) If it's been more than
>six months and you want a card, try anyway. Others have gotten cards from
>him beyond the six month period. The SAE/US$2/no IRC/no buro is hard and
>fast with him, though.
>
>73,
>Scott WO1G

Nope...I've had 100% return from F6FNU also, but have never enclosed more
than US$1 per card. He's always returned the cards using reduced-rate
airmail (note the cut corners on the envelope) which costs him well
under $1.00 ($0.40 or so the last time I looked at the exchange rate).
So he's still making a very tidy profit at $1.00 per card.

Rich Eckman KO4MR
NASA Langley
eckman@eos1.larc.nasa.gov

1265. Re: QSLing via F6FNU

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 18:51:06 UTC
From: jayk@fc.hp.com
Message-ID: <CKz0D7.6HK@fc.hp.com>
Source record: 271415

: The SAE/US$2/no IRC/no buro is hard and fast with him, though.
: Scott WO1G

Except for the time I sent him four IRCs and he sent back a card.
Just lucky I guess....

73, Jay K0GU

1266. AMSAT HF PBBS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 18:54:05 UTC
From: BJARTS@stthomas.EDU
Message-ID: <01H8OKRY66V694EBSP@stthomas.edu>
Source record: 271416

AMSAT HF PBBS

WT0N-3 WILL BE ON 10.127 LBS (30 METERS) MONDAY THROUGH SATURDAY
FROM 1600 UTC UNTIL 23OO UTC . THIS STATION WILL CARRY ALL AMSAT
BULLETINS AND KEPS. IT WILL ALSO CARRY OTHER SATELLITE RELATED
ITEMS SUCH AS "SPACENEWS". THIS PBBS WILL BE SET UP ON 300 BAUD
HF PACKET, BUT IT WILL ALSO BE AVAILABLE FOR AMTOR OR PACTOR
OPERATIONS IF THERE IS A NEED TO DO SO. AT THIS TIME, THE PBBS WILL BE
SET UP AS AN EXPERIMENT AND ANY COMMENTS AND SUGGESTIONS SHOULD
BE SENT TO THE SYSOP, BJ ARTS WT0N, AT ONE OF THE FOLLOWING:

PACKET:WT0N@WB0GDB.#STP.MN.USA.NOAM

INTERNET:BJARTS@STTHOMAS.EDU

HF PACKET: WT0N-3 (ON 30 METERS)

THE STATION IS LOCATED IN ST.PAUL, MN.USA. AGAIN PLEASE FEEL
FREE TO SEND SUGGESTIONS ON HOW TO MAKE THIS PBBS BETTER FOR THE
AMSAT USER.

73 AND THANKS FOR YOUR TIME de BJ WT0N

1267. MOD for FT-727R wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 18:54:42 UTC
From: sha9681@cup.edu
Message-ID: <1994Feb9.135443.523@cup.edu>
Source record: 271417

I am looking for a Mod for my Yaesu FT-727R HT. Well basicly, I mainly need a mod to extend my Memory, 10 channels, just isn't enough. If anyone has any, or can tell me where I can get any, please resond via e-mail to the below address. Thanks a bunch!

73's
N3OVV
ad486@freenet.buffalo.edu

1268. AMSAT PBBS ON HF

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 19:04:25 UTC
From: BJARTS@stthomas.EDU
Message-ID: <01H8OL50F5DU94EBSP@stthomas.edu>
Source record: 271418

AMSAT HF PBBS

WT0N-3 WILL BE ON 10.127 LBS (30 METERS) MONDAY THROUGH SATURDAY
FROM 1600 UTC UNTIL 23OO UTC . THIS STATION WILL CARRY ALL AMSAT
BULLETINS AND KEPS. IT WILL ALSO CARRY OTHER SATELLITE RELATED
ITEMS SUCH AS "SPACENEWS". THIS PBBS WILL BE SET UP ON 300 BAUD
HF PACKET, BUT IT WILL ALSO BE AVAILABLE FOR AMTOR OR PACTOR
OPERATIONS IF THERE IS A NEED TO DO SO. AT THIS TIME, THE PBBS WILL BE
SET UP AS AN EXPERIMENT AND ANY COMMENTS AND SUGGESTIONS SHOULD
BE SENT TO THE SYSOP, BJ ARTS WT0N, AT ONE OF THE FOLLOWING:

PACKET:WT0N@WB0GDB.#STP.MN.USA.NOAM

INTERNET:BJARTS@STTHOMAS.EDU

HF PACKET: WT0N-3 (ON 30 METERS)

THE STATION IS LOCATED IN ST.PAUL, MN.USA. AGAIN PLEASE FEEL
FREE TO SEND SUGGESTIONS ON HOW TO MAKE THIS PBBS BETTER FOR THE
AMSAT USER.

73 AND THANKS FOR YOUR TIME de BJ WT0N

1269. Re: Microwave oven shielding

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 19:26:41 UTC
From: chuck@eng.umd.edu
Message-ID: <2jbddh$7ja@mojo.eng.umd.edu>
Source record: 271419

In article <horak.760812890@convex.com> horak@convex.com (David Horak) writes:
>I have a question to ask. While playing with my new Tropez 90 MHz phone
>the other day, I tried putting it into both of my microwaves (no I didn't
>nuke the phone :') and I guess I expected the shielding to cut off the
>signal, thereby causing the out of range indicator to beep. The phone
>was still able to communicate with the base. If the microwave cannot
>attenuate 900 MHz, is it really attenuating the GHz stuff? Would
>someone care to comment on the type shielding used in these ovens?

The biggest source of leakage in a microwave oven is the door seal. Modern
microwaves use what is called a "choke" seal. It is a tuned, narrow width,
groove formed into the outer edge of the door. The choke seal used is only
effective at frequencies greater than 2 GHz. There is also an upper freq
limit.

Microwaves leak bunches of RF inspite of these seals. Tune a receiver
to around 2450, and you will hear some of the trashiest RF.

Chuck Harris - WA3UQV
chuck@eng.umd.edu

1270. Nashua, NH - Beginner question...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 19:36:00 UTC
From: sms@barney.palette.COM
Message-ID: <m0pUKi7-0008X4C@barney.palette.com>
Source record: 271420

Hi Folks,

I was wondering if someone could help me. I'm really new to
all of this, so bear with me... 8^)

I'm hoping to take the tech exam w/code sometime this month
or next. Right now I have a pro-2028 scanner, that I have
have about 5 local repeaters tuned to.

Every once in a while I hear on 146.8500 mhz (A repeater in
Derry, NH) some operators doing CW practice, as if in a classroom
environment.

This sounds extremely interesting to me, since I'm having a little
problem trying to get CW down pat...

Does anyone know anything about this, and if so, is this done on
a daily/weekly/monthly basis? Is there some sort of schedule?
I also think I heard them giving ARRL news also one night...?

Any help you can provide would be greatly appreciated!

Thanks Alot!!!

Steve Santinelli

1271. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 19:40:01 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CKz2Mq.6Dp@news.Hawaii.Edu>
Source record: 271422

In article <CKxq14.LvA@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Sounds exactly like the famous Milham study of amateur radio operators
>which implied that exposure to RF radiation causes cancer. I wonder
>what the cause is for the golf course managers: too much fresh air?
>

Probably exposure to chemical spraying of the course, and sun exposure.

As far as RF radiation causing cancer, try to get some cancer figures
from the Coast Guard concerning the high cancer rate among the omega
and LORAN navigation station operators. It's enough to make a QRP operator
out of you!

==========

Jeffrey NH6IL jherman@hawaii.edu, who, in his spare time, cannibalizes
old TV sets to make QRP transmitters (CW, of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500 kc CW)

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.
==========

1272. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 19:52:36 UTC
From: llake1@services.DEse.state.mo.US
Message-ID: <Pine.3.07.9402091336.B12761-5100000@services>
Source record: 271423

```
help
index
```

1273. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 19:58:56 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CKz3I8.6M4@news.Hawaii.Edu>
Source record: 271424

In article <1994Feb9.031017.13806@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <CKxKI7.1IJ@world.std.com> barnaby@world.std.com (Richard L Barnaby) writes:
>>Any advice for cracking the morse-as-characters to morse-as-words barrier?
>
>No. I've been a ham 30 years and I still can't do it. If I don't write
>it down, I have no idea what's being sent.
>

Yes. First, put down your pencil and force yourself to copy in your head.
In fast Morse, you don't want to try to pick out individual letters; rather
you want to hear entire words. Now , one way recognizing words is to make
up code tapes yourself consisting of common words you might hear during
a CW QSO: the, rig, ant, qth, ...; send each word at least a dozen times
and recognition will come very quickly (this is how I learned Vietnamese -
but Gary will quickly deny any correlation between learning a language and
learning code even though the methods of learning are the same: repetition!).

I'd wish you the best of luck but luck has nothing to do with it; just
practice, practice, practice.

72 to you Richard (and Gary, too!)

--
Jeffrey NH6IL jherman@hawaii.edu, who, in his spare time, cannibalizes
old TV sets to make QRP transmitters (CW, of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500 kc CW)

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.

1274. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 20:03:31 UTC
From: alanb@sr.hp.com
Message-ID: <CKz3pw.8yG@srgenprp.sr.hp.com>
Source record: 271425
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <CKxpL6.LKB@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
: >Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: >: In article <CKvGDJ.GFv@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
: >: >Consider a vertical dipole in free space. You could insert a horizontal
: >: >infinite ground plane at the feedpoint without changing the radiation
: >: >pattern. Now you have two verticals, one pointing up, one pointing down.
: >: >Each vertical radiates half the power of the original dipole.
: >
: >: True because each has half the current that flows in the entire dipole.
: >
: >No, the current is the same, but the power is halved. There are (at least)
: >two ways to see this: 1) Only 1/2 the voltage is applied to each 1/4-wave
: >element. Since power = voltage times current, the power is 1/2.
: >2) The element is only 1/2 as long. So the same current results in
: >only 1/2 as much power radiated.

: Dipole split by infinite ground plane.

: |
: |
: -------/\/\/\/\---o | o---/\/\/\/\-------
: E1 | E2
: |
: |
^^^ 36.5 ohms ^^^ 36.5 ohms
------------ 73 ohms ------------

: If we apply drive to E1-E2, equal currents are driven into each element's
: impedance. So the halves of the dipole have equal currents flowing in them,
: but 180 degrees out of phase. With the infinite ground plane isolating the
: halves, one half has half the total current flow.

Let's call the voltage applied between E1 and E2 "V". Since there are
equal and opposite voltages on the two terminals, the voltage applied
to each is V/2.

If, for example, V = 73 volts, the current in the dipole is 1 A (since
the radiation resistance is 73 ohms.) With the ground plane, the
impedance of each 1/4-wave element is 73/2 = 36.5 ohms. Since you have
half the voltage (37.5 V) applied to each half, the current is still 1A
in each 1/4-wave element.

The resulting field is the same for the ground-plane case as for the
dipole in free space. It is as if the other half of the dipole were

still present. That's where the concept of the "image" antenna
extending below the ground plane comes from.

AL N1AL

1275. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 20:20:00 UTC
From: alanb@sr.hp.com
Message-ID: <CKz4HD.9KD@srgenprp.sr.hp.com>
Source record: 271426

Steve Coletti (bigsteve@dorsai.dorsai.org) wrote:
: In article <CKxq14.LvA@srgenprp.sr.hp.com>, Alan Bloom wrote:
: > to investigate the death rates of golf course managers. The study
: > found that golf course managers have death rates from several kinds
: > of cancer that are significantly higher than the national norm. The
: >
: > Sounds exactly like the famous Milham study of amateur radio operators
: > which implied that exposure to RF radiation causes cancer. I wonder
: > what the cause is for the golf course managers: too much fresh air?

: I'd venture a guess that the death rate is probably due to the exposure
: to chemicals and insecticides used in grounds keeping.

I suppose, although I doubt they use much insecticide on golf courses.
(They're mostly grass, aren't they?)

I'm beginning to wonder if there is anything that DOESN'T cause
cancer. A local best-selling Doctor claims that milk causes leukemia.
If I remember his reasoning, it goes like this: A high percentage
of milk cows have bovine leukemia. Bovine leukemia is caused by a virus.
Human leukemia can be caused by the same virus. While Pasteurization
kills the viral organisms by breaking them into particles, those
particles are still capable of causing leukemia in humans.

Sounds like an awfully dubious string of assertions to me, but lots
of people buy the good Doctor's book. When it comes to cancer,
reason takes a back seat to fear.

AL N1AL

1276. Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 20:20:04 UTC
From: gdavis@griffin.uvm.edu
Message-ID: <gdavis.760825204@griffin>
Source record: 271427

I heard a strange story on the CBC last evening. The report was on
the increasing interest in nudism in the Winter months. To promote
this festive and relaxing activity additional interests where specified.

There is, according to the CBC, a nudist amateur radio club.

I am wondering where, how many members? Anybody know anything about this?

- In the Buff
Gary WQ1F

--
******** Gary E. Davis***** WQ1F *****
The most common of all follies is to believe passionately in the
palpably not true. It is the chief occupation of mankind.-H.L.Mencken

1277. Re: Anyone Hear from Space Shuttle?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 20:21:53 UTC
From: dparker@netcom.com
Message-ID: <dparkerCKz4KH.HoF@netcom.com>
Source record: 271328

blood@austin.ibm.com wrote:

: Has anyone heard the shuttle on 2mtrs? With 3 hams out there and
: a broken satellite, perhaps they have some time on their hands.
: Or just too busy trying to fix it. Where Do I listen? 145.55?

I worked them on Packet Sunday afternoon. The Packet uplink
is 144.49, and the call is W5RRR-1
I have yet to hear any voice on that freq.
Good Luck!
Dave
KD6RRS

1278. Copying by 'mill'

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 20:21:57 UTC
From: greg@netcom.com
Message-ID: <gregCKz4KM.n4v@netcom.com>
Source record: 271329

In article <1994Feb8.155316.10036@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>
>I also have a friend who was a Navy radio intercept operator in WWII.
>letter sound directly with a finger action on the keyboard, a form
>of Pavlovian conditioning.

So *THAT* is the explanation for the drooling :-)

(There's an old joke--- ---how do you tell the stage is level? Answer: the concertina player is drooling out of both sides of his mouth.)

Greg

1279. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 20:47:46 UTC
From: x1rbrown
Message-ID: <x1rbrown-090294144508@rbrown.exnet.iastate.edu>
Source record: 271330

In article <CKy1qC.GzC@kaiwan.com>, dab@kaiwan.com (Doug Brandon) wrote:
>
> I worked YX0AI on Aves Island in Feb/Mar 1992. The QSL info was via YV5A
> and I've sent three requests over the past two years with no response.
> Has anybody received cards via this route, or is there an alternate/better
> route?

A guy in Florida was hand carrying cards to YV for awhile and was able to
get YX0AI cars back with some regularity. Check the guys on INDEXA (14236
at 2330Z every day) for current info.
>
> Does anybody know if F6FNU QSLs via the bureau?

Nope, as others have mentioned. A couple of green stamps should do it. My
feeling is that if I need the card...right or wrong, I'll send the bucks.

Roger Brown
Iowa State University Extension
x1rbrown@exnet.iastate.edu
Amateur Radio ND0J

1280. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 21:03:40 UTC
From: eckman@eos1.larc.nasa.gov
Message-ID: <2jbj3c$2cn@reznor.larc.nasa.gov>
Source record: 271331

In article <x1rbrown-090294144508@rbrown.exnet.iastate.edu> x1rbrown (Roger Brown) writes:
>> Does anybody know if F6FNU QSLs via the bureau?
>
>Nope, as others have mentioned. A couple of green stamps should do it. My
>feeling is that if I need the card...right or wrong, I'll send the bucks.
>
I've been thinking about this a bit today (a dangerous thing to do!)
and I guess that the real issue is whether it is appropriate to run
a QSL manager operation for profit. I guess that a few managers make
a few bucks by managing QSLs for a DX operation, but it's generally
considered a public service to the amateur community.
I personally think that it's wholly inappropriate to charge upwards
of five times cost for the privilege of receiving a QSL card, as in the
case for F6FNU. You can't exactly pass a law forbidding it. But,
I recall that the DXAC was soliciting opinions on QSL practices last
year. Perhaps it would be appropriate for the DXAC to disallow DXCC
credit for any operation that utilizes an obviously for-profit QSL
manager.
Just a thought. Obviously, one would have to rigorously define what
a 'for-profit' operation is. In Germany, $1.00 is no longer sufficient
for air-mail postage to the states, for example. But the fact is that
in France, the cost of (reduced rate) air-mail postage is still
substantially under US$1. For-profit QSL managing just doesn't
seem to be in the spirit of DXing or amateur radio in general.

Richard Eckman KO4MR
NASA Langley
eckman@eos1.larc.nasa.gov

1281. Bosnian Ham Address

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 21:26:02 UTC
From: sbaker@umassmed.UMMED.EDU
Message-ID: <9402092126.AA29848@umassmed.UMMED.EDU>
Source record: 271332

I have been expecting to find out the call sign of a ham in Bosnia who is operating "clandestinely" from some bosnian refugees. I just received what the translaters obtained, it is like (but not exactly):

378-88-813-164

(I modified a couple of digits in case it is somehow traceable)

This is obviously not a call sign, or recognizable as a frequency. I wonder if it is an i.p. address for a packet mail network. It bears a slight resemblance to an internet i.p. address. The ham in question is purportedly located in Mostar, Bosnia and I am attempting to locate a way to pass health and welfare traffic. Thanks.

--

Stephen P. Baker phone: (508) 856-2625
Lecturer in Biostatistics (508) 856-3131 fax
Department of Academic Computing (413) 253-3923 home
University of Massachusetts Medical School e-mail: sbaker@umassmed.ummed.edu
55 Lake Avenue North -.- -.. .---- .--. ..-.
Worcester, MA 01655

1282. Morse code as words!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 22:06:26 UTC
From: ham@wam.umd.edu
Message-ID: <2jbmp2$3jb@cville-srv.wam.umd.edu>
Source record: 271333

I have been on CW for about 7 years. I first learned CW at age 14, and promptly took two years off (so I forgot most of it). I re-acquired the ability to copy code, and in eight months was up to about 20 wpm. This was roughly 7 years ago, and JUST in the last year have I begun to start hearing words instead of letters. For me, this came at roughly 28 wpm or so (plus or minus a bit), and with a good amount of listening and operating.

For instance, when you see the word "INCOGNITO" or "AMATEUR" or "SCHEDULE" or virtually ANYTHING else, do you have any problem at all saying the word out loud? No, of course not, because you're been reading since a very young age. Now, if someone taught you the Hebrew alphabet and asked you to read Hebrew, you would have to sound out every letter. I guarantee that you would NOT appear fluent (this is my case).

Similarly, at age whatever, you have been taught the letters of the Morse Code. Words are made up of letters, but hearing letters and converting them to words is NOT equivalent to hearing words. I now hear words like the, and, or, if, you, etc., etc.

And suffixes, like -ing, -est, -ier, and -er.

Scott NF3I Just takes time, I guess. Throwing away the pencil is the key.

--
73, _____ _____ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 123 QSLed on dipoles _____| Dipoles! Antenna!

1283. G0LII- Pse help on address

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 23:06:15 UTC
From: Terry.Murphy@launchpad.unc.edu
Message-ID: <2jbq97$85c@samba.oit.unc.edu>
Source record: 271335

Can anyone help lookup the call G0LII

73 de ab4vj terry

--
The opinions expressed are not necessarily those of the University of
North Carolina at Chapel Hill, the Campus Office for Information
Technology, or the Experimental Bulletin Board Service.
internet: laUNChpad.unc.edu or 152.2.22.80

1284. FY5YP,TO5M,ZS3AW QSL routes?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-09 23:32:30 UTC
From: slay@netcom.com
Message-ID: <slayCKzDE7.4Lx@netcom.com>
Source record: 271336

I'm wondering if anybody can tell me the current QSL routing for FY5YP, TO5M, and ZS3AW. The first two were worked this year and the latter was worked a couple of times in the early 1970s. ZS3AW was in what is now Namibia (V5) but I'd sure like to know how to track him down. Thanks and 73 de Sandy WA6BXH/7J1ABV slay@netcom.com

1285. Looking for LOGIKEY keyer

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 00:07:32 UTC
From: hhv@rhi.hi.is
Message-ID: <2jbts4$6jb@eldborg.rhi.hi.is>
Source record: 271337
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

Can anyone tell me the present address of the Logikey Company,
or any other outlet for their LOGIKEY microprocessor based morse
keyer?

Please respond by e-mail at: hhv@rhi.hi.is

73 and thanks!

Hannes Hogni

1286. Re: Log periodic which covers 6 Meter band?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 00:28:45 UTC
From: robertrice@delphi.com
Message-ID: <hu0rVVN.robertrice@delphi.com>
Source record: 271338

Scott Whittle <drx@chinet.chinet.com> writes:

>Anyone know of a company which sells a Log periodic antenna which covers
>the 6 meter Band??

Well... I know I've seen them in the ham mags. There is also a surplus
one LP-1402B AS-2851 which you can occasionally find. Look at the ads in
nuts & volts etc.

1287. Re: 40 Meter Loop Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 00:31:23 UTC
From: randall@informix.com
Message-ID: <randall.760840283@infmx>
Source record: 271339

irvse.EGert@dg-rtp.dg.COM (Steve Egert) writes:

>I live in a condo that has a lot that is just too short to put up a 40 meter
>dipole (and the homeowner's association made me take down the vertical). Does
>anyone have any plans for a 40 meter transmitting loop? I've seen some that
>are compact, made of copper pipe and are capable of multiband operation.
>I've also read that they tend to cancel out atmospheric noise.

The best place to go is the ARRL Antenna Book, the chapter on loop antennas (chapter 5, I believe.) You will find plans there on how to build a small transmitting loop with a large variable capacitor. It is similar in design to the AEA Isoloop, which I have used with success on 30m through 10m. (It doesn't cover 40m.) This antenna is difficult to build properly, and the parts are not readily available or cheap.

Another thing you can do is to erect a loop fed with parallel line. (450 ohm ladder line or good 300-ohm TV twin-lead) You will need an antenna tuner capable of supporting a balanced line. The loop should be at least 34 feet (1/4 wave) in circumference, but a 1/2 wave (68 feet) is probably better. Since you are feeding it with parallel line through a tuner, length isn't critical. It will probably work better mounted vertically. Since you are limited in space, install it however it fits best in the room you've got. This antenna won't work as well as a full-size dipole, but it should work.

1288. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 01:01:51 UTC
From: daved@autodesk.com
Message-ID: <2jc11v$skc@autodesk.autodesk.com>
Source record: 271340

myers@cypress.West.Sun.COM (Dana Myers) writes:
>
> (lots deleted)
>
> call John Lansdale and ask for his price sheet. He sells VHF Lo-band (for 6m)
> Micors, complete with control group, for $75+shipping.
>
>
Are these retunable for 2m? with the right split, or modifiable to be so?
(as easily as you described)

With a service manual, I wouldn't be afraid to retune an old commercial
rig, the trick (secret?) seems to be in knowing *exactly* what old rigs
will retune without (much) part swapping. Any (further) pointers on
sources and models to look for would be greatly appreciated!

Note - I've built a FX-146, and use it for packet only. It picks up
lots of stuff it shouldn't (I have yet to call and ask for the filter
that'll fix this). I expect it puts out the illegal harmonics that have
been repeatedly mentioned here. If anyone has or knows of a fix for
the transmitter, I'd love to implement it. I also wouldn't mind at
all were I to have a chance to put it on an analyzer and see just how
bad it really is... (Hey Al - Naw, I bet you're too busy....;-)

Dave Duchesneau KD6LSA

1289. ARRL CONTEST

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 02:54:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <94021001303587@sec21.uucp>
Source record: 271341

ALL,

I hope to meet everyone February 19 and 20 during the
CW ARRL CONTEST, specially on 20, 15 and 10 m.

Best 73, Gerson Rissin - PY1APS, PY7APS
ex PY0APS

################################ Super Tag ################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

1290. Re: Talk America problems

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 03:56:47 UTC
From: john@anasazi.com
Message-ID: <1994Feb10.035647.16179@anasazi.com>
Source record: 271342
Cross-posted to: rec.radio.amateur.misc,comp.sys.ibm.pc.misc,comp.sys.mac.misc

wy1z@netcom.com (Scott Ehrlich) writes:

>I would like to get some feedback on your feelings about the Talk America
>radio network.

>The three shows I've been listening to for a while now are:

>Computer Exchange Radio
>Modem Mania
>Ham Radio and More

>I've been listing to these three shows for a couple of months now, and it
>seems the same technical glitches keep resurfacing. These problems are
>not on the shows' end - they are on Talk America's end.

>You'd think they would have cleaned up their act by now.

>I still listen to the shows, but the bugs keep annoying me.

>I think Modem Mania has the most technical glitches of the three.

>Your input is welcome.

I can speak for Ham Radio and More. We are just getting started (first
Talk America show was in November). It takes a while to get things going.
We work as follows:
We do the show at a studio at KFNN in Phoenix.
Talk America calls us on three phone lines. One of those take audio from
us up to their network.
Another gives us program audio back in real time (as opposed to
the 8 second tape delay that you hear).
The third is used for the two production engineers to talk back and
forth.
They take the calls and call our guest (if the guest is not in-studio)
and mix all the stuff together.

There are a lot of places for failure, and we don't have enough practice to
get it all right yet. Our last problem was caused by a cable mis-plugged
in OUR studio.

If you think YOU are unhappy about production problems, imagine how Len and I
feel! But I'm not casting any blame - it's tricky stuff and the economics
don't allow the sort of fancy production capabilities that a Rush LImbaugh
or a TV station can do.

John Moore

Co-Host - Ham Radio and More
--
John Moore Scottsdale, AZ 85253 USA (602-951-9326) Std Disclaimer Applies!
john@anasazi.com Amateur call:NJ7E Civil Air Patrol:Thunderbird 381
- Democracy is two wolves and a sheep using majority vote to decide what -
- to have for dinner. SUPPORT THE BILL OF RIGHTS - INCLUDING THE 2nd! -

1291. Re: N connectors (was Re: "Flexible" 9913 (Was - Re: Coaxial cab

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 04:16:43 UTC
From: dino@cam.org
Message-ID: <dino-090294231643@dino.hip.cam.org>
Source record: 271343

> N connectors also make an effort to be weather resistant where PL-259/SO-239
> do not. Land mobile radios seem to use SO-239 up to UHF (512MHZ max), then
> N connectors (800/900, etc.).
>
> ---
> * Dana H. Myers KK6JQ

Has anyone had any experience with the mini UHF connectors, I've seen show
up on some of the new mobile commercial radio. They look like PL259
connectors, but are about half the size. They would seem to have the same
limitations that the regular kind, but has anyone checked them to see what
impedance they give and or return loss?

--
"""""""""""""""""""""""
| Dino Moriello """""""""""""""""""""""
| PO BOX 105 Internet: dino@CAM.ORG """""""""""""""""""""""
| Radisson,Quebec Compuserve: 76120,1472 Tel.: 514-974-0773 |
| CANADA J0Y 2X0 Packet: VE2DM@VE2FKB 819-638-8281 |
"""
Please E-mail replies since I can't always read the USENET postings.

1292. New ARRL files on world.std.com

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 05:17:21 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCKztCx.58q@netcom.com>
Source record: 271344

The following files have been placed onto world.std.com:

In pub/hamradio/ARRL/Server-files/info/qst:

dspqst.zip - Source code for the September 1992 QST article by Hershberger

kh6cp10g.zip - Post Script artwork for Zack's 10Ghz Transverter (May '93 QST)

qsocorder.zip - Source code for the "QSO Corder" project from QST

vester-a.zip - The revised version. SSTV/Wefax by Ben Vester (from QST)
(NOTE: This file will be on World in a day or two)

xtalf.zip - Lotus spreadsheet of Crystal Filter calculator from May '82 QST

In pub/hamradio/ARRL/Server-files/info/qex:

qexfq194.zip - Pascal source code for the January QEX frequency counter

73,
Scott, WY1Z

--
```
==========================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
==========================================================================
```

1293. W2NSD

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 05:36:26 UTC
From: haynes@cats.ucsc.edu
Message-ID: <2jch4q$e3g@darkstar.UCSC.EDU>
Source record: 271345

There was an item in Science magazine, 4 Feb issue, says Wayne is about to
publish a magazine titled "Cold Fusion"
--
haynes@cats.ucsc.edu
haynes@cats.bitnet

"Ya can talk all ya wanna, but it's dif'rent than it was!"
"No it aint! But ya gotta know the territory!"
Meredith Willson: "The Music Man"

1294. Re: ANARTS RTTY NEWS BULLETIN 792 16/01/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 06:49:28 UTC
From: dave@eram.esi.com.au
Message-ID: <5175@eram.esi.com.au>
Source record: 271346
Cross-posted to: aus.radio,rec.radio.amateur.misc

In article <760263555snz@eiffel.demon.co.uk>,
rogerb@eiffel.demon.co.uk writes:

[Refusal of licence for ASCII RTTY repeater]

| I suspect the actual reason was just that those in control didn't want
| to see anyone doing anything different or innovative.

Things don't seem to have changed all that much...

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

1295. Re: N connectors (was Re: "Flexible" 9913 (Was - Re: Coaxial cab

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 07:14:26 UTC
From: jeffl@comix.UUCP
Message-ID: <757@comix.UUCP>
Source record: 271347

In article <2j6rtmINNf0s@abyss.West.Sun.COM> myers@cypress.West.Sun.COM writes:
>
>N connectors also make an effort to be weather resistant where PL-259/SO-239
>do not. Land mobile radios seem to use SO-239 up to UHF (512MHZ max), then
>N connectors (800/900, etc.).

The Motorola Mostar 800Mhz trunked radio uses UHF connectors.
As far as I know, it's the only 800Mhz radio that does. It
also uses an automotive trailer power connector wired backwards
(exposed +12v), so I don't consider this to be an exemplary radio.

Drivel: One of my favorite dumb stunts is to solder type N connectors
on both ends of some stiff coax (9913) while still rolled into a tight
coil. When I straighten out the coax, the center pins pop out.

--
Jeff Liebermann Box 272 1540 Jackson Ave Ben Lomond CA 95005
408.336.2558 voice wb6ssy@ki6eh.#nocal.ca.usa wb6ssy.ampr.org [44.4.18.10]
408.699.0483 digital_pager 73557,2074 cis [don't]
jeffl@comix.santa-cruz.ca.us scruz.ucsc.edu!comix!jeffl

1296. KC1XX qth/qsl-info = ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 09:11:16 UTC
From: planke@hekla.Systemtechnik.TU-Ilmenau.DE
Message-ID: <2jctnk$qsr@prakinf2.PrakInf.TU-Ilmenau.DE>
Source record: 271348

Do you know where KC1XX is situated? And his qsl-information?

Thank you in advance.
DL5ATP
--
Thomas Planke Planke@Systemtechnik.TU-Ilmenau.DE
Technical University of Ilmenau Phone: +49 3677/69-1465

1297. Daily Summary of Solar Geophysical Activity for 07 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 09:14:34 UTC
From: oler@rho.uleth.ca
Message-ID: <9402100914.AA17781@rho.uleth.ca>
Source record: 271349
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

07 FEBRUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 038, 02/07/94
10.7 FLUX=095.9 90-AVG=106 SSN=072 BKI=5546 6553 BAI=049
BGND-XRAY=B1.1 FLU1=7.2E+06 FLU10=1.0E+04 PKI=4647 6553 PAI=054
BOU-DEV=071,108,041,138,179,096,094,029 DEV-AVG=094 NT SWF=00:000
XRAY-MAX= B8.2 @ 1415UT XRAY-MIN= A9.9 @ 1749UT XRAY-AVG= B1.7
NEUTN-MAX= +000% @ 2325UT NEUTN-MIN= -004% @ 0830UT NEUTN-AVG= -1.7%
PCA-MAX= +0.1DB @ 0610UT PCA-MIN= -0.3DB @ 1345UT PCA-AVG= -0.0DB
BOUTF-MAX=55356NT @ 0209UT BOUTF-MIN=55280NT @ 1030UT BOUTF-AVG=55323NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+067,+000,+000
GOES6-MAX=P:+137NT@ 1741UT GOES6-MIN=N:-099NT@ 0618UT G6-AVG=+089,+038,-035
FLUXFCST=STD:097,099,102;SESC:097,099,102 BAI/PAI-FCST=025,025,020/033,025,020
KFCST=5656 4343 4455 5333 27DAY-AP=015,020 27DAY-KP=2133 2543 4434 4433
WARNINGS=*GSTRM
ALERTS=**MINSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 06 FEB 94 was 45.0.
The Full Kp Indices for 06 FEB 94 are: 4o 4o 3o 6o 6o 7o 5o 5o
The 3-Hr Ap Indices for 06 FEB 94 are: 27 27 15 84 76 132 45 45

SYNOPSIS OF ACT

Solar activity remained very low. Region 7664 (S12W49)
continued its growth and became a small class D group. This
region produced several B-class events.

Solar activity forecast: solar activity should become low
with Region 7664 beginning to produce small C-class bursts. If
the current pace of growth continues, small M-class flares
could be observed in a few days from this region.

STD: Electrons at greater than 2 MeV have become elevated. The
enhancement began at about mid-day on the 7th. The enhancement

appears to be approximately similar in intensity to what was observed at this time during the last solar rotation. If flux levels continue to remain strongly enhanced over the next week as occurred last rotation, geosynchronous satellite anomalies may be observed.

Geomagnetic storm conditions continued. Mid latitudes experienced minor to major storm levels. High latitude conditions ranged between active and severe storm levels. The Forbush decrease noted yesterday returned to a near normal level.

Geophysical activity forecast: the geomagnetic field should become predominantly active for the next three days. Isolated periods at minor to major storm are forecast for mid latitudes and isolated major to severe storm periods are possible for high latitudes.

Event probabilities 08 feb-10 feb

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 08 feb-10 feb

A. Middle Latitudes
Active 35/35/35
Minor Storm 35/35/35
Major-Severe Storm 20/20/20

B. High Latitudes
Active 30/30/30
Minor Storm 40/40/40
Major-Severe Storm 20/20/20

HF propagation conditions were significantly below normal over almost all regions today. Strong geomagnetic and auroral storming produced radio blackout conditions for transpolar and transauroral circuits. Absorption was widespread and relatively strong today. The storming raised LUFs and lowered MUFs. MUFs were decreased by between 30 and 50 percent over most regions. Fair to poor propagation was observed over even the low latitudes. Middle latitudes saw fair to very poor propagation. Storming is still in progress at the present time, although it is expected to subside slightly, later on 08 February. A return to near-normal conditions is not expected for several days yet, except over the lower latitudes where near-normal conditions may return on 09 February. Higher latitudes will require additional time to recover from this ionospheric storm.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7664 S11W28 014 0130 DAO 09 020 BET
7665 N04W24 010 0020 HSX 02 002 ALPHA
7666 N18W08 354 0090 CSO 08 005 BET
7667 S08W04 350 0020 BXO 05 005 BET
REGIONS DUE TO RET
NMBR LAT
7657 N10 234
7652 N04 221

LISTING OF SOLAR ENERGETIC EVENTS FOR 07 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 07 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 07/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
06 Feb: 0742 0747 0755 SF 7664 S10W24
0812 0816 0820 B5.0 SF 7664 S10W25
1252 1313 1328 B7.9 SF 7664 S13W30
1650 1654 1659 B1.6

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7664: 0 0 0 3 0 0 0 0 003 (75.0)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (25.0)

Total Events: 004 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1298. KENWOOD TH77E VS STANDARD 720

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 09:44:34 UTC
From: demetre@phaethon.intranet.gr
Message-ID: <2jcvm2$5kk@helios.intranet.gr>
Source record: 271350
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

CQ Netters

Does anyone have comparison data for the Kenwood TH77E and the Standard 720
dual band handhelds ???
Which is better ? why ? can either of them turn their TX off automaticly
while being used as repeaters ??
Which has more repeater related functions ??

73's

1299. SAREX Keps for Feb 10

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 10:00:11 UTC
From: ABFHB@STDVAX.GSFC.NASA.GOV
Message-ID: <940210050011.21c3154f@STDVAX.GSFC.NASA.GOV>
Source record: 271351

SB SAREX @ AMSAT $STS-60.015
SAREX Keps for Feb. 10

Gil Carman, WA5NOM reports that there was a separation burn yesterday
afternoon which raised the Shuttle perigee altitude about 3 n.mi. The
following are elements from the post-burn vector.

STS-60
1 22977U 94006A 94041.68880588 .00001098 -91503-7 80760-5 0 143
2 22977 56.9892 183.8290 0006683 303.1211 56.9216 15.71605210 1146

Satellite: STS-60
Catalog number: 22977
Epoch time: 94041.68880588 = (10 FEB 94 16:31:52.82 UTC)
Element set: 014
Inclination: 56.9892 deg
RA of node: 183.8290 deg Space Shuttle Flight STS-60
Eccentricity: .0006683 Keplerian Element set JSC-014
Arg of perigee: 303.1211 deg from NASA flight Day 8 vector
Mean anomaly: 56.9216 deg
Mean motion: 15.71605210 rev/day G. L. Carman
Decay rate: 1.098e-05 rev/day^2 NASA Johnson Space Center
Epoch rev: 114
Checksum: 301

Submitted by Frank H. Bauer, KA3HDO, for the SAREX Working Group

/EX

1300. Daily Summary of Solar Geophysical Activity for 08 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 10:04:36 UTC
From: oler@rho.uleth.ca
Message-ID: <9402101004.AA20934@rho.uleth.ca>
Source record: 271352
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

08 FEBRUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 039, 02/08/94
10.7 FLUX=095 90-AVG=106 SSN=085 BKI=6555 6445 BAI=050
BGND-XRAY=B1.2 FLU1=5.1E+06 FLU10=2.3E+04 PKI=6566 6455 PAI=056
BOU-DEV=151,086,106,083,130,059,055,073 DEV-AVG=092 NT SWF=00:000
XRAY-MAX= B7.3 @ 1614UT XRAY-MIN= A7.5 @ 0206UT XRAY-AVG= B1.8
NEUTN-MAX= +002% @ 1325UT NEUTN-MIN= -003% @ 1105UT NEUTN-AVG= -0.5%
PCA-MAX= +0.1DB @ 1800UT PCA-MIN= -0.2DB @ 1040UT PCA-AVG= -0.0DB
BOUTF-MAX=55355NT @ 2359UT BOUTF-MIN=55306NT @ 1718UT BOUTF-AVG=55330NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+058,+000,+000
GOES6-MAX=P:+122NT@ 1521UT GOES6-MIN=N:-099NT@ 0704UT G6-AVG=+084,+041,-037
FLUXFCST=STD:097,098,100;SESC:097,098,100 BAI/PAI-FCST=025,020,020/035,025,025
KFCST=4455 6423 4345 4433 27DAY-AP=020,021 27DAY-KP=4434 4433 4433 5334
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MAJSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 07 FEB 94 was 25.0.
The Full Kp Indices for 07 FEB 94 are: 4o 6- 4+ 7- 6o 5o 5- 3o
The 3-Hr Ap Indices for 07 FEB 94 are: 30 65 35 109 86 51 42 16

SYNOPSIS OF ACT

Solar activity remained very low. New Region 7668
(N09E50) emerged rapidly and produced several optical flares
with B-class enhancements. Region 7664 (S14W62), which was
growing rapidly on 07 Feb, stabilized during the period. A lack
of data is inhibiting analysis.

Solar activity forecast: solar activity should become
generally low. Region 7668 is becoming a likely candidate for
low C-class subflares. Old Region 7654 is due at the east
limb at the end of the period and should start to elevate

activity levels at that time. Last rotation, Region 7654 produced four M-class and many C-class events.

The geomagnetic field was at active to major storm levels. Some high latitude sites experienced severe storm conditions. The severity of this disturbance appeared to be moderating toward the end of the period. More frequent active to unsettled k indices were observed at various observatories.

Geophysical activity forecast: the geomagnetic field should become predominantly active for the duration of the forecast period. Occasional minor to major storm periods are likely. The coronal hole responsible for this disturbance is quite elongated and disturbed geomagnetic conditions should be expected for approximately one week.

Event probabilities 09 feb-11 feb

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 09 feb-11 feb

A. Middle Latitudes
Active 35/35/35
Minor Storm 35/35/35
Major-Severe Storm 10/10/10

B. High Latitudes
Active 35/35/35
Minor Storm 35/35/35
Major-Severe Storm 15/15/15

HF propagation conditions were disturbed over most regions today. A moderate ionospheric storm is in progress. MUFs are depressed and LUFs are raised, decreasing the available bandwidth and resulting in more difficult communications, particularly for transpolar and transauroral circuits where propagation has been useless for a good part of the UTC day. Conditions are expected to remain disturbed over the next 24 to 48 hours before very gradually improving. Conditions are not expected to return to near-normal for at least several days, perhaps extending beyond 5 to 7 days.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

LISTING OF SOLAR ENERGETIC EVENTS FOR 08 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1044 1044 1045 160

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 08 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 08/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
07 Feb: 0217 0225 0231 B4.3
0449 0454 0459 B6.4 SF 7664 S12W39
0854 0858 0905 B2.4
1251 1257 1259 B3.9
1357 1414 1432 B8.2 SF 7664 S12W42
1404 1414 1427 B8.6

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Region 7664: 0 0 0 2 0 0 0 0 002 (33.3)
Uncorrellated: 0 0 0 0 0 0 0 0 004 (66.7)

Total Events: 006 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event

Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1301. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 10:06:16 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <760981837.F00002@ocitor.fidonet>
Source record: 271283

```
The following files were processed Thursday 02-10-94:

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
OPDX146.ZIP ( 3901 bytes) Oh/Pa Dx Bulletin 02/07/94
RSGB0206.ZIP ( 9588 bytes) RSGB Bulletin 02/06/94

---------------------------------------------------------------------
13489 bytes in 2 file(s)

HAMPACK [ HAM: Packet Communications programs ]
---------------------------------------------------------------------
BB21PC.ZIP ( 225173 bytes) AA4RE BBS Beta V2.1P - Common Code
BB21PL.ZIP ( 105696 bytes) AA4RE BBS Beta V2.1P - Libraries
for "protected mode"
BB21PN.ZIP ( 194729 bytes) AA4RE BBS Beta V2.1P - "Real Mode"
code - 8088 and up with 640K ram
BB21PP.ZIP ( 228342 bytes) AA4RE BBS - V2.1P - "Protected
Mode" 80286 and up with 2 meg ram o
r more
RXCLU50.ZIP ( 70061 bytes) Monitor PacketCluster w/o logging
in
SIMPTR20.ZIP ( 85163 bytes) SimpTerm generic TNC/TU packet
program

---------------------------------------------------------------------
909164 bytes in 6 file(s)

HAMSAT [ HAM: Satellite tracking and finding programs ]
---------------------------------------------------------------------
AMSAT036.ZIP ( 6204 bytes) Amsat Bulletin #036 02/03/94

---------------------------------------------------------------------
6204 bytes in 1 file(s)

HAMSCAN [ HAM: Scanner Freqs and Freq database programs ]
---------------------------------------------------------------------
NJSHP.ZIP ( 584 bytes) NJ State highway patrol 800 Mhz
frequencies

---------------------------------------------------------------------
584 bytes in 1 file(s)

HAMUTIL [ HAM: Radio operating aids ]
---------------------------------------------------------------------
BEARING1.ZIP ( 154519 bytes) Bearing & distance database
```

154519 bytes in 1 file(s)

Total of 1083960 bytes in 11 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

1302. Amateur Radio Newsline #860 4 Feb 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 10:33:14 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <0jSMjGG8y5H5053yn@dorsai.dorsai.org>
Source record: 271353
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text is transcribed from the audio service by Dale Cary and is first published on Genie.

Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

Notes: 1- The regular transcribed version was not available this week, so I'm doing it myself. Pardon the typos.
2- Because of earthquake related mail delays, this weeks audio report, (860), that this version is made from, was to be aired the previous week. For that reason, one of the stories which was outdated, is not included here.

****
From around the world, this is NEWSLINE. Amateur Radio's independent, on the air, bulletin service.
****
Edition #860, Reporter: Roy Neil, K6DUE

Closed Circuit Advisory

A reminder. The address for the NEWSLINE Support Fund is; Newsline, C/O Dr. Norm Chalfin, K6PGX, Post Office Box 463, Pasadena, CA 91102. Remember, we need your support to keep NEWSLINE, online.

*****
Headline

The following is a QST
Ham Radio ticket, and a court says a Ham does have a right to a tower, and antenna.

*****
ARRL Suggests Lifetime Ham License

The ARRL has petitioned the FCC to make Amateur Radio operator licenses valid for life. In its petition, the League says that there in nothing in the Communications Act of 1934, that would prevent such a license term for radio amateurs. It wants a lifetime operators license to allow inactive amateurs to return to the service at the same class of license without the necessity of retesting. This proposal would apply only to operator licenses. Amateur radio station licenses would, by

law, still be limited to a 10 year term. A person with a lifetime operator license, but no station license, would not be permitted to operate a station of his own, but would be able to operate from the station of another amateur.

The League says that nothing in this proposal should have any effect on the FCC's call sign issuance program as it currently exist, or as proposed in the vanity callsign program. The ARRL says at this time it is not proposing to make this rule change retroactive, rather, it suggests the easiest way to implement it, is simply to extend currently held operator licenses from 10 years to life. No rule making number has yet been assigned to this ARRL regulatory change request.

*****

ARRL Asks For Vanity Comment-Date Extension

Word from Newington, CT., that the ARRL is asking the FCC for an extension to the Comment Cutoff deadline, on the Commission's proposal to establish a Vanity callsign system. The FCC's notice of proposed rule making, known as Personal Radio, Docket: 93-305, was released December 29, 1993, it has a comment deadline of March 7, 1994. The League said that it immediately decide to publish the text of the rule making proposal, in it's entirety, in the Feb. 1994, issue of it's QST

ARRL says it also is asking its members to make their views on the matter, made known to their elected representatives, but in its request for an extension of the filing deadline, until April 21st, the ARRL says that because the matter of issuing preferred call signs involves a scarce resource, the question of maintaining fairness in all aspects of the program must be addressed. The League also says that the March 7th comment deadline, simply does not allow enough time for ARRL members to express their views on the proposal. Nor will it let the ARRL board formulate a position, based on membership input, as to what position it should take. It's now up to the FCC to decide on this ARRL time extension request, we'll let you know when the Commission decides. (Reported by David Black, KB4KCH)

*****
Court Finds In Favor Of Ham Antenna

A federal appeals court has found in favor of a Minnesota ham in the latest round of a 3 year battle to install a tower and antenna. Back in January of 1991, Sylvia Pentel, N0MRW, applied to the city of Medota Heights for a zoning variance for a 68 ft. crank-up tower. At the time she was using a roof mounted vertical, which, she was unaware, violated the city's zoning rules. The city denied her application for a tower,

but did grant Pentel a special use permit to allow here to keep the vertical, but that did not satisfy N0MRW.

Pentel sued the city in U.S. district court. Her attorney, John B. Bellows Jr., K0QBE, argued that the ordinance restricting her tower and antenna was preempted by federal law. A law known as PRB-1, which requires a reasonable accommodation of radio amateurs. The U.S. Court of Appeals for The 8th Circuit, has ruled that in establishing PRB-1, the FCC was attempting to strike a balance between the interests of municipalities and ham radio operators. The court noted that granting a special use permit for Pentel's vertical was not an acceptable accommodation to the radio amateur under the terms of PRB-1 and ordered the city to try again. The court did put some limit on it's decision. It said the finding does not mean the city must necessarily grant Pentel's application for a tower. Rather it stated the Mendota Heights, MN, must make a reasonable accommodation to insure her interests as a radio amateur are protected.

*****
Ham Convicted of Harassing McDonalds Customers

A United States district court in Texas has written an end to the story of Terry VanSikle, WB5WXI, by sentencing him to 90 days of home confinement, 3 years probation, fining him $1000, and ordering that he undergo a group counseling program as directed by the probation office. VanSikle is a TV news cameraman at station WFAA who had been accused by the FBI of harassing customers at a McDonalds restaurant drive-through window in the Dallas area. He initially protested his innocence last summer. One newspaper even ran a 2 column feature about VanSikle, quoting him as saying that the frequencies used by McDonalds are posted on computer bulletin boards, and anyone could have been responsible.

But on the 18th of October, Terry VanSikle changed his story. He pleaded guilty to one count of violating Title 47, section 333 of the U.S. code by willfully and maliciously interfering with radio communications. Sentencing was set for early January, and that time he faced a maximum term of 1 year in prison and $100,000. fine. The lighter sentence of 90 days home confinement and probation falls under federal sentencing guide lines. It's mitigated by the fact that VanSikle has already has lost some $15,000. worth of scanners, two way radios, and other gear confiscated when he was detained.

Still, VanSikle's troubles may not be over. There's a likelihood of FCC administrative action to strip him of any federally issued radio licenses. And also there's the possibility of civil action against him by the McDonalds Corporation to recoup any losses incurred as a result of his

jamming their radio system.

*****
ARRL Reacts To NJ RF Fee Proposal

Officials of the American Radio Relay League have told the New Jersey Department of Environmental Protection and Energy that a State proposal to register and impose fees on radio transmitters, and other sources of RF, was contrary to federal law; at least as the law is related to radio amateurs. The New Jersey proposal exempted amateur radio stations at this time, but leaves the door open for future regulation of hams and imposition of fees. But ARRL general counsel, Chris Imlay, N3AKD, says that only the FCC has the power to license and regulate radio transmitters. Imlay says that applying the proposed regulations to amateurs would effectively preclude amateur radio communications in New Jersey. The NJ Dept. of Environmental Protection And Energy has extended the deadline for comments on the proposal until February 22nd. Hams in NJ, and the surrounding States, are being encouraged to write the NJ Legislature in opposition to the radio tax proposal.

*****
DXpediton

In DX, word that the LAMBDA Amateur Radio Club, LARC, will sponsor it's 3rd expedition from March 5th to the 10th. LARC members are planning to operate on HF and OSCAR 13, mode "B" and mode "S" from the Caribbean Island of Anguila in the British West Indies. The operators making the trip will be Jim Kelly - KK3K, Don Bledsoe - WB6LYI, Mark Wilcox - KC3XC, Tom Hendrix - KI4ZN, Howard Wyman - W9BVD, Norm Gray - KF7IK, James Keis - AF9A, and Wayne Shuller - AI9Q. A QSL for all operators is direct to their current call book addresses. This may well be the first OSCAR 13, mode "S" expedition for the record books.

*****
Free QRP Info

Two QRP nets, located in the Pacific Northwest, are now available to help you meet other low power enthusiasts throughout the country. The Northwest QRP Club meets every Monday evening at 0300 UTC on 10.123 Mhz. The Northwest QRP Club Saturday Morning Net can be found at 0730 UTC on 3.561 Mhz. If you're interested in receiving a free copy of their NWQ newsletter, please send an SASE to Bill Todd, 4153 49th Ave. S.W., Seattle, WA 98116.

*****
Exam Dates Set

Two ARRL national exam days have been set for 1994, May 14th
and October 29th. Details will be in the February Issue of
QST

*****
Marathon Ham

A ham who ran in the New York City Marathon last November, to
raise money for Cancer research, will be doing it again soon
on the West Coast. Fred Dube, AA8FQ, has announced that he
will run in the March 6th Los Angeles Marathon and will be on
the air before and during the race. With backing from ICOM
America, Dube says that he will hold as many QSO's as he can
while running the course. He says he plans to use repeaters
on 145.200Mhz, 146.925Mhz, 445.325Mhz, and 447.235Mhz. Fred
also will try his luck on the national SIMPLEX calling
frequency, 146.52. His frequency coordination is being
handled by the Baldwin Hills ARC. If band conditions warrant,
he also plans to try some 20 meter remote base operations.
Look for him on 14.295Mhz.

AA8FQ's participation in the New York City Marathon raised
about $2500. that was donated to the Sloan-Kettering Memorial
Cancer Center. This time the proceeds of sponsored miles will
benefit the Los Angeles Childrens' Cancer Research Fund. That
organization is considered one of leading pediatric cancer
research organization in the country. Ham's interested in
sponsoring miles to be run by Fred can contact him at (216)
721-2466. Meanwhile we at NEWSLINE wish Fred Dube, AA8FQ good
luck in his next run to save lives.

*****

For this week, that's all from the Amateur Radio Newsline.
You can write to us at Post Office Box 463, Pasadena, CA 91102.

* * * Newsline Copyright 1994 all rights are reserved. * * *

< ^^^

1303. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 11:43:15 UTC
From: andy@clark.net
Message-ID: <2jd6kj$mqt@clarknet.clark.net>
Source record: 271354

Gary Davis (gdavis@griffin.uvm.edu) wrote:
: I heard a strange story on the CBC last evening. The report was on
: the increasing interest in nudism in the Winter months. To promote
: this festive and relaxing activity additional interests where specified.

: There is, according to the CBC, a nudist amateur radio club.

Is this like 'operating barefoot'? Where to they clip the HT's external
speaker-mike? ;->

k4adl

1304. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 12:59:41 UTC
From: mosier@fagan.uncg.edu
Message-ID: <mosier.83.0@fagan.uncg.edu>
Source record: 271355

In article <2jd6kj$mqt@clarknet.clark.net> andy@clark.net
(Andrew M. Cohn) writes:

>: There is, according to the CBC, a nudist amateur radio club.
>
>Is this like 'operating barefoot'? Where to they clip the HT's external
>speaker-mike? ;->

Where do they hang the HT??

steve
mosier@fagan.uncg.edu

1305. Re: ZA1A

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 13:02:57 UTC
From: dls@genrad.com
Message-ID: <2jdba1INN83o@sweetpea.genrad.com>
Source record: 271356

In article <2jarl9$qtk@cville-srv.wam.umd.edu> ham@wam.umd.edu (Scott Richard Rosenfeld) writes:
>Wow, only two years? Mine took 10 months by direct mail to Italy! Even
>my card from Pitcairn Is. (only three ships a year?) took just 4 months.
>
>Of course, I'm still getting cards from the USSR via the bureau. In
>December, I got a card through the bureau from UL7LWF. I worked this
>QSO in 1988! Yes, FIVE years!

I don't understand what is so unusual about the time lengths shown above.
I'm a QSL sorter, and about two months ago, I saw a card dated 1977 coming thru....17 years.....

I regularly see cards that are dated 10 years ago....

Diana

--
->Diana L. Carlson dls@genrad.com Ham: KC1SP (Sweet Pea) <-
->I'D RATHER BE FLYING! P-ASEL, INST CAP: CPT, NHWG <-
->GenRad, 300 Baker Ave MS/1, Concord, MA 01742 (508)369-4400 x2459 <-

1306. Long range digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 13:05:53 UTC
From: br@cs.cmu.edu
Message-ID: <CL0F1v.EzK.2@cs.cmu.edu>
Source record: 271357

Can any of you radio folks give me a hand with this?

I need a system capable of transmitting about 1 MegaBit per second
of digital data from anywhere on the planet. This would be a one-way
link. I'm sure this can be done, but can it be done reliably without
a satellite and lots of very fancy gear? If so, I have some questions:

How much might the equipment to do this cost?
How much would this equipment (the transmitter) weigh?
How much volume would this equipment (transmitter) occupy?
How much power would the transmitter require during operation?
How big would the antenna have to be?

If the problem is simplified to communicate within a single hemisphere,
does that make life alot easier?

Any information would be a great help!
Thanks very much!
Bill

1307. Re: "Flexible" 9913 (Was - Re: Coaxial cable)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 13:33:05 UTC
From: root@jackatak.raider.net
Message-ID: <u60iHc9w165w@jackatak.raider.net>
Source record: 271358

kg7bk@indirect.com (Cecil Moore) writes:
> Steve Bunis SE Southwest Chicago (doc@webrider.central.sun.com) wrote:
> : > Some other things to keep in mind about 9913. Remember that you'll need
> : > special UHF N connectors if you plan on using the cable for UHF
> : > applications.
Some hams think they are special because of the price... actually,
their best purpose is that they are EASIER to install than to properly
install PL-259, *AND* they are weatherproof.

> : Also, regarding the N connectors, at what point do they start making
> : a discernible difference? I thought that NMO was supposed to do well
> : at least past the 70cm. band. -- Steve Bunis
The NMO is a mounting mechanism for antennas (mobile) and is NOT a
connector type. NMO is preferred for most all VHF/UHF mobile
applications, including Cell Phone at 875MHz.

> My dual-band 2x4MAX Comet has an so239 connector on it. Just how bad
> is a pl259 connection on UHF?
I should probably let Al, N1AL repost his excellent post from a year
ago, but he used good equipment (beyond what the avergae ham has
access to) and discovered that the PL-259 was worthy of the name "UHF
connector" well into the Gigahertz region... The superiority of the
"N" connector is mostly because to solder a PL-259 *PROPERLY* is
really a sunuvabitch, whereas making good "N" connector junctions is
only dependent on measureing carefully and understanding the process.
(VERY good article in 73 mag... May '93, I think...)

> Should I use an N to so239 adapter? I
> use 9913 on HF with pl259s and some copper tape.
Perhaps the PL-259 connectors are leaking into the 9913 cable. Not a
good situation... the adapter isn't gonna help that... the "N"
connector will, however... I use'em in my mobile HF... not for loss,
but for ease and weather-proofing... no environment is worse than
mobiling, especially this time of year!
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

1308. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 13:44:19 UTC
From: drs@ccd.harris.com
Message-ID: <1994Feb10.134419.7253@ccd.harris.com>
Source record: 271359

Alan Bloom (alanb@sr.hp.com) wrote:
: I heard a report on the (radio) network news last night to the effect
: that the national association of golf course managers funded a study
: to investigate the death rates of golf course managers. The study
: found that golf course managers have death rates from several kinds
: of cancer that are significantly higher than the national norm. The
: study tabulated cause of death from death certificates.

: Sounds exactly like the famous Milham study of amateur radio operators
: which implied that exposure to RF radiation causes cancer. I wonder
: what the cause is for the golf course managers: too much fresh air?

I think the answer is obvious (if you weren't kidding), pesticides and
fertilizer.....Doug, N4IJ

: :=)

: AL N1AL

--

Doug Snowden
drs@ccd.harris.com
N4IJ

1309. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 13:52:45 UTC
From: thomasr@acpub.duke.edu
Message-ID: <2jde7d$fac@news.duke.edu>
Source record: 271360

Maybe the nude radio club is run by N9UDE

1310. Re: Antenna Erection Aids - Thor's socks

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 13:56:48 UTC
From: Greg@epitome.er.doe.gov
Message-ID: <2jdef0$hus@cronkite.nersc.gov>
Source record: 271361

The sock wins my vote for most creative, low cost, easy to transport solution. Now I have a reason to save my old sox!

Thanks!
Greg

Greg Chartrand _/_/ _/_/ _/_/ _/_/
WA9EYY/3 _/ _/ _/ _/ _/
_/ _/_/_/ _/_/_/ _/_/_/ _/ _/_/_/
_/ _/ _/ _/ _/ _/ _/
_/_/_/ _/ _/ _/_/_/ _/_/_/

1311. Re: soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 13:59:21 UTC
From: ehare@arrl.org
Message-ID: <1994Feb10.135921.6023@arrl.org>
Source record: 271362

John Unger (junger@rsg1.er.usgs.gov) wrote:

: Has anyone had any experience (either good or bad) using one of
: the small butane torch/soldering irons to solder PL-259 connectors
: to RG-8U coax. Do they work as well as or better than a big
: (>100W) soldering iron?

I got a chance to try one here in the ARRL Lab (a torch type, not one
that heats a soldering-iron tip). It worked okay, but I still think I
prefer the big soldering iron. Of course, I must point
out that I have had umpteen years experience with the big iron and
only about 10 minutes experience with the torch. :-)

The fact that I was able to use it after only a few minutes practice
does suggest that they work. I would much prefer to carry
one of them off on a Field Day wilderness expidition, or up a tower,
that an electric one. :-)

73 from ARRL HQ, Ed
--

Ed Hare, KA1CV ehare@arrl.org
American Radio Relay League

1312. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 14:28:01 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.760890247@hpuerca>
Source record: 271363

In <gdavis.760825204@griffin> gdavis@griffin.uvm.edu (Gary Davis) writes:

>There is, according to the CBC, a nudist amateur radio club.
>I am wondering where, how many members? Anybody know anything about this?
>- In the Buff
>Gary WQ1F

I see a potential for rf burns that you certainly wouldn't
show off at OTHER ham club meetings :-)

Ed H-N5RCK
HP Atlanta

1313. Re: 40 Meter Loop Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 14:52:28 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2jdhnc$92h@vixen.cso.uiuc.edu>
Source record: 271364

irvse.EGert@dg-rtp.dg.COM (Steve Egert) writes:

>I live in a condo that has a lot that is just too short to put up a 40 meter
>dipole (and the homeowner's association made me take down the vertical). Does
>anyone have any plans for a 40 meter transmitting loop? I've seen some that
>are compact, made of copper pipe and are capable of multiband operation.
>I've also read that they tend to cancel out atmospheric noise.

One of my afternoon projects was a 3ft diameter loop with #16 wire and
a wide-spaced hamfest capacitor. The loop tuned on 12-30MHz and performed
as good or better than my attic dipole on 18 MHz. There was small
wire warming on 14 MHz. The antenna was on a pole (held by one hand) at the
ceiling level.
I think for 7 MHz you should be fine with #12 wire and 5-6 ft diameter.
As a side note, at the ceiling level the loop performs well only when
positioned vertically, not horizontally.

Ignacy Misztal, NO9E, SP8FWB
ignacy@uiuc.edu

1314. Re: 40 Meter Loop Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 14:54:01 UTC
From: gene@eagle.csl.uiuc.edu
Message-ID: <gene.760892041@eagle.csl.uiuc.edu>
Source record: 271365

See January '94 issue of WorldRadio magazine, p. 62 concerning the "camping" comment, i.e. 2-turn, 5.5 ft diameter 40-80 vertical-loop. Also see the June '93 issue (160-80-40 compact loops) for similar information.
--

Internet, BITNET: gene@csl.uiuc.edu

1315. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 15:02:03 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-100294095646@136.141.220.39>
Source record: 271366

In article <CKxKI7.1IJ@world.std.com>, barnaby@world.std.com (Richard L Barnaby) wrote, in part:

> My question then is "Where to go from here?"
> I cant write fast enough to go faster than say 25 WPM, I can't hear
> words yet (a few only). I'd like to break the barrier and be able to
> (as some buddys do) lean back in the chair and comfortably copy 35+
> without writing or tying a thing.
> Sounds like I should forget the typewriter, as it appears only good for
> code groups, not QSOs.
> Any advice for cracking the morse-as-characters to morse-as-words barrier?

At the risk of being redundant: PRACTICE.

Used to be a lot of on-the-air commercial cw that was interesting to copy, and that ran at pretty good speeds. Nowadays, for something interesting to copy, maritime weather stuff is only about 16 - 18 wpm, so you have to listen to hams chatting. But if you're not concerned with test passing, just comprehension copy in your head, lean back and listen at speeds a bit faster than you're comfortable with, work at picking out the words, and do it _often_. Nightly is good, and at least three times a week is mandatory...any less and you'll be older'n me before you make progress! You'll know when you start picking out the words, because suddenly 40 wpm starts to become intelligible!

Hang in there.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1316. re: Verticals

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 15:19:52 UTC
From: gdavis@griffin.uvm.edu
Message-ID: <gdavis.760893592@griffin>
Source record: 271367

Having used vertical dipoles and (slopers) for some years I can attest
to their good but not always excellent DX performance. The problem with
many of the antenna theory texts and amateur radio antenna cook books
is that they are in reality painting a much rosier picture than most
amateurs can acheive in practice. This is largely due to ground losses at
low radiation angles from capacitive (lossy ground) efects and poor ground
conductivity. Yes, a vertical dipole will radiate all the RF, but the ground
will dissipate much of the very low angle radiation, thusly masking what
would in theory be an excellent DX antenna in a very minimum or realestate.

I have found the 160 meter GAP vertical to be a big disappointment on
160. Apparently a much better counterpoise is needed than the four sixty
foot wires GAP suggets.

On 80 meters it does a good job... can work the VKs on most mornings.

On 40 it does a good job in the early afternoon. I used to be able to
hear Europe on my sloping dipole as early as 1430 local time, but could
never be heard, even with 500 watts. With the GAP they usually respond
with at least as good an RST as I can give them.

On 20 the GAP seems a bit dead unless the band is very good.
I don't know why this should be. I would presume since its physical
length is over the 1/2 wave dipole requirement that it would work as
well as a vertical dipole, but again theory and practice seem at variance.

Has anyone else used the GAP (45 footer on 160-- 20 meters).

I would presume from my experience that its efficency varies widely
across its design frequency range.

--
******** Gary E. Davis***** WQ1F *****
The most common of all follies is to believe passionately in the
palpably not true. It is the chief occupation of mankind.-H.L.Mencken

1317. Re: Securing VXO coils, what glue?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 15:36:56 UTC
From: gcouger@olesun.okstate.edu
Message-ID: <1994Feb10.153656.14274@osuunx.ucc.okstate.edu>
Source record: 271368
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <tgmCKxytD.3sD@netcom.com>,
Thomas G. McWilliams <tgm@netcom.com> wrote:
>asirene@ntuvax.ntu.ac.sg wrote:
>: I am winding some coils for a VXO and want to know if
>: the "glue-gun" melted plastic is suitable for securing the coil
>: or if it is too lossy?
>
>The classic solution is Q-dope made by dissolving polystyrene
>in a solvent. Polystyrene is plentiful but I can't remember
>the proper solvent. I made a gooey useless mess once when I
>used a less than optimal solvent. Acetone should work.

Almost anyting will disolve styrofoam except water and alcohol. Paint
thinner, gasoline, kerosene, MEK, acetone. I would try paint thinner and
if that didn't suit me I'd use gasoline second it is not much more flamable
than the rest and it is quick drying.

Gordon AB5Dg

/* Gordon Couger */
/* Biosystems & Agricultural Engineering */
/* Oklahoma State University */
/* 114 Ag Hall, Stillwater, OK 74074 */
/* gcouger@olesun.agen.okstate.edu 405-744-9763 day 624-2855 evenings */
/* I Speak only for myself and not for anyone else */

1318. Dayton room needed

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 15:40:45 UTC
From: tucker@gauss.eedsp.gatech.edu
Message-ID: <1994Feb10.154045.22050@ee.gatech.edu>
Source record: 271369

A group of students from Georgia Tech is looking for a hotel room
in Dayton for the Dayton Hamvention. I know that sometimes people
have extra rooms because plans change, etc. If you have a room in
Dayton for that weekend, please let me know.

We would prefer to stay at Stouffer's. (I can hear the laughter
now.) I know it's a long shot, but if you or anyone you know
has an extra Stouffer's room, please let me know. Our club does
a fair amount of contesting and we'd like to meet some of the people
we talk to regularly.

Thanks for the help.
73 de Jeff, N9HZQ
--

Jeff Tucker ()< N9HZQ
tucker@eedsp.gatech.edu Graduate Student, Electrical Engineering
W4AQL Contest Team Georgia Institute of Technology

1319. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 15:42:44 UTC
From: Adrien_Glauser@magic-bbs.corp.apple.com
Message-ID: <1994Feb10.104244.180517@magic-bbs.corp.apple.com>
Source record: 271370

```
>[ Article crossposted from rec.radio.amateur.policy ]
>[ Author was David R Tucker ]
>[ Posted on Tue, 8 Feb 1994 01:29:30 GMT ]
>
>Today I called the FCC in Washington and spoke to Tom FitzGibbon, who
>works in the Amateur Radio section of the Private Radio Bureau. He
>told me that the FCC exercises no jurisdiction over radio stations in
>Canada, that a US-licensed amateur operating there under the
>reciprocal agreement was free to use any frequency or mode authorized
>by the Government of Canada, and that the same was true for all other
>foreign countries as well.
>
>-drt

This is true if you are just passing through here and not planning on
staying here to live. If you plan to stay here to live you must contact the
Departement of Communications and they will issue you a callsign for the
area in which you will be residing. Otherwise for just passing through you
can use you current callsign and indicate that you are mobile within one of
the VE areas in Canada.

Adrien
```

1320. Mac Ham BBS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 15:53:59 UTC
From: paulot@cais.com
Message-ID: <Pine.3.05.9402101059.A26233-a100000@cais.com>
Source record: 271371

Hello everyone,I'm posting this message to all Amateur Radio ops that use
Mac's for this hobby.I have currently a BBS in Washington,DC that is
trying to come up with a solution for Mac files for the ham community.
The BBS is available 24 hours a day at 202-393-0502,running Hermes II
software,on a 2400 bd modem.Soon we will have higher speed acess.
We have a good selection of ham files as well more traditional shareware
aplications for the Macintosh.Give it a try!
Thanks for readin this message.

73's de Paulo,N3MGA

1321. This Week on Spectrum 02/12/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 15:59:58 UTC
From: spectrum@starcomm.overleaf.com
Message-ID: <2jdllu$19p@starcomm.overleaf.com>
Source record: 271372
Cross-posted to:
rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.scanner,rec.video.satellite,rec.radio.cb,alt.radio.scanner,alt.radio.pirate

This week's Spectrum will feature a listener appreciation and input segment. It will be your opportunity to give us feedback. What you like, what you don't like and or what you would change if you were in the Spectrum drivers seat. In addition we'll have lots of the features you enjoy.
--
Spectrum airs live Sunday at 0300 UTC (2200 EST Saturday) on:

WWCR, 5810 KHz, Nashville, TN (World Wide)
WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Omega Radio Network, Galaxy III, X17, 5.8 MHz WIDE audio. (Satellite)

Spectrum is rebroadcast:

Sunday at 1500 EST, on WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Monday at 0400 UTC (2300 EST Sunday),
on WWCR, 7435 KHz, Nashville, TN (World Wide)

--
Spectrum, "The Communications Magazine You Read With Your Ears."
Box 722, Holmdel, NJ, 07733-0722, USA
spectrum@overleaf.com, askspectrum@attmail.com, spectrumshow@genie.geis.com
+1 800-787-SPECTRUM, +1 908-671-4209

1322. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 16:32:21 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2jdnil$ui@news.acns.nwu.edu>
Source record: 271373

In a long tirade, Greg Bullough <greg@netcom.com> commenting on words
by Ed Hare and Jon Bloom, wrote:

<snip> <snip>

>> But I *do* have the data at hand. Our recent (1992) market survey
>>shows that 35% of amateurs "enjoy building equipment or kits." 42%
>>enjoy "experimenting with equipment or antennas." So the statement that
>>few ever build circuits is clearly unsupportable.
>> Now, where's *your* data?
>
>I guess I consider almost 20 years as an active ham a pretty good basis
>for what my fellows do and don't do.
>
>But let's look at these "facts" with a critical eye, shall we?
>
> 1. 35% is not exactly a clear majority, now is it?
> 2. The 42% includes 'or antennas.' Considering that
> antennas are generally NOT plug-and-play items,
> I'd expect MOST hams have to do it. Does this
> mean the other 58% hate it?
> 3. The phrasing of the question begs for a higher
> number. They 'enjoy' it. I 'enjoy' sunning on
> the beach on a tropical isle. Doesn't mean I
> do it, or get to do it, very often. But I would
> submit that there are some vested interests in
> asking the question that way. Such as the advertising
> dollar. And such as justifying the existance of QEX.
> 4. The very existence of QEX can be taken to mean two
> things; there is sufficient interest to support a
> whole distinct publication; or there is insufficient
> interest to put the material into the mainstream.

Ham radio is a big hobby with many different parts, interests and
sub groups. Any hobby that involves wireless communication
would qualify for it. This implies a number of things:
- The sheer number of activities will reduce the percentage of
participation for any one activity. It is like having a field
of hundreds of candidates running for president. If there
are more than a few credible ones then the percentages are going
to be small regardless of the numerical size of the following.

Further,
- I do not think that any one ham can reasonably claim to
represent all interests

- I do not think that even one organization can, for that matter
So it is not surprising that any one organization does not have all
the active hams, much less all people with call signs allocated by FCC.

But, I think that ARRL does really try to respresent the parts that
I am interested in. When I feel that does not, as I did when the
digital committee in its infinite wisdom requested 1.810 to 1.830
for automatic unattended packet, I write to my director. I wrote a
letter and had thirty or so hams co-sign it and sent it to W9prn. Followed
it up with phone calls and visits to make sure that he got the message.

>
>Gee, wouldn't it be useful if we had an ARRL staff which, instead of
>attacking *MEMBERS* whose perceptions disturb them, claiming that
>'all of your "assertions" are 180 degrees out' took the time to
>figure out what's wrong? Why do some people look at the ARRL this
>way? Why aren't a mojority of the hams members? Why do memberships
>lapse?

I can perhaps see your reasoning: customer is right, arrl is an
organization of/by hams and staffers work for ARRL and so on.
But when you assert that your statements must be accepted by all at
ARRL, you make an error in your syllogism. They do not work for you
(you in singular here). They work for all members and have to represent
their intestests as a *whole*. This may involve disagreeing with an
individual member now and again.

<snip>

Rajiv dit l dit
aa9ch l
r-dewan@nwu.edu ********** =
* rajiv aa9ch/m * =
* r-dewan @nwu.edu * l
* j45 str key on knee * l
********* kwd ts50 tx bugcatcher * l
* *l
* *** *** *H
* * * * * *H
base* *kenwd850*vert*80mloop* *kent**
*** ***

1323. Can someone help with call book lookup

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 16:52:45 UTC
From: dep@scr.siemens.com
Message-ID: <CL0pJx.K5t@scr.siemens.com>
Source record: 271374

Hi

Could someone please help me out. I have an old call book and this
ham is not in it. Would someone be so kind and send me his address.

Call: KB7USN

I have tryed the on-line call book in Buffalo and had no luck.

Thanks

Dave Post
WA2QIK
dep@siemens.com

1324. Re: Looking for LOGIKEY keyer

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 16:54:31 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2jdos7$1bm@news.acns.nwu.edu>
Source record: 271375
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <2jbts4$6jb@eldborg.rhi.hi.is>,
Hannes Hogni Vilhjalmsson <hhv@rhi.hi.is> wrote:
>Can anyone tell me the present address of the Logikey Company,
>or any other outlet for their LOGIKEY microprocessor based morse
>keyer?

It is manufactured and sold by
Idiom Press
Their address appears in their ad on page 128 of Feb 1994 QST.

Rajiv
aa9ch
r-dewan@nwu.edu

1325. Re: Do NiMH Batteries Dev. Memories?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 17:01:03 UTC
From: RBOLT.300@POSTMAN.GSFC.NASA.GOV
Message-ID: <RBOLT.300-100294130342@bolt.gsfc.nasa.gov>
Source record: 271376

Yes, the bunny so equiped can remember both his father & mother. Hi Hi
W1DGA

1326. Re: Verticals

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 17:02:26 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2jdpb2$1hk@news.acns.nwu.edu>
Source record: 271377

In article <gdavis.760893592@griffin>,
Gary Davis <gdavis@griffin.uvm.edu> wrote:
>
<snip>
>
>I have found the 160 meter GAP vertical to be a big disappointment on
>160. Apparently a much better counterpoise is needed than the four sixty
>foot wires GAP suggets.
>
>On 80 meters it does a good job... can work the VKs on most mornings.
>
>On 40 it does a good job in the early afternoon. I used to be able to
>hear Europe on my sloping dipole as early as 1430 local time, but could
>never be heard, even with 500 watts. With the GAP they usually respond
>with at least as good an RST as I can give them.
>
>On 20 the GAP seems a bit dead unless the band is very good.
>I don't know why this should be. I would presume since its physical
>length is over the 1/2 wave dipole requirement that it would work as
>well as a vertical dipole, but again theory and practice seem at variance.
>
>
> Has anyone else used the GAP (45 footer on 160-- 20 meters).
>

I owned and used one for a year or so. Worthless on 160, deaf on 80,
good on 40, mediocre to bad on 20. None surprising. It is a 1/2 wave
center fed on 40, 1/4 wave with a compromized radial on 80, 1/8 wave
with alsmost non-existent radials on 160, non-phased full wave on 40.

My live-and-learn experience in dealing antenna hype.

Rajiv
aa9ch
r-dewan@nwu.edu

1327. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 17:12:18 UTC
From: Allen Wallace <allen@dtint.dtint.com>
Message-ID: <1994Feb10.171218.7423@dtint.dtint.com>
Source record: 271278

In article <gdavis.760825204@griffin> Gary Davis, gdavis@griffin.uvm.edu writes:
> I heard a strange story on the CBC last evening. The report was on
>the increasing interest in nudism in the Winter months. To promote
>this festive and relaxing activity additional interests where specified.
>
>There is, according to the CBC, a nudist amateur radio club.
>
>I am wondering where, how many members? Anybody know anything about this?

There might be, but I bet that they are all OMs and no YLs or XYLs!
--

Tom Kimpton(System Administrator) {root,tom}@dtint.dtint.com
Digital Technology Int. (801)226-2984
500 W. 1200 South, Orem UT, 84057 FAX (801) 226-8438

1328. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 17:26:56 UTC
From: debmoore@netcom.com
Message-ID: <debmooreCL0r4w.6E7@netcom.com>
Source record: 271279

Gary Davis (gdavis@griffin.uvm.edu) wrote:
: I heard a strange story on the CBC last evening. The report was on
: the increasing interest in nudism in the Winter months. To promote
: this festive and relaxing activity additional interests where specified.

: There is, according to the CBC, a nudist amateur radio club.

: I am wondering where, how many members? Anybody know anything about this?

Supposedly, 14.265mhz, 4pm,(pst); Thurs.
Unfortunately, my antenna is marginal, and at that time of day all I
get is hash on 20m, so I haven't been able to check in. Maybe I'll
try again tonight.
--
==========
Bob Shilling Berkeley, CA debmoore@netcom.com
KK6QQ rcshilling@lbl.gov
DoD# 1195

1329. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 17:36:15 UTC
From: lapin@casbah.acns.nwu.edu
Message-ID: <2jdraf$24f@news.acns.nwu.edu>
Source record: 271280

The Ramsey thread...It just won't go away!

While reading on the throne, I came across an article that brought to mind the Ramsey thread.

From Lamb JJ and Dudley B: "An Effective Low-Cost 'Phone and C.W. Transmitter of Modern Design," QST, Vol. XIII, No. 9, p. 9, (September 1929):

"We hams are not all located on Wall Street [NOTE THE DATE!!], nor do we have at hand the facilities and personnel of a G. E. Research Laboratory. Most of us, therefore, need not so much guard against reckless abandon in designing the expensive technically idealistic sort of rig but rather must we beware of becoming niggardly in providing sufficient equipment of the right type to give us our money's worth in ultimate performance. There is many an otherwise good set in which an apparently slight change in design in the interest of false economy has resulted in a relatively enormous sacrifice of performance. It pays to be sure a penny-wise design may not pan out a pound-foolish flop."

Are you reading this, Mr. Ramsey?

'Nuff said.

Greg Lapin KD9AZ

1330. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 17:49:28 UTC
From: doc@webrider.central.sun.com
Message-ID: <2jds39INN2bj@cronkite.Central.Sun.COM>
Source record: 271281

FYI (from rec.nude) -

Subject: Amateur Radio NudeNet
Date: Thu, 10 Feb 1994 02:13:10 GMT

It's once again time to announce the weekly ham radio NudeNet. We
meet on Thursdays at 14.265 MHZ +/- at 4:00PM PST (0000 GMT). The net sessions
usually last 1 - 2 hours, with an average of 10 or 12 check-ins.

Last week, we had 6 checkins. I expect the number of checkins to remain
a bit on the low side through-out the holiday period. Afterwards, especially
when propagation picks up in late February or early March, I expect the number
of checkins to increase again.
.
.
(snip)
.
.
This is a fledgling but growing ham radio net. You hams out there
should try to make it. Those of you that have participated in the past but
haven't showed for awhile ought to stop in again.

Those hams who are so inclined might want to post a notice on the
bulletin boards of any local landed clubs or maybe announce something in the
newsletter of any non-landed clubs you belong to. Let's get the word out!
.
.
(snip)
.
.
That's it for this week!
73,

In article 760890247@hpuerca, edh@hpuerca.atl.hp.com (Ed Humphries) writes:
> In <gdavis.760825204@griffin> gdavis@griffin.uvm.edu (Gary Davis) writes:
>
> >There is, according to the CBC, a nudist amateur radio club.
> >I am wondering where, how many members? Anybody know anything about this?
> >- In the Buff
> >Gary WQ1F
>
> I see a potential for rf burns that you certainly wouldn't
> show off at OTHER ham club meetings :-)
>
> Ed H-N5RCK
> HP Atlanta

```
---
--
-- Steve Bunis, Sun Microsystems ***DoD #0795*** 93-ST1100
-- Itasca, IL ***AMA #682049***
-- ***HRCA #HM125617**
-- *** N9VLP ***
```

1331. Re: Antenna Erection Aids - Thor's socks

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 17:53:39 UTC
From: greg@netcom.com
Message-ID: <gregCL0sDG.LvD@netcom.com>
Source record: 271282

In article <9402091910.AA23952@rodgers.rain.com> lbrunson@rodgers.rain.COM writes:
>certain applications. I use an old sock.

'In days of old, when hams were bold
and sling-shots weren't perfected
they'd put some rocks into a sock
thus skyhooks were erected'

Greg

1332. Power Supply Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 18:32:12 UTC
From: Bob.Albert@f943.n102.z1.fidonet.org
Message-ID: <760937769.AA04746@mcws.fidonet.org>
Source record: 271284

In general, 200 mV ripple should be adequate for most mobile type rigs. As for load regulation, the main thing is not to apply excessive input to the rig at any time; read the specifications to determine what that level is.

I tend to operate my mobile type rigs (in the shack) at reduced potential to increase reliability and lamp life. Thus, rather than goosing the rig to 14 Volts to get a little more output, I tend to run it at 12.2 or so; that way I may never have to fix the thing.

If your power supply has poor load regulation, try adding a bleeder resistor (dummy load); most of the time the majority of the increase occurs at less than 10% of rated load due to capacitors charging to peak values.

Let me know if I can help further; I used to do power supply circuit design for a living... 73 DE K6DDX

1333. Re: Do NiMH Batteries Dev. Memories?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 19:14:54 UTC
From: x1rbrown
Message-ID: <x1rbrown-100294131354@rbrown.exnet.iastate.edu>
Source record: 271285

In article <1994Feb8.203847.1@ccsvax.sfasu.edu>, f_riskph@ccsvax.sfasu.edu
(DR. PAUL H. RISK, COLLEGE OF FORESTRY) wrote:
>
> Do NiMH batteries develop a *memory* like NiCads do if they are recharged too
> often before they're fully discharged?
>
> TNX
> Paul N1DJD

Paul, I don't have an answer to your question...but I would like a direct
email contact! Long time to talk to...

Roger Brown
Iowa State University Extension
x1rbrown@exnet.iastate.edu
Amateur Radio ND0J

1334. Re: Looking for LOGIKEY keyer

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 19:19:15 UTC
From: slay@netcom.com
Message-ID: <slayCL0wC3.u0@netcom.com>
Source record: 271286
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

Hannes Hogni Vilhjalmsson (hhv@rhi.hi.is) wrote:
: Can anyone tell me the present address of the Logikey Company,
: or any other outlet for their LOGIKEY microprocessor based morse
: keyer?

If I'm not mistaken, the LogiKey is the commercial version of the CMOS Super Keyer II which was first described in the November 1990 issue of QST. That keyer is available in Kit Form (i.e. parts, pcb, but no switches, boxes, or batteries) from:

Idiom Press
Box 583
Deerfield, IL 60015

When I bought mine (it is a WONDERFUL keyer), I paid $45 + $3 for domestic USA shipping. Foreign orders were $45 + $5.

Sorry, that's all the info I have.
73 de Sandy WA6BXH/7J1ABV slay@netcom.com WA6BXH@N0ARY

1335. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 19:25:36 UTC
From: kevin jessup <kevin.jessup@mixcom.mixcom.com>
Message-ID: <1994Feb10.192536.12095@mixcom.mixcom.com>
Source record: 271287

In <gdavis.760825204@griffin> gdavis@griffin.uvm.edu (Gary Davis) writes:

>There is, according to the CBC, a nudist amateur radio club.

>- In the Buff
>Gary WQ1F

First the "codeless" TECHNICIAN license. Then an article in the amateur
radio areas of the internet on "erection aids".

Now, nudist amateur radio clubs! What's become of our hobby?? :-)))

--
/`-_ kevin.jessup@mixcom.com |
{ }/ Marquette Electronics, Inc | I suport publick skools! ;-)
\ / Milwaukee, Wisconsin, USA |
|__*| N9SQB, ARRL, Amateur Radio |

1336. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 19:26:35 UTC
From: jackson@longlast.cs.nyu.edu
Message-ID: <2je1pb$pbc@slinky.cs.nyu.edu>
Source record: 271288

In article <rohvm1.mah48d-090294083450@136.141.220.39>, rohvm1.mah48d@rohmhaas.com (John E. Taylor III) writes:
|> In article <2j8dql$7ul@news.acns.nwu.edu>, rdewan@casbah.acns.nwu.edu
|> (Rajiv Dewan) wrote, in part:
|>
|> > >How many people use typewriters or computers for copying code?
|> >
|> > I think that there is one down side to this approach.

So how many of you think I am UTC by learning on a computer?

--
Steven Jackson New York University
Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012
"Not in my head.. so I don't have to think.." -- Nik Fiend

1337. WARNING: Potential Satellite Anomaly Warning

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 19:29:58 UTC
From: oler@rho.uleth.ca
Message-ID: <9402101930.AA23713@rho.uleth.ca>
Source record: 271289
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

POT

UPDATED: 18:00 UT, 10 FEBRUARY

/\

ATTENTION:

High energy electrons at greater than 2 MeV remain enhanced. Levels observed since about the 7th are approximately the same as what was observed in January. Geosynchronous satellites (and possibly lower orbiting birds) may experience anomalous charging events as a result of this activity. It is reasonable to suspect that this activity will continue for several more days at least, given the extent of the responsible coronal hole. This may increase the risk for deep charging events given the unusual duration of this activity.

** End of Warning **

1338. Re: Bosnian Ham Address

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 19:31:32 UTC
From: german@infi.net
Message-ID: <CL0wwK.D8@infi.net>
Source record: 271290

Stephen Baker (sbaker@umassmed.UMMED.EDU) wrote:
: I have been expecting to find out the call sign of a ham in Bosnia who is
: operating "clandestinely" from some bosnian refugees. I just received what the
: translaters obtained, it is like (but not exactly):

: 378-88-813-164

This is, I believe, a telephone number. 387 is the Bosnia country
code, the next two digits are for the city in question, and the remaining
six are the local number. Sarajevo, for instance, is 387-71-XXX-XXX. Some
local numbers do have seven digits. The amazing thing in this war is that
the phones will occasionally come to life and people trapped inside can
telephone out. It is much more difficult to make a call into the country,
since the few lines that remain are almost always busy. Good luck if you try
to get through. I have been attempting to send a fax to the United Nations
Protection Forces in Sarajevo on behalf of one of our local correspondents there for
nearly two weeks without much success.

--
Tony Germanotta, staff writer, The Virginian-Pilot, Norfolk, Va.
-=-
Blame no one else for the opinions I don't have.
e-mail: german@wyvern.com phone:(804)446-2276

1339. Re: Index to the rec.radio.amateur.* Supplemen

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 19:38:23 UTC
From: msti0087@rz.uni-hildesheim.de
Message-ID: <1994Feb10.193823.2137@rz.uni-hildesheim.de>
Source record: 271291

Hi OM`s

I want to meet some OM`s in the Palm Beach FL area.
From 17.3.-31.3.94 I spend my holidays there.
I`m waiting for your mail...
Good luck to all...
Martin DL5OBF

1340. Correction to the Anik Satellite Failure Reports

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 19:46:14 UTC
From: oler@rho.uleth.ca
Message-ID: <9402101946.AA24723@rho.uleth.ca>
Source record: 271292
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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ADMINISTRATIVE BULLETIN

10 February, 1994

Correction to Anik Failure Reports

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CORRECTION TO THE ANIK FAILURE REPORTS

It is unfortunate and somewhat ironic that a report which is intended to clarify conditions which contributed to the Anik satellite failures on 20 January 1994 must itself be clarified. We apologize for this.

Too much emphasis was placed on the non-recurrence possibilities of high-energy electron fluxes. The report stated that the possibility of observing a recurrence in high-energy fluxes was "highly speculative." This is incorrect. There is overwhelming evidence that recurrence of electron fluxes is correlated with coronal holes. If the coronal hole in question is stable and persists for more than one solar rotation, you can statistically expect to see a recurrence in the same electron activity as well.

What we should have stated, instead, was that the DURATION and TIMING of the the recurrent electron activity may not be as predictable, particularly if the structure of the coronal hole changes substantially from one rotation to the next. I was surprised to actually see this in the final report. Unfortunately, it was not properly reviewed it before it was released. I must therefore take responsibility for this inaccuracy and do hereby formally apologize for any misconceptions this may have caused.

Electrons do recur with coronal holes. Since February 7th, we have observed a recurrence in the electrons which affected the Anik birds in January. The duration and magnitude of the activity has been (so far) and is expected to be approximately the same as was observed last month. This again raises the possibility that some birds may see additional deep dialectric charging events. Satellites in lower orbits are not free from the effects of this activity. Although the high-energy electrons do tend to concentrate along the outer area of the magnetosphere, some lower orbiting satellites can also be affected by the higher electron concentrations.

The rest of the report is accurate enough. Solar flares and magnetic storms can be dismissed as the source. We simply needed to clarify that electron recurrence is correlated with coronal holes and is not in fact "speculative", as well as the possible vulnerability of lower-orbiting

satellites.

If the previous erroneous report is reproduced in newsletters or publications, feel free to edit it so that the above corrections are included. If necessary, send me a copy and I'll proof read it for correctness.

Cary Oler
Director, STD,
INT
COler@Solar.Stanford.Edu

** End of Bulletin **

1341. 440MHz band (region 2)?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 20:09:40 UTC
From: ssohn@ece.rutgers.edu
Message-ID: <Feb.10.15.09.40.1994.3092@ece.rutgers.edu>
Source record: 271293

Anyone out there know band range of 440MHz in region II?
Thanks in advance.
73's de Surgwon,KD6TRC

1342. Re: Bosnian Ham Address

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 20:47:43 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCL10FJ.F3D@netcom.com>
Source record: 271294

In article <9402092126.AA29848@umassmed.UMMED.EDU> sbaker@umassmed.UMMED.EDU (Stephen Baker) writes:
>I have been expecting to find out the call sign of a ham in Bosnia who is
>operating "clandestinely" from some bosnian refugees. I just received what the
>translaters obtained, it is like (but not exactly):
>
>
> 378-88-813-164
>
>(I modified a couple of digits in case it is somehow traceable)
>
>This is obviously not a call sign, or recognizable as a frequency. I wonder if
>it is an i.p. address for a packet mail network. It bears a slight resemblance
>to an internet i.p. address. The ham in question is purportedly located in
>Mostar, Bosnia and I am attempting to locate a way to pass health and welfare
>traffic. Thanks.
>
>
>--
>
>
>Stephen P. Baker phone: (508) 856-2625
>Lecturer in Biostatistics (508) 856-3131 fax
>Department of Academic Computing (413) 253-3923 home
>University of Massachusetts Medical School e-mail: sbaker@umassmed.ummed.edu
>55 Lake Avenue North -.- -.. .---- .--. ..-.
>Worcester, MA 01655

nslookup comes up with the following:

Server: meceng-9.coe.neu.edu
Address: 129.10.9.191

Name: [378.88.813.164]
Address: 122.88.45.164

I did this from my Northeastern University account.

It could also be a phone number, though I don't know how the Bosnian phone system works.

Hope this helps.

--
==========
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |

```
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|--------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
============================================================================
```

1343. CT-USER mailing list is now available!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 21:03:27 UTC
From: Jim Reisert AD1C <reisert@wrksys.enet.dec.com>
Message-ID: <9402102103.AA19362@easynet.crl.dec.com>
Source record: 271295

I have set up a reflector (similar to CQ-CONTEST) for users of K1EA's contest logging software, CT. If you are interested in joining the list, send a message to "MajorDomo@sttng.mlo.dec.com" and put this text in the *BODY* of your mail message:

info ct-user

It will send you the Frequently Asked Questions (FAQ) list, which will tell you how to subscribe.

73 - Jim AD1C

1344. Re: Antenna Erection Aids - Thor's socks

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 21:21:25 UTC
From: julian@bongo.tele.com
Message-ID: <1994Feb10.212125.5878@bongo.tele.com>
Source record: 271296

In article <2jdef0$hus@cronkite.nersc.gov> Greg@epitome.er.doe.gov (Greg Chartrand) writes:
>The sock wins my vote for most creative, low cost, easy to transport
>solution. Now I have a reason to save my old sox!

Of course the appliance operators will buy ready knitted
socks. The real hams will knit their own - no doubt from recycled
sweaters.

Many hams prefer the Wigwam brand of socks. Some users report
good results with military surplus socks, but they often require
modification before use.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

1345. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 21:33:30 UTC
From: curran@corona.med.utah.edu
Message-ID: <CURRAN.94Feb10143331@corona.med.utah.edu>
Source record: 271297

Thanks for your reply Terry.
Since the Vertical mail made it out to the usenet, I'll
fill in the details. I'm interested in constructing a
ground plane for 20 and/or 40 and was interested in
finding out what has worked for others in terms or
materials and layout. There is an artical from 1988
QST describing elevated GP ants using 4 radials, rather
than 120+ buried, and claiming good theoretical results.

Specifically in my installation, I lack high supports
for dipoles, zepps etc, and although my ladder line fed
80' flatop apparently works well, I was hoping to achieve
a low angle of radiation and possibly better DX conditions
by going vertical.

A more appropriate forum for this is probably r.r.a.antenna,
and I'd happily take comments to my e-mail box.

Best 73s,

Mark C.
--
----
8)
Mark Curran 8)
curran@corona.med.utah.edu 8) 8)
Amateur Radio: KA1ODA/7 8) 8)
* 8) 8)
Hey Baby, Wanna come over and pet my Piranha? * 8)
* 8)

1346. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 21:38:16 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1994Feb10.213816.16514@rsg1.er.usgs.gov>
Source record: 271298

In article <gdavis.760825204@griffin>, gdavis@griffin.uvm.edu (Gary Davis) writes:
|> I heard a strange story on the CBC last evening. The report was on
|> the increasing interest in nudism in the Winter months. To promote
|> this festive and relaxing activity additional interests where specified.
|>
|> There is, according to the CBC, a nudist amateur radio club.
|>
|> I am wondering where, how many members? Anybody know anything about this?

And where do you hang your HT? Yowwwwwch!

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

1347. RTTY DX NOTES 11 FEB

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 21:41:13 UTC
From: Angelo_Glorioso_Iii@agwbbs.new-orleans.LA.US
Message-ID: <Angelo_Glorioso_Iii.2nnh@agwbbs.new-orleans.LA.US>
Source record: 271299

```
RTTY DX NOTES 11 FEB 93

RTTY DX NOTES W/E 11 FEB 94
VK2SG RTTY DX NOTES FOR WEEK ENDING 11 FEB 93 (BID RTDX0211)

OUR INFORMATION THIS WEEK CAME FROM 9X5LJ, I5AAX AND THE IK5PWJ
PACKET CLUSTER, I5FLN, WB2CJL, AA5AU, W5KSI, ZS5S, AND THE NJ0M NODE
OF THE TWIN CITIES DX PACKETCLUSTER NETWORK. THANKS TO ALL FOR
YOUR HELP.

BANDPASS:
FRIDAY 4
0735-14084 FK8GS REV.
0939-14082 YL1ZE
1142-21083 UN8PFE
1302-14085 4S7RM
1320-14089 SO6AD/9
1340-14091 HK0DPA
1348-14088 9H1ET
1500-21085 TZ6FIC
1510-21089 XE1SRF
2350-14089 JA3DLE/1

SATURDAY 5
0245-14086 VQ9TV
0835-14082 6W6JX
1257-14087 YV5KAJ
1304-21085 TZ6FIC
1316-21082 TU4EV
1400-21088 ZD7DP
1435-21085 CU3EM
1525-14086 J88BS
1543-14081 4U1ITU
1707-14083 XU7VK
1817-14082 J28JJ
1918-14086 EA8AK
1922-14088 ZA1MH
2008-14092 FG5FI
2149-14085 FM5GN
2156-14087 LU4DXU

SUNDAY 6
0006-14085 S92ZM
0042-21076 3Y0PI FEC QSL KA6V SEE NOTE
0103-21076 3Y0PI ARQ
0620-14079 UA0ST
```

0624-14086 TR8MD QSL F6FNU
0648-14082 S53X
0756-14079 4U1ITU
0756 14079 4X/OK1FGV
0800-14080 T91ENS PACTOR
0826-14090 ER1PE
0830-14071 OD5ZZ PACTOR
0921-21086 EA6VS
0926-14083 UX0KC
0930-14085 6W6JX
0950-14090 UY7LT
0951-14090 RW8LZ
1035-14086 RV9CX
1050-14086 XU7VK QSL HA0HW
1053-14085 UN5PR
1053-14085 UH8WAD
1340-21085 ZS5J
1343-21083 SV9CAG
1400-14085 BV7WB
1400-21086 ZD7DP
1403-14087 4U1ITU
1405-14085 XU7VK
1415-14088 CU3EM
1431-14089 HP1XVI
1440-14091 YB3AQF
1441-28083 V50CM
1454-14086 TA5C
1506-21076 TU2BB PACTOR
1509-14091 UT2UZ
1533-14087 5B4VX
1538-21083 V50CM
1532-14080 VU2YK PACTOR
1705-14083 XU7VK
2226-14087 FM5GN
2322-14087 HP1XVI

MONDAY 7
1107-14085 XU7VK
1711-14089 CO2AW
1829-14083 C91AI QSL CT1DGZ
1900-14084 3Y0PI INVERTED
2007-14083 CX3ABE
2021-21085 ZD7SM
2148-14084 CO2AW
2206-14084 YN4JAR
2224-14084 HK0DPA
2239-14084 S92ZM
2340-14084 ZP6EM
2354-14086 KP4SQ

TUESDAY 8
0002-14088 PJ2MI
0026-14083 VP8CIL
0030-14083 FY5FG
0032-14085 ZP6EM
0039-14080 3Y0PI QSX UP
0119-14076 3Y0PI
0302-14081 3Y0PI
0048-14082 CE3NDN PACTOR
1721-14090 HK0DPA
1822-14086 CO2AW
1857-14083 CX3ABE
1904-14085 5Z4FO
1930-14083 YN5JAR
2153-14070 V31AR FEC/ARQ
2218-14084 9Y4VU
2230-14082 CO2AW
2235-14080 3Y0PI PACTOR QRM
2300-14082 3Y0PI QSY'D TO ESCAPE PACTOR QRM

WEDNESDAY 9
0102-14082 3Y0PI STILL GOING STRONG

THURSDAY 10
0100-14081 V31JU

NOTES OF INTEREST:
TNX TO TONY WA4JQS, AT 3Y0PI, FOR HIS VALIANT EFFORTS IN
SUCCESSFULLY REPAIRING THE RTTY GEAR UNDER THE MOST ADVERSE
CONDITIONS.

A35JJ, TONGA - LOOK FOR A35JJ BETWEEN 12 AND 20 FEBRUARY
ON ALL BANDS. QSL TO JR2KDN.

FOR NEXT WEEK'S BULLETIN, SEND YOUR BANDPASS AND
NOTES OF INTEREST TO LUCIANO, I5FLN AT ZS5S.ZAF.AF OR
AT 9X5LJ.#KGL.RWA.AF.

73 ES GOOD HUNTING DE JULES W2JGR AT W2TKU.#SRQFL.FL.USA.NA

/EX

-- Via DLG Pro v1.0

Internet:angelo_glorioso_III@agwbbs.new-orleans.LA.US
Usenet:rex!agwbbs!angelo_glorioso_III
Packet:N5UXT @ N5UXT.#NOLA.LA.USA.NA
Tcp/ip:N5UXT.AMPR.ORG [44.108.2.13]

1348. Repair of HP 8481A Power Sensor - Is it possible?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 22:47:02 UTC
From: ka1gt@cbnewsm.cb.att.com
Message-ID: <CL15yH.6J5@cbnewsm.cb.att.com>
Source record: 271300

Anyone know if a repair of a blown out HP 8481A Power Sensor is possible?
Any info would be appreciated. Any kind of repair - I don't expect to
regain the original accuracy of the HP unit!

E-mail replies if possible please.

Thanks in advance,
Bob Atkins, KA1GT

1349. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-10 23:03:16 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb10.230316.2343@ke4zv.atl.ga.us>
Source record: 271301
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

```
In article <CKz3pw.8yG@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: In article <CKxpL6.LKB@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>: >Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: >: In article <CKvGDJ.GFv@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>: >: >Consider a vertical dipole in free space. You could insert a horizontal
>: >: >infinite ground plane at the feedpoint without changing the radiation
>: >: >pattern. Now you have two verticals, one pointing up, one pointing down.
>: >: >Each vertical radiates half the power of the original dipole.
>: >
>: >: True because each has half the current that flows in the entire dipole.
>: >
>: >No, the current is the same, but the power is halved. There are (at least)
>: >two ways to see this: 1) Only 1/2 the voltage is applied to each 1/4-wave
>: >element. Since power = voltage times current, the power is 1/2.
>: >2) The element is only 1/2 as long. So the same current results in
>: >only 1/2 as much power radiated.
>
>: Dipole split by infinite ground plane.
>
>: |
>: |
>: -------/\/\/\/\---o | o---/\/\/\/\-------
>: E1 | E2
>: |
>: |
> ^^^ 36.5 ohms ^^^ 36.5 ohms
> ------------ 73 ohms ------------
>
>: If we apply drive to E1-E2, equal currents are driven into each element's
>: impedance. So the halves of the dipole have equal currents flowing in them,
>: but 180 degrees out of phase. With the infinite ground plane isolating the
>: halves, one half has half the total current flow.
>
>Let's call the voltage applied between E1 and E2 "V". Since there are
>equal and opposite voltages on the two terminals, the voltage applied
>to each is V/2.
>
>If, for example, V = 73 volts, the current in the dipole is 1 A (since
>the radiation resistance is 73 ohms.) With the ground plane, the
>impedance of each 1/4-wave element is 73/2 = 36.5 ohms. Since you have
>half the voltage (37.5 V) applied to each half, the current is still 1A
>in each 1/4-wave element.
```

Yes, yes, I understand that, but look at what you're saying, "the current is *still* 1A in *each* 1/4-wave element." Since the dipole has *two* elements, 1+1=2, it's instant flow is twice the current of a single element. (I understand what phase does to *net* current at the *feedpoint*, but that's really a different issue. When the barrier of the infinite ground plane comes into play, it *isolates* the two branches so we can treat them separately. Hence we can see the individual 1 ampere flows at the feedpoints of the two halves without phase combinations.)

Let's examine *why* an antenna radiates for a moment to see what I'm getting at here. Radiation occurs when an electric charge is accelerated. The relevant factors are the amount of electric charge, RF current, the accelerating potential, RF voltage differential over the charge path, and frequency, the rate of change of voltage along a current path. These three are all intimately related, but in most antennas, the instanteous current is a key to predicting radiation field shape, and hence gain. The 1/4-wave monopole in the example has half the instant current of the dipole, and half the total end to end electrical potential. So crudely it would seem to have 1/4th the field strength, but it's length is 1/2 as great (frequency effect) so the accelerating gradient is the same. That leaves the *signs* of the current flows that make the field of a free space dipole. These vector sum to the same field strength as the monopole over an infinite ground plane. The dipole's currents generate fields which vector sum in a way that makes 1+1 appear to equal 1. The ground plane should be seen as a *shield* to prevent this summing, not as a mirror.

>The resulting field is the same for the ground-plane case as for the
>dipole in free space. It is as if the other half of the dipole were
>still present. That's where the concept of the "image" antenna
>extending below the ground plane comes from.

Uh huh, but an "image" antenna extending below the ground plane is not reality. It's a visualization trick that's sometimes useful, but the currents that actually flow are induced currents flowing along the surface of the conducting plane. They are *not* the same as the currents that would flow in an "image" antenna. They are the currents a *field* generated by the image antenna would induce in a perfect conductive sheet. This is important to understanding the effects of *real* ground planes which are neither perfectly conducting, nor infinite in extent. And is the reason *real* 1/4-wave monopoles over *real* ground planes have less gain than vertical dipoles, or 1/2-wave vertical monopoles.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1350. A is for alpha.....

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 00:00:42 UTC
From: erik_read@qms1.life.uiuc.edu
Message-ID: <erik_read-100294175751@gardner2.life.uiuc.edu>
Source record: 271302

I have a friend who speaks english badly and does not choose words to describe the letters. I think the military has a thing where they use standardized, easily recognisable words, like alpha, bravo, charlie, etc.....
I myself do not know them all and I really think that this would help a lot.
Can anyone help me? Is this the right place to be posting?

Thanks in advance; Erik

1351. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 00:07:43 UTC
From: andy@clark.net
Message-ID: <2jei8f$afh@clarknet.clark.net>
Source record: 271303

Stephen Mosier (mosier@fagan.uncg.edu) wrote:
: In article <2jd6kj$mqt@clarknet.clark.net> andy@clark.net
: (Andrew M. Cohn) writes:

: >: There is, according to the CBC, a nudist amateur radio club.
: >
: >Is this like 'operating barefoot'? Where to they clip the HT's external
: >speaker-mike? ;->

: Where do they hang the HT??

: steve
: mosier@fagan.uncg.edu

That should be obvious. ;-> -andy

1352. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 00:12:39 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb11.001239.2842@ke4zv.atl.ga.us>
Source record: 271304

In article <CKz3I8.6M4@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>In article <1994Feb9.031017.13806@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>In article <CKxKI7.1IJ@world.std.com> barnaby@world.std.com (Richard L Barnaby) writes:
>>>Any advice for cracking the morse-as-characters to morse-as-words barrier?
>>
>>No. I've been a ham 30 years and I still can't do it. If I don't write
>>it down, I have no idea what's being sent.
>>
>
>Yes. First, put down your pencil and force yourself to copy in your head.

Easy to say. Some of us find it to be impossible however.

>In fast Morse, you don't want to try to pick out individual letters; rather
>you want to hear entire words. Now , one way recognizing words is to make
>up code tapes yourself consisting of common words you might hear during
>a CW QSO: the, rig, ant, qth, ...; send each word at least a dozen times
>and recognition will come very quickly (this is how I learned Vietnamese -
>but Gary will quickly deny any correlation between learning a language and
>learning code even though the methods of learning are the same: repetition!).

Well short words can be considered simply extensions to the alphabet,
as in Chinese and other pictographic representations of words rather
than characters. The problem comes with longer or less familiar words.
Then you're back to character by character spelling to determine what
was sent.

I can wait and recognize "the", but when it turns out to be the
opening character group in "Thessalonian", I'm screwed. Dealing
character by character on paper insures I get either correctly.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1353. Re: Long range digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 00:33:43 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb11.003343.2956@ke4zv.atl.ga.us>
Source record: 271305

In article <CL0F1v.EzK.2@cs.cmu.edu> br@cs.cmu.edu writes:
>
> Can any of you radio folks give me a hand with this?
>
> I need a system capable of transmitting about 1 MegaBit per second
> of digital data from anywhere on the planet. This would be a one-way
> link. I'm sure this can be done, but can it be done reliably without
> a satellite and lots of very fancy gear? If so, I have some questions:

This is a *very* demanding application. To get global coverage without benefit of relay, you're basically forced to use ELF, but you can't get high throughputs at ELF because of the limited bandwidth. It's easy to get 1 Mbit/s throughput at UHF, but you're restricted to slightly greater than line of sight range, or somewhat more if you do high power forward scatter. At HF, you can get spot coverage to portions of the globe due to ionospheric refraction at certain times, under certain conditions related to time of day, solar cycle, etc, but the multipath (selective fading) of such channels makes high data rates difficult at best.

This application demands either wireline or satellite relay to be practical.

> How much might the equipment to do this cost?
> How much would this equipment (the transmitter) weigh?
> How much volume would this equipment (transmitter) occupy?
> How much power would the transmitter require during operation?
> How big would the antenna have to be?

All of the above can be answered "a lot" or "huge".

> If the problem is simplified to communicate within a single hemisphere,
> does that make life alot easier?

A bit. You could bounce the signals off the Moon, but that's not available 24x7, and would still require huge amounts of power and antenna gain to achieve 1 Mbit/s throughput. Meteor scatter could give you a 1500 km radius under ideal conditions, and would require slightly less demanding equipment (but only *slightly* less).

The problem is the need for 24x7 communications to *anywhere* on the globe at 1 Mbit/s. If you needed spot coverage to selected points on an intermittant basis determined by external conditions, or you could accept *much* less throughput, then the problem begins to become doable. It's still hard without artificial relay, however.

Sounds like this is a balloon experiment from the parameters you set out. You're not going to be able to get global coverage at high data

rate from a balloon borne package without external relay.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1354. Re: N connectors (was Re: "Flexible" 9913 (Was - Re: Coaxial cab

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 00:42:22 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb11.004222.3189@ke4zv.atl.ga.us>
Source record: 271306

In article <CKx5LM.B5o@hpcvsnz.cv.hp.com> tomb@lsid.hp.com (Tom Bruhns) writes:
>Chuck Harris - WA3UQV (chuck@eng.umd.edu) wrote:
>
>: (Hint, the worst things about the PL are soldering the braid, and lack of
>: weather resistance. The best things about the N are the solderless braid
>: connection, the physical strength, and the weather resistance.)
>
>I've seen folk curse at N connectors on 9913. It appears to me that the
>9913 doesn't provide very good support for the compression gland in N
>connectors, since the line is essentially hollow and made from (soft)
>polyethelene. The N connectors I've seen sold for it are what I'd
>call "short-barrel." You can get longer barrel ones that offer better
>support for the line, and I find they stay on much more securely. You
>have to do the center pin mod yourself to get them to accept the
>larger center conductor of the 9913. (Sorry, I don't have the UG numbers
>in front of me...)

The problem with putting compression fittings on 9913 is the low braid coverage. It really has nothing at all to do with the dielectric, which never enters into physical connections. Since it uses foil for the bulk of it's shielding, and the braid count on 9913 is way down, you tend to get connectors that tear off easily. Newer 9913 has more braid than older lots so it works better. The better solution is to use the crimp connectors designed for 9913. I like the Kings brand best. This captures the braid between two barrels and crimps them into a solid unit. Because it engages much more braid area than the gland, which only pinches a narrow circle of braid, the crimp connector makes a much stronger connection. You need the proper tooling to attach these connectors, gas pliers don't cut it, and the tooling is expensive, but it's worth it.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1355. Daily Summary of Solar Geophysical Activity for 09 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 01:34:50 UTC
From: oler@rho.uleth.ca
Message-ID: <9402110134.AA01345@rho.uleth.ca>
Source record: 271307
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

09 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 040, 02/09/94
10.7 FLUX=101 90-AVG=106 SSN=064 BKI=4544 4554 BAI=034
BGND-XRAY=B2.1 FLU1=0.0E+00 FLU10=0.0E+00 PKI=4445 4455 PAI=034
BOU-DEV=060,095,068,074,031,044,033,048 DEV-AVG=056 NT SWF=00:000
XRAY-MAX= C3.0 @ 1822UT XRAY-MIN= B1.6 @ 0312UT XRAY-AVG= B3.7
NEUTN-MAX= +002% @ 2155UT NEUTN-MIN= -003% @ 0955UT NEUTN-AVG= +0.1%
PCA-MAX= +0.1DB @ 2115UT PCA-MIN= -0.3DB @ 0405UT PCA-AVG= +0.0DB
BOUTF-MAX=55360NT @ 0300UT BOUTF-MIN=55305NT @ 1806UT BOUTF-AVG=55336NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+065,+000,+000
GOES6-MAX=P:+124NT@ 2004UT GOES6-MIN=N:-068NT@ 0423UT G6-AVG=+086,+035,-031
FLUXFCST=STD:103,104,109;SESC:103,104,109 BAI/PAI-FCST=025,020,015/025,025,020
KFCST=3355 4333 3355 4333 27DAY-AP=021,019 27DAY-KP=4433 5334 3344 4333
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MAJSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 08 FEB 94 was 25.0.
The Full Kp Indices for 08 FEB 94 are: 6- 5o 6- 6o 6o 4+ 5- 5-
The 3-Hr Ap Indices for 08 FEB 94 are: 63 48 67 87 87 35 36 41

SYNOPSIS OF ACT

Solar activity was low. Region 7668 (N08E35) was
the most active this period producing several optical flares
with B-class enhancements while showing good white light growth.
Rgn 7664 (S12W75) produced the only C-class flare this period
which maxed at 1822. This rgn is also showing growth as it
approaches the west limb. All other regions are stable.

Solar activity forecast: solar activity is expected to be
low with Regions 7664 and 7668 showing the most promise for
C-class activity. Old Region 7654 (N09, carrington 207) is due

to return late on the 11Th. During its last rotation, it produced 4 M-class and 27 C-class flares.

At middle latitudes, the geomagnetic field has been at active to minor storm levels while at high latitudes, the field has been at mostly active to major storm levels with isolated severe storm conditions reported. A favorably positioned coronal hole is believed to be responsible for the storm conditions.

Geophysical activity forecast: the geomagnetic field should remain at mostly active levels for the duration of the forecast period. Occasional periods of minor to major storms are still likely. Disturbed geomagnetic conditions should be expected for the next six days.

STD: High energy electrons at greater than 2 MeV continue to be observed. Satellite charging anomalies are possible and will remain possible for as long as this enhancement continues.

Event probabilities 10 feb-12 feb

Class M 10/15/20
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 10 feb-12 feb

A. Middle Latitudes
Active 50/45/20
Minor Storm 15/15/10
Major-Severe Storm 15/10/05

B. High Latitudes
Active 50/50/55
Minor Storm 15/15/10
Major-Severe Storm 10/10/10

HF propagation conditions are disturbed over all regions. Although transpolar and transauroral circuits have been hit the hardest, degradations have been noticed through to the equatorial regions. MUFs are well below normal, depressed by between 20 and 50 percent. LUFs are also elevated, narrowing the available bandwidth. Periods of total radio blackouts are continuing to be observed for transauroral and transpolar circuits. Although conditions are expected to very gradually improve over the next week, nothing substantial is expected.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7664 S12W75 035 0180 EAO 11 009 BET
7665 N03W69 029 0000 AXX 01 001 ALPHA
7666 N18W28 348 0110 CAO 04 004 BET
7668 N08E35 285 0240 DAO 09 010 BET
7667 S07W15 335 PLAGE
REGIONS DUE TO RET
NMBR LAT
7652 N04 221
7654 N09 207

LISTING OF SOLAR ENERGETIC EVENTS FOR 09 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 09 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 09/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
08 Feb: 0746 0817 0837 1F 7668 N07E60
0957 0959 1007 SF 7668 N07E59
1305 1312 1328 SF 7668 N08E55
1605 1613 1619 B7.3 SF 7668 N08E54
1750 1753 1833 SF 7668 N08E53
1917 1921 1932 SF 7668 N08E52
2323 2327 2331 B4.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7668: 0 0 0 5 1 0 0 0 006 (85.7)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (14.3)

Total Events: 007 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1356. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 02:05:52 UTC
From: alanb@sr.hp.com
Message-ID: <CL1F5v.KID@srgenprp.sr.hp.com>
Source record: 271308
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: Yes, yes, I understand that, but look at what you're saying, "the
: current is *still* 1A in *each* 1/4-wave element." Since the dipole
: has *two* elements, 1+1=2, it's instant flow is twice the current
: of a single element.

If you installed RF ammeters in each element, they would read the same no matter whether the ground plane is present or no. (Since the RF generator and both elements are in series, the current must be the same in each.) Each 1/4-wave element radiates 1/2 the total power no matter whether the ground plane is present or no.

(Is anybody else still following this convoluted discussion?)

AL N1AL

1357. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 02:50:59 UTC
From: k9cw@prairienet.org
Message-ID: <2jerqj$pcn@vixen.cso.uiuc.edu>
Source record: 271309

In a previous article, rdewan@casbah.acns.nwu.edu (Rajiv Dewan) says:

>In article <CKy1qC.GzC@kaiwan.com>, Doug Brandon <dab@kaiwan.com> wrote:
><snip>
>
>>Does anybody know if F6FNU QSLs via the bureau?
>

No, you won't receive a QSL from F6FNU via the bureau. Nor will he answer
cards sent to him via the bureau. I have sent many cards to him direct
for various DX stations, and I have always received a prompt reply. What
he requires is a legible QSL, an SASE, and sufficient $$ for return postage.
Not too much to ask...

73, Drew
--
------------------------------------------------------------------*
| Andrew B. White K9CW | internet: k9cw@prairienet.org |
| ABW Associates, Ltd. | phone/fax: 217-643-7327 |
------------------------------------------------------------------*

1358. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 03:01:38 UTC
From: jimc@megatek.com
Message-ID: <1994Feb11.030138.403@megatek.com>
Source record: 271310

In article <gdavis.760825204@griffin> gdavis@griffin.uvm.edu (Gary Davis) writes:
> I heard a strange story on the CBC last evening. The report was on
>the increasing interest in nudism in the Winter months. To promote
>this festive and relaxing activity additional interests where specified.
>
>There is, according to the CBC, a nudist amateur radio club.
>
>I am wondering where, how many members? Anybody know anything about this?
>
>
>
>- In the Buff
>Gary WQ1F
>
>--

We meet on Thursday nights at 0000Z on 14.265Mhz +/- 10. Tonight there
was only 8 checkins, but it's still wintertime... In the spring and summer
there's usually 10-20 checkins.
We wind up talking about nude beaches, nude resorts, natural (free)
hot springs, stuff like that. Maybe talk about some new law banning skinny-
dipping here or there, and sometimes one of the local nudist/naturist groups
succeeds in stopping some new law or ordinance from happening.
Tonight we started to formulate plans for a commemorative(sp?) QSL
card and/or certificate for Nude Recreation Week, which happens July 4-10 this
year. Yes, the picture QSL will have nude people on it, just don't expect any
"centerfolds". I'll provided details about operating times and freqs for the
"Special Event" as we decide on them.

BTW, hams in the nudist/naturist "community" have noticed a far higher
per capita ham population among nudists/naturists than in the general
population. Wonder why that is?

73,
-jim

I was about to say "check us out sometime", but I think I'll refrain.

--
Jim Campbell "The Tye-Dye Guy" | "Remember to tweet!"
jimc@megatek.com | When in doubt, you're probably
WB6ZPB NSS ASA TNS | unsure about something

1359. Re: Microwave oven shielding

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 03:24:34 UTC
From: B10990@ANLVM.CTD.ANL.GOV
Message-ID: <16F5912D16.B10990@ANLVM.CTD.ANL.GOV>
Source record: 271311

In article <2jbddh$7ja@mojo.eng.umd.edu>
chuck@eng.umd.edu (Chuck Harris - WA3UQV) writes:

>
>In article <horak.760812890@convex.com> horak@convex.com (David Horak) writes:
>>I have a question to ask. While playing with my new Tropez 90 MHz phone
>>the other day, I tried putting it into both of my microwaves (no I didn't
>>nuke the phone :') and I guess I expected the shielding to cut off the
>>signal, thereby causing the out of range indicator to beep. The phone
>>was still able to communicate with the base. If the microwave cannot
>>attenuate 900 MHz, is it really attenuating the GHz stuff? Would
>>someone care to comment on the type shielding used in these ovens?
>
>The biggest source of leakage in a microwave oven is the door seal. Modern
>microwaves use what is called a "choke" seal. It is a tuned, narrow width,
>groove formed into the outer edge of the door. The choke seal used is only
>effective at frequencies greater than 2 GHz. There is also an upper freq
>limit.
>
>Microwaves leak bunches of RF inspite of these seals. Tune a receiver
>to around 2450, and you will hear some of the trashiest RF.
>
>
>------
>Chuck Harris - WA3UQV
>chuck@eng.umd.edu

I haven't tried this, but remember that a receiver is orders of
magnitude more sensitive than the permitted leakage of an oven.
The oven can leak up to 5 mW/cm^2 at 5 cm, while a good receiver
can detect femtowatts.

--Gary K9CZB

1360. So what happened to the Kenwood TR-751 & TR-851 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 03:42:03 UTC
From: brian@umbc.edu
Message-ID: <2jeuqbINN5br@umbc7.umbc.edu>
Source record: 271312

Upon trying to buy a Kenwood TR-851A, I was told that it was
"quietly discontinued" by Kenwood. Does anyone have any idea why?

Does anyone have a good suggestion for a good 440Mhz base unit ? I don't
really need the all-mode capabilities of the 851, but I liked the idea that
it didn't have teenie-weenie controls to make it fit in a car nicely.

73's

Brian
KA3BRZ

--
Brian Cuthie
Systemix Software, Inc.
brian@systemix.com

1361. FOR SALE: YAESU 470 DUAL BAND HT!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 04:19:08 UTC
From: trop@hls.com
Message-ID: <1994Feb10.201912.1416@hls.com>
Source record: 271313
Cross-posted to: rec.radio.amateur.misc,rec.radio.swap

FOR SALE: Yaesu 470 Dual Band 2m/70cm handheld tranceiver

Includes: Standard battery pack (FNB-17)
AC Adapter/Charger
Standard rubber duck
Radio case
Wrist strap
Optional alkaline battery case

I purchased this radio as a backup radio to my primary 470. I have since purchased another backup radio and would like to sell this one. It has essentially been sitting in the box since I purchased it and really hasn't been used for more than a couple of hours (it still has the protective cover over the keypad!). All manuals and associated documentation are included with the original box. I have used the battery that came with it, so you have your choice of battery. Prices are firm and include 2 day FEDEX delivery, although a Bay Area buyer is preferred.

HRO price ~$340 + 15 for the alkaline battery case
$275 with original battery
$290 for battery with new inserts (has some scratches)

Email or phone for more info on this radio or its features

Troy T. Pummill, N6XMV
trop@hls.com
H: (408) 475-0249 leave message

1362. ANARTS RTTY NEWS795 06/02/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 05:36:02 UTC
From: dave@eram.esi.com.au
Message-ID: <5181@eram.esi.com.au>
Source record: 271314
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS NEWS795 06/02/94

Sunday Broadcast Schedule.
3.545 MHz 0930 UTC VK2BQS (Jim)
7.045 MHz -3 0030 UTC VK2CTD (Col)
14.070 MHz (amtor/fec) 0030 UTC VK2DPM (Alan)
14.091 MHz 0030 UTC VK2BQS (Jim)
146.675 MHz 0030/0930 UTC VK2JPA (Pat)
144.850 MHz (ax25 bbs) VK2JPA AT VK2RWI
146.675 MHz (rtty mmbbs/repeater) VK2RTY

Views expressed in this news bulletin are not necessarily
those of the Broadcast Officer, the Relay Officers, or of the
Society.

A reminder for the Gosford - Central Coast Field Day

This Field Day is on again on Sunday 27 February, at the
prestige venue of the Wyong Racecourse in Howarth St. Wyong.

There is plenty of room for all, a most pleasant location and
an airconditioned building in case of hot weather.

ANARTS will be there again this year with displays both static
and operational. There will also be some computer graphics to
feast your eyes on.

As well, the Morse contest will be running again. It was such
a success last year that it will be a feature of the stand
again this year. Polish your sending and receiving skills and
come along and participate in this most historic method of
amateur digital transmission.

Tell you more as the event draws nearer.

Guidelines for the preparation of programs for transmission by
---------- Amateur Radio Teletype
---
from Frank VK2FJL
page 4

(C) Avoid the use of incompatable UPPER-CASE characters
such as: maltese cross, exclamation mark, semi-colon,
ampersand, plus sign, pound sign, dollar sign, slash,
percent, commercial at and other off-beat hieroglyphics
as these may well print out as something altogether
different on the receiving machine, often completely
destroying the intended effect.

(D) When preparing a picture, you will find it easier if
you first draw your picture onto graph paper. outline
your drawing in similar fashion to the drawings found
in children's colouring books. Draw in the lines div-
iding the different areas of shade. Next, decide on
which character you will use to shade each area. Then
simply `knit' your new picture onto punch tape `one
stitch at a time' and ensure that correct end-of-line
protocol is used. Take care, after your second picture
it is possible to become `hooked' on RTTY art.

(10) QUALITY CONTROL.

Finally, a brief word on the content quality of text trans-
mitted by your station. Remember that whatever you trans-
mit by RTTY lives on in print for other members of other
households to read. All transmissions under your callsign
reflect the standards of your station and serve to either
enhance or damage your reputation with other amateurs and
their families who share an interest in our hobby.
The final choice is yours.....

CONCLUSION

It is hoped that these `ten commandments' for RTTY
program preparation will help to promote an even higher
standard of RTTY among VK amateurs.......

HAPPY RTTY-ING

The preceeding text has been transcribed from information
received from VK3EW David. June 1987.
I trust that it will prove of value to interested amateurs.

73's. De VK2FJL.. Frank.. Central Coast NSW..

EA WW RTTY Contest

Date: February 12-13, 1994

QSO Points: On 20, 15, and 10 M : 1 point for QSO within own
continent, and 2 points for QSO outside own continent. On 40

and 80 M, 3 points for QSO within own continent, and 6 points for QSO outside own continent. QSOs within same DXCC country are valid only for multiplier credit, but have zero QSO point value.

Final score: Total QSO points on all bands times total mulipliers on all bands.

Awards: Plate to winner in each class. Certificate to winner to winner in each DXCC country in each class. (Must have 50 or more QSOs.)

Logs: Use separate logsheets for each band. Include a summary sheet to show scoring and other essential information.

Deadline: Mailing deadline is April 9, 1994.

Mail entry to:

EA RTTY Contest Manager
Antonio Alcolado, EA1MV
P.O. Box 240
09400 Aranda de Duero (Burgos)
SPAIN

Best of luck

IPS weekly report
---
28 January - 3 February 1994

Issue no.: 05

Date of issue: 4 February 1994

Date 28 29 30 31 01 02 03
10cm 119 102 99 98 94 96 98
A 15 07 09 08 06 15 (10 estimated)
T 41 82 94 82 61 76 55

Summary of activity

Solar activity was very low 30th January to 2nd February, low on 3rd February, and moderate 28th-29th January. There were two M1 flares on 28th and two M2 flares on 29th.

The geomagnetic field at Learmonth (WA) was quiet to unsettled 28th-30th with one active period on 29th, quiet 31st-1st, returning to quiet to unsettled on 2nd-3rd with an active period on 3rd from 1200-2100UT.

Ionospheric F2 ctitical frequencies at Sydney were near predicted monthly values on 28th, and parts of 1st and 3rd, otherwise 15-35 per cent above predicted monthly values. There was some Sporadic E around 1700 and 1800UT on 1st.

Forecast for the next week (28 - 3 February)

Solar : Low.

Geomagnetic: 4-6 February quiet to unsettled and an active
period is expected for 7-11 February.

Ionospheric: Near predicted levels to 20 per cent above, then
about 15 per cent below predicted monthly levels
from the 7th-11th February.

Courtesy of IPS Radio and Space Services

VK2SG RTTY DX NOTES 28 JAN 94

VK2SG RTTY DXNOTES FOR WEEKENDING JAN. 28, 1994 (BID RTDX0128)

IT SEEMS THAT FROM THIS WEEK WILL BE THE WEEK FOR DX-
PEDITIONS. THEY WILL BE APPEARING FROM SOME VERY EXOTIC
PLACES, SO KEEP THE FINGERS SHARPENED UP AND THE SCREEN ALIVE
AT ALL TIMES.

OUR THANKS THIS WEEK GO TO: ZS5S, W2JGR, WB2CJL, WB9B, 9X5LJ,
I5ICY, I5FLN, DJ3IW AND THE CENTRAL EU DX-CLUSTER NODE
DB0SPC, AND NJ0M NODE OF THE TWIN CITIES DX PACKET CLUSTER.

BANDPASS:

FRIDAY 21
0713-21070 SU1CR ARQ 1559-14090 S57J
1653-14084 SU1AH

SATURDAY 22
0837-21070 SU1CR ARQ 1200-14084 HI8BG
1203-14084 UT5DX 1224-14079 VS6FN PACTOR
1318-14086 YU1NR 1422-14090 RA2FB
1427-14085 K5KWG/ZA 1440-21088 VP2EL
1459-21088 7P8SR 1537-21088 ZS9A
1538-21085 9H1ET 1612-21085 TZ6FIC
1622-21088 KG4HG 1824-21084 5R8DS QSL F6FNU
1994-21094 CU1AC 2008-14070 VQ9WL PACTOR
2148-14084 S92ZM 2215-14088 CN8NP

SUNDAY 23
1419-21085 S57U 1425-14086 ER1PE
1449-21070 SU1CR ARQ 1543-14088 5B4VX
1555-14086 TA5C 1559-21089 9H1ET
1612-21083 TZ6QC 1621-21092 CP1FF
1623-14080 TL8GM 1635-21087 VQ9WL
1647-21089 CU1AC 1653-14089 HK0DPA
1813-21082 FG5FI 1816-14089 EA8AKL
1822-21086 5R8DS 1925-21085 CP6RP QSL I0WDX
1927-14084 TZ6FIC 1928-14086 J28BM
2056-14086 V50CM

MONDAY 24
0705-21070 SU1CR ARQ 1344-14085 RC2CR
1358-21087 YB3AQF 1548-14083 OK1KQJ
1700-21085 ZD7DP QSL BOX 86, ST. HELENA

TUESDAY 25
0650-14095 UN7FO 2021-14083 V50CM

WEDNESDAY 26
0005-14085 PS8KW 0717-14078 SV2BBJ
1127-21088 UN8PFE 1131-21085 UX0KN
1225-14088 SK4BX 1324-14085 S51GL
1450-14086 EA8/ON8RI 1551-21082 IX0KN
1610-14089 ER3ED 1830-14084 FG5FI

THURSDAY 27

No reports.

NOTES OF INTEREST:
PETER I IS. 3Y0PI. THE DXPEDITION TEAM IS PROCEEDING ON SCHEDULE A WITH AN EXPECTED LANDING DATE ON THE ISLAND OF FEBRUARY 1ST.

PACIFIC TOUR. NOB, JF2MBF AND YASU, JI1NJC WILL MAKE A TRIP WHICH INCLUDE TONGA (A35JJ) FROM FEB. 12 TO 20, TUVALU (T23JJ) FROM FEB. 22 TO MARCH 1ST, WEST KIRIBATI (T30JJ) FROM MARCH 3 TO 8TH., NAURU (C21/W3KD) FROM MARCH 9 TO 14. ACTIVITY WILL BE ON ALL BANDS AND MODES. QSL DIRECT VIA JF2MBF OR JR2KDN VIA BUREAU.

S.M.O.M. 1A0KM. AFTER THREE YEARS A GROUP OF OPERATORS WILL BE ON FROM JAN. 26 TO 31 ON CW/SSB AND RTTY ON ALL BANDS BUT NO 160. QSL VIA I0IJ.(NO REPORT ON THE CLUSTER ANYWAY UP TO NOW).

MOUNT ATHOS. MONK APOLLO, HAS BEEN QUITE ACTIVE RECENTLY ON 20, 80 AND 40 SSB. KEEP FINGERS CROSSED FOR A RETURN ALSO TO RTTY.

SEND YOUR BANDPASS AND NOTES FOR NEXT WEEK TO BOB, WB2CJL AT W5KSI.#NOLA.LA.USA.NA OR ZS5S.ZAF.AF.

GL DE (DX2) LUCIANO, I5FLN AT ZS5S.ZAF.AF
(VIA HF AMTOR)

Coming events

1994

February 12th-13th EA WW RTTY
Contest

March 19th-20th BARTG WW RTTY
Contest

April 16th-17th SARTG WW AMTOR
Contest

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President (Col) VK2CTD, or the Secretary (Pat) VK2JPA@VK2RWI.

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or by packet to VK2JPA @ VK2RWI.

Email addresses for the Broadcast Officer are :

patl@extro.ucc.su.oz.au or VK2JPA@VK2DAA.nsw.aus.oc

The Society welcomes news items on any digital subjects from anywhere in the broadcast footprint. We know we reach New Zealand and many South Pacific islands, and we are looking forward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer

That concludes ANARTS NEWS795 06/02/94.

Inserted by VK2BQS Jim. Vice-President ANARTS.
--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

1363. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 05:40:09 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CL1p2x.8s2@news.Hawaii.Edu>
Source record: 271315

In article <1994Feb11.001239.2842@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>
>I can wait and recognize "the", but when it turns out to be the
>opening character group in "Thessalonian", I'm screwed. Dealing
>character by character on paper insures I get either correctly.
>

Geez Gary, what kind of QSOs do you have? In 18 years I've never had someone send that word to me; phooey - your QSOs sound MUCH more interesting than mine.

Jeff NH6IL

1364. Re: Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 05:49:47 UTC
From: bote@access1.digex.net
Message-ID: <bote.760945378@access1>
Source record: 271316

lakeith@robins.af.mil (CONTRACTOR Larry Keith;653 CCSG/SCT) writes:
>William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:
>: Dayton may have had the "natural" for a large convention and has certainly
>: worked to get this spot as the "big one", but maybe it's ripe for plucking
>: given the constraints forced upon them by the area.
>Where are you going to find a facility that has that much display
>space along with 3000+ flea market spaces? And, we need parking for

How about the U.S. Air Arena (formerly the Capital Center)
just outside of Washington, D.C.?

You know how huge it is inside if you have ever watched
a basketball game televised from there. It has plentiful
parking around it for "tailgating" and parking. Additional
parking is available at a nearby community college. It has
3 hotels within a stone's throw and many more
within a 10 mile radius.

The city is served by 3 major airports, Amtrak, bus lines,
Interstates 95, 70/270, and 66, has a subway station
within 5 miles of the Arena, etc, etc. An off-the-cuff
guess is that there are several transportation companies
from whom to extract a reasonable price for shuttle
bus service as necessary.

Not to mention the historical attractions and museums in
town. Hell, in a few years you can see what all the
bruhaha over Disney was all about.

And, of course, if it is held in April you can see
the 1994 World Series champion Baltimore Orioles
at their new home. :)

Now, all DARA has to do is sell our club the rights
to being the biggest and best and it's no problem. :)

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 51 days until Opening Day! Spring Training starts in 7 days!!!!

1365. FCC Daily Digest - 1994-02-09

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 05:51:27 UTC
From: bruce@pixar.com
Message-ID: <1994Feb11.055127.16518@pixar.com>
Source record: 271317

DAILY DIGESTVol. 13, No. 26 February 9, 1994

PUBLIC NOTICES

TARIFF TRANSMITTAL PUBLIC REFERENCE LOGS -
FEB. 7,8

PUBLIC INFORMATION COLLECTION
REQUIREMENT SUBMITTED TO OMB FOR REVIEW -
contact: Judy Boley at (202) 632-0276

ADDITIONAL COMMENTS SOUGHT ON EX PARTE
PRESENTATIONS - PR DOCKET 93-61; comments due
February 25, replies March 7; contact: John Borkowski at
(202) 632-7125 (DA 94-129)

Report I-6923 - OVERSEAS COMMON CARRIER
SECTION 214 APPLICATIONS - ACTIONS TAKEN

Report I-6926 - OVERSEAS SECTION 214
APPLICATIONS ACCEPTED FOR FILING

Report 58 - OPEN PROCEEDINGS

TEXTS

The Acting chief, Allocations Branch, Policy and Rules
Division, Mass Media Bureau, by NPRMs adopted on the
dates shown, proposed change the Allotment Tables for the
following communities; comments April 4, replies April 19:

OLA, AR. Allotment of FM Channel 267A (MM
Docket 94-8, January 27, DA 94-95);

TUNICA, MS.Allotment of FM Channel 241C3
(MM Docket 94-9, January 25, DA 94-96);

THE DALLES, OR. Allotment of FM Channel
224C3 (MM Docket 94-6, January 25, DA 94-79)

EAGLE RIVER, WI. Allotment of TV Channel 34
(MM Docket 94-7, January 26, DA 94-85)

The Acting Chief, Allocations Branch, by R&Os adopted on
the dates shown, dismissed petitions to amend the FM Table

for the following communities:

HAWAIIAN OCEAN VIEW ESTATES AND
OCEAN VIEW, HI (MM Docket 93-258, January
24, DA 94-71);

WESTBROOK, ME. (MM Docket 93-188, January
27, DA 94-97);

HUNTSVILLE, MO, AND PELLA, ia (mm
Docket 93-315, January 24, DA 94-72)

PAULS VALLEY, OK. Effective April 4, amended FM
Table to substitute Channel 24C3 for Channel 249A;
modified license of KGOK accordingly. (MM Docket 93-
247, by R&O [DA 94-78] adopted January 25 by the Acting
Chief, Allocations Branch)

EXPANDED INTERCONNECTION. Granted,until July 1,
Pacific Bell request for waiver of requirement for
interconnectors to provide percent interstate usage reports to
LECs to determine to what extent interstate and intrastate
access charges are applicable. (CC Docket 91-141,
Transport Phase I, by MO&O [DA 94-133] adopted
February 7 by the Acting Chief, Common Carrier Bureau)

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ADDENDUM: The following items, released February 8,
were not listed on that day's digest:

NEWS RELEASES

FCC FREEZES CABLE REVENUES WHILE IT
FINALIZES RATE REGULATION (MM Docket 92-266,
Report DC-2567, Action in Docket Case)
Extended freeze on regulated cable service revenues
from February 15, 1994, to May 15, 1994.
Action by the Commission February 8 by Order
(FCC 94-33).
News Media contact: Maureen Peratino or Susan
Lewis Sallet at (202) 632-5050; Cable Services Bureau
contact: Larry Walke at (202) 416-0856.

KAREN WATSON NAMED DIRECTOR, OFFICE OF
PUBLIC AFFAIRS

TEXT

CABLE RATE FREEZE. See first item under "NEWS
RELEASES" above.

Report No. DC-2567 ACTION IN DOCKET
CASE February 8, 1994

FCC FREEZES CABLE REVENUES WHILE IT
FINALIZES RATE REGULATION
(MM Docket 92-266)

The Commission today extended its freeze of
regulated cable
service revenues from February 15, 1994 to May 15,
1994, to give
affected parties time to familiarize themselves with any
modifications to the Commission's rules that the
Commission may
adopt later this month when it considers pending petitions
for
reconsideration of the cable rate regulations. The freeze
will
also facilitate the orderly implementation of any new rules
that
may be adopted at that time.

In the absence of this freeze, cable operators could
increase
their revenues while the Commission is completing its
pending
reconsideration of cable rate regulations. The
Commission expects
to have any modifications to the rules, which may result
from the
pending reconsideration, in place by the time this freeze
expires.
As a result, this freeze will prevent unjustifiable rate
increases
before franchising authorities have been given the
opportunity to
become familiar with any revised rules and prepare to
regulate
cable television rates.

As of January 31, 1994, the Commission has received
4,896
applications for certification from local franchising
authorities
covering approximately 7,534 communities serviced by
cable, which
represents a significant increase from November 1993.
The freeze
period is the minimum amount of time necessary for
franchising

authorities and other affected parties to familiarize themselves
with any new rules that may be adopted and prepare to regulate
cable operators before the effective date of any such rules.

Cable operators may petition for relief from the requirements
of the freeze where the operator can show that the freeze is
causing severe economic hardship or threatens the viability of
continued provision of cable service.

Action by the Commission February 8, 1994, by Order (FCC 94-
33). Chairman Hundt, Commissioners Quello and Barrett, with
Commissioner Barrett issuing a separate statement.

-FCC-

News Media contact: Maureen Peratino or Susan Lewis Sallet at
(202) 632-5050
Cable Services Bureau contact: Larry Walke at (202) 416-0856

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Bruce Perens AB6YM Bruce@Pixar.com 510-215-3502

1366. FCC Daily Digest - 1994-02-10

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 05:53:48 UTC
From: bruce@pixar.com
Message-ID: <1994Feb11.055348.16676@pixar.com>
Source record: 271318

DAILY DIGESTVol. 13, No. 27 February 10, 1994

NEWS RELEASES

OMB DESIGNATES FCC AS PILOT AGENCY FOR
PROGRAM PERFORMANCE PLANNING
The Federal Communications Commission has been
designated by the Director, Office of Management and
Budget as a Government Performance and Results Act of
1993 program performance planning pilot for fiscal years
1994, 1995, and 1996.
News Media contact: Patricia A. Chew at (202)
632-5050; Office of the Managing Director contact: H.
Walker Feaster at (202) 632-0923.

PUBLIC NOTICES

TARIFF TRANSMITTAL PUBLIC REFERENCE LOG -
NON-DOMINANT CARRIERS: February 9

TARIFF TRANSMITTAL PUBLIC REFERENCE LOG:
February 9

Report 15735 - BROADCAST APPLICATIONS

Report 21820 - BROADCAST ACTIONS

Report 21822 - BROADCAST ACTIONS

Report I-6924 - INTERNATIONAL AND SATELLITE
APPLICATIONS ACCEPTED FOR FILING

TEXTS

OLIVIA AND SAUK RAPIDS, MN. Proposed substitution
of Channel 269C2 for Channel 269A at Sauk Rapids and
modificiation of license WHMH(FM) accordingly; issued
order to show cause to KOLV at Olivia as to why its
license should not be modified to specify operation on
Channel 261A in lieu of Channel 269A at Olivia. Comments
are due April 5; replies April 19. (By NPRM and OSC [DA
94-63] adopted January 14 by the Acting Chief, Allocations
Branch)

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ADDENDA: The following items, released February 9,
were not listed on Digest 26:

NEWS RELEASES

CHAIRMAN HUNDT KICKS OFF 1994 BROWN BAG
LUNCHEON SERIES - Public Policy and Planning
contacts: Stan Felder or Kara Casey at (202) 632-0244;
News Media contact: Steve Svab at (202) 632-5050.`

FCC ISSUES INFORMATION REGARDING CABLE
RATE COMPLAINT PROCESS - Cable Services Bureau
contact: Michael Ruger at (202) 416-0845

PUBLIC NOTICES

Report 1145 - CABLE TELEVISION RELAY SERVICE
(CARS) APPLICATIONS RE: APPLICATIONS
ACCEPTED FOR FILING

Report 3485 - CABLE TELEVISION ACTIONS

Report 15734 - BROADCAST APPLICATIONS

Report 21819 - BROADCAST ACTIONS

Report PMS-94-19 - COMMON CARRIER PUBLIC
MOBILE SERVICES INFORMATION RE:
APPLICATIONS ACCEPTED FOR FILING

Report PMS-94-20-A - COMMON CARRIER PUBLIC
MOBILE RADIO SERVICE INFORMATION

Report D-734 - COMMON CARRIER BUREAU
DOMESTIC FACILITIES APPLICATIONS RE:
APPLICATIONS ACCEPTED FOR FILING

Report D-734-A - COMMON CARRIER BUREAU
DOMESTIC FACILITIES APPLICATIONS

Report DS-1393 - COMMON CARRIER SERVICES
INFORMATION RE: SATELLITE RADIO
APPLICATIONS ACCEPTED FOR FILING

Report DS-1394 - DOMESTIC FIXED SATELLITE
SERVICE

Report 1069 - PRIVATE RADIO BUREAU PART 21
RECEIPTS AND DISPOSALS: Week of January 26 thru
February 2

TEXT

EAGLE RIVER, WI. Proposed allotment of Channel 34 at
Eagle River as that community's first local service.
Comments are due April 4; replies April 19. (By NPRM
[DA 94-84] adopted January 26 by the Acting Chief,
Allocations Branch, Mass Media Bureau)

February 10, 1994

OMB DESIGNATES FCC AS PILOT AGENCY FOR
PROGRAM PERFORMANCE PLANNING

The Federal Communications Commission has been designated by the Director, Office of Management and Budget
(OMB) as a Government Performance and Results Act of 1993 (GPRA) program performance planning pilot for fiscal years
1994, 1995, and 1996. Participation in the program performance plan pilot, which encourages the development of alternative
performance indicators, would provide the Commission with the opportunity to re-evaluate existing performance indicators and
provide some insight into developing customer service standards as a means of measuring program performance.

The pilot designation covers the Private Radio Bureau's Land Mobile Radio Application activity, and the Office of
Engineering & Technology's Equipment Authorization activity. These and other Commission licensing activities are uniquely
representative of the type of federal functions identified in OMB's GPRA implementation plan, since they span multiple service
categories and represent a sizable portion of the Commission's workload. Further, as the Commission's current management
reporting system includes much of the necessary framework needed for program performance planning, its current operations
provide an ideal environment for testing various features of the Act and for developing final agency guidelines prior to
government-wide implementation of program performance planning in FY 1998.

In his letter to Chairman Hundt, OMB Director Leon Panetta said: "With this new Act, we have the means at hand for
bringing about basic changes in how our Government works and is managed. These changes will not be easy or simple to
accomplish. The pilot projects are a valuable opportunity to gain experience in achieving this transformation."

In fulfillment of its role as a program performance planning pilot, the Commission will prepare and forward to OMB
annual program performance plans and reports on actual program performance. OMB will use the results of the Commission
pilot, together with the results of other federal agencies' pilots, in developing its pilot summary report to Congress in which it
may recommend revisions to the GPRA.

The GPRA was passed in response to Congressional concerns that government programs lacked sufficient articulation
of goals and therefore cannot provide adequate information on program performance.

-FCC-

News Media contact: Patricia A. Chew at (202) 632-5050.
Office of the Managing Director contact: H. Walker Feaster at (202) 632-0923.

February 9, 1994

FCC ISSUES INFORMATION REGARDING CABLE RATE COMPLAINT PROCESS

Some recent news reports have indicated that, after February 28, 1994, cable television subscribers, franchising
authorities and State and local government entities will not be able to file complaints in response to changes in cable programming
service rates. The purpose of this announcement is to clarify the legal requirements related to filing complaints under the Cable
Television Consumer Protection and Competition Act of 1992.

The Cable Act provides that cable subscribers, franchising authorities and State and local government entities should
have a reasonable period of time to complain about changes in their cable programming service rates. The Commission has
established that reasonable period as 45 days from the date the subscriber receives a bill showing a rate change.

However, the Cable Act provided that, following the Commission's adoption of regulations to implement the Act, a 180-
day complaint period would apply to give affected parties additional time to file complaints. That 180-day period, which will
expire on February 28, 1994, applies only to complaints filed in response to rate changes made following the implementation
of the initial regulations on September 1, 1993.

Cable subscribers, franchising authorities and State and local government entities will continue to have 45 days to
complain about changes in cable programming service rates. Therefore, cable subscribers, franchising authorities and State and
local government entities will continue to have the opportunity to ask the Commission to review what they believe to be
unreasonable changes in rates for cable programming service. In assessing the reasonableness of a rate, the Commission will
consider the total rate and not just the most recent rate increase. This opportunity will continue, for example, regardless of any
changes to its rules the Commission may or may not adopt at its meeting on February 22, 1994.

Under the Cable Act, the Commission does not regulate the basic service tier, defined in the Cable Act as the program

package which includes signals from local television stations (such as ABC, CBS, and NBC affiliates and independent television
stations).

(over)

-2-

Rates for basic tier service are regulated by local franchising authorities, who must first certify their intent to regulate with the
Commission. The Commission is responsible for the regulation of rates for cable programming service, which includes all
channels not included in basic service and not offered separately as pay-per-channel programming or pay-per-view program
services, and related equipment.

Complaints must be filed on FCC Form 329, the Cable Programming Service Rate Complaint Form. Anyone wishing
to file a complaint in response to cable programming service rates should write to the Federal Communications Commission,
Cable Form Request 329, Post Office Box 18238, Washington, D.C. 20036 or call 202-416-0919 to request a copy of Form 329.
To obtain assistance in completing Form 329, call (202) 416-0902. The complaint form may be returned to the Commission by
mail or by facsimile machine.

-FCC-

Cable Services Bureau contact: Michael Ruger at (202) 416-0845

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Bruce Perens AB6YM Bruce@Pixar.com 510-215-3502

1367. Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 06:18:41 UTC
From: bote@access1.digex.net
Message-ID: <bote.760946660@access1>
Source record: 271319

gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>This is a *very* demanding application. To get global coverage without...

It sounds like you might know something about this.
So, now that you have raised your hand :)

I have gotten a bug up my rear to configure our point-to-point
repeater linking system with digital paths ranging 20
to 40 miles apart.

We currently use plain old analog audio Motorola MICOR
UHF mobiles to do the linking between repeater sites,
and they work well (naturally!). However, my calibrated ear
frequently cringes at the minor white noise which
accumulates over the multiple hop links, such as
those which traverse 3 or 4 hops. By the time the
signal gets to the fourth site, there is enough
additive noise and minor equalization and level
difference that I believe that digital transmission
would provide superior performance.

I am certain that I am not breaking new ground here.
Has anyone played with this who could comment on
how practical this would be?

I just received a catalog from Consumer Microcircuits
Ltd in the U.K. listing a CVSDM codec. I remember
playing with these in electronics lab in college;
would these provide a narrow enough digital signal
to shove through a radio system designed for 5KC
bandwidth given a band-limited audio input to the
codec?

I don't recall if the output of such a codec would
be transmittable over the air or would require
a modem of some sort. If so, this might kill it.

Our link system currently consists of link repeaters
serving a locale, linked to the next hub via a
transciever located at that next hub site. I envision
a digital system which could sync up rather quickly
as the transceivers keyed up each time. I would rather
not put up a full-duplex RF system just to keep
the modems happy. I have lots more to tell but
I'll shutup now.

Comments?

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 51 days until Opening Day! Spring Training starts in 7 days!!!!

1368. Looking for authors of FFTMORSE/DSPMORSE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 09:33:43 UTC
From: kayd@OES.ORST.EDU
Message-ID: <2jfjdn$fu3@gaia.ucs.orst.edu>
Source record: 271320

I've done some major overhauling of DSPMORSE which was based on FFTMORSE in order to get it working on my 486DX-33 w/SBPro. It no longer requires ct-voice.drv, but does now include some SB Freedom Project code for DMA routines. I worked about 7 hours on it today/last night to get it to copy 13wpm from some 1976 ARRL code tapes flawlessly from my walkman into the microphone input of the SBPro. It does have a couple problems I can't iron out, but maybe someone else could.

Anyway, I'm sitting on the new source code until the author(s) contact me.

Darrek Kay
kayd@xanth.cs.orst.edu
(503)737-9410

1369. Re: Predicting inductor self resonant freq?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 09:37:10 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CL201y.JLp@hpqmoea.sqf.hp.com>
Source record: 271321

Look in Zverev, in the section on Helical Resonators. It even allows
you to account for screening cans !

Cheers
David

1370. help

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 11:32:23 UTC
From: rueffer@moesc.ESrf.FR
Message-ID: <199402111140.DAA16091@ucsd.edu>
Source record: 271322

```
help
```

1371. Re: Dominican Republic / Haitti

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 11:39:21 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9402110636591.gilbaronw0mn.DLITE@delphi.com>
Source record: 271323

>Hi, I am planning a vacation in HI & HH during may of 94
>Looking for hints and tips about getting licence, and any
>problems encountered when operating, first trip to caribean.
>All help welcome...
>73 de Dick G0BPS
>
Have fun and be sure to brush up on your MERENGUE before you go.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

1372. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 12:43:44 UTC
From: ali@ukc.ac.uk
Message-ID: <39@swan.ukc.ac.uk>
Source record: 271324

In article <1994Feb11.001239.2842@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>I can wait and recognize "the", but when it turns out to be the
>opening character group in "Thessalonian", I'm screwed. Dealing
>character by character on paper insures I get either correctly.

The way it works in my head seems to be that I have a longish mental FIFO with parallel access for pattern matching. The FIFO seems to run at about 5-10 letters, though access back to 10 letters requires me to think harder than for, say, 5. The length varies with speed too. Oh yes, and there are also algorithms for stuff missed in QRM: I am conscious of rescanning activity going on in my mind to try to `make sense' of whole chunks of partially copied code. This is mostly english grammer context guessing, but there is also a little bit of `that S could have been an H, but not a Q'.

The character-by-character loading of the FIFO is subconscious, I just `hear' the words, I guess as my brain picks out whole words from the FIFO. At high speed, near the limit of my ability, I hear whole phrases. I suspect this is why most operators I know have a small speed range (about 5wpm) just below their maximum, where they read code more comfortably than lower speeds. Of course, I use the FIFO as an analogy. Goodness knows what is really going on in my head. I'd have the same difficulty describing how I ride a bike.

The point I seek to make (long windedly) is that unless you put the pencil down Gary, you deny yourself the chance of developing this `look back and re-evaluate' ability, which is how I copy Thessalonian via "the", "these", "no, what the hell is this word?" and finally "Thessalonian", though I think most of us CW freaks would actually miss the word unless there were preceding context clues. But maybe I shouldn't admit that :-)

Alan G3XAQ

1373. Re: Bosnian Ham

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 12:54:50 UTC
From: sbaker@umassmed.UMMED.EDU
Message-ID: <9402111254.AA01783@umassmed.UMMED.EDU>
Source record: 271325

Tony Germanotta said:
: : 378-88-813-164
:
: This is, I believe, a telephone number. 387 is the Bosnia country
: code, the next two digits are for the city in question, and the remaining
: six are the local number. Sarajevo, for instance, is 387-71-XXX-XXX. Some
: local numbers do have seven digits. The amazing thing in this war is that
: the phones will occasionally come to life and people trapped inside can
: telephone out. It is much more difficult to make a call into the country,
: since the few lines that remain are almost always busy. Good luck if you try
: to get through. I have been attempting to send a fax to the United Nations
: Protection Forces in Sarajevo on behalf of one of our local correspondents there for
: nearly two weeks without much success.
:
: --
: Tony Germanotta, staff writer, The Virginian-Pilot, Norfolk, Va.
: -=-

Thanks to Tony and others who responded privately, who pointed out that this did
look amazingly like a phone number and that ip addresses fall within the range
of 0.0.0.0 to 255.255.255.255. I will advise the bosnians that this is NOT any
sort of ham address and that they might pick up a phone and try phoning either
the ham or their friends/relatives directly and persistently. Thanks again to
everyone who tried to help.
--

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Lecturer in Biostatistics (508) 856-3131 fax
Department of Academic Computing (413) 253-3923 home
University of Massachusetts Medical School e-mail: sbaker@umassmed.ummed.edu
55 Lake Avenue North -.- -.. .---- .--. ..-.
Worcester, MA 01655

1374. Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 13:04:36 UTC
From: gaulandm@tekig7.PEN.TEK.COM
Message-ID: <13690@tekig7.PEN.TEK.COM>
Source record: 271326

A mailing I read is involved in a comparision of the speeds of
printing and cursive writing. I decided to consult some experts.
So, all you high-speed CW ops, which do _you_ use?

73,
mag

--
Michael A. Gauland gaulandm@tekig7.PEN.TEK.COM
AA7JF (503) 627-5067

1375. Icom IC-W21AT Mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 13:13:00 UTC
From: clinton.peebles@kbsbbs.com
Message-ID: <940212050041278@kbsbbs.com>
Source record: 271327

Does anyone know what the mods are for the Icom IC-W21AT Handheld?

Thanks. Clinton VE7KNL
Clinton.Peebles@kbsbbs.com

* QMPro 1.52 * I'd give my right arm to be ambidextrous..

1376. ARRL DX Bulletin #9 - February 10, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 13:45:33 UTC
From: Jim Reisert AD1C <reisert@wrksys.enet.dec.com>
Message-ID: <$arld.009@ampr.org>
Source record: 271228
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

ZCZC AE07
QST de W1AW
DX Bulletin 9 ARLD009
>From ARRL Headquarters
Newington CT February 10, 1994
To all radio amateurs

SB DX ARL ARLD009
ARLD009 DX news

The items in this week's bulletin are courtesy of Steve, W9NUF; the Northern Illinois DX Association; Ed, KB7E; and the Ohio/Penn and Yankee Clipper Contest Club PacketCluster networks. Thanks.

PETER FIRST ISLAND. 3Y0PI has been very active and should remain so until about February 19. DXers bemoaning the tough winter of 1994, check this out. Last Saturday 3Y0PI had to QRT
a storm that battered the team with 80 MPH winds and dumped five feet of snow on them. And this is during the Antarctic SUMMER/FALL.

Although some equipment was damaged, the team has made well over 20,000 Qs, more than 20 percent of their 100 Kilo-Q goal. Listen for them on CW, SSB, AmTOR, PacTOR and satellite. EME operations should commence soon. QSL CW via KA6V, SSB via AA6BB.

LACCADIVE ISLANDS. Geology students VU2STG and his newly licensed XYL are on an exploration and study assignment. During free time they operate VU7LI on SSB only. Please be patient as amateur radio is not the primary purpose for their visits to the Laccadives and equipment is minimal. QSL via VU2STG.

SOVEREIGN MILITARY ORDER OF MALTA. According to Luciano, I0JBL, the 1A0KM operation has been rescheduled for sometime in late February.

ANGOLA. D2EGH can be found on 14225 kHz at 2000z. QSL via CT1EGH. Listen for D2/AA4HU on 14225 kHz at 1745 and 2000z.

BANGLADESH. S21AM has been worked on 14185 kHz SSB at 1200z. QSL via Manju, PO Box 4000, Dhaka.

ETHIOPIA. ET3RA has been on 21250 kHz at 1600z. QSL via HB9CVB. ET3YU works CW on 14035 kHz between 1600 and 1700z.

ISRAEL. For the past two nights, Chicago area hams have worked 4X4NJ on 1832 at 0420z.

MAURITIUS. Jacky, 3B8CF, is a relatively easy catch on both 80 and 40 meters. Try 3506 kHz at 0200z and 7007 kHz at 0420z.

QATAR. A71BH can be worked on 14215 kHz around 1300z. QSL via OH6EEG.

FRENCH POLYNESIA. Walter, DJ0FX, is active as FO0PT from Moorea Island of the Windward Group, IOT
until February 19. Walter operates on all bands, mostly CW. Check the low end of 40 meters between 0730 and 1000z. QSL via the DARC Bureau.

SAN ANDREAS ISLAND. HK0/K1WGM has been worked on 160 meters around 1833 kHz at 0430z. Also check 80 meters on either 3505 or 3510 kHz between 0400 and 0600z. QSL K1WGM.

CAMBODIA. An operation by Laszio, HA0HW, is slated to begin in early April. The call signs XU9XA and XU0HW have been mentioned.

COSTA RICA. An operation is planned for February 17, 18 and 19 from Guanacaste Island, a new IOT
signs will be K5MK/TI7 and TI2WLE/TI7. Try 14260 and 21260 kHz for SSB, and 40 kHz up from the bottom edge for CW. QSL via K5MK.

THIS WEEKEND ON THE RADIO. Indoor sports this weekend include the North American Sprint, Phone; the EA RTT
QSO Party; and the YL OM Contest. For more information on these events, check pages 127 and 128 of January QST
NNNN

--
James J. Reisert Internet: reisert@wrksys.enet.dec.com
Digital Equipment Corp. UUCP: ...decwrl!wrksys.enet.dec.com!reisert
146 Main Street - MLO3-6/C9 Voice: 508-493-5747
Maynard, MA 01754 FAX: 508-493-0395

1377. ORBS$042.OSCAR.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 13:47:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7193.99.0C38A0F6@drig.com>
Source record: 271229

```
SB KEPS @ AMSAT $ORBS-042.O
Orbital Elements 042.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH,TX February 11, 1994
BID: $ORBS-042.O
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94040.06708801
Element set: 260
Inclination: 27.2057 deg
RA of node: 342.5166 deg
Eccentricity: 0.6022455
Arg of perigee: 153.1354 deg
Mean anomaly: 258.3191 deg
Mean motion: 2.05877972 rev/day
Decay rate: -1.48e-06 rev/day^2
Epoch rev: 8014
Checksum: 282

Satellite: UO-11
Catalog number: 14781
Epoch time: 94040.53052044
Element set: 663
Inclination: 97.7907 deg
RA of node: 61.1932 deg
Eccentricity: 0.0011408
Arg of perigee: 323.9974 deg
Mean anomaly: 36.0464 deg
Mean motion: 14.69140692 rev/day
Decay rate: 3.22e-06 rev/day^2
Epoch rev: 53156
Checksum: 292

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94040.55124186
Element set: 860
Inclination: 82.9210 deg
RA of node: 63.1886 deg
Eccentricity: 0.0012804
Arg of perigee: 25.2124 deg
Mean anomaly: 334.9655 deg
```

Mean motion: 13.72330924 rev/day
Decay rate: 3.0e-07 rev/day^2
Epoch rev: 33240
Checksum: 267

Satellite: AO-13
Catalog number: 19216
Epoch time: 94040.93964943
Element set: 875
Inclination: 57.8821 deg
RA of node: 268.9522 deg
Eccentricity: 0.7208878
Arg of perigee: 334.5703 deg
Mean anomaly: 3.1370 deg
Mean motion: 2.09717918 rev/day
Decay rate: 3.90e-06 rev/day^2
Epoch rev: 4334
Checksum: 331

Satellite: FO-20
Catalog number: 20480
Epoch time: 94035.98074861
Element set: 656
Inclination: 99.0184 deg
RA of node: 212.8744 deg
Eccentricity: 0.0540153
Arg of perigee: 279.0888 deg
Mean anomaly: 74.9498 deg
Mean motion: 12.83223693 rev/day
Decay rate: -2.2e-07 rev/day^2
Epoch rev: 18717
Checksum: 336

Satellite: AO-21
Catalog number: 21087
Epoch time: 94041.01003248
Element set: 423
Inclination: 82.9396 deg
RA of node: 236.8134 deg
Eccentricity: 0.0036944
Arg of perigee: 77.6411 deg
Mean anomaly: 282.8874 deg
Mean motion: 13.74533854 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 15211
Checksum: 298

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94040.58590730
Element set: 661

Inclination: 82.9204 deg
RA of node: 106.0890 deg
Eccentricity: 0.0030651
Arg of perigee: 102.2186 deg
Mean anomaly: 258.2406 deg
Mean motion: 13.74034795 rev/day
Decay rate: 4.2e-07 rev/day^2
Epoch rev: 15112
Checksum: 275

Satellite: ARSENE
Catalog number: 22654
Epoch time: 93338.80803910
Element set: 243
Inclination: 1.4104 deg
RA of node: 113.5274 deg
Eccentricity: 0.2936576
Arg of perigee: 161.9838 deg
Mean anomaly: 210.8642 deg
Mean motion: 1.42202044 rev/day
Decay rate: -8.7e-07 rev/day^2
Epoch rev: 299
Checksum: 278

/EX

1378. ORBS$042.MICRO.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 13:50:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7194.99.0C38A0F7@drig.com>
Source record: 271230

```
SB KEPS @ AMSAT $ORBS-042.D
Orbital Elements 042.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH,TX February 11, 1994
BID: $ORBS-042.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94037.22619383
Element set: 961
Inclination: 98.5971 deg
RA of node: 123.7526 deg
Eccentricity: 0.0010334
Arg of perigee: 214.1893 deg
Mean anomaly: 145.8624 deg
Mean motion: 14.29821595 rev/day
Decay rate: 7.7e-07 rev/day^2
Epoch rev: 21087
Checksum: 317

Satellite: AO-16
Catalog number: 20439
Epoch time: 94037.21681236
Element set: 762
Inclination: 98.6031 deg
RA of node: 124.8401 deg
Eccentricity: 0.0010724
Arg of perigee: 214.1741 deg
Mean anomaly: 145.8750 deg
Mean motion: 14.29877371 rev/day
Decay rate: 7.1e-07 rev/day^2
Epoch rev: 21088
Checksum: 290

Satellite: DO-17
Catalog number: 20440
Epoch time: 94040.75231196
Element set: 762
Inclination: 98.6061 deg
RA of node: 128.6181 deg
Eccentricity: 0.0010852
Arg of perigee: 203.0624 deg
Mean anomaly: 157.0068 deg
```

Mean motion: 14.30016024 rev/day
Decay rate: 6.0e-07 rev/day^2
Epoch rev: 21140
Checksum: 247

Satellite: WO-18
Catalog number: 20441
Epoch time: 94037.22688753
Element set: 762
Inclination: 98.6048 deg
RA of node: 125.1409 deg
Eccentricity: 0.0011314
Arg of perigee: 214.6745 deg
Mean anomaly: 145.3695 deg
Mean motion: 14.29991649 rev/day
Decay rate: 6.6e-07 rev/day^2
Epoch rev: 21090
Checksum: 317

Satellite: LO-19
Catalog number: 20442
Epoch time: 94037.21376903
Element set: 761
Inclination: 98.6040 deg
RA of node: 125.3540 deg
Eccentricity: 0.0011701
Arg of perigee: 213.9496 deg
Mean anomaly: 146.0939 deg
Mean motion: 14.30085714 rev/day
Decay rate: 7.2e-07 rev/day^2
Epoch rev: 21091
Checksum: 279

Satellite: UO-22
Catalog number: 21575
Epoch time: 94040.70538846
Element set: 463
Inclination: 98.4469 deg
RA of node: 117.7141 deg
Eccentricity: 0.0007501
Arg of perigee: 318.1128 deg
Mean anomaly: 41.9484 deg
Mean motion: 14.36888785 rev/day
Decay rate: 8.5e-07 rev/day^2
Epoch rev: 13477
Checksum: 328

Satellite: KO-23
Catalog number: 22077
Epoch time: 94041.42783993
Element set: 358

Inclination: 66.0820 deg
RA of node: 185.3819 deg
Eccentricity: 0.0009572
Arg of perigee: 318.8321 deg
Mean anomaly: 41.1977 deg
Mean motion: 12.86284604 rev/day
Decay rate: -3.7e-07 rev/day^2
Epoch rev: 7048
Checksum: 319

Satellite: AO-27
Catalog number: 22825
Epoch time: 94037.24428981
Element set: 259
Inclination: 98.6630 deg
RA of node: 114.3002 deg
Eccentricity: 0.0008288
Arg of perigee: 227.9109 deg
Mean anomaly: 132.1364 deg
Mean motion: 14.27605705 rev/day
Decay rate: 5.5e-07 rev/day^2
Epoch rev: 1900
Checksum: 292

Satellite: IO-26
Catalog number: 22826
Epoch time: 94037.72532850
Element set: 260
Inclination: 98.6651 deg
RA of node: 114.7973 deg
Eccentricity: 0.0008457
Arg of perigee: 230.9496 deg
Mean anomaly: 129.0928 deg
Mean motion: 14.27708094 rev/day
Decay rate: 6.6e-07 rev/day^2
Epoch rev: 1907
Checksum: 328

Satellite: KO-25
Catalog number: 22830
Epoch time: 94040.70815228
Element set: 262
Inclination: 98.5680 deg
RA of node: 116.3594 deg
Eccentricity: 0.0011136
Arg of perigee: 187.2116 deg
Mean anomaly: 172.8898 deg
Mean motion: 14.28032363 rev/day
Decay rate: 5.7e-07 rev/day^2
Epoch rev: 1950
Checksum: 298

/EX

1379. ORBS$042.WEATH.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 13:53:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7195.99.0C38A0F8@drig.com>
Source record: 271231

```
SB KEPS @ AMSAT $ORBS-042.W
Orbital Elements 042.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX February 11, 1994
BID: $ORBS-042.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94040.90849396
Element set: 709
Inclination: 99.0697 deg
RA of node: 89.8019 deg
Eccentricity: 0.0014366
Arg of perigee: 217.1066 deg
Mean anomaly: 142.9114 deg
Mean motion: 14.13586894 rev/day
Decay rate: 4.9e-07 rev/day^2
Epoch rev: 47236
Checksum: 344

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94040.91622187
Element set: 607
Inclination: 98.5109 deg
RA of node: 53.7900 deg
Eccentricity: 0.0013419
Arg of perigee: 346.1037 deg
Mean anomaly: 13.9772 deg
Mean motion: 14.24863433 rev/day
Decay rate: 7.5e-07 rev/day^2
Epoch rev: 38448
Checksum: 313

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94040.41461213
Element set: 260
Inclination: 82.5397 deg
RA of node: 10.2207 deg
Eccentricity: 0.0016130
Arg of perigee: 174.2344 deg
Mean anomaly: 185.9005 deg
```

Mean motion: 13.84706640 rev/day
Decay rate: 7.4e-07 rev/day^2
Epoch rev: 30467
Checksum: 267

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94039.99790931
Element set: 262
Inclination: 82.5380 deg
RA of node: 54.3969 deg
Eccentricity: 0.0015730
Arg of perigee: 222.0779 deg
Mean anomaly: 137.9138 deg
Mean motion: 13.16964807 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 26638
Checksum: 335

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94040.89310848
Element set: 513
Inclination: 99.1603 deg
RA of node: 26.7549 deg
Eccentricity: 0.0012242
Arg of perigee: 127.5055 deg
Mean anomaly: 232.7231 deg
Mean motion: 14.12957503 rev/day
Decay rate: 9.9e-07 rev/day^2
Epoch rev: 27724
Checksum: 293

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94040.58249263
Element set: 261
Inclination: 82.5181 deg
RA of node: 245.6465 deg
Eccentricity: 0.0012880
Arg of perigee: 224.0063 deg
Mean anomaly: 136.0047 deg
Mean motion: 13.84356993 rev/day
Decay rate: 4.6e-07 rev/day^2
Epoch rev: 25003
Checksum: 296

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94040.90489425
Element set: 982

Inclination: 82.5493 deg
RA of node: 357.9703 deg
Eccentricity: 0.0005714
Arg of perigee: 252.5364 deg
Mean anomaly: 107.5110 deg
Mean motion: 13.04423038 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 20630
Checksum: 275

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94040.79306496
Element set: 762
Inclination: 82.5504 deg
RA of node: 309.6649 deg
Eccentricity: 0.0016176
Arg of perigee: 139.0978 deg
Mean anomaly: 221.1403 deg
Mean motion: 13.84188455 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 18299
Checksum: 328

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94041.23792391
Element set: 889
Inclination: 98.8429 deg
RA of node: 65.4112 deg
Eccentricity: 0.0014899
Arg of perigee: 8.2542 deg
Mean anomaly: 351.8867 deg
Mean motion: 14.01324157 rev/day
Decay rate: -2.56e-06 rev/day^2
Epoch rev: 17592
Checksum: 332

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94040.59762982
Element set: 761
Inclination: 82.5218 deg
RA of node: 247.4867 deg
Eccentricity: 0.0014958
Arg of perigee: 48.7238 deg
Mean anomaly: 311.5204 deg
Mean motion: 13.83572578 rev/day
Decay rate: 8.2e-07 rev/day^2
Epoch rev: 17011
Checksum: 320

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94040.56395652
Element set: 669
Inclination: 82.5392 deg
RA of node: 259.8160 deg
Eccentricity: 0.0013347
Arg of perigee: 141.0577 deg
Mean anomaly: 219.1526 deg
Mean motion: 13.16459526 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 13456
Checksum: 303

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94039.95700562
Element set: 919
Inclination: 98.6320 deg
RA of node: 70.4809 deg
Eccentricity: 0.0012014
Arg of perigee: 247.6730 deg
Mean anomaly: 112.3172 deg
Mean motion: 14.22366100 rev/day
Decay rate: 1.36e-06 rev/day^2
Epoch rev: 14230
Checksum: 260

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94039.95480389
Element set: 665
Inclination: 82.5517 deg
RA of node: 207.2863 deg
Eccentricity: 0.0013312
Arg of perigee: 152.8840 deg
Mean anomaly: 207.2989 deg
Mean motion: 13.16827561 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 11958
Checksum: 327

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94040.74736914
Element set: 261
Inclination: 82.5509 deg
RA of node: 307.4298 deg
Eccentricity: 0.0021041
Arg of perigee: 221.4188 deg
Mean anomaly: 138.5364 deg
Mean motion: 13.83000237 rev/day

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Decay rate: 9.3e-07 rev/day^2
Epoch rev: 2247
Checksum: 284

/EX
```

1380. ORBS$042.MISC.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 13:54:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7196.99.0C38A0F9@drig.com>
Source record: 271232

```
SB KEPS @ AMSAT $ORBS-042.M
Orbital Elements 042.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX February 11, 1994
BID: $ORBS-042.M
TO ALL RADIO AMATEURS BT

Satellite: POSAT
Catalog number: 22829
Epoch time: 94037.20759234
Element set: 252
Inclination: 98.6603 deg
RA of node: 114.2924 deg
Eccentricity: 0.0009404
Arg of perigee: 217.5862 deg
Mean anomaly: 142.4662 deg
Mean motion: 14.28001942 rev/day
Decay rate: 7.0e-07 rev/day^2
Epoch rev: 1900
Checksum: 273

Satellite: MIR
Catalog number: 16609
Epoch time: 94041.42205754
Element set: 131
Inclination: 51.6168 deg
RA of node: 102.3559 deg
Eccentricity: 0.0004327
Arg of perigee: 318.6406 deg
Mean anomaly: 41.4259 deg
Mean motion: 15.60125914 rev/day
Decay rate: 1.1161e-04 rev/day^2
Epoch rev: 45627
Checksum: 270

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94037.44922672
Element set: 434
Inclination: 28.4703 deg
RA of node: 355.6949 deg
Eccentricity: 0.0006487
Arg of perigee: 159.4554 deg
Mean anomaly: 200.6293 deg
```

Mean motion: 14.90460557 rev/day
Decay rate: 9.64e-06 rev/day^2
Epoch rev: 986
Checksum: 322

Satellite: GRO
Catalog number: 21225
Epoch time: 94040.40150147
Element set: 64
Inclination: 28.4620 deg
RA of node: 38.7432 deg
Eccentricity: 0.0003896
Arg of perigee: 207.9052 deg
Mean anomaly: 152.1343 deg
Mean motion: 15.40033195 rev/day
Decay rate: 5.773e-05 rev/day^2
Epoch rev: 3721
Checksum: 254

Satellite: UARS
Catalog number: 21701
Epoch time: 94041.38819457
Element set: 476
Inclination: 56.9858 deg
RA of node: 307.1671 deg
Eccentricity: 0.0004660
Arg of perigee: 110.5959 deg
Mean anomaly: 249.5594 deg
Mean motion: 14.96301395 rev/day
Decay rate: 2.182e-05 rev/day^2
Epoch rev: 13195
Checksum: 322

/EX

1381. ORBS$042.2L.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 13:57:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7197.99.0C38A0FA@drig.com>
Source record: 271233

```
SB KEPS @ AMSAT $ORBS-042.N
2Line Orbital Elements 042.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX February 11, 1994
BID: $ORBS-042.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10
1 14129U 83058B 94040.06708801 -.00000148 00000-0 10000-3 0 2607
2 14129 27.2057 342.5166 6022455 153.1354 258.3191 2.05877972 80144
UO-11
1 14781U 84021B 94040.53052044 .00000322 00000-0 62635-4 0 6637
2 14781 97.7907 61.1932 0011408 323.9974 36.0464 14.69140692531560
RS-10/11
1 18129U 87054A 94040.55124186 .00000030 00000-0 16659-4 0 8605
2 18129 82.9210 63.1886 0012804 25.2124 334.9655 13.72330924332409
AO-13
1 19216U 88051B 94040.93964943 .00000390 00000-0 10000-4 0 8755
2 19216 57.8821 268.9522 7208878 334.5703 3.1370 2.09717918 43343
FO-20
1 20480U 90013C 94035.98074861 -.00000022 00000-0 31548-4 0 6561
2 20480 99.0184 212.8744 0540153 279.0888 74.9498 12.83223693187179
AO-21
1 21087U 91006A 94041.01003248 .00000094 00000-0 82657-4 0 4237
2 21087 82.9396 236.8134 0036944 77.6411 282.8874 13.74533854152118
RS-12/13
1 21089U 91007A 94040.58590730 .00000042 00000-0 27829-4 0 6615
2 21089 82.9204 106.0890 0030651 102.2186 258.2406 13.74034795151126
ARSENE
1 22654U 93031B 93338.80803910 -.00000087 00000-0 00000 0 0 2437
2 22654 1.4104 113.5274 2936576 161.9838 210.8642 1.42202044 2990
UO-14
1 20437U 90005B 94037.22619383 .00000077 00000-0 47034-4 0 9612
2 20437 98.5971 123.7526 0010334 214.1893 145.8624 14.29821595210876
AO-16
1 20439U 90005D 94037.21681236 .00000071 00000-0 44536-4 0 7626
2 20439 98.6031 124.8401 0010724 214.1741 145.8750 14.29877371210889
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DO-17
1 20440U 90005E 94040.75231196 .00000060 00000-0 40428-4 0 7621
2 20440 98.6061 128.6181 0010852 203.0624 157.0068 14.30016024211408
WO-18
1 20441U 90005F 94037.22688753 .00000066 00000-0 42405-4 0 7628
2 20441 98.6048 125.1409 0011314 214.6745 145.3695 14.29991649210908
LO-19
1 20442U 90005G 94037.21376903 .00000072 00000-0 44757-4 0 7617
2 20442 98.6040 125.3540 0011701 213.9496 146.0939 14.30085714210913
UO-22
1 21575U 91050B 94040.70538846 .00000085 00000-0 43536-4 0 4637
2 21575 98.4469 117.7141 0007501 318.1128 41.9484 14.36888785134771
KO-23
1 22077U 92052B 94041.42783993 -.00000037 00000-0 10000-3 0 3583
2 22077 66.0820 185.3819 0009572 318.8321 41.1977 12.86284604 70485
AO-27
1 22825U 93061C 94037.24428981 .00000055 00000-0 40372-4 0 2598
2 22825 98.6630 114.3002 0008288 227.9109 132.1364 14.27605705 19007
IO-26
1 22826U 93061D 94037.72532850 .00000066 00000-0 44626-4 0 2603
2 22826 98.6651 114.7973 0008457 230.9496 129.0928 14.27708094 19076
KO-25
1 22830U 93061H 94040.70815228 .00000057 00000-0 40495-4 0 2625
2 22830 98.5680 116.3594 0011136 187.2116 172.8898 14.28032363 19500
NOAA-9
1 15427U 84123A 94040.90849396 .00000049 00000-0 50435-4 0 7095
2 15427 99.0697 89.8019 0014366 217.1066 142.9114 14.13586894472362
NOAA-10
1 16969U 86073A 94040.91622187 .00000075 00000-0 50459-4 0 6073
2 16969 98.5109 53.7900 0013419 346.1037 13.9772 14.24863433384485
MET-2/17
1 18820U 88005A 94040.41461213 .00000074 00000-0 52632-4 0 2603
2 18820 82.5397 10.2207 0016130 174.2344 185.9005 13.84706640304670
MET-3/2
1 19336U 88064A 94039.99790931 .00000051 00000-0 10000-3 0 2623
2 19336 82.5380 54.3969 0015730 222.0779 137.9138 13.16964807266383
NOAA-11
1 19531U 88089A 94040.89310848 .00000099 00000-0 78246-4 0 5131
2 19531 99.1603 26.7549 0012242 127.5055 232.7231 14.12957503277247
MET-2/18
1 19851U 89018A 94040.58249263 .00000046 00000-0 27583-4 0 2617
2 19851 82.5181 245.6465 0012880 224.0063 136.0047 13.84356993250031
MET-3/3
1 20305U 89086A 94040.90489425 .00000044 00000-0 10000-3 0 9823
2 20305 82.5493 357.9703 0005714 252.5364 107.5110 13.04423038206305
MET-2/19
1 20670U 90057A 94040.79306496 .00000024 00000-0 79036-5 0 7621
2 20670 82.5504 309.6649 0016176 139.0978 221.1403 13.84188455182995
FY-1/2
1 20788U 90081A 94041.23792391 -.00000256 00000-0 -14146-3 0 8899
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2 20788 98.8429 65.4112 0014899 8.2542 351.8867 14.01324157175928
MET-2/20
1 20826U 90086A 94040.59762982 .00000082 00000-0 60627-4 0 7618
2 20826 82.5218 247.4867 0014958 48.7238 311.5204 13.83572578170118
MET-3/4
1 21232U 91030A 94040.56395652 .00000051 00000-0 10000-3 0 6695
2 21232 82.5392 259.8160 0013347 141.0577 219.1526 13.16459526134562
NOAA-12
1 21263U 91032A 94039.95700562 .00000136 00000-0 80464-4 0 9196
2 21263 98.6320 70.4809 0012014 247.6730 112.3172 14.22366100142301
MET-3/5
1 21655U 91056A 94039.95480389 .00000051 00000-0 10000-3 0 6651
2 21655 82.5517 207.2863 0013312 152.8840 207.2989 13.16827561119586
MET-2/21
1 22782U 93055A 94040.74736914 .00000093 00000-0 71559-4 0 2616
2 22782 82.5509 307.4298 0021041 221.4188 138.5364 13.83000237 22471
POSAT
1 22829U 93061G 94037.20759234 .00000070 00000-0 45885-4 0 2520
2 22829 98.6603 114.2924 0009404 217.5862 142.4662 14.28001942 19004
MIR
1 16609U 86017A 94041.42205754 .00011161 00000-0 14078-3 0 1312
2 16609 51.6168 102.3559 0004327 318.6406 41.4259 15.60125914456273
HUBBLE
1 20580U 90037B 94037.44922672 .00000964 00000-0 81415-4 0 4349
2 20580 28.4703 355.6949 0006487 159.4554 200.6293 14.90460557 9866
GRO
1 21225U 91027B 94040.40150147 .00005773 00000-0 13376-3 0 648
2 21225 28.4620 38.7432 0003896 207.9052 152.1343 15.40033195 37217
UARS
1 21701U 91063B 94041.38819457 .00002182 00000-0 21249-3 0 4767
2 21701 56.9858 307.1671 0004660 110.5959 249.5594 14.96301395131953
/EX
```

1382. Hamblaster update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 14:04:42 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb11.140442.11801@tellab5.tellabs.com>
Source record: 271234

The Hamblaster Update

Over the past several months I posted updates about a
DSP "The Hamblaster" that Will Torgrim (N9PEA) and myself
are developing.

We are focusing our efforts on a packet modem that allows
the user to improve H.F. reception by interfacing the Ham-
blaster (a PC compatable DSP sound board) to a transceiver
and a packet or all mode TNC. Modems/filters for RTTY,
Packtor, Amtor are also under developement and are compatable
with the same control panal software.

Here are the latest developements
2-10-94

Several weeks ago I mentioned that the projected cost for
the board would be about $350.00. It was just a
"guessestmate". It looks like it will be more in the $275.00
range and could be as low as $250.00. This may still sound
high compared to the Soundblaster or other sound cards, but
you have to remember that it's made exclusivly for Ham Radio
and it won't have the volume (sales) of other sound cards.
I would also like to point out that it's not just software.
It's a sound card with a DSP and a digital port that can
interface to a TNC. The DSP is used as an improved filter
for Packet or RTTY and other digital modes. It unless there's
a way to interface it with Baycom, it cannot copy packet
without a TNC.

1) External Power supply

I think one feature that separates the Hamblaster
from other sound boards is it's ability to run on
an external 12 volt supply. When a filter or modem
is loaded, You can turn off the computer and
Hamblaster keeps on going and going and going!

When it's connected to a PK-232, there's no need
to keep the computer on in order to keep the DSP
alive. Right now, my PK232/Hamblaster is runing
and it's been operating for about 5 days

2) Adaptive (LMS) filter

There's ongoing developement in this area. We are
planing (I don't think this has been done before)

to add controls to the LMS algorithm.

3) Soundblaster compatibility

The Hamblaster IS NOT soundblaster compatible.
It was designed that way so that it will run
independant of other sound boards. I can still
use my Soundblater to record sound, play music,
load software from the CD or use the midi interface.
At the same time, I can receive packets or use
a DSP filter with my Ham equipment.

Jack Albert Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-4590
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440
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*
THE BOWTIE FILTER

1383. Re: A is for alpha.....

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 14:34:28 UTC
From: Anthony_Pelliccio@brown.edu
Message-ID: <Anthony_Pelliccio-110294093606@138.16.64.8>
Source record: 271235

In article <erik_read-100294175751@gardner2.life.uiuc.edu>,
erik_read@qms1.life.uiuc.edu (erik read) wrote:

> I have a friend who speaks english badly and does not choose words to
> describe the letters. I think the military has a thing where they use
> standardized, easily recognisable words, like alpha, bravo, charlie,
> etc......
> I myself do not know them all and I really think that this would help a
> lot.
> Can anyone help me? Is this the right place to be posting?
>
> Thanks in advance; Erik

Alpha
Bravo
Charlie
Delta
Echo
Foxtrot
Golf
Hotel
India
Juliette
Kilo
Lima
Mike
November
Oscar
Papa
Quebec
Romeo
Sierra
Tango
Uniform
Victor
Whiskey
X-Ray
Yankee

So I'm Kilo Delta One November Romeo

--
== Anthony_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)
== Brown University Alumni & Development Computing Services
== Box 1908, Providence, RI 02912 Tel. (401) 863-1880

== I speak for myself, and not for Brown University. Remember that!

1384. soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 15:06:15 UTC
From: phillips@eso.mc.xerox.COM
Message-ID: <9402111506.AA23765@zombi>
Source record: 271236

I saw a trick on this news group not long ago that seems to work well
for soldering PL-259's. Remove the two bolts and tip from a transformer-
type soldering gun and press the two tips -hard- against the PL-259.
Instead of the soldering tip carrying the current, the Pl-259 itself carries the
current and gets hot. The voltage is very low and you won't get shocked.

It heats very quickly when you hold a tight connection, and you're done before
the insulator has time to melt.

=Mark=
n2rpz@eso.mc.xerox.com

1385. License from Panama?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 15:38:17 UTC
From: mjokinen@cc.Helsinki.FI
Message-ID: <2jg8p9$acc@klaava.Helsinki.FI>
Source record: 271237

I am one of these hopeless creatures, who cannot raise the 40
marks per minute cw-cpy-speed to 60 which is the limit for the senior
class licens in our country. In the junior class we are allowed to phone
operations only on the 28 mHz band. As I am planning a longer yachting
voyage and I would like to be in contact with my fellow countrymen
through ham radio, it would be interesting to know if it is true that
you may buy for yourself a ham licens from Panama. How much would it
cost?

____
Matti Jokinen
Institute of Dentistry
University of Helsinki
Matti.Jokinen@helsinki.fi

1386. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 15:50:21 UTC
From: jms@col.hp.com
Message-ID: <2jg9ft$8ds@hp-col.col.hp.com>
Source record: 271238
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Alan Bloom (alanb@sr.hp.com) wrote:
: Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: : Yes, yes, I understand that, but look at what you're saying, "the
: : current is *still* 1A in *each* 1/4-wave element." Since the dipole
: : has *two* elements, 1+1=2, it's instant flow is twice the current
: : of a single element.

: If you installed RF ammeters in each element, they would read the
: same no matter whether the ground plane is present or no. (Since
: the RF generator and both elements are in series, the current must
: be the same in each.) Each 1/4-wave element radiates 1/2 the total
: power no matter whether the ground plane is present or no.

: (Is anybody else still following this convoluted discussion?)

: AL N1AL

Yes, but you're both over my head. I still read it, though.

Mike, K0TER

1387. Re: Looking for LOGIKEY keyer

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 15:52:28 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2jg9js$puv@news.acns.nwu.edu>
Source record: 271239
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <slayCL0wC3.u0@netcom.com>, Sandy Lynch <slay@netcom.com> wrote:
>Hannes Hogni Vilhjalmsson (hhv@rhi.hi.is) wrote:
>: Can anyone tell me the present address of the Logikey Company,
>: or any other outlet for their LOGIKEY microprocessor based morse
>: keyer?
>
>If I'm not mistaken, the LogiKey is the commercial version of the CMOS
>Super Keyer II which was first described in the November 1990 issue of QST.
>That keyer is available in Kit Form (i.e. parts, pcb, but no switches,
>boxes, or batteries) from:
>
> Idiom Press
> Box 583
> Deerfield, IL 60015
>
>When I bought mine (it is a WONDERFUL keyer), I paid $45 + $3 for domestic
>USA shipping. Foreign orders were $45 + $5.

The Logikey keyer also is sold by the same company: Idiom Press. Last
I saw in an ad, the price for Logikey was $129 +s&H

BTW, Idiom Press is run by Bob Locher, W9KNI, top US operator in
the just released CW DXCC list. He is also the author of a book
on DXing and the author of the DXing chapter in ARRL Operating Guide.

He is an A1 operator.

Rajiv
aa9ch
r-dewan@nwu.edu

1388. Re: Looking for LOGIKEY keyer

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 15:56:26 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Feb11155626@mipgsun.mipg.upenn.edu>
Source record: 271274
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

>Is this an Iambic keyer or a regular keyer. I haven't used an iambic
>keyer (saw one once) but it seems like it'll take relearning.

It is an iambic keyer. Fairly full featured.

>Is it worth it?

I don't know since I have never used any others. I was attracted to
this keyer because it is available in kit form. I didn't want to
simply buy it.

The article describing the keyer is in QST and in recent issues
of the ARRL handbook. It describes an earlier version of the
software. The new version adds emulation of Accukeyer and Curtis "A"
etc. Memory dot and dash is now configurable. There are several
other enhancements as well.

The online manual is available for free from Idiom Press with
a formatted diskette and mailer. I know. I got it when I
bought the kit and converted it to Latex.

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

1389. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 16:14:33 UTC
From: barnaby@world.std.com
Message-ID: <CL2IGA.1z8@world.std.com>
Source record: 271240

gaulandm@tekig7.PEN.TEK.COM (Mike Gauland) writes:

>A mailing I read is involved in a comparision of the speeds of
>printing and cursive writing. I decided to consult some experts.
>So, all you high-speed CW ops, which do _you_ use?

>Michael A. Gauland gaulandm@tekig7.PEN.TEK.COM
>AA7JF (503) 627-5067

Gosh Michael,
My cursive is so bad, *I* can't read it after I write it.
My lettering is guite good (many years of Mechanical Drawing experience)
and so I use lettering for all handwritten correspondence, and CW copy.
However I've had to adopt hybrid style to copy at 25 WPM (my current
threshold). As stated in an earlier thread, I've tried typewriters
with poor luck, as they are less easy to correct.
What I use is a lowercase cursive 'e' (looks like a squiggle) for "E"
a lowercase "t" with a long tail and no cross for a "the".
a "Plus sign" for "and"
I'd be interested to know what abbreviations others use for characters/words
73 Barnaby barnaby@world,std,com (AA1IB)
7

1390. Re: Yaesu FT-5100 <-> MFJ-1270B

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 16:17:42 UTC
From: llabella@panix.com
Message-ID: <2jgb36$f9p@panix.com>
Source record: 271241

plymale@myhost.subdomain.domain wrote:

: I'm trying to interface a Yaesu FT-5100 to a MFJ-1270B TNC via
: the 5100's DATA IN/OUT jack. I constructed a connector based on
: the instructions in the 5100 manual. The problem is that the
: transmit audio level out of the TNC is way too low. Adjusting
: trimpot R76 during the 1270B recalibration procedure does not help.
: Any suggestions for increasing transmit audio level are appreciated.

: Thanks...

: Bill - KD4CIY

: --

: Bill Plymale plymale@mousetrap.es.vt.edu 703-231-9530
: Virginia Tech (Enrollment Services Information Systems)

1391. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 16:23:11 UTC
From: kg7bk@indirect.com
Message-ID: <CL2Iuo.21A@news.direct.net>
Source record: 271242
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Mike Stansberry (jms@col.hp.com) wrote:

: : (Is anybody else still following this convoluted discussion?)
: : AL N1AL

: Yes, but you're both over my head. I still read it, though.
: Mike, K0TER

Would everybody (anybody) trust ELNEC to settle this discussion?

73, Cecil, kg7bk@indirect.com

1392. Re: Operating in Canada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 16:38:28 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CL2JK4.CHp@ucdavis.edu>
Source record: 271243
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc

Rich Wales (richw@mks.com) wrote:

: Please be careful here not to fall into the fallacy of assuming that US
: and Canadian citizenship are mutually exclusive. Contrary to popular
: belief, US law does =not= ban dual citizenship; and, for that matter,
: neither does Canadian law. Lots of people are citizens (by birth or by
: naturalization) of both the US and Canada; the US State Department knows
: about them and explicitly doesn't mind. If anyone is interested in more
: info on this subject, I'll be glad to oblige.
That is only for US citizens. A Canadian cannot be granted US
citizenship without renouncing thier Canadian citizenship. I have a
friend who married a Canadian national, she had to renounce her Canadian
citizenship to become a US citizen. She then went back to Canada and
became a nauralized Canadian too. In short, you can only have one
citizenship when you accept US citizenship, but you can add others as you
go.

Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* The only thing I can officially say for the University is: *
* What I say is in no way related to oficial University policy *
--

1393. Re: RAMSEY FX TRANSCEIVER (now long)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 16:44:31 UTC
From: jbloom@arrl.org
Message-ID: <1994Feb11.164431.7979@arrl.org>
Source record: 271244

Greg Bullough (greg@netcom.com) wrote:
: (excuse inclusion of a lot of text, but since Messrs. Hare and Bloom can't
: be relied upon to quote in context and fairly, and to limit attributions
: to what was *said* rather than what would be convenient for their attacks,
: it would seem necessary)
: In article <1994Feb3.190229.8136@arrl.org> jbloom@arrl.org (Jon Bloom (KE3Z)) writes:
: >Greg Bullough (greg@netcom.com) wrote:
: >: In article <1994Jan28.171743.483@arrl.org> ehare@arrl.org (Ed Hare (KA1CV)) writes:
: >: >Greg Bullough (greg@netcom.com) wrote:
: >: >
: >: >: Steven has hit it on the head. As hams, we have for years said "can't
: >: >: afford a commercial rig? Home-brew or build a simple kit." Then
: >: >: QST and all the other magazines which bang this drum (which quite
: >: >: handily fills up magazine pages with circuits that few ever
: >: >: build) reap big advertising dollars from kit companies.
: >: >
: >: >For starters, I am not sure that few ever build projects from
: >: >magazines.
: >
: >: Why? Haven't you polled your readers, in order to make intelligent
: >: editorial decisions? Haven't you asked 'if not, why not?' '73' has
: >: an article-by article reader feedback form, every issue. If you
: >: don't have the information, you really aren't in much of a position
: >: to either support or refute my assertion, are you?

: > Well, at least Ed doesn't make "assertions" that he can't support
: >with data. If he doesn't have the data at hand, he doesn't make
: >statements as though they were facts.

: As I have stated before, and as even someone with a sixth-grade level of
: literacy ought to be able to glean from the above exchange, it was
: Mr. Hare who initially indicated that he was 'unsure' of his facts.

Huh? When did I suggest anything different? I'm not saying--and I
haven't said--that Ed didn't say that. I'm saying that what he said
was the truth.

: I responded that such a thing suprised me, having assumed that some
: survey would have been made and its results disseminated to the staffers.

A survey was made, but not everyone got a copy of the results, only
those who were working directly with the data.

: Since the issue in question was one of being in or out of touch with
: the ham population at large, this was very pertinent.

: He apparently mis-represented that; he indeed does believe that he has
: facts at hand.

How you come to that conclusion escapes me. He did not have the data at hand, so he didn't pretend that he did have it. Nor did he say, "No information exists about this at ARRL HQ." He said, "I am not sure." He misrepresented nothing; you're simply inferring something that isn't so. The fact that the data exists here (and that I have a copy) doesn't logically lead to the conclusion that Ed had the data, and particularly not that Ed knew what the data said and was lying about it. The statement, "I'm not sure" means just what it says. In this case, it means that Ed didn't have the data and didn't search it out.

: > But I *do* have the data at hand. Our recent (1992) market survey
: >shows that 35% of amateurs "enjoy building equipment or kits." 42%
: >enjoy "experimenting with equipment or antennas." So the statement that
: >few ever build circuits is clearly unsupportable.
: > Now, where's *your* data?

: I guess I consider almost 20 years as an active ham a pretty good basis
: for what my fellows do and don't do.

Anectodal evidence is notoriously inaccurate. When nothing else is available, you use it. But when you have statistical or measured data, you use that; it's far more reliable.

: But let's look at these "facts" with a critical eye, shall we?

: 1. 35% is not exactly a clear majority, now is it?

Who said anything about a majority? The operative phrase here (your phrase) is "few ever build." Now, what number divides "few" from "not few" is a matter on which reasonable prople can disagree. I think 35% is clearly "not few." Perhaps you disagree. But consider this: if we are to cover in QST only those activities which a majority of amateurs "enjoy," according to our survey the coverage would be limited to: talking with friends, mobile or portable operating, and listening. (Although hamfests and repeater operation do check in at 49%, which is within the margin of error of a majority.) Frankly, I would consider that a pretty limited QST. So, I don't accept that a majority is necessary in order to justify QST coverage; only a substantial interest is needed.

: 2. The 42% includes 'or antennas.' Considering that
: antennas are generally NOT plug-and-play items,
: I'd expect MOST hams have to do it. Does this
: mean the other 58% hate it?

It probably means the other 58% comprises some people who hate it and some who are indifferent.

: 3. The phrasing of the question begs for a higher
: number. They 'enjoy' it. I 'enjoy' sunning on
: the beach on a tropical isle. Doesn't mean I

: do it, or get to do it, very often. But I would

Presumably you can't enjoy it unless you do it. Would you have preferred we ask "do you do" rather than "do you enjoy?" I mean, we'd get a whopping response to "do you put connectors onto coax cables," but that doesn't mean very many enjoy it, or that it's the reason they like ham radio. What we were tring to get at in the survey is, what do people like to do in ham radio. And that, in my opinion, is one of the key questions that should drive the make-up of QST.

: submit that there are some vested interests in
: asking the question that way. Such as the advertising
: dollar. And such as justifying the existance of QEX.

You'll have to explain the vested interest to me; I sure don't get it. If dollars were the only measure, we'd fill the magazine with nontechnical material--it's a whole lot cheaper to produce. As for QEX, we lose money on that. So the "vested interest" would seem to be to show that there's no need for technical material so we can drop it.

: 4. The very existence of QEX can be taken to mean two
: things; there is sufficient interest to support a
: whole distinct publication; or there is insufficient
: interest to put the material into the mainstream.

Ah, but QEX is not about buildable projects (although it does contain a few). It's about advanced technical work. It doesn't relate to the discussion here, which is about publishing buildable circuits.

: And that it really doesn't support conclusions any more than the average
: Joe Ham's experience. Of course, Joe Ham spends his money based on his
: experience, more than Mr. Bloom's data. And it is also that experience
: which leads him to stay in the hobby rather than take up snowmobiling.

The point here is that the data is a measure of that experience. My personal experience, your personal experience, Ed's persoanl experience; they are *not* "average Joe Ham's experience" because no individual is average, with 0.7 spouses and 2.3 kids. You need to look at a lot of experiences to develop an average, and that's one of the things the survey technique does. (It also identifies where the average is not a useful measure, and where there are significant departures from "average.")

: >: >Some of the authors that have offered a kit have reported
: >: >large sales
: >
: >: And god bless 'em if they do, for they are the ones who recognize
: >: that parts procurement is 90% of the problem and 200% of the
: >: expense of home-brewing. Someone who take the time to write an article,
: >: and then offer a kit, with no intention of profiting by either is,
: >: IMHO, entitled to some sort of sainthood.
: >
: >But, according to you, QST shouldn't publish such articles. Isn't that

: >just a bit, well, inconsistent?

: Yes, and that should have been your first hint that you were, well,
: not correct in your interpretation of my position. Perhaps if you
: took the time to read and understand, you might gain insight
: outside of the boundaries of greater Newington.

Ad hominem attacks impress me not in the least.

: >: >something else. Go to any hamfest, note the rows upon rows of
: >: >vendors offering components. Hams are buying them, putting them
: >: >in bags and taking them home. They must be doing something with
: >: >the parts.
: >
: >: In my experience, they're gathering bits for something they'll
: >: 'get around to someday,' and or looking for a specific component
: >: for some simple use.
: >
: >So, hams are hoarding basements full of parts without ever using any of
: >them? *That's* your experience? Wierd!

: Aw c'mon. You mean to say you don't know bunches of hams with garages/
: basements full of stuff that they're going to assemble when they get
: 'a round tuit' along with some half-finished projects, and most of
: the parts for this or that? Where have you been?

Yes, I *do* know bunches of hams with bulging garages and basements
(and attics, too). But the reason they haven't gotten to those projects
is because they are building *other* things. And they are exactly the
people who build stuff from QST. They just don't have time to build as
much as they'd like!

: >Well, I did an informal poll of the technical editors and lab staff
: >here at HQ. Of the 10 people I talked to, one (count 'em) received his
: >license after the age of 20. So we've *all* had experience outside the
: >environment of ARRL HQ. We weren't born here in the ARRL Lab, you know!
: >And only a few of these people have EE degrees. (Just enought to keep
: >the other ones on the straight and narrow!) So, once again, the
: >available evidence shows your "assertion" to be in error.

: 'Had experience' and where you work every day are two different things.
: You get used to things. After five or more years, for example, it would
: seem strange for me to work somewhere that had no internet access, even
: though I know most people don't have it, and can remember what it was
: like when it was a challenge to move data to a system four miles away.
: That's normal. It really doesn't hurt anything, unless you *forget*
: that you're in a different situation from most people, and fail to
: accept that you have to do some different things to allow for it.

You mean, like take a survey to find out what people think, instead of
relying on our personal experience?

In any case, I don't think the situation is all that different. Most of the people here at HQ who build stuff (which is not everyone, by any stretch--on a guess, it's probably somewhere around that 35% number) do it the same way as everyone else: they buy the circuit board and parts kit from FAR Circuits or wherever. Those few of us who make use of the test equipment in the lab made use of the test equipment in our previous workplaces, too. (I can remember many Saturdays of working on ham equipment at work before I ever came to work here.) So the experience of people here at HQ is not dramatically different from that of "average Joe Ham," despite what you may think.

[deleted]

: >: way, the League and QST have flirted with this policy from time to
: >: time, but they can't seem to get away from the 'all home-built' ideal.
: >
: > Do you *read* QST? Have you seen the "New Ham Companion" section? I
: >challenge you to find *one place* in the ARRL literature where it says
: >a new ham should homebrew his station in order to get on the air. Just
: >one place.

: It was all over the older League publications.

: Perhaps, if I have some time, I'll look up some citations.

Do so, please.

: Perhaps, Jon, you can fill us in on when the League and the editorial
: staff thereof, conciously chose to change to a editorial policy where
: home-brew was presented as an ancillary activity, rather than as an
: ideal?

Well, in the 10 years I've worked here, I've never felt that homebrew was being held up as an ideal. I can't speak for the situation before that.

: >full-page ads in *other* magazines. (Hey, maybe that's it... maybe all
: >your complaints are really about another magazine, and you've just
: >confused it with QST! At least that would explain why all of your
: >"assertions" are 180 degrees out.)

: Gee, wouldn't it be useful if we had an ARRL staff which, instead of
: attacking *MEMBERS* whose perceptions disturb them, claiming that
: 'all of your "assertions" are 180 degrees out' took the time to
: figure out what's wrong? Why do some people look at the ARRL this
: way? Why aren't a mojority of the hams members? Why do memberships
: lapse?

I'm not attacking you, Greg. I'm attacking your conclusions. There's a big difference.

: >: More correctly stated: 'by what the Directors want hams (particularly
: >: new hams) to see.'
: >
: >Really? On what basis do you supply this correction? Facts, please,

: >because all the information *I* have (from sitting in the editorial
: >review meeting every week) shows that what the editors discuss is what
: >we think the *members* want to read. And on the rare occasions I've
: >heard a Director comment on the content of QST, it's invariably been to
: >relay a *member* complaint or concern.

: I guess that means that the content is pretty well in tune with the
: Directors' desires, then. Again, I base this on the facts that:

: 1. QST is an official journal
: 2. QST seems to be as good at covering opinions which
: dissent from the League line as the National Review
: is at covering liberal politics; conversely, the
: League's positions are about as well covered in
: QST as conservatives are in the National Review.
: I rarely see something in QST which would help
: a member make up his mind on an issue.

: Perhaps it should be that way. I know I'd rather see it that way,
: and see it honestly admitted, than see it denied.

As I said in an earlier posting (not the one you quoted), there is a
difference between technical material (which is the subject--at least
the original subject--of this thread) and nontechnical material. Sure,
QST presents the Board's views about issues facing Amateur Radio. But
that doesn't influence the selection of technical material. Not that
I've ever seen, anyway.

: >: And good it was. QST Product Reviews are the ONLY ones I would ever
: >: trust. Mostly because I've seen gushing, press-release quality *articles*
: >: in 73 and CQ, masquerading as product reviews. It only begs the question
: >: of why, when this landmark kit has been on the market for several years
: >: already, it was just recently the subject of a review in QST. Lots of
: >: stuff of much lesser interest has appeared before this one. I mean,
: >
: >Uh, lesser interest to who? Got any support for that, Greg?

: The first thing that springs to mind was the review of the SWL receiver
: which was in the PR section a couple months back. Did it really deserve
: a full-blown review? It was a piece of equipment of only secondary (and
: to give due credit, by the time the review was perused, I understood
: it to be more like 'teriary') interest to hams. The question is, was
: a full review necessary to establish that?

But how do you *know* it's secondary? That's my question. If you're
saying it's of secondary interest to you, fine. Buit if you're saying
it's of secondary interest to hamdom at large, I'd like to have that
based on something more than one man's opinion. Our selection of items
for "Product Review" treatment is based largely on what we've heard
from our members--what they like and don't like. (And they aren't shy
about telling us, fortunately.)

: >: I bought one of the close-outs of the first Ramsay 146 kits on sale
: >: a good two years ago! Haven't got around to assembling it yet, but
: >: I wish I'd known what to watch for before plunking even the bargain-basement
: >: price on the counter.
: >
: > Since you ask...we originally bought one of the Ramsey units in the
: >summer of 1991.

: ...that would have been a good time.

: > This was the earlier version (the FTR-146). We built
: >it and were in the process of reviewing it when we received a call
: >(unsolicited) from one of the folks at Ramsey, saying that they had
: >noticed we bought one and thought we'd be interested in knowing that
: >they were about to release a new design, and perhaps we would want to
: >hold off our review of what was about to become an obsolete unit. (At
: >the same time, I reported to Ramsey that the radio failed to meet
: >harmonic spectral purity requirements.) They promised to send us one of
: >the new units as soon as it became available. (Normally, we only
: >*purchase* Product Review items, but we decided that it would be hard
: >for them to fine-tune a kit :-)
: > We waited a couple of months, then called Ramsey. To make a long
: >story short, we called *every* couple of months, but we never received
: >the promised radio. Finally, we just bought one (through a third
: >party). This is the unit we reviewed. In March of 1993, we contacted
: >Ramsey to report that the radio we built didn't meet FCC specs. They
: >offered to send us one of their built radios, so we could check it
: >against ours. We did so, and found that *their* radio didn't meet
: >specs. In fact, it worked just like the one we built. We reported
: >that to them and asked that they provide a fix to the spectral purity
: >problems. They did so, and we implemented the fixes (as described in
: >the review article).
: > This entire process took just about two years, the bulk of which was
: >our waiting for Ramsey to deliver a promised radio--that we never got.

: This is interesting information indeed! Certainly, there is some 'fault'
: with Ramsey. It may even be that they knew what the likely results would
: be. We'll never know.

Nope, we won't.

: However, the option to purchase existed all along. And, it seems to me,
: that:
: 1. There was *some* responsibility to somehow inform the
: readership of the problems seen with the first kit. After
: all, these kits are probably one of the most appealing
: items, especially to new hams, on the market today. QST
: was very accomodating to Ramsey. Would that they would hve
: been so to us! Again, this goes to an issue of being 'in
: touch' with what hams need.

: 2. It is quite possible to 'tune' a kit. You can make sure that
: all the components are within design tolerances, you can

: take a very careful parts inventory, you can look at the
: PC board with a very good magnifier, and you can generally
: make sure that it's in the highest percentile of what you
: turn out.

Possible, yes, but not that easy. Since we ended up not getting a kit donated from them, the point is moot. But I'll add that I have seen kits donated for Product Review (from other manufacturers) that were missing parts. But, yeah, that seemed odd to me, too!

: I wish, and I suspect some others do, that QST had pushed harder on this
: one, and been more out front with those of us that pay the bills. Especially
: when, as in this case, the initial work pointed to the possibility of a
: serious problem.

Well, only somewhat serious. The initial design had only harmonic spectral problems, not the close-in spurs of the second unit. And the fix for that was addition of one capacitor, or an external filter. There's no doubt, though, that if we had it to do over again, we'd do it differently--faster, that is. Live and learn.

: It's a much higher calling to point out problems for the ham-consumer,
: than it is to review the Conglomerate 1001D 8-band transceiver with
: DSP; of course the 1001D is a more fun toy to play with, but 95%
: of the time it works pretty much as advertised (across three color
: pages of QST, I might point out).

Not always. Read the reviews and note the problems we identify with the units we review. Some of the high-priced units have been shown to be deficient in one way or another. And, too, the risk factor is higher on a $2000 transceiver than on a $150 kit. If you had to buy one of the two "blind," without the availability of a review, would you rather it be the $2000 unit, or the $150 one?

: What it comes down to is, you guys knew, or at least had an inkling,
: that there might have been a problem. And you didn't tell us! I guess
: I'd expect that either you'd find a way to tell us, or push to get
: the Review done, to settle the matter.

On this issue, I agree with you. We should have done--I should have done--a better job. Having never before gone though an experience like the one I described, I fumbled the ball somewhat. So, if you want to heap vituperation on anyone, I'm the guy. But one mistake does not a philosophy make. Extrapolating this error to the conclusion that we don't care, or that we are out of touch just isn't warranted.

: And *THAT* is the kind of thing that I'm talking about when I claim
: that there is a divergence between what the ham radio population needs
: from the League's publications, and what they get.

Well, our occasional errors aside (we *are* human, whatever you may think), our research, and our member feedback, show that we *are* giving people much of what they want. Not everyone gets everything

they want, that's for sure. But overall, we're getting the information people want to them. And the publications evolve to match the evolving interests of our members. We're always interested in hearing opinions as to what we could do better. But statements of opinion presented as fact--based on one person's experiences, be they of 20 years standing or 50 years standing--aren't going to carry as much weight as good opinion research data. That is particularly the case when those opinions run counter to the weight of other opinions we hear from members. That's the bottom line to this discussion.
--
Jon Bloom KE3Z jbloom@arrl.org

1394. Soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 17:10:17 UTC
From: gorski@vms.huji.ac.il
Message-ID: <1994Feb11.171017.3080@vms.huji.ac.il>
Source record: 271245

If all else fails, read the directions.

I found the directions in the ARRL handbook to be excellent.

73's and Shalom from Jerusalem

Azriel 4X1PI

1395. Re: which is better qrp band--30 or 40?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 17:21:49 UTC
From: parish@think.com
Message-ID: <2jgerdINNibi@early-bird.think.com>
Source record: 271246

In article <slayCKx9CH.CFp@netcom.com> slay@netcom.com (Sandy Lynch) writes:
>mtrail@violet.berkeley.edu wrote:
>: The title says it all. Which band do you qrp'ers
>: prefer?
>
>For questions on QRP - I suggest a good source of info is the QRP reflector.
>To subscribe to the mailing list, simply send an e-mail msg to:
>
>qrp-request@think.com
>
>I can't recall if you should only enter SUBSCRIBE or also include info
>on yourself (e.g. name, call, qrp rig, etc).
>Cheers de Sandy WA6BXH/7J1ABV
>

The QRP mailing list has changed in the way that it is administered.
Please read the following that was posted to QRP this week:

Subject: QRP List now under Majordomo

All administrative requests should now be sent to "Majordomo@Think.COM";
mail sent to the QRP-Request address will cause an automatic reply from
Majordomo telling you what you should do.

If you want to unsubscribe from this list, send a message to the majordomo
address above containing only the line:

unsubscribe qrp

If you want to get the QRP-Digest list (still considered highly
experimental!) instead of the QRP list, send a message containing these two
commands:

unsubscribe qrp
subscribe qrp-digest

More info on things you can do with/to majordomo can be had by sending the
command:

help

Eventually, I will move the files which are in the QRP anonymous FTP area
into an area where they can be automaticaly retrieved by majordomo; as yet,
you'll find nothing with "index qrp".

If you still have questions or comments that require a human, send to
QRP-Admin@Think.COM, and someone will (eventually) get back to you.

73,
--Bruce Walker
bruce@think.com WT1M

1396. Re: which is better qrp band--30 or 40?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 17:29:07 UTC
From: brunob@hpldsla.sid.hp.com
Message-ID: <121020036@hpldsla.sid.hp.com>
Source record: 271247

You will be much better off by using 30m for followin reasons.

40 is segmentaized e.m. different ITU zones can operate only on certain
freq. or segments of the 40m band.
40 has Broadcasts and other QRM working against QRP.
On 40 "other" station can use 1KW so ham to ham QRM is a factor.

30 is 'NEW' and same freq. for all ITU.
Very little QRM
On the edge of muf
Max power is 100w
Beam fix or rotatebl is feasable and in my opinion a must for QRP.

Try it you may like it!!!!!

from the log of AA6AD

1397. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 17:51:36 UTC
From: jfw@ksr.com
Message-ID: <2jggj8$mb7@hopscotch.ksr.com>
Source record: 271248

jimc@megatek.com (Jim Campbell) writes:
> BTW, hams in the nudist/naturist "community" have noticed a far higher
>per capita ham population among nudists/naturists than in the general
>population. Wonder why that is?

Why, it's obvious. The same CC&Rs that ban antennas also ban nudity.

:-)

1398. Re: Nashua, NH - Beginner question...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 17:57:50 UTC
From: levin@bbn.com
Message-ID: <LEVIN.94Feb11125750@medea.bbn.com>
Source record: 271249

In article <m0pUKi7-0008X4C@barney.palette.com> sms@barney.palette.COM (Steven Santinelli) writes:
Every once in a while I hear on 146.8500 mhz (A repeater in
Derry, NH) some operators doing CW practice, as if in a classroom
environment.

This sounds extremely interesting to me, since I'm having a little
problem trying to get CW down pat...

Does anyone know anything about this, and if so, is this done on
a daily/weekly/monthly basis? Is there some sort of schedule?
I also think I heard them giving ARRL news also one night...?

They do have a slow-speed CW net on this repeater, I believe weekly.
It is primarily aimed at no-code techs looking to upgrade (since they
can transmit and receive on this band), but of course it can help the
listener improve copying proficiency as well. As I said, I believe
it's weekly, so keep an ear out about the same time - you may also
hear someone at other times announcing the net or describing it to
another repeater user.

Good luck on your tests and come to a Nashua Area Radio Club meeting
<<ad alert>> (all invited, first Monday each month at 7pm in the
Nashua Public Library)

/JBL KD1ON
=
Nets: levin@bbn.com |
pots: (617)873-3463 | "I gotta go."
KD1ON (@KB4N.NH.USA) | -- I. Shoales

1399. rsgb gb2rs news 13th feb

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 18:03:42 UTC
From: ted@tedb.demon.co.uk
Message-ID: <760989822snz@tedb.demon.co.uk>
Source record: 271250
Cross-posted to: rec.radio.amateur.misc,uk.radio.amateur

Good morning. It's Sunday the 13th of February and here is the GB2RS news broadcast, prepared by the Radio Society of Great Britain.

First the headlines:- The VHF Convention and Thinking Day on the Air are both held next weekend; and more auroras are forecast for this week.

Next Sunday sees the premier event in the VHF Calendar, the RSGB VHF Convention, held at its usual venue, Sandown Race Course, Esher, Surrey. Doors will open at 10.30am and the convention features a trade exhibition and a lecture programme featuring VHF, UHF and Microwaves, starting at 2.15pm. The February edition of Radio Communication carries full details of the event including a list of lectures. Refreshments will be available from 11.00am and talk-in will be on channels S22 and SU22 by GB2VHF. Further information can be obtained from Geoff, G3FZL on 081 699 6940. Also next Sunday is the Trafford rally in Manchester. More details of this later in our bulletin.

Thinking Day on the Air takes place next weekend the 19th and 20th of February. Guides and Brownies all over the world will be communicating with each other via amateur radio stations and as usual many governments have relaxed their third party message restrictions for this event.

The Society has had enquiries about what to do if something goes wrong when applying for, or renewing, their licence. Subscription Services Limited work as agents of the Radiocommunications Agency, so it is to the RA that the complaints must be addressed. To assist the RA in looking at your query, it is important that all communication with SSL is by letter, not by telephone, and that copies are kept of all correspondence.

The Scarborough Amateur Radio Society at its Annual Dinner this month presented Jim Lynch, G0NXX, with the Fred Powel Trophy for working the greatest number of DXCC countries in the previous 12 months. Jim's score was 225 countries, all on CW using 80 watts to a Ground Plane antenna.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO. From American Samoa, G4ZVJ will sign AH8F from Tutuila Island from the 16th of February for a month, mainly on CW. From Belize, many American operators will be active on all bands/modes from the 16th, until the 23rd of February, using individual V31 calls. For the ARRL CW Contest they will use the callsign V31WW. From Revilla Gigedo, XE1BEF and many others will sign XF0C from Clarion Island from Friday the 18th of February for two weeks. Activity will be on all bands 6 - 160 metres on CW, SSB and RTTY. And from Jamaica, K6JAH will sign 6Y5/K6JAH from Sunday the 20th of February for two weeks. Activity will be on 10 - 40 metres SSB only.

{Newsreaders: These events, the Welsh Mobile Rally, the Cambridge & DARC Radio & Computer Rally and the Northern Cross Rally can be deleted if your broadcast does not cover the local area for any or all of these Rallies}

Rally news now and we know of the following event(s) for today, Sunday the 13th of February:

The Welsh (Barry) Mobile Rally is being held at the Barry Leisure Centre, off Holton Road, Barry. Doors open at 10am, or 9.30 for disabled visitors. The event features trade stands and a bring and buy stall. Refreshments are available and talk-in is on 2 metres channel S22.

The Cambridge & District Amateur Radio Club Radio Electronic and Computer Rally is being held at Addenbrookes Hospital Ambulance Station, Cambridge. The site has easy access from the M11, junction 11 and the A45 via the Ring road. Doors open at 10.30am. The event features trade stands and a bring and buy stall. Refreshments will be available and talk-in will be on channel S22.

The Northern Cross Rally is being held at the Rodillian School on the A61 road between Leeds and Wakefield, near the junction of the M1 and M62 motorways. Doors open at 11am, or 10.30 for disabled visitors and for bring and buy vendors. There are over 60 trade and group stands and a bring and buy stall. The RSGB Propagation Studies Committee and the RSGB Planning Advisory Committee will be represented. The Wakefield and District Radio Society is showing some new Morse test practice aids and RSGB books. Morse Tests are available on demand, but please remember to bring two passport size photographs. Refreshments are available and talk-in is on channel S22 and via the repeater GB3WU.

There is only one Mobile Rally next weekend:

On Sunday the 20th of February, the Trafford Rally will be held at the G-MEX Centre, Manchester. Doors open at 10.30am for all but there is a disabled persons priority queue. This event features all the usual trade stands and many other attractions, including an RSGB book and information stand. Refreshments will be available and talk-in will be on channel S22 via GB1GMX. Further details can be obtained from G1IJK on 061 748 9804.

Next some dates for your diary:

The 1994 RSGB London Amateur Radio and Computer Show is to be held during Saturday the 12th and Sunday the 13th of March, at the Lee Valley Leisure Centre, Picketts Lock Lane, Edmonton, North London. February's RadCom contains details of the Show which is being run by RadioSport Ltd, in conjunction with the RSGB and the Southgate Amateur Radio Club. A Show Guide is being published as a supplement to the March edition of RadCom which is due to be posted in about ten day's time. There will be no RSGB National Convention this year so the Society will put on a larger stand at the London Show. For further information call 0923 893929.

HF contest news now:

The ARRL International CW DX Contest takes place next weekend from 0000 UTC on Saturday the 19th, to 2400 UTC on Sunday the 20th of February. Contestants may

use all bands from 1.8MHz to 28MHz, but excluding the WARC bands. See February RadCom page 19 for rules and entry details but please disregard the dates which are incorrect. To recap, the correct dates are the 19th and 20th of February.

Next some VHF contest news:

First the result of the RSGB 144MHz AFS, Fixed and Listeners Contest held in December 1993. In the Multi Operator Section the winner was GD4IOM with 4,177 points, with G4ANT second with 4,112 points. In the Single Operator section the winner was G4PIQ with 9,950 points, with G4WFR as runner up with 3,944 points. The leading Affiliated Society was the Martlesham DX and Contest Group which came first with a score of 13,921 points. The Spalding and District Amateur Radio Society was runner-up with 8,081 points. The full results will be published in RadCom as soon as possible. The next sessions of the RSGB 70MHz Cumulative Contest take place today, Sunday the 13th and again Sunday the 27th of February, both from 1000 to 1200 UTC. There are three sections:- Fixed station single operator, Open and Listeners. See December's RadCom page 83 for details.

GX3CHM/P will aired from East Pennard, Somerset, during Sunday the 20th of February. It will be operated by members of the Yeovil Amateur Radio Club who will be commemorating the 40th anniversary of first sky-wave contact using a transistor transmitter. GX3CMH/P will operate on 3.560MHz CW using an equivalent QRPP transmitter to that used in the first tests. For further details contact G4JBL on 0258 473845. RSGB members may like to note that a feature on this historic event appeared in the February RadCom. The West Bromwich Central Radio Club wishes to thank all participants in January's County Air Ambulance Appeal for the very kind sentiments expressed. There was a refreshingly high level of activity, particularly on 2 metres. The County Air Ambulance award certificate is available to stations who worked four or more of the County Air Ambulance special event stations. The Award Manager is Geoff, G0KNM whose address is correct in the RSGB Call Book. For further information contact the Club Secretary Ian, G0PAI on 021 561 2884.

And now the solar factual data:

The period from the 31st of January to the 6th of February saw the quiet side of the sun looking our way. Based on past history little was expected to happen, and indeed little happened up to the 3rd when to everyone's surprise a major magnetic storm occurred at high latitudes. This was due to a coronal hole that suddenly developed from the sun's southern hemisphere. As this swept across the earth, major magnetic storms developed at high latitudes, and extended to mid latitudes as well. No flares were associated with this disturbance. The HF bands were very severely affected and had not recovered when this bulletin was being prepared. MUFs were down to around 15MHz and that was for continental short wave broadcasters. No long distance broadcasters could be heard. Auroras were reported on the 5th and 6th, both on 6 and 2 metres, with further storms being forecast. Sunspot indices declined as expected and meaned at about 46. Solar flux levels hardly changed day to day and averaged 95 units. The 90 day mean on the 5th was 106 units. The geomagnetic Ap index was quiet up to the 3rd with levels around 8 units; on

the 4th it became unsettled with levels up to 19 units with a storm developing at high latitudes. Levels increased to 33 units on the 5th when a major storm at high latitudes began at 10.30, which increased to an Ap of 60 by the 6th. The period averaged an Ap of 21.4 units. The coronal hole passage was expected to take 5 or 6 days so warnings of further storms were kept in force. The auroras built up to an excellent one on the afternoon of the 6th, with continental contacts on 6 meters being plentiful with powers of only 3 watts. The aa indices, as supplied by the British Geological Survey for the 25th to the 31st January, gave daily averages of 25.7 nanoTeslas. This is about K3, just unsettled. The 25th was the quietest day, down to 10.4 nanoTeslas or K2. The X-Ray flux declined considerably and averaged A9.7 with the 5th being down to only A8.0 units. The sunspot means for January were RI 58.8 with a maximum of 104 on the 5th and a minimum of 25 on the 17th. The 6 month smoothed spots for July are 54.6 +/-5.

Now the ionospheric data for Central France:

The F2 daytime critical frequencies at Poitiers as reported by Meudon averaged 7.9MHz but with the magnetic storm the daily highs dropped to only 5.0MHz on the 6th. The darkness hour lows also declined and averaged 2.8MHz; there was blanketing E and spread F lasting up to 6 hours on some days.

Now the ionospheric data for the north:

The F2 daytime critical frequencies at Ekaterinberg have varied from 8.7MHz on the 1st down to 2.9MHz on the 5th with the period averaging 5.7MHz. The darkness hour lows averaged 2.4MHz but was down to only 1.8MHz on the 6th. Flares are listed in energy levels and GB2RS gives only the higher ones, the M and the X. These are followed by a number depending on the energy level, and the optical brightness, which is F (faint), N (normal) or B (bright), followed by a number or letter S which means sub, or less than. So SN means sub normal or N1 is more than normal.

And lastly the solar forecast:

This week, the more active side of the sun will be coming into view. Solar flux levels are expected to rise to about the 110s. Based on past history the geomagnetic activity is expected to be just unsettled. Daylight MUFs are expected to reach 24MHz, possibly slightly higher on north/south paths. Darkness hour lows are expected to be about 8MHz.

And that's the end of the solar information.

Finally in the main news, SSL has informed the Society that as of last Wednesday morning, the latest callsigns issued were in the G0 U L and G7 R P series, and Novice calls in the 2 0 A H and 2 1 C P series. .

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

Next, the local news.

NEWS FOR THE SOUTH EAST

Meetings for Tuesday the 15th of February:

Acton, Brentford and Chiswick Radio Club has a talk entitled 'Kit Building for Beginners'. More details from G0JRY, tel: 081 749 9972

Bromley and District Amateur Radio Society has a talk on 'RAYNET' by Phil, G6AQP. For further details contact Alan, G0TLK on 081 777 0420.

Dacorum Amateur Radio and Transmitting Society has a talk entitled 'Amateur Radio, an Old Man Needing the Kiss of Life?'. For details contact Nick on 0582 766973.

Maidenhead and District Amateur Radio Club has a talk on 'Space, the Risk Business' by Geoff Hall. For more details contact Neil, G0SVN on 0628 25952.

Stevenage and District Amateur Radio Society has a Video evening. Details from Neil, 2E1ASZ, tel: 0438 350882.

Meetings for Wednesday the 16th of February:

Aylesbury Vale Radio Society has a talk by Richard Biltcliffe. For further details contact Martyn, G4XZJ, on 0296 81097.

Brighton and District Amateur Radio Society has a talk entitled 'Video Recorders - Operation, Faults and Repair' by Eddie, G3ECW, at 8pm. A good attendance is requested please. Further details from Harold, G3WR, tel: 0273 501100.

Chesham and District Amateur Radio Society has a Construction evening - 'Wire Aerials' with G8AHS. Details from Ian, G0RTF on 0494 676391.

Hastings Electronics and Radio Club has a talk on 'Security Alarms' by Peter, G0FVV. Further details from Stan, G4ITM on 0424 430579.

Three Counties Amateur Radio Club has a talk entitled 'The History of Dunsfold Aerodrome from its Beginning in 1940 to the Present Day' by Paul McCue. Further details from Tom, tel: 0428 606298.

Worthing and District Amateur Radio Club has a talk on 'Phase Look Loops' by G0SWH. For further details contact G4GPX on 0903 753893.

Meetings for Thursday the 17th of February:

Cray Valley Radio Society has a talk entitled 'Penguin Night! - VP8SSI' by Bob Treacher. Contact Bob on 081 850 1386 for details.

East Kent Radio Society has a short talk on 'How I became a Radio Amateur' by George, G4AOE. Further information from Paul, G3VJF on 0227 364606.

Hoddesdon Radio Club has a Visit by Waters & Stanton Electronics. All are welcome to attend. Details from Roy, G4UNL, tel: 081 804 5643.

Shefford and District Amateur Radio Society has a Members' Activity night. Contact Paul, G1GSN on 0462 700618 for further details.

Sutton and Cheam Radio Society has a Constructional Contest. For details contact John, G0BWV, tel: 081 644 9945.

Vange Amateur Radio Society has a talk entitled 'Home Brew - Hints and Tips'. Contact Doris on 0268 552606 for further information.

Meetings for Friday the 18th of February:

Hilderstone Amateur Radio Society has a Construction evening - 'High Pass Filter'. For further details, telephone 0843 869812.

Loughton and District ARS has a talk on 'Meccano - its History and Present Popularity' by Alan Curtis. Details from John, G8DZH on 081 508 3434.

Silverthorn Radio Club has a preparation evening for 'Thinking Day on the Air'. Details from G0LWS on 081 529 4489.

West Kent Amateur Radio Society has a Video night, with some of the latest videos from the RSGB. For further details contact G3OHV, tel: 0892 664960.

Winchester Amateur Radio Club has a talk on 'Radio Interaction between Radio Astronomers and Radio Amateurs' by Alan Dowdell. Further details from John, G4AXO, tel: 0962 860807.

Meeting for Saturday the 19th of February:

Crystal Palace and District Radio Club meets for its AGM and Construction Contest. For further details contact Wilf, G3DSC on 081 699 5732.

NEWS FOR SOUTH WEST

Exeter Amateur Radio Society Club has a new venue and now meets in The Moose International Centre, Blackboy Road, Exeter. For details contact Ray, G3YBK 0392 78710.

Meetings for Wednesday the 16th of February:

South Bristol Amateur Radio Club has a Demonstration of Practical Morse. For more information telephone 0275 834282.

Trowbridge and District Amateur Radio Club has an 'Open evening'. For further details contact Ian, G0GRI on 0225 864698 (evenings).

Meeting for Thursday the 17th of February:

Yeovil Amateur Radio Club has a talk and demonstration on 'The Clubs Original Semi-Conductor Transmitter' by G3MYM. Contact Cedric, G4JBL on 0258 473845 for further information.

Meetings for Friday the 18th of February:

North Bristol Amateur Club has a talk entitled 'Transistor Applications'. More details from Tony, G4ROX tel: 0272 513573.

Saltash and District Amateur Radio Club has a 'Demonstration and Operation of the Club's HF Rig'. Details from Brian Giles, tel: 0752 844321.

Shirehampton Amateur Radio Club is closed for half-term. The next meeting is on the 4th of March. For further details contact Ron, G4GTD on 0272 770504.

Taunton and District Amateur Radio Club has a talk 'The Development of the Air-to-Air Guided Missile' by Doug, G5JJ. Contact G3WNI on 0823 680778 for details.

Torbay Amateur Radio Society has its Annual General Meeting. Further details from Walt, G3HTX on 0803 526762.

NEWS FOR EAST ANGLIA

Meetings for Wednesday the 16th of February:

Ipswich Radio Club has a talk entitled 'Antennas' by Frank, G3FIJ. Further details from Sheila, G8HYE, tel: 0473 742072.

Norfolk Amateur Radio Club has a talk on 'Science for All' by Arnold, G3PTB. For further details contact Sheila, G0KWP on 0603 618810.

Meeting for Friday the 18th of February:

Cambridge and District Amateur Radio Club has a talk by Dr Peter Andrews of the Royal Greenwich Observatory. Visitors are welcomed to attend. The meeting starts at 8pm. For further details contact John, G0TIL on 0763 243570.

NEWS FOR THE MIDLANDS

Meetings for Monday the 14th of February:

Radio Society of Bloxwich has a Competition night - Design a Society Logo, QSL Card and Poster. Details from Rob, G0MLY on 0922 683877.

Mansfield Amateur Radio Society has a talk entitled 'Are We Being Conned - part 3.' by Charles, G4ZZG. For further information contact Mary, G0NZA on 0623 755288.

Stratford upon Avon and District Radio Society has a Test Equipment evening - with preferential treatment given to homebrew or converted equipment. Further details from Clive, G0CHO on 0789 450623.

Meeting for Tuesday the 15th of February:

Grantham Radio Club has a talk on 'Overcoming EMC Problems' by G4OUB. Further details from John, G8WWJ, 0476 65743.

Meetings for Wednesday 16th of February:

Derby and District Amateur Radio Society has a talk on 'The History of the Motor Tyre' by Brian, G4SXE of the Pirelli Company. Further details from Hayley, G7PXA on 0773 856904.

Telford and District Amateur Radio Society has a talk entitled 'Connectors Revisited' by Brian, G6UDX. For further details contact Dave, G4EIX, on 0952 588878.

Meetings for Thursday the 17th of February:

Amateur Radio Club of Nottingham has a Surplus Equipment Sale, with Dave, G3YUT as auctioneer. Further details from Simon, G0IEG on 0602 501733.

Solihull Amateur Radio Society has a talk entitled 'A Brief Guide to Re-chargeable Batteries' by Collin, G3USA. Details from Paul, G8AYY on 021 783 2996.

Meeting for Sunday the 20th of February:

Charnwood Amateur Radio Contest Club has a Contest Planning session. For further details telephone 0509 232927.

NEWS FOR THE NORTH OF ENGLAND

Meetings for Monday the 14th of February:

Sheffield Amateur Radio Club has a talk and demonstration of the club's Packet Station. Details from David, G0JJR tel:0742 446282.

Scarborough Amateur Radio Society meets for its Annual General Meeting at 7.30pm at Scarborough Cricket Club. Further details from Ross, G4ZNZ, tel: 0723 514767.

Thornton Cleveleys Amateur Radio Society has a Construction and Fix-it evening. Further details from G4BFH who is QTHR.

Meetings for Tuesday the 15th of February:

Chester and District Amateur Radio Society has a talk on 'Radio Waves in Medicine, High Resonance Scanning. Further details from G0OXA, tel: 051 608 3229.

Halifax and District Amateur Radio Society has a Junk Sale at the club's new venue at West End Hotel, West End, Halifax. Contact David, G0DLM on 0422 202306 for further details.

Liverpool and District Amateur Radio Society has a Debate - 'The Place of the Computer in Amateur Radio'. Further details from Ian, G4WWX QTHR.

Wakefield and District Radio Society meets for a Tally Inquest evening. Further details from Roy, G0TBY on 0924 893321.

Meetings for Wednesday the 16th of February:

Denby Dale and District Amateur Radio Society has its Preliminary Rally meeting at 8.30pm. Details from Ivan, G0SBR on 0484 532371.

Hornsea Amateur Radio Club has a lecture on 'Phasors'. Details from G4YTV, QTHR.

North Wakefield Radio Club has a visit to the Wakefield Police Control Centre. For further details contact John, G4RCG on 0924 362144.

Wirral Amateur Radio Society has a visit by Keith Brooks, G0SPH the RSGB's RLO for Merseyside. Details from G3FOO, tel: 051 644 6094.

Meetings for Thursday the 17th of February:

Spen Valley Amateur Radio Society has a talk on 'Decorative Paint Finishes' for Russell, G0FOI. For further details contact David, G1CTO on 0924 497767.

Trafford Amateur Radio Club has its Preparation Meeting for the G-MEX Rally. For details contact Malcolm Collis on 061 748 8046.

Meetings for Friday the 18th of February:

Goole Radio and Electronics Society has a Quiz evening. For further details contact Steve, G8VHL on 0405 769130.

North Ferriby United Amateur Radio Society has a Members' Problems and Tips evening. Further details from Frank, G3YCC, tel: 0482 650410.

South Manchester Radio Club has a talk entitled 'Future Communications' by G4HOW. For further details contact Edward, G7FQY, tel: 061 969 1964.

NEWS FOR SCOTLAND

Meeting for Tuesday the 15th of February:

Dundee Amateur Radio Club has a talk entitled 'Computers in Your Amateur Radio Station' by Allan, GM4ZUK. Details from GM4FSB who is QTHR.

Meeting for Wednesday the 16th of February:

Glenrothes and District Club has a talk on 'The Radio Control of Model Aeroplanes' by the Fife Model Aero Club. Details: GM1BID, 0592 267515.

Meeting for Thursday the 17th of February:

Dunfermline Radio Society has a talk on 'Moon Bounce' by David, GM4JJJ. Further details from Wallace, GM0GNT who is QTHR.

NEWS FOR WALES

Meetings for Thursday the 17th of February:

Rhondda ARS has a talk: 'TV Bandwidth' by GW1ABB at the NUM Club, Tonypandy at 7.45pm. Details from Dennis on 0443 440680.

Swansea Amateur Radio Society has a Planning session for 'Thinking Day on the Air'. Details from Graham, GW3SIY, on 0792 403527.

NEWS FOR NORTHERN IRELAND

Meeting for Wednesday the 16th of February:

Belfast RSGB Group has a talk entitled 'Raynet' by Ian, GI4MDD starting at 8pm. For further details contact Richard Ferris,who is QTHR.

And that's the end of this week's GB2RS news broadcast, which was prepared by the Radio Society of Great Britain.

1400. Re: Do NiMH Batteries Dev. Memories?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 18:08:19 UTC
From: bcoleman@hayes.com
Message-ID: <8649.2d5b9153@hayes.com>
Source record: 271251

In article <1994Feb8.203847.1@ccsvax.sfasu.edu>, f_riskph@ccsvax.sfasu.edu (DR. PAUL H. RISK, COLLEGE OF FORESTRY) writes:
> Do NiMH batteries develop a *memory* like NiCads do if they are recharged too
> often before they're fully discharged?

NiCd batteries don't do this. Charge memory isn't caused by recharging too soon. It is caused by repeatedly discharging to the same depth and then recharging.

Even so, the construction of modern NiCds is such that it is extremely difficult to produce the memory effect. 20 years ago, it was much easier.

The only instances of NiCd memory I'm aware of involved Police HTs which were used for a fixed period (1-3 hours), then tossed back into the charger at the station. Since the period was repeated over and over again, the batteries eventually got "used" to that charge level. After about 100 such cycles, if you tried to use them longer, the voltage dropped off rather quickly.

A good example of why NiCd memory is a myth. I have an electric razor that I've used for 12 years. That's thousands of charge cycles to the same depth. Yet the razor still works fine. The NiCds have outlasted the wiring to the razor motor (which I've repaired about 15 or so times).

The best thing you can do about NiCd memory is to forget it.

Two rules for long NiCd life: don't overheat them by overcharging; don't discharge them too deeply, or you may get cell reversal in the pack.

--
Bill Coleman, AA4LR ! CIS: 76067,2327 AppleLink: D1958
Principal Software Engineer ! Packet Radio: AA4LR @ W4QO
Hayes Microcomputer Products, Inc. ! UUCP: uunet!hayes!bcoleman
POB 105203 Atlanta, GA 30348 USA ! Internet: bcoleman%hayes@uunet.uu.net
Disclaimer: "My employer doesn't pay me to have opinions."
Quote: "The same light shines on vineyards that makes deserts." -Steve Hackett.

1401. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 18:10:08 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-110294100747@fp2-st-affairs-11.uoregon.edu>
Source record: 271252

In article <2jerqj$pcn@vixen.cso.uiuc.edu>, k9cw@prairienet.org (Andrew B. White) wrote:

>
> In a previous article, rdewan@casbah.acns.nwu.edu (Rajiv Dewan) says:
>
> >In article <CKy1qC.GzC@kaiwan.com>, Doug Brandon <dab@kaiwan.com> wrote:
> ><snip>
> >
> >>Does anybody know if F6FNU QSLs via the bureau?
> >
>
> No, you won't receive a QSL from F6FNU via the bureau. Nor will he answer
> cards sent to him via the bureau. I have sent many cards to him direct
> for various DX stations, and I have always received a prompt reply. What
> he requires is a legible QSL, an SASE, and sufficient $$ for return postage.
> Not too much to ask...
>
> 73, Drew
>
There have been a few occasions where I've had to send him cards & $$ several time to get the card.

However, this past bureau shipment contained a card from XU5SE. The back of this card says, "Via F6FNU".

I don't recall whether I sent it to XU5SE via the bureau, through N7RO or direct to F6FNU and he just returned it via the bureau.

I CAN say that I was surprised.

Steve

1402. NUDE AMATEUR RADIO CL

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 18:14:56 UTC
From: steven.rosenberg@support.com
Message-ID: <9402111014.A6793wk@support.com>
Source record: 271253

>Gary Davis (gdavis@griffin.uvm.edu) wrote:
>: I heard a strange story on the CBC last evening. The report was on
>: the increasing interest in nudism in the Winter months. To promote
>: this festive and relaxing activity additional interests where specified.
>
>: There is, according to the CBC, a nudist amateur radio club.
>
>Is this like 'operating barefoot'? Where to they clip the HT's external
>speaker-mike? ;->
>
>k4adl
>

I guess these folks have extensive experience with EME -- what's a
little moonbounce between friends?

KC6FYL

1403. Butternut HF6V upgrade kit ???

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 18:20:03 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-110294101401@fp2-st-affairs-11.uoregon.edu>
Source record: 271254

Now that I finally have a radio that covers the WARC bands, I'm thinking of getting the add on kit for 12 & 17 meters for my Butternut vertical.

Does anyone have any experience with this upgrade?

I'm specifically interested in whether the bandwidth is narrowed on the other bands once this kit is installed.

For example, Butternut has said that the 160 meter add on kit will narrow the bandwidth on 80 meters. Will this one affect the others to any great extent?

BTW, the Butternut is the best performing vertical I've owned. I'd love to see what I could get out of it if I got it up in the air. Right now it's ground mounted with 17 radials, most of which are cut for the higher bands.

Since Dec. 1989, have worked 275 countries overall with it (about 268 of them running barefoot). Also have worked 150+ countries on 40 meters with it, at least 110 of those running barefoot.

Performance barefoot is dropping off considerably with the solar cycle the way it is these days, but for a vertical, I'm still very happy with it.

Steve

1404. Re: Ramsey FX Transceivers

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 18:48:43 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2jgjubINNi0f@abyss.West.Sun.COM>
Source record: 271255

In article <2jc11v$skc@autodesk.autodesk.com> daved@autodesk.com (Dave Duchesneau) writes:
>myers@cypress.West.Sun.COM (Dana Myers) writes:
>>
>> (lots deleted)
>>
>> call John Lansdale and ask for his price sheet. He sells VHF Lo-band (for 6m)
>> Micors, complete with control group, for $75+shipping.
>>
>>
>Are these retunable for 2m? with the right split, or modifiable to be so?
>(as easily as you described)

No. If you want a 2m rig, look for a VHF High-band radio. They come
in splits like 138-150, 150-162, 162-174. The obvious choice is the
split similar to 138-150; it should simply tune and play. The next
choice is the 150-162 split; they often just tune down to 146Mhz with
no work, but there is the risk that they won't. Sometimes you can add
a few capacitors, etc., but if the helical resonators won't peak at
your frequency of interest, you're better off looking for another
radio. It is my experience that land mobile gear is highly reliable
until you start making major modifications, i.e. use a 162-174MHz
radio for 145MHz packet, etc.

>With a service manual, I wouldn't be afraid to retune an old commercial
>rig, the trick (secret?) seems to be in knowing *exactly* what old rigs
>will retune without (much) part swapping. Any (further) pointers on
>sources and models to look for would be greatly appreciated!

Exactly! The trick is knowing which ones are "better" and which
ones won't work. I've long promised to write a "Land Mobile Gear on
Amateur Radio" FAQ, but have yet to spend enough time....

73
Dana
--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1405. Re: Long range digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 18:55:16 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.760992916@BIX.com>
Source record: 271256

br@cs.cmu.edu (Bill Ross) writes:

> Can any of you radio folks give me a hand with this?

> I need a system capable of transmitting about 1 MegaBit per second
> of digital data from anywhere on the planet. This would be a one-way
> link. I'm sure this can be done, but can it be done reliably without
> a satellite and lots of very fancy gear? If so, I have some questions:

> How much might the equipment to do this cost?
> How much would this equipment (the transmitter) weigh?
> How much volume would this equipment (transmitter) occupy?
> How much power would the transmitter require during operation?
> How big would the antenna have to be?

> If the problem is simplified to communicate within a single hemisphere,
> does that make life alot easier?

> Any information would be a great help!
> Thanks very much!
> Bill

I think you'd have a better chance of doing this if your last name
was Gates, not Ross. Does that help you guess what sort of cost we're
talking about?

Seriously, there's no way to do this except with a satellite or a land
line (probably a fiber) and lots of very fancy, very expensive gear.
There's no way at all to do this with radio. HF can often propogate
to anywhere on the planet via skywave (bouncing off the ionosphere)
but not reliably and there's no way anyone's going to give you the
spectrum you need to move 1Mbit/sec that way (we're talking international
treaty kind of limitations!) There's enough spectrum if you can use
UHF or higher frequencies, but these are line-of-sight only, which is
why you need a satellite.

I suggest it's time to reconsider whether this is really something
you "need". :-)

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715
Hamilton Laboratories, 13 Old Farm Road, Wayland, MA 01778-3117

1406. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 19:16:42 UTC
From: drs@ccd.harris.com
Message-ID: <1994Feb11.191642.19238@ccd.harris.com>
Source record: 271257

Mark Curran (curran@corona.med.utah.edu) wrote:
: Thanks for your reply Terry.
: Since the Vertical mail made it out to the usenet, I'll
: fill in the details. I'm interested in constructing a
: ground plane for 20 and/or 40 and was interested in
: finding out what has worked for others in terms or
: materials and layout. There is an artical from 1988
: QST describing elevated GP ants using 4 radials, rather
: than 120+ buried, and claiming good theoretical results.

I use a ground plane on 40 meters. It is full sized (33 feet long) and sits on a 4 X 4 piece of wood buried in the ground. I have (for convenience only) a tilt-over arrangement with the support. The aluminum tubing starts out about 1 3/4 " and tapers as you go up. The base of the vertical is about 20 feet off the ground. I have had this same antenna 12 feet off the ground with nearly good results. I have 6 radials draped off of it at about 45 degree angles, and they are fastened to whatever I could find (trees, pvc pipe, etc). My antenna puts me (on a DXing basis) in the second level in a pile-up. The first level being those with 3 element full size beams at 120 feet, etc. There has been occasions where I have beaten some of them out when the propagation was favorable. In a nutshell, I will continue to use this antenna until I (if ever) get to the 70-80 height with my tower. Then I would start thinking about other antennas. If you don't put down a zillion radials, don't even try mounting a vertical on the ground unless you are easily satisfied. Some people claim that they have good results with a vertical on the ground, but you can bet they don't work DX.

The second best (in my opinion) antenna for the lower heights is the loop or delta loop antenna. It is quieter on receive than a vertical.

Doug N4IJ

: Specifically in my installation, I lack high supports
: for dipoles, zepps etc, and although my ladder line fed
: 80' flatop apparently works well, I was hoping to achieve
: a low angle of radiation and possibly better DX conditions
: by going vertical.

: A more appropriate forum for this is probably r.r.a.antenna,
: and I'd happily take comments to my e-mail box.

: Best 73s,

: Mark C.
: --
: ----------

: 8)
: Mark Curran 8)
: curran@corona.med.utah.edu 8) 8)
: Amateur Radio: KA1ODA/7 8) 8)
: * 8) 8)
: Hey Baby, Wanna come over and pet my Piranha? * 8)
: * 8)
: --

--

Doug Snowden
drs@ccd.harris.com
N4IJ

1407. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 19:28:52 UTC
From: barnaby@world.std.com
Message-ID: <CL2rG5.BJK@world.std.com>
Source record: 271258
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

jms@col.hp.com (Mike Stansberry) writes:

>Alan Bloom (alanb@sr.hp.com) wrote:
>: Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

>: : Yes, yes, I understand that, but look at what you're saying, "the
[Misc technical discussion deleted]

>: If you installed RF ammeters in each element, they would read the
[Misc Technical Rebuttal deleted]

>: (Is anybody else still following this convoluted discussion?)

>: AL N1AL

>Yes, but you're both over my head. I still read it, though.

>Mike, K0TER
Kinda reminds me of 2 great 3-cushion billiard players running
8-10 billiards in a row on each other.
Don't take it to e-mail!
Barnaby AA1IB

1408. Re: Looking for LOGIKEY keyer

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 19:33:47 UTC
From: barnaby@world.std.com
Message-ID: <CL2roD.DGI@world.std.com>
Source record: 271259
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:

>In article <slayCL0wC3.u0@netcom.com>, Sandy Lynch <slay@netcom.com> wrote:
>>Hannes Hogni Vilhjalmsson (hhv@rhi.hi.is) wrote:
>>
>>When I bought mine (it is a WONDERFUL keyer), I paid $45 + $3 for domestic
>>USA shipping. Foreign orders were $45 + $5.

>The Logikey keyer also is sold by the same company: Idiom Press. Last
>I saw in an ad, the price for Logikey was $129 +s&H

Is this an Iambic keyer or a regular keyer. I haven't used an iambic
keyer (saw one once) but it seems like it'll take relearning.
Is it worth it?
Comments anyone?
Barnaby AA1IB

1409. DX Desktop

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 20:09:43 UTC
From: cowart@convex.com
Message-ID: <cowart.760997383@neptune>
Source record: 271260

I am considering getting DX Desktop 2.0. It is a windows-based hardware and software package that integrates a TNC and radio to a database. I saw a demo a couple of months ago. The thing I like about it the most is that it requires only one comm port by using a plug-in card that connects to the TNC, radio, and rotor. The thing I dislike about it the most is the price, $289!

Has anyone used this package? How stable is Debco Electronics? Are they going to be here next year?

I am currently using DXBase. Has anyone imported DXBase into it?

Any comments would be greatly appreciated.

Thanks and 73,

Mike, WA5CMI

1410. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 20:13:30 UTC
From: dickrb@lsid.hp.com
Message-ID: <CL2tIl.Ln0@hpcvsnz.cv.hp.com>
Source record: 271261

Greetings -

If you want to answer this yourself try printing upper-case 'E' and then print lower-case 'e' - big difference time wise !! Now you know that printing in 'caps' is not the way to do it.

Next limit yourself to printing lower-case characters and print lower-case 'e' many times - see how many you print in 15 seconds. Repeat this using cursive and you have the answer. Every time you have to lift the pen from the paper it slows you down....

I could not print fast enough to pass the code test at 20wpm using upper-case printing (I use upper-case block printing because my cursive writing is so bad that most people have a hard time reading it) so I converted to cursive when copying >20wpm.

Once you are comfortable copying hi speed CW you will just 'read' it in your head and only list things on paper like the persons name and address.

Good luck

de w7wkr
sk

Mike Gauland (gaulandm@teig7.PEN.TEK.COM) wrote:
: A mailing I read is involved in a comparision of the speeds of
: printing and cursive writing. I decided to consult some experts.
: So, all you high-speed CW ops, which do _you_ use?

: 73,
: mag

: --
: Michael A. Gauland gaulandm@tekig7.PEN.TEK.COM
: AA7JF (503) 627-5067

1411. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 20:16:02 UTC
From: alanb@sr.hp.com
Message-ID: <CL2tMr.86p@srgenprp.sr.hp.com>
Source record: 271262

Andrew B. White (k9cw@prairienet.org) wrote:

: No, you won't receive a QSL from F6FNU via the bureau. Nor will he answer
: cards sent to him via the bureau. I have sent many cards to him direct
: for various DX stations, and I have always received a prompt reply. What
: he requires is a legible QSL, an SASE, and sufficient $$ for return postage.
: Not too much to ask...

I think what people object to is that F6FNU does not do the QSL'ing
as a public service, as most QSL managers do, but to make a profit.
I'm not sure I necessarily object to him making a profit, but then I
feel we have a right to demand a professional level of service from him.

AL N1AL

1412. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 20:22:26 UTC
From: alanb@sr.hp.com
Message-ID: <CL2txF.8EJ@srgenprp.sr.hp.com>
Source record: 271263

Jim Campbell (jimc@megatek.com) wrote:
: In article <gdavis.760825204@griffin> gdavis@griffin.uvm.edu (Gary Davis) writes:
: >
: >There is, according to the CBC, a nudist amateur radio club.
: >

: We meet on Thursday nights at 0000Z on 14.265Mhz +/- 10. ...

: Tonight we started to formulate plans for a commemorative(sp?) QSL
: card and/or certificate for Nude Recreation Week, which happens July 4-10
: this year. Yes, the picture QSL will have nude people on it, just don't
: expect any "centerfolds". ...

How many people have received their free QSL card from K4NBN "No Bad News"?
(He used to have a monthly ham ad in QST.) The nude lady in the QSL photo
was indeed a kind of centerfold, although not the type you might expect.
It was done as a promotion for a nudist colony in Georgia or somewhere.

AL N1AL

1413. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 20:24:50 UTC
From: alanb@sr.hp.com
Message-ID: <CL2u1F.8IA@srgenprp.sr.hp.com>
Source record: 271264

Mike Gauland (gaulandm@tekig7.PEN.TEK.COM) wrote:
: A mailing I read is involved in a comparision of the speeds of
: printing and cursive writing. I decided to consult some experts.
: So, all you high-speed CW ops, which do _you_ use?

Try it! Take some text (newspaper or whatever) and see how fast you
can copy it down both ways. Personally I find that over about 25 wpm
I have to switch over to cursive writing.

AL N1AL

1414. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 20:31:04 UTC
From: alanb@sr.hp.com
Message-ID: <CL2uBt.8qr@srgenprp.sr.hp.com>
Source record: 271265

Richard L Barnaby (barnaby@world.std.com) wrote:

: What I use is a lowercase cursive 'e' (looks like a squiggle) for "E" ...

"E" is the hardest letter to copy fast in Morse code for two reasons:
It is the fastest to send (a single dit) and the longest to write
(4 separate lines). The standard solution most telegraphers have used
for decades is to write the "E" in a single motion like a backwards "3".

Fortunately, the other short letters (T, I, S) are also fast to write.

AL N1AL

1415. Cal. State Univ. Northridge Police Dept. earthquake experience

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 20:40:41 UTC
From: lockhart@mothra.nts.uci.edu
Message-ID: <2jgqg9$rp0@news.service.uci.edu>
Source record: 271266

The following article was lifted from the February 1994 edition of the California Public-Safety Radio Association (CPRA) newsletter and is written by Mr. Robert A. Stoffel. Mr. Stoffel is the Operations Chairperson. CPRA is a Chapter of Associated Public-Safety Communications Officers, Inc.

I've edited the text very lightly, but the information is unaffected. The article is posted in rec.radio.amateur.misc because amateur radio is discussed as a disaster recovery aid.

CPRA - Operations Chairman
Robert A. Stoffel
County of Orange
Communications Division
840 N. Eckhoff St, Suite 104
Orange, CA 92688-1021
Phone: (714) 834-7211
FAX: (714) 834-7210

NEWS AND VIEWS FROM THE OPERATIONS COMMITTEE
. . "Attention All Units and Stations"

Greetings from the Operations Committee. Everyone in Southern California is still talking about the recent earthquake, so I thought I would take a trip to the public safety communications center that was closest to the epicenter. This was of course the California State University Police Department at California State University, Northridge. The Police Department is on the first floor of a four story building located on the campus. The other three floors are used for student dorms.

Cal State Northridge Police Dispatch is like your typical small sized law enforcement operation. The Police Department operates on a VHF high-band simplex radio system, with a remote base located on top of an eight story campus building. A backup local base is also installed at the police building. Communications on this channel, plus several other campus operations is accomplished from a two-bay, Motorola CentraComm II console. The center also houses a compliment of equipment, including a CLETs terminal, CCTV monitors, alarm panels and printers.

During the early morning hours of January 17, only one dispatcher and one patrol unit was on duty. Most of the campus was vacant, as the school was on recess. Only about 500 students were living in campus housing facilities, as opposed to the 2,000 that are normally on-site when school is in session. This of course doesn't count the

many thousands of students who would have been on campus if classes were in session. At 04:30:55.3 (local time) the M6.8 earthquake struck, and immediately knocked out all power and telephone systems. All contents inside the dispatch center went flying, and the immediate structural damage started. The emergency generator did not start, causing failure of the base station radios and loss of all power. The dispatcher was able to escape flying and falling equipment until the shaking stopped, however, the damage was so severe that the doors were jammed shut, preventing an exit from the building. Another officer was able to help the dispatcher escape, On the way out, all portable radios were grabbed and brought out with them.

With no place to go, all operations were moved to an open field on campus. Operations continued in this field for the next 24 hours until inspection teams checked the damage and declared it safe to return. Officer Dana Archer, who was off duty at the time, arrived on campus within a couple of hours. Having a background in communications, Dana was able to improvise a field dispatch center.

This was accomplished by taking a mobile radio, hooking it to a power supply, then to a portable generator. A car antenna was used as the "base" antenna. By the second day Cal State University, Fullerton provided a mobile command post trailer that was used as a field dispatch center, especially during aftershocks when the main building was again evacuated.

Officer Archer provides some food for thought, after experiencing the devastation of this earthquake, for other dispatch centers. Start with the basics, like ensuring all equipment in the center is secure, and supplies like water and food are readily available.

From that point, make sure that bigger things are established in your agency. For example, each agency should have a designated ECO and a mobile command vehicle that can accommodate a communications center operation, should it be necessary to evacuate your own center. Have some type of back-up communications equipment that can talk to an adjoining agency. Cal State Northridge Police have an LAPD radio, and all emergency requests for law and fire assistance were placed over this radio, since all phone lines were down. Several fires broke out on the campus, and this was the only link available for obtaining assistance. Finally, use the resources of amateur radio. If not established, start a RACES program to supplement and support the communication needs of your agency when disaster strikes. Cal State Northridge does not have such a program in place, but Officer Archer noted that if they had, it would have been an excellent way to communicate with the "outside world".

I want to thank CSUN Police Office Dana Archer for taking the time to give us all something to think about, and items to check on at our own dispatch center. He leaves us with this comment, which applies to every agency, large or small, "If you are expected to provide public safety service, you have to have a plan, a back-up

plan, and the facilities to handle an emergency such as this."

1416. Re: N connectors (was Re: "Flexible" 9913 (Was - Re: Coaxial cab

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 20:42:23 UTC
From: CSLE87
Message-ID: <CSLE87-110294154224@145.39.1.10>
Source record: 271267

In article <757@comix.UUCP>, jeffl@comix.UUCP (Jeff Liebermann) wrote:

> In article <2j6rtmINNf0s@abyss.West.Sun.COM> myers@cypress.West.Sun.COM
> writes:
> >
> >N connectors also make an effort to be weather resistant where PL-259/SO-239
> >do not. Land mobile radios seem to use SO-239 up to UHF (512MHZ max), then
> >N connectors (800/900, etc.).
>
> The Motorola Mostar 800Mhz trunked radio uses UHF connectors.
> As far as I know, it's the only 800Mhz radio that does.

No, almost every older 800 MHz radio used the UHF connector because
most service technicians could not properly assemble any other style. This

changed when crimp-on connectors became available and reliable; that is
also when Cellular started using the TNC rather than N.

Now that the Mini-UHF is readily available you will see them on all kinds
of RF equipment. They are properly designed to maintain a near 50 ohm
impedance at MUCH higher frequencies than the old mis-named UHF models.
Of course if you want the ultimate in both small and low VSWR, try the SMA.

> It
> also uses an automotive trailer power connector wired backwards
> (exposed +12v), so I don't consider this to be an exemplary radio.

Take another look at that power cable. On the power source side the +12
is the protected lead, not exposed, and it's still the same on Motorola
products today. Don't go by the color code on the pigtail in your car -
I've found an awful lot of people who ignored red and black when they
bought cables surplus. The key is that the ground lead on the source is
exposed, the source is protected. If your radio isn't that way, it was
serviced by someone who put the connector on backwards when he finished
working on the board!

>
> Drivel: One of my favorite dumb stunts is to solder type N connectors
> on both ends of some stiff coax (9913) while still rolled into a tight
> coil. When I straighten out the coax, the center pins pop out.

Same thing happens even with the big stuff like 7/8", so ALWAYS unroll it
before you connectorize.

>
> --
> # Jeff Liebermann Box 272 1540 Jackson Ave Ben Lomond CA 95005

> # 408.336.2558 voice wb6ssy@ki6eh.#nocal.ca.usa wb6ssy.ampr.org [44.4.18.10]
> # 408.699.0483 digital_pager 73557,2074 cis [don't]
> # jeffl@comix.santa-cruz.ca.us scruz.ucsc.edu!comix!jeffl

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

Some of the opinions expressed above aren't even claimed by the author!
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

1417. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 20:52:50 UTC
From: slay@netcom.com
Message-ID: <slayCL2vC2.Dn4@netcom.com>
Source record: 271268

: A mailing I read is involved in a comparision of the speeds of
: printing and cursive writing. I decided to consult some experts.
: So, all you high-speed CW ops, which do _you_ use?

Cursive is definitely faster than printing. Using a keyboard is much
faster still. The best is to copy in your head. For me, I'll use pencil
and paper up til around 25 wpm; more likely a keyboard which is comfortable
(for me) up til around 35-40 wpm. If you use a keyboard, at higher speeds
you generally have to read the text of what you typed to know what you
copied - it (the code) passes directly from your ears to you fingertips
and doesn't stop off in the brain. ;-) For anything >40 wpm, I personally
have to copy in my head and make notes, where possible, on paper.
Cheers de Sandy WA6BXH/7J1ABV slay@netcom.com

1418. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 21:13:44 UTC
From: groverc@gvgadg.gvg.tek.com
Message-ID: <8299@gold.gvg.tek.com>
Source record: 271269

> Steve Coletti (bigsteve@dorsai.dorsai.org) wrote:
> : In article <CKxq14.LvA@srgenprp.sr.hp.com>, Alan Bloom wrote:
> : > to investigate the death rates of golf course managers. The study
> : > found that golf course managers have death rates from several kinds
> : > of cancer that are significantly higher than the national norm.

It sounds as though Mark Twain was right when he described golf as

"A good walk ruined."

I wonder if just hanging around all those country club types
could cause cancer.

Grover
WT6P

1419. Re: Dayton Parking: Hell on Earth!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 21:36:53 UTC
From: morris@ucunix.san.uc.edu
Message-ID: <2jgtpl$133@ucunix.san.uc.edu>
Source record: 271270

The key to handling Dayton Hamvention traffic is simple. Arrive early and stay late. People who plan on getting there at 8 or 10AM are just asking for trouble, IMHO. Yes, I know I'm spoiled because it's just up the road, but when I've gone at 5-6AM it's never that much of a hassle. After closing it's busy, so plan on taking the latest 73 with you and having another mett or brat before heading out to your hotel/mall parking.

This is supposed to be fun, folks! (-: (he says, elbowing his way close to the boatanchors).

Theodore Allan (Ted) Morris, University of Cincinnati Medical Center, 513-558-0177V, -2682F, MORRIS@UCUNIX.SAN.UC.EDU, MORRISTA@UC.EDU, WB8VNV
Previous politically-incorrect tag-line removed.

1420. Re: Morse code as words!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 21:51:17 UTC
From: R0264@vmcms.csuohio.edu
Message-ID: <16F5AED09.R0264@vmcms.csuohio.edu>
Source record: 271271

In article <2jbmp2$3jb@cville-srv.wam.umd.edu>
ham@wam.umd.edu (Scott Richard Rosenfeld) writes:

>
>I have been on CW for about 7 years. I first learned CW at age 14, and
>hear words like the, and, or, if, you, etc., etc.
>>>>>>>>>>>>>>>>>>
>
>And suffixes, like -ing, -est, -ier, and -er.
>
>Scott NF3I Just takes time, I guess. Throwing away the pencil is the key.

I'm getting there with short words and prefixes and suffixes. However, it has seemed to me that the "single-letter" stage was a necessary one for me, and I still have to resort to it when hearing callsigns and wierd abbreviations. Also there are occasions where I copy with pencil and paper, and then later by a process of inference, figure out what the stuff means. So, I don't think throwing away the pencil is good blanket advice for everybody under all circumstances. ----- Phil Emerson, AA8JO.

1421. Peter Island activity info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 22:12:58 UTC
From: central@garnet.msen.com
Message-ID: <2jgvta$s61$1@garnet.msen.com>
Source record: 271272

The following information on the Peter Island DXpedition's recent activity is furnished by the Great Lakes Packet Cluster and Bob Berquist (NC8I).

The format should be self-exaplanitory...

DX de KJ6NZ: 21295.0 3Y0PI QSX 21319.81 0205Z 02/03/9402:12:20
DX de K3HSK: 14195.0 3Y0PI working 2's 5x9 in PA 0219Z 02/03/9402:13:46
DX de W9YSX: 10105.0 3Y0PI 0211Z 02/03/9402:21:02
DX de NI3B: 14195.0 3Y0PI now on 2s... 0216Z 02/03/9402:21:31
DX de K8IP: 14025.0 3Y0PI WRKD 14035.0 0220Z 02/03/9402:23:13
DX de WB6YPX: 10104.0 3Y0PI UP 2 0220Z 02/03/9402:23:51
DX de K5FNQ: 21295.0 3Y0PI working 0's and 9's now 0219Z 02/03/9402:26:56
DX de KB8MUV: 14195.0 3Y0PI ON 3'S 0236Z 02/03/9402:34:18
DX de N8GNA: 21290.0 3Y0PI 0239Z 02/03/9402:36:19
DX de KR8V: 14024.0 3Y0PI WRKD 14039.5 0242Z 02/03/9402:37:55
DX de N8OAR: 14195.0 3Y0PI wrking 4's now 0248Z 02/03/9402:44:51
DX de K8LJG: 10102.9 3Y0PI Qsx up 5 khz 0259Z 02/03/9402:54:57
DX de K8JP: 14023.5 3Y0PI QSX 14034.30 0301Z 02/03/9403:02:18
DX de W3OO: 10103.0 3Y0PI worked 10110 0316Z 02/03/9403:12:09
DX de WB9SAU: 14195.0 3Y0PI 200-220 ON 8'S THEN 9'S! 0322Z 02/03/9403:19:26
DX de KB8LM: 14195.0 3Y0PI 0330Z 02/03/9403:26:15
DX de K8JP: 10102.7 3Y0PI QSX 10110.20 8'S 0332Z 02/03/9403:32:18
DX de WB9CIF: 14195.0 3Y0PI WRKED 14219.6 0341Z 02/03/9403:41:10
DX de K3TLP: 10102.7 3Y0PI 0 's now 0346Z 02/03/9403:52:10
DX de K3TLP: 10102.7 3Y0PI 6 's now 0401Z 02/03/9404:06:01
DX de K8IP: 10103.0 3Y0PI FREE FOR ALL WRKD 113 0412Z 02/03/9404:13:32
DX de K8JJC: 14023.8 3Y0PI "UP" 0458Z 02/03/9404:54:30
DX de K8JJC: 14195.0 3Y0PI QSX 200/210. STILL S9 HR. 0505Z 02/03/9405:01:41
DX de KW0L: 14195.0 3Y0PI up 200-210 0602Z 02/03/9406:01:32
DX de KA9LTR: 10102.9 3Y0PI up 5 kHz. 0727Z 02/03/9407:22:59
DX de KE9ET: 14195.0 3Y0PI "STILL GOING" 0906Z 02/03/9409:05:29
DX de KJ8G: 14195.0 3Y0PI ON 8'S 1020Z 02/03/9410:16:36
DX de NN9G: 14025.0 3Y0PI wrk 037 0215Z 02/04/9402:12:59
DX de KC8PG: 7007.0 3Y0PI EU-ONLY 0222Z 02/04/9402:17:53
DX de KU8U: 14025.0 3Y0PI UP 14040.9 EZ 0232Z 02/04/9402:28:26
DX de WV1R: 145890.0 3Y0PI AO-13 Mode B 0234Z 02/04/9402:31:35
DX de AF8N: 14196.1 3Y0PI Now on 8s 0240Z 02/04/9402:34:35
DX de WB9QPG: 145890.1 V98AWU NOT 3Y0PI 0246Z 02/04/9402:47:43
DX de WA8OSE: 10109.1 3Y0PI QSX 10122.00 0322Z 02/04/9403:25:58
DX de N9AR: 14196.0 3Y0PI got him at 14203.4 0323Z 02/04/9403:30:01
DX de W8ILC: 14024.7 3Y0PI WKD AT 050 2ND CALL 0327Z 02/04/9403:33:59
DX de KF8RW: 14025.0 3Y0PI wrkd 14.03950 0341Z 02/04/9403:39:48
DX de NW3C: 7007.0 3Y0PI loud but wrking eu only 0356Z 02/04/9403:56:27
DX de W8IQ: 7005.5 Z21HS FOR THOSE BORED WITH 3Y0PI 0419Z 02/04/9404:15:15

DX de AA8BE: 10108.0 3Y0PI 0459Z 02/04/9404:53:49
DX de AA8BE: 10109.0 3Y0PI QRX 10.123 0459Z 02/04/9404:54:35
DX de K8JP: 7022.0 3Y0PI MOVING HR 0456Z 02/04/9405:06:59
DX de KB8BS: 10109.2 3Y0PI WRKD AT .116.95 0509Z 02/04/9405:07:55
DX de W9KIA: 7024.2 3Y0PI QSX 7028.70 0536Z 02/04/9405:34:58
DX de W9SZ: 7024.0 3Y0PI N W3'S NOW 0613Z 02/04/9406:11:22
DX de KJ8G: 14195.0 3Y0PI 0750Z 02/04/9407:45:05
DX de KJ8G: 7038.0 3Y0PI RX 5155 ON 8'SS 0949Z 02/04/9409:44:19
DX de KC8PG: 7038.0 3Y0PI QSX 7155, TNX RICK FIRST SPOT 0959Z 02/04/9409:55:27
DX de KB9CRY: 7038.0 3Y0PI qsx 7175, by #s 1021Z 02/04/9410:16:25
DX de WB8VPA: 7038.0 3Y0PI qsx 7175 1019Z 02/04/9410:32:45
DX de K3GGN: 7038.1 3Y0PI midwest now qsx 7.175 1103Z 02/04/9410:59:03
DX de WO9Z: 21294.0 3Y0PI QSX 21313 0051Z 02/05/9400:48:17
DX de W9GCW: 14195.0 3Y0PI 0100Z 02/05/9400:58:17
DX de W8IQ: 14195.2 3Y0PI ON 3'S NORM 4'S THEN 8'S 0133Z 02/05/9401:29:50
DX de W8AH: 14195.0 3Y0PI on 4s 0144Z 02/05/9401:42:19
DX de KB8LM: 14195.0 3Y0PI 0204Z 02/05/9401:58:57
DX de KB8LM: 14195.0 3Y0PI QSX 14219.60 0222Z 02/05/9402:17:11
DX de K8JJC: 7024.1 3Y0PI WRKD UP 5.9 0228Z 02/05/9402:22:31
DX de NO9Z: 7024.0 3Y0PI up 0228Z 02/05/9402:29:41
DX de NE8J: 14195.0 3Y0PI WRK'D AT 14210.9 0235Z 02/05/9402:32:42
DX de WD8LLD: 7024.3 3Y0PI wkd 7031.1 0230Z 02/05/9402:33:47
DX de KA6A: 7024.0 3Y0PI back agn 0238Z 02/05/9402:39:01
DX de KS9Y: 14195.0 3Y0PI qsx 14202.1 0246Z 02/05/9402:41:50
DX de N9CMB: 14196.0 3Y0PI QSX 14.205.0 0246Z 02/05/9402:45:16
DX de WA8OSE: 7036.4 3Y0PI QSX 7036.00 0306Z 02/05/9403:03:27
DX de WA8OSE: 7024.1 3Y0PI QSX 7036.00 sri 0307Z 02/05/9403:08:10
DX de WB9IIQ: 3507.0 3Y0PI 0330Z 02/05/9403:28:13
DX de N9US: 145887.0 3Y0PI AO-13 - QSX 435.501.0 0402Z 02/05/9404:00:08
DX de N9BMS: 3507.0 3Y0PI 0403Z 02/05/9404:02:06
DX de W9ZRX: 7024.1 3Y0PI QSX 7040.60 0523Z 02/05/9405:34:52
DX de AA9AA: 7024.1 3Y0PI up, strong!! 0539Z 02/05/9405:35:38
DX de K8JP: 7023.8 3Y0PI QSX 7040.70 0551Z 02/05/9405:49:40
DX de K8JJC: 3507.1 3Y0PI NOW ON E.U. 0635Z 02/05/9406:29:32
DX de KA9ZAP: 7024.0 3Y0PI WORKED AT 7043.8 0644Z 02/05/9406:40:59
DX de WG8M: 7022.2 3Y0PI UP 5 0804Z 02/05/9408:00:05
DX de WA9IVU: 14195.0 3Y0PI QRZ EUROPE 200 UP 1116Z 02/05/9411:12:14
DX de WA8RXI: 14195.0 3Y0PI QSX 210 All 1119Z 02/05/9411:14:27
DX de KB8O: 7007.2 3Y0PI QSX UP 1125Z 02/05/9411:23:31
DX de K8UNV: 14195.0 3Y0PI WKD 202.5 1132Z 02/05/9411:28:27
DX de WT8R: 14195.0 3Y0PI QSX 14220.0 1154Z 02/05/9411:56:33
DX de AA9JY: 14195.0 3Y0PI listening right on 14.220 1204Z 02/05/9411:59:43
DX de N4VGI: 14195.0 3Y0PI WRK 14217 1227Z 02/05/9412:28:21
DX de WD8O: 14194.8 3Y0PI worked at .2199 1247Z 02/05/9412:42:24
DX de KE9ET: 21295.0 3Y0PI 1311Z 02/05/9413:08:24
DX de K3OTY: 18141.0 3Y0PI his freq 1350Z 02/05/9413:54:05
DX de W9UI: 18141.9 3Y0PI qsx 148 1407Z 02/05/9414:02:09
DX de W9UI: 21294.9 3Y0PI working EU 1409Z 02/05/9414:05:42
DX de WK3N: 18141.6 3Y0PI qsx 148 1405Z 02/05/9414:10:06
DX de KB8EU: 28475.0 3Y0PI 480-490 1523Z 02/05/9415:19:32

DX de KB8EU: 28487.8 3Y0PI worked 487.8 1539Z 02/05/9415:35:09
DX de NE8Z: 21295.0 3Y0PI 1602Z 02/05/9415:57:34
DX de WA0FLS: 28475.0 3Y0PI wrked 489.2 1558Z 02/05/9415:59:24
DX de NI8K: 28474.7 3Y0PI QSX 28492.12 Peter 1601Z 02/05/9415:59:42
DX de KR8V: 28474.8 3Y0PI QSX 28479.99 1611Z 02/05/9416:06:46
DX de NI8K: 21295.0 3Y0PI QRT untill 1600 1621Z 02/05/9416:19:33
DX de W9EDA: 21295.0 3Y0PI 300-310 1702Z 02/05/9416:59:01
DX de WA0FLS: 28475.0 3Y0PI still there-no numbers 1702Z 02/05/9417:02:45
DX de KJ8G: 28024.0 3Y0PI QSX .030-.035 1819Z 02/05/9418:13:35
DX de K8LJG: 18074.0 3Y0PI 1837Z 02/05/9418:32:43
DX de K8LJG: 28023.2 3Y0PI Moved Freq 2011Z 02/05/9420:07:16
DX de W8SEY: 28023.2 3Y0PI WKD ON 28031.7 2033Z 02/05/9420:27:24
DX de K8LJG: 28024.0 3Y0PI QSY back up 2032Z 02/05/9420:28:15
DX de W8SEY: 18073.9 3Y0PI WKD 18088.3 2144Z 02/05/9421:38:27
DX de WB8RNY: 14195.0 3Y0PI 2144Z 02/05/9421:39:58
DX de AA8HV: 18073.0 3Y0PI wkd 18.087.0 2209Z 02/05/9422:05:08
DX de AA8HV: 14195.0 3Y0PI by numbers now 5's 2214Z 02/05/9422:09:47
DX de NE8Z: 18073.7 3Y0PI 18.085.0 2219Z 02/05/9422:14:39
DX de WB8RJX: 21295.0 3Y0PI 2238Z 02/05/9422:33:48
DX de N8CLJ: 28024.0 3Y0PI 30-35 2250Z 02/05/9422:45:27
DX de K1CMI: 28475.0 3Y0PI 2255Z 02/05/9422:51:49
DX de WD8NSD: 21295.0 3Y0PI 300-310 HE SED 40/80/160 SSB T 2302Z 02/05/9422:59:22
DX de WY2E: 14195.0 3Y0PI wkd 202 2301Z 02/05/9422:59:23
DX de AA3BK: 18086.4 3Y0PI WRKED THIS FREQ 2258Z 02/05/9423:04:45
DX de VE1EOS: 18073.6 3Y0PI list up 2315Z 02/05/9423:13:46
DX de AB0X: 28024.0 3Y0PI WRKD ON 28034 IN 1 CALL, HONES 2316Z 02/05/9423:16:36
DX de WB6VGI: 21295.0 3Y0PI wkh 306.5 2312Z 02/05/9423:27:41
DX de 3Y0PI: 14195.0 WRKED AT 14209.6 2335Z 02/05/9423:30:52
DX de NE8Z: 14195.0 3Y0PI TEMP -5C & HEAVY SNOW STORM 2345Z 02/05/9423:41:03
DX de W8KZM: 14195.0 3Y0PI 8'S NEXT AFTER BRIEF QRX FE 0000Z 02/05/9423:57:07
DX de W8KZM: 14195.0 3Y0PI ON 8'S NOW 0020Z 02/06/9400:17:58
DX de N8AC: 14195.1 3Y0PI -AMAZING HE CALLED FOR 8`S NO 0045Z 02/06/9400:51:20
DX de N9CNS: 145888.8 3Y0PI AO-13 up 5 to 10 0123Z 02/06/9401:21:46
DX de WD8NSD: 7000.0 3Y0PI 80MPH WINDS LOST 40M ANT 0741Z 02/06/9407:34:14
DX de W8TA: 3785.0 3Y0PI 1036Z 02/06/9410:32:46
DX de K9RHY: 28475.1 3Y0PI TALKING NW zPC30 1651Z 02/06/9417:18:35
DX de W9HUW: 28475.0 3Y0PI LISTENING 480 UP 1735Z 02/06/9417:38:08
DX de KG9N: 28475.0 3Y0PI 1727Z 02/06/9417:41:15
DX de KB8LM: 28475.0 3Y0PI 56 HERE 1752Z 02/06/9417:48:49
DX de K8NA-9: 28475.0 3Y0PI WORKING 8's NOW 1837Z 02/05/9418:39:19
DX de KB8S-8: 21024.0 3Y0PI UP 5 1857Z 02/05/9418:58:57
DX de WG8M: 28021.6 3Y0PI QSX UP 1922Z 02/05/9419:23:03
DX de WS1A: 28475.0 3Y0PI On 0s 1927Z 02/05/9419:27:04
DX de N4YIC: 24940.0 3Y0PI Seems to be working everyone 1924Z 02/05/9420:01:49
DX de K2SB: 28021.5 3Y0PI wrkd 28.030.4 1925Z 02/05/9420:02:21
DX de AB5GU: 28475.0 3Y0PI ON 5'S LOUD 2008Z 02/05/9420:10:35
DX de W4ZYT: 24940.1 3Y0PI Worked 24.955.1 1934Z 02/05/9420:19:57
DX de KA2YPT: 28021.6 3Y0PI strong 5/9 up 5-15 wrked 026 2030Z 02/05/9420:31:33
DX de K5XI: 24894.0 3Y0PI QSX 24900.00 2034Z 02/05/9420:38:11
DX de KA1ERL: 14195.0 3Y0PI 200-220if u still need it 2045Z 02/05/9420:46:00

DX de KK2I: 18074.0 3Y0PI UP 2045Z 02/05/9420:48:19
DX de K3NW: 28031.3 3Y0PI 28029.8 2018Z 02/05/9421:01:27
DX de KS9Z: 28021.5 3Y0PI QSX 28031.67 2105Z 02/05/9421:04:28
DX de VE3ZTH: 14024.0 3Y0PI 2110Z 02/05/9421:11:46
DX de WB8K: 28475.0 3Y0PI on 8's wrkd 488 2119Z 02/05/9421:20:50
DX de N3AKD: 28021.0 3Y0PI wkd 28.036.9 2024Z 02/05/9421:20:51
DX de KS9Z: 21024.0 3Y0PI QSX 21032.36 2115Z 02/05/9421:21:41
DX de W4ZYT: 24894.4 3Y0PI Wkd 24898.9 2032Z 02/05/9421:23:08
DX de WB8OGM: 28021.6 3Y0PI worked at 28031.11 2125Z 02/05/9421:26:11
DX de K2GPL: 21024.0 3Y0PI qsx 21033.1 2122Z 02/05/9421:28:23
DX de VE3ZTH: 14195.0 3Y0PI 210-220 2130Z 02/05/9421:31:54
DX de K3NL: 28475.0 3Y0PI wking 6's 2050Z 02/05/9421:39:28
DX de AA2GQ: 28475.0 3Y0PI qsx 490 2103Z 02/05/9421:44:52
DX de WQ3X: 28021.5 3Y0PI QSX 042 2105Z 02/05/9421:44:52
DX de KB8O: 21024.0 3Y0PI QSX 21038.6 OOPS 2142Z 02/05/9421:48:09
DX de N8BIB: 14195.0 3Y0PI 200-220 2215Z 02/05/9422:17:17
DX de KA9LTR: 21023.8 3Y0PI up 2230Z 02/05/9422:32:45
DX de KG8AA: 14195.0 3Y0PI SPLIT, 200-220, WITH EUROPEANS 2303Z 02/05/9423:05:39
DX de W3ZDF: 14195.0 3Y0PI Wrkin Europe 2343Z 02/05/9423:46:12
DX de KB2HZ: 28021.0 3Y0PI 2251Z 02/05/9423:48:30
DX de KB2HZ: 28021.8 3Y0PI moved 2252Z 02/05/9423:50:16
DX de WY8N: 28474.4 3Y0PI ON .485 2254Z 02/05/9423:55:05
DX de K3SA: 28021.0 3Y0PI 28.029.5 2304Z 02/06/9400:00:01
DX de AC6V: 14194.9 3Y0PI WRKING EUROPE 2359Z 02/06/9400:02:45
DX de N8SFD: 14195.0 3Y0PI QSX 200-210 0002Z 02/06/9400:06:17
DX de WY8N: 28021.7 3Y0PI XMT .029.5 2309Z 02/06/9400:07:11
DX de AF8C: 14195.0 3Y0PI qsyed to somewhere 0013Z 02/06/9400:14:04
DX de NE8Z: 14342.0 3Y0PI PASSING TRAFFIC TO VP8 0019Z 02/06/9400:21:27
DX de NE8Z: 21076.0 3Y0PI PACKTOR/STNS CONNECTED NOW 0031Z 02/06/9400:33:10
DX de AB9E: 14024.0 3Y0PI UP & CALLING FOR EU 0041Z 02/06/9400:43:19
DX de WB8RJX: 21076.0 3Y0PI FEC 0111Z 02/06/9401:13:11
DX de NE8Z: 10113.5 3Y0PI BOB/N4GCK 0111Z 02/06/9401:13:18
DX de WV1R: 10101.4 3Y0PI .118 up - on 3's 0155Z 02/06/9401:58:06
DX de AG8L: 14024.1 3Y0PI wkd 033.0 0227Z 02/06/9402:30:30
DX de K9ADJ: 14024.0 3Y0PI SRI TYPO 0303Z 02/06/9403:21:36
DX de WB9CIF: 10101.3 3Y0PI WRKD 10117.7 0314Z 02/06/9403:25:34
DX de N9XX: 14024.0 3Y0PI 42.8 0324Z 02/06/9403:30:19
DX de WV1R: 3785.0 3Y0PI QSX 3800.00 0338Z 02/06/9403:40:36
DX de WT8C: 14023.8 3Y0PI QSX 14034.80 0351Z 02/06/9403:54:17
DX de WA9AKT: 10101.3 3Y0PI 10117.7 again! 0353Z 02/06/9403:56:27
DX de K8RC: 14023.9 3Y0PI QSX 35.8 0357Z 02/06/9404:03:53
DX de NZ9Z: 10101.3 3Y0PI 10117.7 AGAIN!!! 0403Z 02/06/9404:09:54
DX de N9JCL-6: 14024.0 3Y0PI WORKED .0365 0409Z 02/06/9404:13:58
DX de KU0A: 14194.8 3Y0PI LISTNING 14200 0425Z 02/06/9404:28:25
DX de W8KZM: 10101.6 3Y0PI WRKED 10118.0 0433Z 02/06/9404:35:46
DX de WB9Z: 3785.0 3Y0PI QSX 3800 up 0434Z 02/06/9404:37:35
DX de N9JCL-6: 14024.0 3Y0PI WORKED .0365 0409Z 02/06/9404:42:36
DX de KU0A: 14194.8 3Y0PI LISTNING 14200 0425Z 02/06/9404:42:38
DX de W8KZM: 10101.6 3Y0PI WRKED 10118.0 0433Z 02/06/9404:42:49
DX de WB9Z: 3785.0 3Y0PI QSX 3800 up 0434Z 02/06/9404:42:50

DX de W9TA: 14194.9 3Y0PI WORKED @ 14200.1 0441Z 02/06/9404:46:06
DX de W8KZM: 3785.0 3Y0PI 3800-05 ON 2'S 0451Z 02/06/9404:54:24
DX de WD8NSD: 3785.0 3Y0PI #1'S ON 3805 0446Z 02/06/9404:54:40
DX de WD8NSD: 3785.0 3Y0PI 3800-3805 ON #2'S 0453Z 02/06/9405:04:13
DX de AA8HZ: 14024.0 3Y0PI 14035.05 LITE PILEUP 0515Z 02/06/9405:17:27
DX de WU8A: 14024.0 3Y0PI QSX 14038.1 #300 !!!!!!! 0533Z 02/06/9405:33:11
DX de K8JJC: 10101.6 3Y0PI 0531Z 02/06/9405:34:33
DX de NI8K: 14200.0 3Y0PI QSX 14.20 Open,GUD SI 0533Z 02/06/9405:36:40
DX de NI8K: 14195.0 3Y0PI QSX 14200.00 Sorry, 0534Z 02/06/9405:39:41
DX de K8JJC: 10101.7 3Y0PI QRN/QRM THERE.QSX 118-125 0537Z 02/06/9405:40:36
DX de NW8F: 14024.0 3Y0PI WRKED AT .036.4 0539Z 02/06/9405:45:40
DX de KZ8E: 10101.5 3Y0PI qsx 10123.6 0602Z 02/06/9406:01:23
DX de N8CQA: 10101.5 3Y0PI qrt'd 0617Z 02/06/9406:17:42
DX de WY9E: 3800.0 3Y0PI DN...wkg EUROPE 0634Z 02/06/9406:35:36
DX de WY9E: 3800.0 3Y0PI U.S. 3780-3790 0724Z 02/06/9407:23:43
DX de KB8LM: 7060.0 3Y0PI UP 0729Z 02/06/9407:30:01
DX de K8JJC: 7060.0 3Y0PI QSX 7.160 0727Z 02/06/9407:30:29
DX de K8JP: 7053.0 3Y0PI QSX 7161.30 MOVED FM QR 0736Z 02/06/9407:41:26
DX de KB8LM: 3800.0 3Y0PI 0745Z 02/06/9407:46:42
DX de KB8LM: 3800.0 3Y0PI 3780 TO 90 0749Z 02/06/9407:50:29
DX de K9GS: 7053.0 3Y0PI QSX 7161 0804Z 02/06/9408:07:56
DX de K8JP: 3799.9 3Y0PI QSX 3787.41 0802Z 02/06/9408:08:08
DX de WD8MQY: 7053.0 3Y0PI 0827Z 02/06/9408:33:48
DX de KB8LM: 3800.0 3Y0PI QSX 3780.00 0853Z 02/06/9408:54:51
DX de W9ZRX: 3799.9 3Y0PI QSX 3781.00 wkd 0902Z 02/06/9409:06:59
DX de W9ZRX: 14195.0 3Y0PI Begging 0933Z 02/06/9409:37:39
DX de K8JP: 14194.7 3Y0PI QSX 14210.00 BEGGING! 0948Z 02/06/9409:53:44
DX de NI8K: 14189.9 3Y0PI Good time to Log em! 1143Z 02/06/9411:45:44
DX de K8MBH: 14189.9 3Y0PI SED 80/160 CW TMRW 1209Z 02/06/9412:08:17
DX de NI8K: 18145.0 3Y0PI Weak in SW Ohio 1245Z 02/06/9412:49:05
DX de AA8FE: 21295.0 3Y0PI QSX 300-310 1308Z 02/06/9413:09:48
DX de KD9EC: 21295.0 3Y0PI ON 3'S AT THIS TIME 1347Z 02/06/9413:56:25
DX de WA8RXI: 21195.0 3Y0PI QSX 21306.5 1437Z 02/06/9414:38:23
DX de N8CLJ: 18074.3 3Y0PI QSX UP 1517Z 02/06/9415:19:18
DX de K8JP: 18073.8 3Y0PI QSX 18075.80 1518Z 02/06/9415:42:04
DX de N8KEM: 24895.0 3Y0PI 1543Z 02/06/9415:57:51
DX de WG8M: 21024.0 3Y0PI 1755Z 02/06/9417:56:29
DX de WD8MQY: 21024.0 3Y0PI 1816Z 02/06/9418:22:20
DX de WG8M: 21024.0 3Y0PI UNDER FOC'ERS 1921Z 02/06/9419:23:19
DX de KJ8G: 21295.0 3Y0PI RX 310 CLG CQ 2151Z 02/06/9421:52:24
DX de AG8L: 18075.0 3Y0PI wkd 076.5 Cq Cq 2214Z 02/06/9422:17:46
DX de AG8L: 18075.0 3Y0PI Begging 2216Z 02/06/9422:20:02
DX de N8BIB: 14195.0 3Y0PI 2259Z 02/06/9423:00:20
DX de WB8RJX: 14195.0 3Y0PI WEAK 2308Z 02/06/9423:10:22
DX de K8JJC: 18074.1 3Y0PI WK HR. 2313Z 02/06/9423:23:07
DX de AA8BE: 18073.0 3Y0PI wrking EU 2331Z 02/06/9423:31:48
DX de WB9SAU: 1800.0 3Y0PI TEST 0036Z 02/07/9400:41:47
DX de W9YSX: 14195.0 3Y0PI back in 5 min 0208Z 02/07/9402:19:09
DX de K8BTH: 3523.0 3Y0PI BIG PILEUP 25 AND UP 0409Z 02/07/9404:10:15
DX de WS8D: 3523.0 3Y0PI working EU 0608Z 02/07/9406:09:31

DX de WG8M: 3521.5 3Y0PI UP 0736Z 02/07/9407:38:08
DX de KC8PG: 7007.0 3Y0PI QSX UP5 0959Z 02/07/9410:01:01
DX de KC8EU: 21295.0 3Y0PI WRKG EUROPE 1507Z 02/07/9415:09:18
DX de KC8EU: 28475.0 3Y0PI 1740Z 02/07/9417:42:23
DX de WB8RJX: 21295.0 3Y0PI 2031Z 02/07/9420:33:07
DX de WB8RJX: 24945.0 3Y0PI JUST STARTING 2032Z 02/07/9420:35:04
DX de WG8M: 21294.7 3Y0PI WORKING 8'S SOON 2159Z 02/07/9422:02:05
DX de N8CLJ: 21295.1 3Y0PI 300 310 8'S 2258Z 02/07/9423:01:14
DX de K8LJG: 21294.7 3Y0PI Just went to 9's 2314Z 02/07/9423:16:18
DX de K3VCZ: 14195.0 3Y0PI 14.200 14.210 2320Z 02/07/9423:22:14
DX de WA8RXI: 14195.0 3Y0PI QSX 200-220 E-U-R-O-P-E fer NW 2322Z 02/07/9423:24:20
DX de N8BLD: 21295.0 3Y0PI BACK AT IT AGN 2323Z 02/07/9423:26:58
DX de KI6BU: 14195.0 3Y0PI STILL NO CW 2327Z 02/07/9423:36:56
DX de W8IQ: 14080.0 3Y0PI RTTY REPORTED BY OTHERS 2336Z 02/07/9423:41:29
DX de KE9A: 21295.0 3Y0PI 5's 2345Z 02/08/9400:03:10
DX de W6OA: 21294.7 3Y0PI Back on Fives.... 0017Z 02/08/9400:20:39
DX de KA6ING: 14195.0 3Y0PI 200,210 EUROPE 0021Z 02/08/9400:26:19
DX de KD6NDX: 14195.0 3Y0PI e u r o p e only 0018Z 02/08/9400:26:30
DX de KE9A: 21025.0 3Y0PI qsx 21030 0012Z 02/08/9400:32:34
DX de VE3ZTH: 14195.0 3Y0PI wrkd 215 0142Z 02/08/9401:44:58
DX de KR8V: 10109.7 3Y0PI QSX 10116.67 0254Z 02/08/9402:56:07
DX de WD8MGQ: 3799.8 3Y0PI QSX 3.780-3.790 0325Z 02/08/9403:25:57
DX de WG8M: 3800.0 3Y0PI QSX 3795 0823Z 02/08/9408:26:00
DX de K8DYZ: 7039.9 3Y0PI qsx 7185.0 0948Z 02/08/9409:50:24
DX de WD8PLE: 24945.0 3Y0PI test 1338Z 02/08/9413:38:44
DX de VE3ZTH: 14195.0 3Y0PI 1414Z 02/08/9414:16:38
DX de K8AJK: 28475.0 3Y0PI UP 5+ 1808Z 02/08/9418:10:27
DX de VE3ZTH: 21024.0 3Y0PI 1838Z 02/08/9418:40:24
DX de VE3ZTH: 21024.0 3Y0PI WRKD 25 1852Z 02/08/9418:55:05
DX de KC8EU: 21296.9 3Y0PI WILL BE OPERATIONAL IN 10 MIN 2134Z 02/08/9421:36:48
DX de KG8BZ: 21025.0 3Y0PI UP 2150Z 02/08/9421:52:59
DX de W2HPQ: 21025.5 3Y0PI WKD 27.7 2211Z 02/08/9422:17:06
DX de WD8O: 21025.5 LU4AA Not 3Y0PI 2215Z 02/08/9422:18:08
DX de WB8ZTV: 14082.9 3Y0PI RTTY UP! 2230Z 02/08/9422:41:18
DX de N8OCN: 21295.0 3Y0PI TO HAVE OPERATOR IN TWO MINS 2237Z 02/08/9422:42:16
DX de N9ITX: 14080.1 3Y0PI RTTY up 2251Z 02/08/9422:55:58
DX de W2JGR: 14081.9 3Y0PI RTTY QSY'D HERE. QSX UP 2301Z 02/08/9423:06:21
DX de W0IZ: 14081.9 3Y0PI RTTY UP UP 2318Z 02/08/9423:24:17
DX de WD8Y: 14023.9 3Y0PI 2333Z 02/08/9423:35:20
DX de WB5M: 14024.0 3Y0PIG wkd 14.030.2 2331Z 02/08/9423:39:13
DX de N8ABW: 14084.0 3Y0PI **RTTY** UP 2348Z 02/08/9423:51:28
DX de AA4M: 14081.9 3Y0PI RTTY, listening up 2351Z 02/08/9423:59:09
DX de W9SZ: 14024.0 3Y0PI UP 2353Z 02/09/9400:03:52
DX de WA8BIJ: 14024.0 3Y0PI sri but europe nly nw 0005Z 02/09/9400:08:05
DX de WA8BIJ: 14024.0 3Y0PI nw taking ss 0007Z 02/09/9400:09:52
DX de WT8S: 14084.0 3Y0PI RTTY W WS9V CALLING REPEATEDLY 0000Z 02/09/9400:10:30
DX de WA2JQK: 14025.0 3Y0PI WRKD 14036 0020Z 02/09/9400:25:52
DX de KR8V: 3507.2 3Y0PI QSX 3511.98 0330Z 02/09/9403:33:13
DX de W9WAQ: 3507.0 3Y0PI UP 4 0351Z 02/09/9403:55:24
DX de AB8K: 14082.0 3Y0PI RTTY 0359Z 02/09/9404:10:26

DX de K8JJC: 10109.0 3Y0PI UP 5. QRZ. 0435Z 02/09/9404:36:11
DX de N9NS: 3506.9 3Y0PI QSX up 5 or so 0509Z 02/09/9405:18:25
DX de KB8LUJ: 14195.0 3Y0PI working 4's to death, of cours 0131Z 02/10/9401:34:56
DX de W9II: 7022.0 3Y0PI UP 0145Z 02/10/9401:44:28
DX de W9UI: 7022.0 3Y0PI worked 036.1 0235Z 02/10/9402:39:05
DX de WB9TOW: 7022.0 3Y0PI qsx 7032.2 0250Z 02/10/9402:56:15
DX de N8EMV: 7022.0 3Y0PI wrked 40.6 0308Z 02/10/9403:11:13
DX de WB9YXY: 3796.0 3Y0PI QSX 3785.0 0322Z 02/10/9403:23:52
DX de W9UI: 14195.1 3Y0PI on 6s then open 0324Z 02/10/9403:29:20
DX de WA9TPQ: 7022.0 3Y0PI wrkd 7.0365 0333Z 02/10/9403:35:49
DX de KB8LM: 3796.0 3Y0PI QSX 3785.00 NEED CONFIR 0345Z 02/10/9403:46:18
DX de WB9YXY: 3799.9 3Y0PI Moved...QSX 80-85 0415Z 02/10/9404:19:31
DX de W9VA: 14030.0 3Y0PI 0438Z 02/10/9404:40:02
DX de WG8M: 7022.1 3Y0PI QSX UP 0813Z 02/10/9408:13:45
DX de WG8M: 3800.0 3Y0PI 3794 0816Z 02/10/9408:16:53
DX de N8IAG: 28475.0 3Y0PI .480-.490 1947Z 02/10/9419:46:09
DX de K8JJC: 28475.0 3Y0PI BOB'S BACK. QSX 480-490. 2016Z 02/10/9420:17:35
DX de WD8PLE: 21295.0 3Y0PI TEST 2108Z 02/10/9421:07:19
DX de N8RGZ: 28475.0 3Y0PI worked 28.484.0 2145Z 02/10/9421:47:10
DX de KC8PG: 21295.0 3Y0PI GUD SIG 2205Z 02/10/9422:06:47
DX de KR8V: 14024.0 3Y0PI 2245Z 02/10/9422:47:31
DX de K8JJC: 14024.0 3Y0PI LAST STN WRKD 30.5 2314Z 02/10/9423:15:25
DX de KG8BZ: 14023.0 3Y0PI UP 0138Z 02/11/9401:38:30
DX de WA9AKT: 14087.5 V31JU RTTY - No 3Y0PI yet! 0145Z 02/11/9401:48:43
DX de WD0GHA: 14195.0 3Y0PI QSX 205-215 WKED 205.23 0247Z 02/11/9402:52:46
DX de W9HLY: 7038.0 3Y0PI wrking europe... 0336Z 02/11/9403:38:19
--
Central Transport
central@msen.com

1422. Re: Butternut HF6V upgrade kit ???

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-11 23:33:43 UTC
From: rovero@oc.nps.navy.mil
Message-ID: <CL32s7.BEM@taurus.cs.nps.navy.mil>
Source record: 271273

In <milewski-110294101401@fp2-st-affairs-11.uoregon.edu>, milewski@oregon.uoregon.edu (Steve Milewski) writes:
>Now that I finally have a radio that covers the WARC bands, I'm thinking of
>getting the add on kit for 12 & 17 meters for my Butternut vertical.
>
>Does anyone have any experience with this upgrade?
>

The add-on 12/17 kit did not affect the lower bands, but did affect
tuning on 15 and 10. Then when I moved I ended up completely
retuning -- changes in 40m tuning really affected all higher bands.

I'll agree with you that the Butternut HF6V is a great antenna. I run
it with the feedpoint 7' up and elevated radials.

P.J. Rovero Internet: rovero@oc.nps.navy.mil
Code OC/Rv Packet: kk1d@k6ly
Naval Postgraduate School
Monterey, CA 93943

1423. Help Wanted for Portland Marathon

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 00:11:18 UTC
From: brucec@tekgen.bv.tek.com
Message-ID: <5263@tekgen.bv.tek.com>
Source record: 271275
Cross-posted to: rec.radio.amateur.misc,pdx.running

Wanted: A volunteer for the Portland Marathon to work as special assistant
to the Strategic Communications Coordinator. The ideal candidate would have
experience in communciation systems (like 2mtr Amateur Radio),
be an experienced runner, and had some experience working at running events.

The job is to help coordinate communication systems on race day. This
includes schlepping radio's and phones; setting them up; working with
Hams, Police, and Medical personnel. It takes a few hours a week in
September until Race Day. Its an all day thing on Race Day.

The reward: a T-Shirt, maybe a hat (if we're lucky), you might also get
to save a life or two, you get to work with some excellent people.

The Portland Marathon happens in late September/early October.

Email: brucec@tqs.com

Bruce Cheney
644-3535 w 625-5747 h

1424. Help w/ GE MPro Repeater

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 00:37:15 UTC
From: sterman@coyote.rain.org
Message-ID: <2jh8br$bps@coyote.rain.org>
Source record: 271276

I need help obtaining crystals for a GE MasterPro Repeater
that I recently obtained and would like to test and prepare
for operation. Can anyone suggest a Mail-Order outfit that
would have them. I have the tubes already.
I just want to start out testing the thing simplex so I can
learn......
Please E-mail to sterman@rain.org KD6BYG

1425. Battery limits for HTX-202 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 00:45:57 UTC
From: partos@lilac.cs.odu.edu
Message-ID: <PARTOS.94Feb11194558@lilac.cs.odu.edu>
Source record: 271277

Does anyone know if there is a circuitry difference in the HTX-202
that prevents the use of high voltage ,(12 v) batteries even though
the external DC jack allows the use of 13.8 v ? I have been told
several stories on this. Could this have been fixed in the 2nd version
of this radio? My circuit diagram (2nd version) shows no difference
in the input circuitry, but people have told me no to use batteries
greater than 9-10 v. Any comments appreciated.
--
|---|
| Richard D. Partos KE4AZJ Norfolk, VA |
Internet: r.d.partos@larc.nasa.gov

1426. Re: Can someone help with call book lookup

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 01:09:42 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.94Feb11200942@gdstech.GRUMMAN.COM>
Source record: 271128

KB7USN is Robert E. Greene, 555 N. Pantano Rd., Az. 85710.
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

1427. Re: Bosnian Ham Address

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 01:50:14 UTC
From: jad8e@darwin.clas.Virginia.EDU
Message-ID: <CL393q.295@murdoch.acc.Virginia.EDU>
Source record: 271129

I worked Danny, T93M, on 12 May 1993. He said he was in
Sarajevo. Unfortunately, I don't know if he is still
transmitting (or alive, either). We talked on 21.282 SSB at
1842 UTC. I didn't get a chance to chew the rag with him since
he had a big pileup of folks trying to get to him. His QSL
manager is DL8OBC.

I know this info isn't directly relevant to the number that was
posted, but if you managed to reach DL8OBC, he/she might be
able to tell you the current operating situation.
--
____
J. Andrew Dickerson jad8e@virginia.edu
Amateur Radio KD4UKW 71442,547@compuserve.com
____

1428. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 02:20:37 UTC
From: jimc@megatek.com
Message-ID: <1994Feb12.022037.1025@megatek.com>
Source record: 271130

In article <1994Feb10.171218.7423@dtint.dtint.com> Allen Wallace <allen@dtint.dtint.com>
writes:
>In article <gdavis.760825204@griffin> Gary Davis, gdavis@griffin.uvm.edu
>writes:
>> I heard a strange story on the CBC last evening. The report was on
>>the increasing interest in nudism in the Winter months. To promote
>>this festive and relaxing activity additional interests where specified.
>>
>>There is, according to the CBC, a nudist amateur radio club.
>>
>>I am wondering where, how many members? Anybody know anything about this?
>
>There might be, but I bet that they are all OMs and no YLs or XYLs!

Close. There is a YL that checks in from Alaska on a fairly regular
basis. The weeks when she shows up are the weeks we have more check-ins on the
net. hmmmmmmm......

-jim

>--
>---
>Tom Kimpton(System Administrator) {root,tom}@dtint.dtint.com
>Digital Technology Int. (801)226-2984
>500 W. 1200 South, Orem UT, 84057 FAX (801) 226-8438

--
Jim Campbell "The Tye-Dye Guy" | "Remember to tweet!"
jimc@megatek.com | When in doubt, you're probably
WB6ZPB NSS ASA TNS | unsure about something

1429. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 03:03:25 UTC
From: k9cw@prairienet.org
Message-ID: <2jhgtt$5s4@vixen.cso.uiuc.edu>
Source record: 271131

In a previous article, gaulandm@tekig7.PEN.TEK.COM (Mike Gauland) says:

>A mailing I read is involved in a comparision of the speeds of
>printing and cursive writing. I decided to consult some experts.
>So, all you high-speed CW ops, which do _you_ use?
>
>
>73,
>mag
>
>--
>Michael A. Gauland gaulandm@tekig7.PEN.TEK.COM
>AA7JF (503) 627-5067
>

Except for notes to jog my memory, I never write anything down. When
we speak to another person, we don't usually write down what was said,
and I think that copying CW is much the same.

73 de Drew K9CW

--
---------------------------------------------------------------*
| Andrew B. White K9CW | internet: k9cw@prairienet.org |
| ABW Associates, Ltd. | phone/fax: 217-643-7327 |
---------------------------------------------------------------*

1430. Re: ICOM IC-28 series mods needed

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 03:26:30 UTC
From: lmarrin@delphi.com
Message-ID: <BAzKNJu.lmarrin@delphi.com>
Source record: 271132

Gary following is a transmit mod for the Icom 28. A friend tried it
and it works.

By the way, the Icom 28 is very popular among the small fishing fleets
in California, as the transmit mod is very easy. Commerical fisherman
sometimes do a lot of bootlegging, in the hope that competing fleets
won't be listening in.

73 from Leigh/KM6JE in Santa Barbara.

==== BOYAN Log to Disk, 08/03/93 at 03:08 ====
From : GI4NDX @ GI4NDX
To : ICOM @ ALLUS
Date : 910908/1749
Msgid : BF 125@GI4NDX, 1055@K6TZ $125_GI4NDX
Subject : IC28 MOD
Path :
K6IYK!KB6JES!KB6RAA!KA0WIN!N4UTO!WN4IIV!W1FJI!W1EOH!WB4RHO!K4RY!W4AP!W

D4AGG!WD4PPF!N4WZL!K4BFT!WB4TTZ!GI4NDX

ICOM IC-28A AND IC-28H

To make the IC-28 transmit 138-174 MHz, cut D21 (no retuning
required). D21 is a tiny glass diode standing on-end near the center
of the upper circuit board, accessible by removing the top cover. The
IC-28 is the only convertible ham rig I know that covers the 170-MHz
federal government (including national park) frequencies.

[source: W9MKV]

END <<< MSG #1055 >>> on
K6TZ BBS.
(Original MSG #125 from GI4NDX @ GI4NDX. filed on 910908/1749)

1431. Need SW + AM?FM unit

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 06:30:30 UTC
From: narla@mace.cc.purdue.edu
Message-ID: <CL3M2u.8xB@mentor.cc.purdue.edu>
Source record: 271133
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.equipment

[Please excuse me if I posted this to an inappropriate news group.]

I am looking for a good receiver to integrate into my system. I want
a receiver that will have a good bandwidth SW PLUS AM & FM in one unit.
Unlike in Asia (and probably Europe), such units are hard to find here
in the USA. I have inquired at a number of stores and they don't carry them.

Any information regarding where I can find such units, approx. pricing,
alternatives (I am an absolute amateur putting together my sound system
for purely personal pleasure), obstacles to importing (if that's an option)
will help me greatly.

PL. E-MAIL ME. Many thanks in advance,

Gowri Narla
narla@mace.cc.purdue.edu

1432. Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 08:14:58 UTC
From: Bob.Albert@f943.n102.z1.fidonet.org
Message-ID: <761106971.AA04946@mcws.fidonet.org>
Source record: 271134

I copy all CW in block capitals. I have always done that, and am used to it, so that's what works for me. I can copy at almost any speed but can't write much faster than about 35 or 40 wpm so I end up just taking notes when in a QSO. 73 DE K6DDX

1433. Re: Butternut HF6V upgrade kit ???

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 13:12:10 UTC
From: t1terryb@cascade.ens.tek.com
Message-ID: <2jikja$aid@cascade.ens.tek.com>
Source record: 271135

>Now that I finally have a radio that covers the WARC bands, I'm thinking of
>getting the add on kit for 12 & 17 meters for my Butternut vertical.
>Does anyone have any experience with this upgrade?

Steve, I also have the HF6V and am very pleased with it. Mine is
mounted on the roof of my mobile home with 8-12 radials for 10-20 and 8
or so on 40. The roof of the mobile home is metal too but no good way to
make a solid connection to it.
I have the 17/12 and 160 meter add on kits and have noted no
severe change on 80 meters or other bands. You should already be aware
since the antenna is so short for that band the bandwidth is only about
25 Khz. I have mine tuned around 3795 but weather can make a severe effect
on it.
>
>I'm specifically interested in whether the bandwidth is narrowed on the
>other bands once this kit is installed.
>
>BTW, the Butternut is the best performing vertical I've owned. I'd love to
>see what I could get out of it if I got it up in the air. Right now it's
>ground mounted with 17 radials, most of which are cut for the higher bands.
Always wondered how ground mounting it would change things. I believe
mounting it up in the air somewhat helps to make the counterpoise more ef-
ficient. The ARRL Handbook says a true ground plane mounted 1/2 wavelength
above ground only needs 4 or 5 radials. I kind of combine the effects of both
round mounted and ground plane by having it 10-12 feet above ground but on
a metal roof with many radials. Whatever it takes to get the angle of radiation
down and work the DX/Contest.

>Since Dec. 1989, have worked 275 countries overall with it (about 268 of
>them running barefoot). Also have worked 150+ countries on 40 meters with
>it, at least 110 of those running barefoot.
>Performance barefoot is dropping off considerably with the solar cycle the
>way it is these days, but for a vertical, I'm still very happy with it.
>Steve
Nice going. I have had mine up sind 1985 and don't really know how
many I have worked on it. But the last few were ZS8MI, CY9CWI, J5UAI, 3C1TR,
S21ZG, etc. Let's me know it is getting out. Now if I could get some decent
propagation and work the 3Y0PI.

Best of luck,
Terry Burge
KI7M

1434. RA3AR - penpal?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 13:22:09 UTC
From: slay@netcom.com
Message-ID: <slayCL454y.2G2@netcom.com>
Source record: 271136

Around 25 years ago, I started to receive and exchange letters with a Russian ham - Anatoly Repin who at the time had held the callsigns UV0IA and UW1BF. We exchanged several letters and photos. Our letters trailed off after I moved away from home for college and career. Then, a couple of years ago, while living in Japan, I once again started receiving letters from him forwarded to me from my US callbook address. This time he explained that he was an ethnic Finn and now used the name Toivo Laimitanen. His current callsign is RA3AR. He sent several photos of himself and I have seen seen some of these photos appear in the past year or so in a couple of ham magazines (QST and DX Magazine, I think). His letters have described some of the severe hardships he faces in the current times in Russia. I am curious to know if any other hams have had similar exchanges with him or others in the former Soviet Union.

Warmest 73 de Sandy WA6BXH/7J1ABV
Packet: WA6BXH@N0ARY.#NOCAL.CA.USA.NA
Internet: slay@netcom.com

1435. 1994 Central States VHF Society Conference

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 13:55:45 UTC
From: rc@cmr.ncsl.NIst.GOV
Message-ID: <9402121355.AA07222@cmr.ncsl.nist.gov>
Source record: 271137

NOTICE
Preliminary Announcement
1994 Central States VHF Society Conference
July 29-30, 1994, Memphis, TN

I have just received the preliminary announcement of the 28th Annual Conference of the Central States VHF Society. It will be held from July 29-30, 1994, at the Wilson World Hotel, 2715 Cherry Road, Memphis, TN. Though not mentioned below, the formal part of the conference is dozen or two good technical or operating talks, Friday and Saturday during the day. Generally about 1/3rd of the presenters have some sort of doctorate (PhD, MD, etc).
Dave Meier, N4MW, the organizer and thus CSVHFS president, says: "The conference format will be as usual, with Friday night flea market and Saturday [night] banquet. In addition to the usual conference activities there will be an informal Thursday night [July 28] EME show-and-tell session....
"Let me introduce this year's Society Vice President, Joel Harrison, WB5IGF. Joel is the recently re-elected ARRL Delta Division Director, so congratulations are in order. Joel is active on all VHF bands, 432 and 1296. He holds WAS on two meters via EME. As an active VHF contester, he arranged to move the ['94] June VHF contest to eliminate conflict with the '94 ARRL National Convention....
"Submit material for publication in the conference proceedings to Joel. Also, let him know if you can be a presenter at the conference. So far we have Wal House WK6KZ and Don Graham VK6HK visiting from Australia. Wal agrees to make a presentation on VHF/UHF/SHF in Australia. ... Send your material to Joel Harrison WB5IGF, 528 Miller Road, Judsonia, AR 72801.
"... Al Ward [WB5LUA] volunteered to handle the noise figure measurements. Kent Britain WA5VJB and Marc Thorson WB0TEM will handle antenna measurements....
"Cissy (AKA Joyce Meir N4ZRW, is arranging the family activities for the conference. Cissy is involved in local club activities, serving last year as the Memphis hamfest Forums Chairperson...." [The CSVHF Conference always draws a large contingent of spouses and children.]

For more info, contact me (w3otc@amsat.org) or Dave (Compuserve/INTERNET 71571,1744@compuserve.com).

73, Bob W3OTC

1436. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 14:56:50 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb12.145650.4024@ke4zv.atl.ga.us>
Source record: 271138

In article <1994Feb10.134419.7253@ccd.harris.com> drs@ccd.harris.com (Doug Snowden) writes:
>Alan Bloom (alanb@sr.hp.com) wrote:
>: I heard a report on the (radio) network news last night to the effect
>: that the national association of golf course managers funded a study
>: to investigate the death rates of golf course managers. The study
>: found that golf course managers have death rates from several kinds
>: of cancer that are significantly higher than the national norm. The
>: study tabulated cause of death from death certificates.
>
>: Sounds exactly like the famous Milham study of amateur radio operators
>: which implied that exposure to RF radiation causes cancer. I wonder
>: what the cause is for the golf course managers: too much fresh air?
>
>I think the answer is obvious (if you weren't kidding), pesticides and
>fertilizer.....Doug, N4IJ

Not so obvious. Studies tracking cancer rates among farmers show hot spots as well as areas of reduced cancer incidence among farmers in various parts of the country. No correlations to pesticide or fertilizer types or usage have been found, just geographic anomalies. What that means isn't exactly clear, but it shows that there's no one to one correlation between either pesticide or fertilizer use and cancer incidence. (My personal *opinion* is that what's being seen is the result of genetics, IE farmers aren't known to move about much and tend to marry locals, so genetic predisposition for certain cancers can be amplified in certain geographic areas.) Farming, of course, continues to be the most dangerous occupation in the US with more occupational injuries and deaths than any other large scale occupation. By comparison, the occupation of police officer is rated rather low on the scale of occupational risk. Just goes to show how perceptions and reality often don't match.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1437. Re: Looking for LOGIKEY keyer

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 16:02:39 UTC
From: slay@netcom.com
Message-ID: <slayCL4CKF.A4J@netcom.com>
Source record: 271139
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

Richard L Barnaby (barnaby@world.std.com) wrote:
: >The Logikey keyer also is sold by the same company: Idiom Press. Last
: >I saw in an ad, the price for Logikey was $129 +s&H

: Is this an Iambic keyer or a regular keyer. I haven't used an iambic
: keyer (saw one once) but it seems like it'll take relearning.
: Is it worth it? Comments anyone?

Yep - just about all the keyers made over the past decade or two have
been *capable* of iambic operation. However, if you have a non-iambic
keyer paddle - they will still work. I prefer non-iambic myself, having
started out on a bug many, many years ago. The Logikey/CMOS Super Keyer II
is wonderful in either iambic or non-iambic operation (I have used both).
Iambic DOES take relearning and involves much less wrist movement than
non-iambic single lever paddles and is probably the way to go IF you are
a newcomer to keyers. IF you learned on a bug and/or LIKE non-iambic
keying - why bother to change?

73 de Sandy WA6BXH/7J1ABV slay@netcom.com

1438. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 16:07:01 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb12.160701.4407@ke4zv.atl.ga.us>
Source record: 271140

In article <bote.760946660@access1> bote@access1.digex.net (John Boteler) writes:
>I have gotten a bug up my rear to configure our point-to-point
>repeater linking system with digital paths ranging 20
>to 40 miles apart.
>
>We currently use plain old analog audio Motorola MICOR
>UHF mobiles to do the linking between repeater sites,
>and they work well (naturally!). However, my calibrated ear
>frequently cringes at the minor white noise which
>accumulates over the multiple hop links, such as
>those which traverse 3 or 4 hops. By the time the
>signal gets to the fourth site, there is enough
>additive noise and minor equalization and level
>difference that I believe that digital transmission
>would provide superior performance.
>
>I am certain that I am not breaking new ground here.
>Has anyone played with this who could comment on
>how practical this would be?

Well lets look at some numbers and see. Lets assume
you want "broadcast" grade audio. That's a SNR of
50 db. Digital transmission regenerates bits so
that above a certain threshold level the effective
SNR is only the quantization error of the digital
equipment itself. A crude way of looking at this
is to consider this error as bit jitter at the lsb-1.
So an 8 bit system would have a SNR of 10*log(2^9)=27 db.
That's obviously not good enough. 16 bits yields a SNR of
10*log(2^17)=51 db which is close enough for our purposes.

Now the Nyquist limit says we have to sample at a minimum
of twice the highest frequency in the audio. If we assume
that's 5 kHz, then our minimum sample rate is 10 kilosamples
per second. That requires a very good brickwall filter, however,
so sampling is usually done at a somewhat higher rate, say 3X
or 4X the highest audio frequency. Lets pick 3X. So our required
bit rate is 16*15,000=240 kb/s. That's not going to fit in a
normal FM two way radio bandwidth, so we're going to have to
resort to trickery.

Codecs use various compression schemes to lower the effective
bit rate. Delta modulation is one such trick, and LPC (linear
predictive coding) is another. These are effective real time
compression methods, but do suffer some artifacts. Or we can

take a page from the newer high speed telephone modems and use
LZW type on the fly lossless compression and complex modem
encodings that use less than one baud per bit. Off the shelf
modems can deliver up to 56 kb effective data throughput over
voice grade channels wsing a base baud rate of 600 baud. That's
not quite good enough though.

Or we can abandon voice grade radios for the links and use purpose
built digital radios with higher baud rates. If we take a 56 kb
WA4DSY RF modem (GRAPES), and couple that with an on the fly
compression scheme like LZW, we can easily get the required 240 kb/s
throughput for broadcast grade audio without dealing with the timing
artifacts of delta modulation or LPC. Occupied bandwidth would be
less than 70 kHz.

If we can settle for less than perfection, however, Motorola has
a codec scheme that they claim can fit a digital voice signal in
the same bandwidth as a NBFM voice signal, IE 20 KHz. It won't
work through off the shelf FM radios though, a purpose built
radio is required, and it won't yield "broadcast" SNRs. I have
the write up on it around here somewhere, but can't lay my hands
on it right now. I seem to recall that its an 8 bit system so
the SNR is going to be around 27 db. It should be noted that hams
consider the 20 db quieting level "full quieting" and thus perfectly
acceptable audio quality.

>I just received a catalog from Consumer Microcircuits
>Ltd in the U.K. listing a CVSDM codec. I remember
>playing with these in electronics lab in college;
>would these provide a narrow enough digital signal
>to shove through a radio system designed for 5KC
>bandwidth given a band-limited audio input to the
>codec?

I don't know this codec. What are the specs? Note that
typical telco "voice grade" codecs have a bit rate of
around 16 kb/s by use of aggressive coding schemes.
Using MSK methods, that could be transmitted in a
22.4 kHz channel. But they won't deliver the "broadcast"
grade audio you apparently want.

>I don't recall if the output of such a codec would
>be transmittable over the air or would require
>a modem of some sort. If so, this might kill it.

Direct FSK is a bandwidth hog, so if the codec data rate
is fairly high, some sort of modem scheme, such as the
above mentioned telephone modems or the WA4DSY MSK design
would be indicated. Naturally, straight AFSK used over a
FM radio is even worse than direct FSK, and should be avoided
at all costs unless the data rate is *really* low, say 1200
to 2400 b/s.

>Our link system currently consists of link repeaters
>serving a locale, linked to the next hub via a
>transciever located at that next hub site. I envision
>a digital system which could sync up rather quickly
>as the transceivers keyed up each time. I would rather
>not put up a full-duplex RF system just to keep
>the modems happy. I have lots more to tell but
>I'll shutup now.

The DSY RF modem will sync in 5 ms (depends on transverter
TR time too) so it should work in a half duplex setup. That's
better than the squelch response time of a typical FM voice
radio. High performance phone modems need a training sequence,
and that pretty much mandates full duplex full time links.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1439. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 16:10:53 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb12.161053.4486@ke4zv.atl.ga.us>
Source record: 271141

In article <CL1p2x.8s2@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>In article <1994Feb11.001239.2842@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>I can wait and recognize "the", but when it turns out to be the
>>opening character group in "Thessalonian", I'm screwed. Dealing
>>character by character on paper insures I get either correctly.
>
>Geez Gary, what kind of QSOs do you have? In 18 years I've never had
>someone send that word to me; phooey - your QSOs sound MUCH more
>interesting than mine.

I've been claiming that all along, Jeff. The high information rate
of voice transmission allows complex ideas to be expressed quickly
enough to be interesting.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1440. Re: Vertical Antennas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 16:19:57 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb12.161957.4593@ke4zv.atl.ga.us>
Source record: 271142
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <CL2Iuo.21A@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>Mike Stansberry (jms@col.hp.com) wrote:
>
>: : (Is anybody else still following this convoluted discussion?)
>: : AL N1AL
>
>: Yes, but you're both over my head. I still read it, though.
>: Mike, K0TER
>
>Would everybody (anybody) trust ELNEC to settle this discussion?

We're not arguing over *results*, we both agree on the patterns
so ELNEC wouldn't settle anything there. What we're discussing
is the most useful way to visualize what's happening in and around
the antenna from a "first principles" point of view. (At least I
am, I'm not sure Al is coming from the same direction.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1441. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 16:30:48 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb12.163048.4714@ke4zv.atl.ga.us>
Source record: 271143

In article <8299@gold.gvg.tek.com> groverc@gvgadg.gvg.tek.com writes:
>
>It sounds as though Mark Twain was right when he described golf as
>
>"A good walk ruined."
>
>I wonder if just hanging around all those country club types
>could cause cancer.

Especially the high powered lawyers! The corona discharge off their
egos would probably light a small city. :-)

Somehow though, I suspect the real major cause of death for golf
pros is jealous husbands. :-)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1442. Readership Report for the Radio-Related Usenet Newsgroups

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 17:29:58 UTC
From: pschleck@unomaha.edu
Message-ID: <1994Feb12.172958.2948@news.unomaha.edu>
Source record: 271144
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner,rec.radio.info

The following is reprinted from news.lists, with only the radio-related newsgroups (and the first newsgroup for comparison) included.

>From: reid@decwrl.DEC.COM (Brian Reid)
>Newsgroups: news.lists
>Subject: USENET Readership report for Jan 94
>Date: 8 Feb 1994 13:59:13 -0800
>Organization: DEC Network Systems Laboratory
>Summary: data for all groups
>Keywords: arbitron, statistics, full

This is the full set of data from the USENET readership report for Jan 94.
Explanations of the figures are in a companion posting.

```
+-- Estimated total number of people who read the group, worldwide.
| +-- Actual number of readers in sampled population
| | +-- Propagation: how many sites receive this group at all
| | | +-- Recent traffic (messages per month)
| | | | +-- Recent traffic (kilobytes per month)
| | | | | +-- Crossposting percentage
| | | | | | +-- Cost ratio: $US/month/rdr
| | | | | | | +-- Share: % of newsrders
| | | | | | | | who read this group.
V V V V V V V V
1 510000 6243 90% 2 25.1 100% 0.00 12.3% news.announce.newusers

211 91000 1114 77% 1314 4119.6 13% 0.06 2.2% rec.radio.amateur.misc
286 82000 1000 77% 1047 2547.4 6% 0.04 2.0% rec.radio.shortwave
417 72000 872 75% 470 537.3 9% 0.01 1.7% rec.radio.swap
542 64000 776 59% 391 575.9 17% 0.01 1.5% alt.radio.scanner
739 54000 662 74% 383 1012.5 1% 0.02 1.3% rec.radio.amateur.policy
939 48000 581 65% 155 1072.4 6% 0.02 1.1% rec.radio.info
963 47000 571 74% 130 221.1 19% 0.01 1.1% rec.radio.noncomm
969 47000 570 55% 663 977.4 9% 0.02 1.1% rec.radio.scanner
1007 45000 554 73% 184 354.6 3% 0.01 1.1% rec.radio.cb
1083 43000 529 58% 233 354.7 5% 0.01 1.0% rec.radio.amateur.homebrew
1143 42000 509 60% 321 660.1 5% 0.02 1.0% rec.radio.amateur.digital.misc
1156 41000 504 58% 268 440.1 10% 0.01 1.0% rec.radio.amateur.antenna
1207 40000 488 67% 353 820.4 6% 0.02 1.0% rec.radio.broadcasting
1235 39000 478 54% 161 265.1 3% 0.01 0.9% alt.radio.pirate
1245 39000 474 58% 283 372.3 3% 0.01 0.9% rec.radio.amateur.equipment
1314 37000 451 57% 101 350.6 40% 0.01 0.9% rec.radio.amateur.space
1894 24000 294 37% 114 189.5 6% 0.00 0.6% alt.radio.networks.npr
2124 20000 240 50% - - - - 0.5% rec.radio.amateur.packet
```

2279 17000 202 32% 4 4.1 25% 0.00 0.4% rec.ham-radio
2293 16000 199 31% 8 11.9 63% 0.00 0.4% rec.ham-radio.swap
2487 13000 155 16% 50 92.7 0% 0.00 0.3% alt.radio.digital
2778 5900 72 19% 61 212.1 65% 0.01 0.1% aus.radio

Several positive trends continue this month. Readership is up dramatically in all active newsgroups (closely following Usenet's predicted exponential growth patterns). Previously tied, rec.radio.amateur.misc has surged ahead of rec.radio.shortwave, which is running second this month. Other newsgroups with extremely strong showings are rec.radio.swap and rec.radio.amateur.policy (meeting their respective goals of keeping for-sale messages and extended legal debate out of the main discussion newsgroup). Currently, rec.radio.amateur.homebrew leads the other new rec.radio.amateur newsgroups by a slight margin, although all are roughly at the same order of magnitude. The recently-created rec.radio.scanner is slowly gaining in readership as well, its propagation almost tied with alt.radio.scanner, which it supersedes. Recently, Chris Yoder (chris@tali.hsc.colorado.edu) sent out an rmgroup for alt.radio.scanner. Unfortunately, a user at another site (infamous for doing these things) took Chris's rmgroup message, converted it to a newgroup message, and sent it back out. Because of this, alt.radio.scanner will not be deleted at sites that obey control messages automatically. Be advised that the newgroup message is a forgery and only the rmgroup message should be carried out.

It is expected that the newly-created newsgroups will continue to grow in readership like previously-created newsgroups such as rec.radio.info and settle out at about 60-70% propagation. If these new radio-related newsgroups still haven't reached your site, please ask your news administrator to create them (refer him/her to the new newsgroup announcements by Dave Lawrence in news.announce.newgroups or the messages posted to the new newsgroups piling up in "junk" :-). Especially point out to him/her that cost/per-reader/per-month is significantly down in all newsgroups.

The defunct newsgroup rec.radio.amateur.packet has been rmgrouped as of September 21st, 1993, and is no longer connected to the PACKET-RADIO mailing list. Netters interested in packet-radio discussion should use rec.radio.amateur.digital.misc and the HAM-DIGITAL mailing list. Propagation and readership continues to drop in the old newsgroup, which is currently in last place among all the rec.radio newsgroups. If this newsgroup still appears at your site, ask your news administrator to rmgroup it.

Note also that the defunct rec.ham-radio hierarchy reappears this month. If the newsgroups are still active at your site, please try to persuade your your news administrators to delete them as these groups have been rendered obsolete (for over 3 years now) by the rec.radio.amateur hierarchy.

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

1443. Club Stn. U of Illinois??

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 18:08:51 UTC
From: Keith Poole <kp2a+@andrew.cmu.edu>
Message-ID: <YhLFgn600iV2I2X8wS@andrew.cmu.edu>
Source record: 271145

Is there an amateur radio club station at the University of Illinois at Urbana-Champaign? If so, is it possible for visitors to use it on HF?

Thanks.

Keith Poole K7MOA/3

1444. Re: A is for alpha.....

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 18:58:21 UTC
From: bck1@cl.cam.ac.uk
Message-ID: <1994Feb12.185821.5943@infodev.cam.ac.uk>
Source record: 271146

In article <erik_read-100294175751@gardner2.life.uiuc.edu> erik_read@qms1.life.uiuc.edu (erik read) writes:
>I have a friend who speaks english badly and does not choose words to
>describe the letters. I think the military has a thing where they use
>standardized, easily recognisable words, like alpha, bravo, charlie,
>etc......
>I myself do not know them all and I really think that this would help a
>lot.
>Can anyone help me? Is this the right place to be posting?
>
>Thanks in advance; Erik

There are a number of different phonetic alphabets, though
Alpha Bravo ... Yankee Zulu is probably by far the best known,
being used internationally for air traffic control, for example.

The NATO phonetic alphabet (aka ICAO alphabet):

Alpha Bravo Charlie Delta Echo Foxtrot Golf Hotel India
Juliet Kilo Lima Mike November Oscar Papa Quebec Romeo
Sierra Tango Uniform Victor Whiskey Xray Yankee Zulu

Telecom B:

Alfred Benjamin Charles David Edward Frederick George Harry
Isaac Jack King London Mary Nellie Oliver Peter Queen Robert
Samuel Tommy Uncle Victor William Xray Yellow Zebra

British A:

Amsterdam Baltimore Casablanca Denmark Edison Florida
Gallipoli Havana Italia Jerusalem Kilogramme Liverpool
Madagascar New_York Oslo Paris Quebec Roma Santiago Tripoli
Uppsala Valencia Washington Xantippe Yokohama Zurich

Brian Kelk
Cambridge
U.K.
bck1@cl.cam.ac.uk

1445. FT470

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 19:36:03 UTC
From: crakrz@camelot.bradley.edu
Message-ID: <2jjb33$arp@camelot.bradley.edu>
Source record: 271147

Can anyone e-mail the mods for the Ft-470 to increase the transmit and recieve rranges? I know to increase the transmit it is the removal of a jumper and to increase the recieve it is only a series of button pushes.
Any help is appreciated
thanks
Geoff
KB9DUX
crakrz@camelot.bradley.edu

1446. Need club contact or Elmer in the Fort Worth area

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 20:10:46 UTC
From: sprouse@n3igw.PGH.PA.US
Message-ID: <89@n3igw.PGH.PA.US>
Source record: 271148

I'm looking for an Elmer in the Fort Worth area. My brother called me the other day to say that while attending a training session for his employer in Oaklahoma one of his classmates had shown him a two meter hand held and told him about the fact that there was no longer a code requirement for the techincian license. I think he is hooked!

I advised him to go down to the local Radio Shack and pick up the "Lets talk radio" package. He has a scanner and I gave him several two meter frequencies to plug in and it occured to me that I might be able to find a contact or club in his area that would help him out. If you know of someone who could help him get started please drop me email and I'll put the two of you together. The work load as of late has not let me keep up with net news so please respond via mail. Thanks.

73's

--
Ken Sprouse / N3IGW sprouse@n3igw.pgh.pa.us
GEnie mail KSPROUSE
Packet radio n3igw@w2xo.pa.usa.noam
Compu$erve 70145,426

1447. Online call book

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 21:45:47 UTC
From: mmjjmm@post.its.mcw.edu
Message-ID: <2jjimb$8h1@post.its.mcw.edu>
Source record: 271149

How do I access the online call book?

--
Michael J. Malloy
Medical College of Wisconsin Truth is a Virus
mmjjmm@post.its.mcw.edu

1448. Nashvill --> Knoxville 2m?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 23:04:33 UTC
From: wlp2y@faraday.clas.Virginia.EDU
Message-ID: <CL4w3L.FGL@murdoch.acc.Virginia.EDU>
Source record: 271150

Howdy. Here's a question for anyone who lives in central or east
Tennessee. Are there any 2m repeater links between Nashville and
Knoxville, TN? Or any strategically replaced repeaters (with good reach)
between them that would allow a conversation?

How much power would be required for the second of the above two
possibilities?

Will Phillips
KE4ALY
leroy@virginia.edu
--

** *
*** * * Wm. L. Phillips

1449. HT Recs out there?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-12 23:06:18 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2jjnda$qjs@bigfoot.wustl.edu>
Source record: 271151
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

I am looking for recommendations for getting a HT. I'm still waiting for my ticket, and I've read that the HT isn't the best thing for a first rig but I'll explain. I'm a undergraduate in a dorm. I can't set up any real antenna. I have no car. However, once I have my license, I'll have access to the school shack. The amateur radio club is in the process of relocating their repeater to the dorm that is about 100m away from me--it's a 2m repeater. What should I get?

I've been looking primarily at dual-banders, especially the ICOM IC-W2A. Any complaints or complements for this or Kenwood's or Yaesu's or Alinco's? I also like the look of having a wide band receiver as the IC-2SRA, but as I already have a PRO-43, I know I don't need it. What are your recommendations? Go new? Go used (I think that there will be an ARRL convention in Dallas area this summer, is that right?)???

I'm kind of flexible on price range--I'm willing to spend a little more if I know I'll be using it for a LONG time.

Where is a good place to buy? Mail order? Tucker's Electronics (ads in _CQ_, etc) is close to my house in Dallas. Any suggestions about dual-band vs. just 2m or 70cm?

Any and all suggestions are appreciated. Thanks in advance.

--jesse wei
<jlw3@cec.wustl.edu>

1450. Re: soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 00:31:05 UTC
From: wolfman@p-cove.UUCP
Message-ID: <iyTNHc2w165w@p-cove.UUCP>
Source record: 271152

junger@rsg1.er.usgs.gov (John Unger) writes:

> Has anyone had any experience (either good or bad) using one of
> the small butane torch/soldering irons to solder PL-259 connectors
> to RG-8U coax. Do they work as well as or better than a big
> (>100W) soldering iron?

I have had real good luck with a little 5 watt iron. All I do is let it
heat up for a while, then hold it on the pl-259 and the coax shielding on
the inside. If I wait like that for about a minute, and then melt the solder
on the tip and let it run into the hold and wait another min, I get a
real good connection.

See ya.

73 de Aaron
KB8PFZ

---

wolfman@p-cove.uucp (Aaron Smith)
Amateur radio station KB8PFZ

1451. Re: Looking for LOGIKEY keyer

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 01:29:39 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2jjvq3$4tk@news.acns.nwu.edu>
Source record: 271153
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

Refering to the Logikey electronic keyer, Richard L Barnaby
<barnaby@world.std.com> wrote:
>
>Is this an Iambic keyer or a regular keyer. I haven't used an iambic
>keyer (saw one once) but it seems like it'll take relearning.
>Is it worth it?
>Comments anyone?

Worth every penny and more. Yesterday, I got the partial kit version,
called CMOS Super Keyer II and sold by Idiom Press. I did not go to
bed till 2am as I was fussing around with the kit and having a great time.
It - accepts commands by paddle, great for mobile operation (my use)
- store upto four messages, soft sectored into a 220 char space
- messages can contain commands to speed up/down, invoke other
messages or itself, user defined breaks for paddle inserted comments
- ultra low power consumption, down to 10ua withing 2 s of idleness
- deals with serial numbers, auto increment, repeat etc
- digital and linear analog speed setting
and much much more.

Here is a short intro to electronic keying. First off, there are many ways
of generating CW:
straight key - quaint but top speed is kinda limited for most ops
mechanical bugs - require training, I would love to master them but
haven't gotten around to it yet
electronic bugs - you make the dahs, it makes the dits. Single lever
paddles are ok. Needs paddles and keyer.
side-swiping - electronic dits/dahs, may have dit/dah memory. Dit/Dah
memory means that the dit/dah elements are self completing
Single lever paddles ok. Many ops use double lever paddles
to do this. Not needed. Electronic keyer needed to
generate the dots/dashes.
iambic - absolutely needs double independent levers in the
paddle. The electronic keyers come in a variety of
flavors. Curtis Mode B is the most common.
keyboard - use programs on pc, tncs or dedicated keyboards. Used
very commonly by super qrq ops, such as k5fo, and
contesters (keyer is often part of the logging program
such as CT, NA, N6TR's logger etc.

I use an iambic paddle and keyer built into my TS850 for most operating. When
contesting I use CT. I use the CMOS Super Keyer II (Kit version of Logikey)
in the car with my TS50/bugcatcher.

A few words about iambic paddle operation. One lever, commonly the left
one, is used to generate dits and the other generates dahs. If either
one of levers is held the effect is like using a side-swipe keyer:
continous series of dits or dahs. Most keyers have dot and/or dahs memory
and so touching the dah paddle followed by the dit paddle generates the
letter N. But this hasn't much to do the iambic capability yet. If
both the paddles are squeezed toghether then the keyer emits a continous
stream of alternating dits and dahs (short/long - iambic meter in poetry
and hence the name). This makes sending code much easier. For instance
to send the letter C, you just hold the paddles together starting with
the dah paddle. The point at which you let go depends on whether it
is a Mode A or Mode B paddle. With mode B you let go of both paddles
while emitting the dah. In mode A, an older mode that is favored by some ops,
you have to let go *after* completing the dah element.

This may sound complicated but is easily unserstood by playing with a keyer/
paddle combo for a while. Also check out (part of my handout to CW students):

1. The iambic gambit. By Lew Fay, AA5Q. QST (I forget the year/month)
2. Keys, Keyers and Keyboards. By Bruce Hale KB1MW QST Dec. 1989.

Hope this helps.

Rajiv dit l dit
aa9ch l
r-dewan@nwu.edu ********** =
* rajiv aa9ch/m * =
* r-dewan @nwu.edu * l
* iambic cmos super2 * l
********* kwd ts50 tx bugcatcher * l
* *l
* *** *** *H
* * * * * *H
base* *kenwd850*vert*80mloop* *kent**
*** ***

1452. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 01:53:21 UTC
From: mzenier@eskimo.com
Message-ID: <CL53x0.MMn@eskimo.com>
Source record: 271154

In <CKz4HD.9KD@srgenprp.sr.hp.com>, Alan Bloom wrote:
: Steve Coletti (bigsteve@dorsai.dorsai.org) wrote:
: : I'd venture a guess that the death rate is probably due to the exposure
: : to chemicals and insecticides used in grounds keeping.

: I suppose, although I doubt they use much insecticide on golf courses.
: (They're mostly grass, aren't they?)

Yes, but it has to be perfect grass. They put so much crud on
golf courses that it made "60 Minutes" when a golfer died from
a reaction to the fungicide that had been spread.

As an example, Diazanon, used for Crane Fly uses 3/4 cup concentrate
for 500 square feet. When used on apples to control Codling Moth,
it's one tablespoon diluted in a gallon of water. (For me, this covers
3 semidwarf trees. And you usually get a headache if the wind blows
the spray back at you. And you can't eat the apples for two weeks.)
The Crane Fly larva eats grass roots. I think they've delisted this use.
I sure as hell wouldn't want to drink well water from under a golf course.

Mark Zenier mzenier@eskimo.com markz@ssc.com

1453. Amateur Radio Astronauts

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 03:54:00 UTC
From: Steve.Fleckenstein%express@rhosoft.com
Message-ID: <5AF04CA1@rhosoft.com>
Source record: 271155

WA>Xref: wetware sci.space.shuttle:9427 rec.radio.amateur.misc:53279
WA>Newsgroups:
WA>sci.space.shuttle,rec.radio.amateur.misc
WA>Path:
WA>wetware!UB.com!pacbell.com!ames!elroy.jpl.nasa.gov!decwrl!netcomsv!netcom.co
WA>m!wa2ise
WA>From: wa2ise@netcom.com (Robert Casey)
WA>Subject: Amateur radio astronauts
WA>Message-ID: <wa2iseCKy2J7.GL4@netcom.com>
WA>Followup-To: sci.space.shuttle
WA>Keywords: hams
WA>Organization: NETCOM On-line Communication Services (408 241-9760
WA>guest)
:40:19 GMT
WA>Lines: 206

WA>copied from amateur radio packet radio:
WA>Subject: Ham Astronaut/Cosmonaut Listing 2/94
WA>From: KG5U@KA5KTH.#SETX.TX.USA.NA
WA>==
WA>The following is compilation of data from a variety of
WA>sources (ARRL, AMSAT, Shuttle Amateur Radio Experiment
WA>Working Group, and Motorola, Goddard Space Flight Center and
WA>Johnson Space Center Amateur Radio Clubs.
WA>==
S. Space Shuttle Astronaut/Hams:
I ran a few of the astronauts calls through the QRZ CD-ROM callbook.
Interesting to note that some of them got their license only a week or
so before the mission.
Steve
* OLX 2.1 TD * If you have a touch-tone phone, please hang up now....
--- RBBSMail v18.2
* Origin: Red Onion, ExPress Wawayanda,New York 914 342 4585 (100:911/7.0)

1454. Re: RAMSEY FX TRANSCEIVER (now long)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 05:16:01 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CL5DAq.2yI@news.Hawaii.Edu>
Source record: 271156

>: >: >Greg Bullough (greg@netcom.com) wrote:
>: >: >
>: >: >: Steven has hit it on the head. As hams, we have for years said "can't
>: >: >: afford a commercial rig? Home-brew or build a simple kit." Then
>: >: >: QST and all the other magazines which bang this drum (which quite
>: >: >: handily fills up magazine pages with circuits that few ever
>: >: >: build) reap big advertising dollars from kit companies.

Geez Greg, how do you know that ``...few ever build...'' those circuits?
Have you taken a poll? You sound like someone else on here who tries to
pass opinion as fact.
And are you saying that few are building QST's circuit or that few are
building period? If it's the latter, why would the rec.radio.caretakers
create a new newsgroup, .homebrew?
And those kit manufacturers advertising in QST must be selling kits
otherwise they wouldn't be in business year after year.
I can't begin to tell you the huge number of folks that are building
and modifying kits on the QRP mail net.
Can you imagine what your subscription/membership fees would be if QST
didn't acccept advertising dollars?
It's usually the appliance operators who scream about how much space
is taken up in QST with circuits...

Even though you're wrong on all counts, 73 to you Greg.

==========
Jeffrey Herman, NH6IL, jherman@hawaii.edu, who, in his spare time, cannibalizes
old TV sets to make QRP transmitters (CW of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500kc CW)

It is said that CW is the second most popular mode on HF, but scanning the
bands I frequently count more CW QSOs than SSB QSOs.
==========

1455. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 05:26:13 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CL5Drp.34F@news.Hawaii.Edu>
Source record: 271157

In article <1994Feb12.145650.4024@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
> Farming, of course,
>continues to be the most dangerous occupation in the US with more
>occupational injuries and deaths than any other large scale occupation.
>By comparison, the occupation of police officer is rated rather low
>on the scale of occupational risk. Just goes to show how perceptions
>and reality often don't match.
>

I believe that mining and firefighting are rated as the most dangerous occupations.
[As a fireman back in Southern California in the 70's I was continually reminded of that fact by my training officer.]

==========
Jeffrey Herman NH6IL jherman@hawaii.edu, who, in his spare time, cannibalizes old TV sets to make QRP transmitters (CW, of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500 kc CW)

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.
==========

1456. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 05:39:27 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CL5EDr.3CB@news.Hawaii.Edu>
Source record: 271158

In article <1994Feb12.161053.4486@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <CL1p2x.8s2@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>>In article <1994Feb11.001239.2842@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>>I can wait and recognize "the", but when it turns out to be the
>>>opening character group in "Thessalonian", I'm screwed. Dealing
>>>character by character on paper insures I get either correctly.
>>
>>Geez Gary, what kind of QSOs do you have? In 18 years I've never had
>>someone send that word to me; phooey - your QSOs sound MUCH more
>>interesting than mine.
>
>I've been claiming that all along, Jeff. The high information rate
>of voice transmission allows complex ideas to be expressed quickly
>enough to be interesting.
>

Now wait a minute! I meant CW QSOs - if folks are sending you words such as Thessalonian on CW THEN your QSOs are more interesting than mine.
You never miss an opportunity to kick CW in the okole (Hawaiian word for what you sit on).

==========
Jeffrey Herman, NH6IL, jherman@hawaii.edu, who, in his spare time, cannibalizes old TV sets to make QRP transmitters (CW of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500kc CW)

It is said that CW is the second most popular mode on HF, but scanning the bands I frequently count more CW QSOs than SSB QSOs.
==========

1457. Noise Problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 06:39:37 UTC
From: dab@kaiwan.com
Message-ID: <2jkhv9$31a@kaiwan.kaiwan.com>
Source record: 271159

(Thanks all for the responses on my YX0AI/F6FNU/N7RO question)

For the past year or so, I've had a very bad noise problem while operating on the HF bands. Since I've been a lot more active the past few months, this is really starting to frustrate me. The noise is not a real choppy sounding noise, but sounds more like VERY strong band noise. However when I have this very loud noise, other stations within a few miles have no noise. Neither of the two noise blankers turned up full blast on my TS-930S do much good. I'm using a vertical antenna, so I can't turn it to see which direction it's coming from. The noise is very apparent on all HF bands from 1.8-28 MHz, 144mhz, as well as sparkles on my cable TV. The noise doesnt seem to make it up to 450mhz though, nice and quiet up there.

I have power lines directly in back of my house, but I don't think they are the problem. I've had Southern California Edison come out a few times over the past couple of years and they reported no problems. The noise is not always there and varries in strength each time it comes on. I think the noise is coming from some sort of appliance or machinery from one of the neighbors' houses, but I have no idea how to find it. It is a little baffling though, sometimes I won't hear the noise for weeks, but is has been present this entire weekend 24 hours a day.

Has anybody had experience tracking down and solving this type of noise problem?

Any advice or comments would be appreciated.

73 de Doug - NF6H

--
/*---*/
Doug Brandon [NF6H] Placentia, California dab@kaiwan.com

1458. Daily Summary of Solar Geophysical Activity for 12 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 07:03:41 UTC
From: oler@rho.uleth.ca
Message-ID: <9402130704.AA10745@rho.uleth.ca>
Source record: 271160
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

12 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

NOTE: Intense stratospheric warming is continuing over the north Atlantic,
southern Greenland and Europe. A strong anticyclone exists over
Europe. The center of the polar vortex and the coldest air resides
over northern Canada at 10 HPA.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 043, 02/12/94
10.7 FLUX=097.6 90-AVG=106 SSN=053 BKI=4543 5434 BAI=029
BGND-XRAY=B3.0 FLU1=8.4E+06 FLU10=1.2E+04 PKI=4544 6444 PAI=036
BOU-DEV=042,092,063,032,088,042,033,054 DEV-AVG=056 NT SWF=00:000
XRAY-MAX= C1.0 @ 2345UT XRAY-MIN= B2.6 @ 0031UT XRAY-AVG= B3.9
NEUTN-MAX= +004% @ 1925UT NEUTN-MIN= -001% @ 2120UT NEUTN-AVG= +0.7%
PCA-MAX= +0.0DB @ 2355UT PCA-MIN= -0.3DB @ 0530UT PCA-AVG= -0.0DB
BOUTF-MAX=55368NT @ 0410UT BOUTF-MIN=55306NT @ 1307UT BOUTF-AVG=55336NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+063,+000,+000
GOES6-MAX=P:+140NT@ 1747UT GOES6-MIN=N:-088NT@ 0738UT G6-AVG=+086,+041,-033
FLUXFCST=STD:103,105,105;SESC:103,105,105 BAI/PAI-FCST=025,025,020/030,025,020
KFCST=3455 5433 3345 4443 27DAY-AP=014,020 27DAY-KP=2343 3332 4544 2333
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MAJSTRM;**245STRM:0248-1047UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 11 FEB 94 was 29.1.
The Full Kp Indices for 11 FEB 94 are: 4o 5- 5+ 6- 5o 5- 4- 4+
The 3-Hr Ap Indices for 11 FEB 94 are: 29 43 54 69 53 44 24 34

SYNOPSIS OF ACT

Solar activity was very low. The only actvity this
period consisted of a B9 optically uncorrelated x-ray event.
Weak low frequency radio activity was also observed this
period. One new region was numbered -- Rgn 7670 (N07E74) which
is believed to be the return of old Region 7654. The previous

daily report erroneously mentioned newly numbered Rgn 7669 (N05E58) as the return of 7654. Active surging is present in and around Rgn 7670. The remainder of the disk and limb was quiet.

Solar activity forecast: solar activity is expected to be very low to low. Regions 7666 and 7668 have the potential to produce C-class activity. Development of Rgn 7670 will be closely watched.

The geomagnetic field has been at mostly active to minor storm levels with major to severe storm conditions reported during the nighttime sectors at high latitude stations. A favorably positioned coronal hole is believed to be responsible for this lengthy storm.

Geophysical activity forecast: the geomagnetic field is expected to remain at mostly active to minor storm levels for the first two days of the forecast period. Occasional periods of major to severe storm conditions are likely during nighttime hours at high latitude stations. Activity is expected to moderate on day three to mostly unsettled to active with some minor storm periods at high latitudes.

Event probabilities 13 feb-15 feb

Class M 05/05/10
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 13 feb-15 feb

A. Middle Latitudes
Active 40/35/25
Minor Storm 20/15/05
Major-Severe Storm 10/05/01

B. High Latitudes
Active 40/40/30
Minor Storm 40/20/10
Major-Severe Storm 15/10/05

HF propagation conditions continued well below normal over all regions. High and polar latitudes continue to show the strongest degradation, as is to be expected. Periods of useless propagation continue to plague these regions. The coronal disturbance which has maintained these conditions is expected to subside over the next 48 to 72 hours. When this occurs, propagation should begin improving - first over the low latitudes, then the middle latitudes, followed last by the high and polar latitudes. The duration and intensity of this disturbance will slow the recovery of the ionosphere.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7666 N18W70 351 0080 HSX 03 001 ALPHA
7668 N08W04 285 0160 EAO 11 010 BET
7669 N05E58 223 0010 HRX 01 001 ALPHA
7670 N07E74 207 0000 AXX 00 001 ALPHA
7667 S07W54 335 PLAGE
REGIONS DUE TO RET
NMBR LAT
7658 N12 185

LISTING OF SOLAR ENERGETIC EVENTS FOR 12 FEBRUARY, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0248 0248 0249 140

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 12 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 12/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
61 S38W38 S56W42 S56W63 S33W54 337 ISO NEG 007 10830A
62 N14E37 S12E35 S10E27 N14E30 257 ISO NEG 005 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
11 Feb: 0439 0443 0451 B3.7
1356 1359 1401 B4.5
1455 1508 1519 C1.3
1642 1649 1658 B6.1
1840 1842 1847 SF 7666 N20W51
2315 2320 2325 B9.2

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7666: 0 0 0 1 0 0 0 0 001 (16.7)
Uncorrellated: 1 0 0 0 0 0 0 0 005 (83.3)

Total Events: 006 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1459. 440 MHz in Orlando - Open Repeaters??

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 07:40:42 UTC
From: edberg@netsun.mdc.com
Message-ID: <2jklhqINNpef@lynx.unm.edu>
Source record: 271161

Hello,
I happen to be in Orlando, Florida on business (ignore signature) and I
didn't bring my repeater directory. Are there any open repeaters here,
and if so, what freqs? Either reply here or call my hotel 407-351-1000.
Thanks and 73s.
don N6CLP

--
****
* e-mail: edberg@netsun.mdc.com * Don Edberg *
* CI$:72417.2067@compuserve.com * Advanced Programs & Technology*
* phone: 1-714-896-5210 * McDonnell-Douglas Aerospace *
* FAX: 1-714-896-6930 * 5301 Bolsa Ave, MS 13-3 *
* Call: N6CLP * Huntington Bch, CA 92647-2099 *
****

1460. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 07:57:08 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <761165569.F00003@ocitor.fidonet>
Source record: 271170

```
The following files were processed Sunday 02-13-94:

HAMPACK [ HAM: Packet Communications programs ]
----------------------------------------------------------------------
VESTER-A.ZIP ( 525172 bytes) SSTV/FAX480/WEFAX System for IBM &
Clones by K3BC

----------------------------------------------------------------------
525172 bytes in 1 file(s)

Total of 525172 bytes in 1 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)
```

1461. Re: FCC.GOV on-line

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 08:13:04 UTC
From: twise@shell.portal.com
Message-ID: <CL5LHy.ApM@unix.portal.com>
Source record: 271162

What will FCC.GOV give us access to?

Travis A. Wise Del Mar High School email: twise@shell.portal.com
1421 Grace Avenue Home: 408/267-9562 AX.25: KB8FOU@N6LDL.CA.USA.NA
San Jose, CA 95125 Fax: 408/267-6981 FTP: portal.com /pub/twise

1462. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 11:43:01 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9402130630591.gilbaronw0mn.DLITE@delphi.com>
Source record: 271163

>>Is this like 'operating barefoot'? Where to they clip the HT's external

>>speaker-mike? ;->
>
>Where do they hang the HT??
>
>steve
>mosier@fagan.uncg.edu
>
Do you really want to know? !!!
You might ask over in rec.nude. They do promote a nude net on Thursdays on
20mtrs I think.

1463. Re: Copying High-Speed CW: Print or Scr

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 11:43:14 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9402130630592.gilbaronw0mn.DLITE@delphi.com>
Source record: 271164

,LT
>A mailing I read is involved in a comparision of the speeds of
>printing and cursive writing. I decided to consult some experts.
>So, all you high-speed CW ops, which do _you_ use?
>
>
>73,
>mag
>
>--
>Michael A. Gauland gaulandm@tekig7.PEN.TEK.COM
>AA7JF (503) 627-5067
>
Printing is not feasabile above 25 WPM. You must learn to use cursive.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

1464. Re: Power Supply Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 13:53:23 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb13.135323.13898@ke4zv.atl.ga.us>
Source record: 271165

In article <760937769.AA04746@mcws.fidonet.org> Bob.Albert@f943.n102.z1.fidonet.org (Bob Albert) writes:
>
>I tend to operate my mobile type rigs (in the shack) at reduced
>potential to increase reliability and lamp life. Thus, rather than
>goosing the rig to 14 Volts to get a little more output, I tend to run
>it at 12.2 or so; that way I may never have to fix the thing.

While 12.2 volts is probably fine, beware of carrying this idea to extremes. Most of the finals in modern VHF/UHF rigs lose efficiency rapidly as voltage is decreased. You can find yourself with low output and overheated finals if you allow the voltage to sag too much. Also, many of the circuits in the radio become non-linear leading to severe distortion and spurious products if operated below their design voltage. Lots of radios just won't operate properly at all if voltage drops to 11 volts or less.

Mobile rigs are designed to tolerate the range of voltages between 12 and 14.8 volts of the automotive electrical environment. Going outside those limits in either direction can lead to trouble. The ideal voltage for automotive gear is 13.8 volts. You should stick as close to that as possible for best results.

If you want to increase lamp life, wire a resistor in series with the bulbs. Lamp output drops rapidly with decreasing voltage, but life goes up almost exponentially with decreasing voltage. A 10% drop from nominal is about the ideal compromise for lamps. This is *not* generally true for RF transistors or ICs, so they should run at their design voltage.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1465. FCC Daily Digests for the

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 14:21:00 UTC
From: steve.allen@brent.uucp
Message-ID: <20345.553.uupcb@brent.uucp>
Source record: 271166

bruce@pixar.com (Bruce Perens) writes, and writes, and writes:
[cable-tv, broadcast FM, commercial microwave, satellite pager
drivel omitted...
]

Bruce: besides being 99.9% irrelevant to amateur radio, this is an
incredible waste of bandwidth. If you feel a need to post this
stuff, form your own newsgroup.
-Steve N2WSA

. QMPro 1.51 . There is no bad weather-- only bad clothing

The Brentwood BBS! 12 Nodes (914)-381-1600

1466. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 14:45:54 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb13.144554.14280@ke4zv.atl.ga.us>
Source record: 271167

In article <39@swan.ukc.ac.uk> ali@ukc.ac.uk (A.L.Ibbetson) writes:
>In article <1994Feb11.001239.2842@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>I can wait and recognize "the", but when it turns out to be the
>>opening character group in "Thessalonian", I'm screwed. Dealing
>>character by character on paper insures I get either correctly.
>
>The way it works in my head seems to be that I have a longish mental
>FIFO with parallel access for pattern matching. The FIFO seems to run
>at about 5-10 letters, though access back to 10 letters requires me to
>think harder than for, say, 5. The length varies with speed too. Oh
>yes, and there are also algorithms for stuff missed in QRM: I am
>conscious of rescanning activity going on in my mind to try to `make
>sense' of whole chunks of partially copied code. This is mostly
>english grammer context guessing, but there is also a little bit of
>`that S could have been an H, but not a Q'.
>
>The character-by-character loading of the FIFO is subconscious, I just
>`hear' the words, I guess as my brain picks out whole words from the
>FIFO. At high speed, near the limit of my ability, I hear whole
>phrases. I suspect this is why most operators I know have a small
>speed range (about 5wpm) just below their maximum, where they read code
>more comfortably than lower speeds. Of course, I use the FIFO as an
>analogy. Goodness knows what is really going on in my head. I'd have
>the same difficulty describing how I ride a bike.
>
>The point I seek to make (long windedly) is that unless you put the
>pencil down Gary, you deny yourself the chance of developing this `look
>back and re-evaluate' ability, which is how I copy Thessalonian via
>"the", "these", "no, what the hell is this word?" and finally
>"Thessalonian", though I think most of us CW freaks would actually miss
>the word unless there were preceding context clues. But maybe I
>shouldn't admit that :-)

OK, Alan, I understand what you're saying. My mental "FIFO", however,
is 3 characters or less deep. And that doesn't matter whether the
characters are input via aural Morse, visual flash cards, or spoken
phonetics. Once the depth exceeds 3, the oldest character is gone off
the stack. Attention span deficit, poor short term pattern memory,
or something.

If I can't get the information down where I can take it in as a
gestalt, I can't understand it. VOA slow English drives me crazy,
I have to take notes to figure out what they're talking about, and
my natural text reading speed has been around 1000 WPM since first

grade. Slow is just no go for me, my mind races so far ahead considering contextual pathways that I lose the thread of meaning if the input is less than about 120 WPM.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1467. Re: License from Panama?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 15:03:04 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb13.150304.14379@ke4zv.atl.ga.us>
Source record: 271168

In article <2jg8p9$acc@klaava.Helsinki.FI> mjokinen@cc.Helsinki.FI (Matti Jokinen) writes:
>I am one of these hopeless creatures, who cannot raise the 40
>marks per minute cw-cpy-speed to 60 which is the limit for the senior
>class licens in our country. In the junior class we are allowed to phone
>operations only on the 28 mHz band. As I am planning a longer yachting
>voyage and I would like to be in contact with my fellow countrymen
>through ham radio, it would be interesting to know if it is true that
>you may buy for yourself a ham licens from Panama. How much would it
>cost?

One would hope not, but there are unethical officials in some countries
who will sell you anything for the right price. While I don't think
Morse is a valid testing requirement, I certainly wouldn't countenance
the buying and selling of licenses.

If you can do 8 WPM, you almost certainly can push that to 12 WPM with
some practice in *writing* faster. That's usually the problem at this
speed plateau, you haven't finished writing one character before the
next has started. If you haven't mastered the multi-tasking process
of "copying behind", and some of us can't due to attention deficits
or whatever, then you have to develop a shorthand way of writing that
will allow you to copy in realtime. Work at developing a stylized
character form that requires minimum strokes to accomplish. Some
people can do that by using disconnected cursive, others develop
their own style of printing. Try copying all lower case, it's generally
faster than upper case block printing. If your authorities will allow
you to copy with a typewriter or computer keyboard, by all means take
advantage of that opportunity. It will speed your copy greatly.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1468. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 15:16:48 UTC
From: segigot@students.wisc.EDU
Message-ID: <199402132111.PAA14524@audumla.students.wisc.edu>
Source record: 271169

unsub

1469. None

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 15:59:16 UTC
From: Drew Oliver <p01251@psilink.com>
Message-ID: <2jliok$fls@wlnntp.psi.com>
Source record: 271171

Is anyone familiar with HAMCOM2.1?

I am wondering:

If this program actually works...

If I screw up building the receiver, will it be damaged (alright)
or will my computer be damaged (not alright)...

If more detailed construction instructions (sounds like Jesse J.)
are available...

If any other programs with more detailed instructions are availble...

I'd appreciate any thoughts anyone might have on these little matters.

/s Drew Oliver

1470. Noise.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 17:15:16 UTC
From: t1terryb@cascade.ens.tek.com
Message-ID: <2jln74$qk8@cascade.ens.tek.com>
Source record: 271172

Why I lost the subject line I don't know but anyway here is some possible help for the person with the noise problem

I was going to ask if the noise is just heard on the TS-930 but your later comments indicate you also here it on 2 meters. I suggest taking an HT around the neiborhood and seeing it you can track it down. Some time ago someone said they had good luck with an handheld 2 meter rig for ham radio 'bunny hunting' and could use their body to shield it and tell which direction the noise is comming from. If that doesn't work, use a sheet of tin foil or whatever to make it directional and see if you can track down your noise problem.

One thing, make sure the noise isn't comming from inside your own how buy turning off equipment, or better yet circuit breakers to isolate things. Sometimes you find you didn't know something was on.

Good luck,
Terry Burge
KI7M

1471. Re: HT Recs out there?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 17:18:35 UTC
From: cravitma@cps.msu.edu
Message-ID: <2jlndb$oib@msuinfo.cl.msu.edu>
Source record: 271173
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

On 12 Feb 1994 23:06:18 GMT, strange alien beings caused Jesse L Wei (jlw3@cec3.wustl.edu) to write:

> I've been looking primarily at dual-banders, especially the ICOM IC-W2A.
> Any complaints or complements for this or Kenwood's or Yaesu's or Alinco's?
> I also like the look of having a wide band receiver as the IC-2SRA, but
> as I already have a PRO-43, I know I don't need it. What are your
> recommendations? Go new? Go used (I think that there will be an ARRL
> convention in Dallas area this summer, is that right?)???

I have a Yaesu FT-470 dual-bander that I am quite happy with, and the model that replaced it (the FT-530 looks quite nice as well). I have also heard a lot of good things about the Alinco DJ-580, which looks like a wholely excellent radio for not an exorbitant amount of money. The Icoms, in my opinion, tend to be a little pricey.

> I'm kind of flexible on price range--I'm willing to spend a little more
> if I know I'll be using it for a LONG time.

The FT-530 and Alinco DJ-580T are both running in the $375-450 range. I'm not sure how much the FT-470 that I have is since it was a gift, but I think around $400.

> Where is a good place to buy? Mail order? Tucker's Electronics (ads in

I find Tucker's pricing to be a little expensive. I am partial to AES (in Milwaukee, among other place) myself, but if you shop around in the ads in CQ or something like that you may be able to do better than AES's prices.

> _CQ_, etc) is close to my house in Dallas. Any suggestions about
> dual-band vs. just 2m or 70cm?

If it were me, I'd get the dual-bander myself. No sense locking yourself out of all that fun stuff available on 440. I almost made that mistake, and then decided that to ask for a dual-bander would be a lot less painful than kicking myself later for not having one.

> Any and all suggestions are appreciated. Thanks in advance.

If you need any more info etc, please feel free to drop me email (cravitma@cps.msu.edu)

Congratulations on passing your test.

/Matthew N9VWG

1472. Need volunteer operators for Bay to Breakers

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 18:42:42 UTC
From: droid@well.sf.ca.us
Message-ID: <CL6En6.E98@well.sf.ca.us>
Source record: 271174

I am cordinating communications volunteers for the San Francisco Bay to Breakers race that will be on May 15th this year.

We will need 60 or so operators to help dispatch the medical teams providing first aid for the runners. We hace a special need for operators who are also runners themselves. One of the assignments is with the Mobile Assistance Teams (MATs) who are on the course to care for those who can't get to an aid station. The operators with these teams should be able to run for a 1/2 mile and still be able to talk when they get to the scene. Operators who are also medically trained are a real plus.

If you wish to join us or want more info send mail to me (droid@well.com) or call your local office of the American Red Cross Bay Area and say you want to volunteer for Bay to Breakers. (Mailing me is better since you will be communicating with me directly, and if you can read this message you can send mail too.) ;-)

Thanks
Marty Brenneis KC6YYP (443.525+ 82.5Hz in Marin County)
KAE7616 (462.700+ 162.2Hz in Oakland Hills)
droid@well.com in cyberspace
"Yo droid!" in the audio band

1473. ANS-043 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 20:49:06 UTC
From: cowdin@pogo.DEn.mmc.COM
Message-ID: <199402132051.MAA18736@AMSAT.Org>
Source record: 271175

SB SAT @ AMSAT $ANS-043.01
N0CCZ BECOMES A SILENT KEY

HR AMSAT NEWS SERVICE BULLETIN 043.01 FROM AMSAT HQ
SILVER SPRING, MD FEBRUARY 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-043.01

Andy Freeborn (N0CCZ) Becomes A Silent Key

It is with great sadness that AMSAT-NA HQ reports that an old friend of TAPR and AMSAT has become a silent key -- Andy Freeborn (N0CCZ) of Colorado Springs. Andy succumed this past week due to cancer at age 72.

Andy was an Air Force pilot who retired to Colorado Springs where he became an amateur and then later involved in packet radio activities. For a number of years he was a member of TAPR's Board of Directors and he served for a couple of years as the TAPR President. In that role he did yeoman duty for AMSAT coordinating TAPR's involvement in the MICROSAT development and he helped kick off the joint TAPR/AMSAT DSP development activities. Andy will certainly be missed!

[The AMSAT News Service would like to thank Tom Clark (W3IWI) for this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-043.02
PHASE-3D FUEL TANKS ARRIVE

HR AMSAT NEWS SERVICE BULLETIN 043.02 FROM AMSAT HQ
SILVER SPRING, MD FEBRUARY 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-043.02

Phase-3D Rocket Fuel Tanks Arrive

On February 8, 1994 AMSAT-DL was informed of the arrival of the six tanks for the AMSAT P3-D spacecraft. Each tank is capable of storing about 50 lbs of rocket propellant. The tanks were manufactured in Russia according to AMSAT specifications. AMSAT-DL was able to order and purchase these tanks under very favorable conditions with the help of AMSAT-UA. "The arrival of these tanks constitutes a major milestone in the fabrication of AMSAT's P3-D satellite. It is another shining example of the international cooperation within the P3-D project and amateur radio in general," said Dr. Karl Meinzer (DJ4ZC), AMSAT-DL President and Project Head.

[The AMSAT News Service (ANS) would like to thank Peter Guezlow (DB2OS), AMSAT P3-D Project Team Member, for this bulletin.]

/EX
SB SAT @ AMSAT $ANS-043.03
AMSAT TURNS 25 YEARS OLD SOON

HR AMSAT NEWS SERVICE BULLETIN 043.03 FROM AMSAT HQ
SILVER SPRING, MD FEBUARY 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-043.03

AMSAT Turns 25 Years Old Soon; WA0PTV Is Preparing AMSAT Journal Issue

This spring AMSAT will turn the quarter century mark. The AMSAT Journal Editor, John Hansen (WA0PTV) is already starting to prepare an AMSAT Journal for this historic occasion. He would very much like to hear from the users of OSCAR satellites about what they feel should be included in this historic issue. He is particularly interested to hear from those who wish to contribute information, photos, or articles to this issue of the AMSAT Journal. This 25th "birthday" issue will be published as the March/April issue of The AMSAT Journal. If you feel that you would like to contribute to this "birthday" issue, please contact WA0PTV at either his INTERNET mail address of wa0ptv@amsat.org or to his home address, 49 Maple Avenue, Fredonia, NY, 14063.

/EX
SB SAT @ AMSAT $ANS-043.04
AO-13 OPERATIONS NET SCHEDS

HR AMSAT NEWS SERVICE BULLETIN 043.04 FROM AMSAT HQ
SILVER SPRING, MD FEBUARY 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-043.04

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date UTC Mode Phs NCS Alt NCS

20-Feb-94 0200 B 070 WA5ZIB W5IU
28-Feb-94 0430 B 068 WB6LLO W9ODI

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. If neither of the Net Control Stations show up, any participant is invited to act as the NCS.

/EX
SB SAT @ AMSAT $ANS-043.05
IO-26 BBS RETURNS

HR AMSAT NEWS SERVICE BULLETIN 043.05 FROM AMSAT HQ
SILVER SPRING, MD FEBUARY 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-043.05

ITAMSAT-OSCAR-26 (IO-26) Returns To Service

After the software crash occurred on the 07-DEC-93, the ITAMSAT (IO-26) Command Team decided to delay the reloading of the code inorder to improve the onboard software and further analyze the Whole Orbit Data (W0D) dumps, to better understand the satellite motion and operation. On the 06-JAN-94, the final version of the code was validated by the Command Team and the BBS was re-opened to all the users. The integrated housekeeping software (IHT ver 2.1) now has WOD capabilities and weekly data dumps will be taken without affecting the BBS operations. It should be remembered by all users that the BBS call sign is ITMSAT-11 for receiving broadcasts and ITMSAT-12 for uploads. Also, the standard PB and PG ground software is needed for accessing the BBS. The downlink frequency is 435.867 MHz using PSK at 1200 baud. Albert Zagni (I2KBD), ITAMSAT Command Team member wishes everyone to "Enjoy ITAMSAT!"

/EX
SB SAT @ AMSAT $ANS-043.06
STRAIGHT KEY NIGHT RESULTS

HR AMSAT NEWS SERVICE BULLETIN 043.06 FROM AMSAT HQ
SILVER SPRING, MD FEBUARY 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-043.06

OSCAR Straight Key Night Shows Off The "BEST FISTS"

Many thanks to all who participated in the 22nd Annual Straight Key Night on the OSCARs, 1-JAN-94. The following "Best Fist" nominations have been received: W1NU, WQ3Y and W6HDO. Although AMSAT didn't ask that logs be submitted, several participants also reported working AMSAT-NA's esteemed President, W3XO/5, in one of Bill Tynan's rare appearances on CW (PVRC members especially will appreciate the significance of this occasion). An "honorary" Best Fist nomination goes to you, Bill; let's hope that more SSB operators will follow your fine example, dust off their old pump handles, and enjoy the fun. See you all next year!

73, Ray W2RS

/EX
SB SAT @ AMSAT $ANS-043.07
STS-60 POST FLIGHT SYNOPIS

HR AMSAT NEWS SERVICE BULLETIN 043.07 FROM AMSAT HQ
SILVER SPRING, MD FEBUARY 12, 1994

TO ALL RADIO AMATEURS BT
BID: $ANS-043.07

STS-60 SAREX Post Flight Synopsis

The first Shuttle Amateur Radio Experiment (SAREX) flight of 1994 can be considered a resounding success. The STS-60 Space Shuttle Discovery mission, which included Astronauts Charlie Bolden, KE4IQB, Ron Sega, KC5ETH, and Russian Cosmonaut Sergei Krikalev, U5MIR concluded on Friday February 11 with a picture perfect touchdown at the Kennedy Space Center. During the mission, nearly 4000 packet connections were made with the SAREX station on Discovery by ham radio operators on the ground. Several voice contacts were also made, primarily late in the mission. True U.S.-Russian cooperation was demonstrated on this flight through on-board experimentation and operation of the SAREX station.

SAREX was officially activated at 14:27 UTC on February 4 with a successful voice contact through the University of Surrey amateur radio station. Doug Loughmiller, G0SYX was the control operator to initiate this first contact with the STS-60 crew.

A highly successful direct contact was completed one orbit later with a school group in Boise Idaho. The contact, held at the Discovery Center included students from several schools including the Boise Senior High School. 19 students were able to ask direct questions to Shuttle Commander Charlie Bolden.

One of the SAREX mission highlights occurred at 10:42 UTC on February 6. Sergei Krikalev, U5MIR, initiated a contact with a school group at the House of Science and Technology for Youth in Moscow, Russia. This represents the first time a cosmonaut on a U.S. space shuttle has communicated with a group in Russia. Leo Lebutin, UA3CR and Valery Agabekov, UA6HZ were the prime school group coordinators for this contact. During the contact Musa Manarov, U2MIR, gave Sergei greetings from Russia. Six students were able to ask their questions to the crew on the Space Shuttle Discovery. In addition, several cosmonauts were on hand to hear the communications. The SAREX contact was also broadcast live throughout Russia on HF (80 meters, 40 meters and 20 meters) as well as on VHF.

Problems with the Wake Shield Facility primary payload affected the SAREX payload somewhat. The Mars, Pennsylvania school contact, had to be rescheduled 4 times before a successful contact was made. 8 students were able to ask questions to Sergei Krikalev and Jan Davis during this contact. The students and teachers should be commended for their persistence and patience.

Other scheduled contacts included the Chariton High School, in Chariton, Iowa, where 3 questions were answered and the James Bean School in Sidney, Maine, where 11 students asked questions to the crew on Discovery.

The following packet message was received by AMSAT member Doug Howard, KG5OA, during one of the last SAREX passes:

[2/10/94 12:11:21]W5RRR-1>QST:
Greetings from Discovery on our sixth day in orbit. We enjoyed a conversation with President Clinton while he was visiting Houston Mission Control yesterday This morning we talked with our colleagues on Mir via satellite and we hope to talk with the Mir cosmonauts today with SAREX. Thanks for your interest and support of our flight. Best wishes from the crew of STS-60.

FYI, unfortunately the Shuttle crew was unsuccessful in their attempts to communicate with the MIR crew using SAREX.

Those of you who have heard or worked the STS-60 crew and wish to receive a QSL card need to send your signal report and an SASE or an envelope and IRCs to the following address:

STS-60 QSL
Education Activities Division
ARRL
225 Main St
Newington, CT 06111

School groups interested in communicating with the Shuttle astronauts are reminded to submit an application and proposal to the ARRL to be considered for a future contact. Final SAREX school group selections are decided approximately 6 months prior to the mission launch date. For more information, please write:

Educational Activities Division
ARRL
225 Main St
Newington, CT 06111

School groups are always welcome to listen into a school group contact when a telebridge contact occurs. We had several schools listening to the Mars, PA contact. For more details on how to listen in through the telebridge, please contact the ARRL at the above address or Frank Bauer, KA3HDO of AMSAT. His e-mail address is ka3hdo@amsat.org

The next SAREX flight, STS-59 is scheduled for April 7. It will be a high inclination (57 degree) mission with voice and packet on-board.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

/EX
SB SAT @ AMSAT $ANS-043.08
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 043.08 FROM AMSAT HQ
SILVER SPRING, MD FEBUARY 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-043.08

Weekly OSCAR Status Reports: 12-FEB-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Jan 31-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 145 |<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 240/0, Apr 04
Poor Sun angle and battery testing need maximum OFF time.
[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current FO-20 operating schedule:
From January '94 thru March '94, the analog mode and the
digital mode will be on alternately for a week at a time.
ANALOG MODE:
23-FEB-94 8:05 -TO- 02-MAR-94 6:40 UTC
09-MAR-94 7:05 -TO- 16-MAR-94 7:30 UTC
23-MAR-94 7:52 -TO- 30-MAR-94 8:15 UTC
DIGITAL MODE: Unless otherwise noted above.
[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

AO-16: Operating normally. [WH6I]

LO-19: Operating normally. [WH6I]

KO-23: Up and running. All appears to be back to normal. [WH6I]

KO-25: BBS is running. It appears that 145.980 MHz is the proper uplink
frequency and the downlink frequency is 436.500 MHz. There are a
number of images on the bird, some in a yet to be described format.
[WH6I]

POSAT: PoSAT is up and running. The processor seems very fast compared
to the other 9600 baud birds and faster through puts are common. A
note on the bird seems to imply that the "amateur experiment" will
be ending soon but no are details available. PoSAT has two uplink
frequencies: 145.925 & 145.975 MHz. The corresponding downlink
frequencies: 435.250 & 435.275 MHz. [WH6I]

IO-26: Is back up and running (1200 baud) and seeing a lot of use. [WH6I]

DOVE: Just a small correction on the address on where to send your DOVE
QSL and shortwave listener reports. PY2BJO reports that if you use
the "extended" zip code for his address, your QSL cards and reports
will arrive sooner. For completeness, his address is as follows:
Dr. Junior Torres De Castro (PY2BJO), 119 Rua Macaubal, Sao Paulo,
Brazil 01256-150. [PY2BJO]

RS-10: With the sudden rise of Solar Flux and 28 MHz open between W and G,
both RS-10 and RS-12 have been giving excellent downlink signals
when well below the user's horizon. GM4IHJ reports hearing the

satellites when over most continents, and DJ8DT reports hearing RS-10's 29.357 MHz beacon when the satellite was overflying Antarctica. Also, ZS6AOP is very active from grid location KG33WV and has made some spectacular contacts on RS-10. He invites all radio amateurs in the surrounding countries to listen for him on RS-10's 10M downlink. [G3IOR & ZS6AOP]

MIR: G3BGM heard MIR working IK1SLD on 144.450 MHz today 03-FEB-94 at 06:21 UTC. The theory about the use of this frequency by the MIR cosmonauts was to avoid clashing with the STS-60 operations. [G3IOR]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

1474. GAP DX EAGLE comments?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 20:55:06 UTC
From: BIDDLEAP@ctrvax.Vanderbilt.Edu
Message-ID: <1994Feb13.205506.29366@news.vanderbilt.edu>
Source record: 271176

Hi,

I was wondering if anyone has had any experience with the DX Eagle antenna
which GAP makes. It is a smaller version which is roughly comparable
to the R-7. I have a lot of input on the Cushcraft, but not much
on this particular GAP model. Most of the info I have gotten involves
experience with the larger low band versions, and is negative.

73

Alan

Recommended
four
line
signature.

1475. QSL route for RW0LZ, please?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 21:07:00 UTC
From: kchen@apple.com
Message-ID: <2jm4pk$hou@apple.com>
Source record: 271177

Can anyone help me with the QSL route for RW0LZ? (R-W-zero-L-Z)

(Not in 1994 Callbook.)

Thanks and 73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

1476. Ohio/Penn DX Bulletin #147

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 23:33:42 UTC
From: kb8nw@barf80.nshore.org
Message-ID: <$opdx.147.1994@ampr.org>
Source record: 271178
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ALLBBS $OPDX.147
Ohio/Penn DX Bulletin No. 147

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 147
BID: $OPDX.147
February 14, 1994
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio
Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, DL7VEE & DXNL, DF4RD, AD1C, W2JGR, K4CEF & Southeastern Cluster Group, WB5B, NL7TB N8AC and VE1CBK for the following DX information.

3Y0PI, PETER I ISLAND. As this bulletin was being prepared, reports indicate that the DXpedition team has worked over 50,000 QSOs. Monday, February 14th, will be the last night for 80/160 meter operations. Tuesday, February 15th, will be the last day for a full-time operations, if the schedule for the pick-up ship holds. The ETA for the pickup ship is February 17 or 18. This requires the team to start dismantling the base about 48 hours before the ship arrives (February 15 or 16).

9I, ZAMBIA. Holger/DL7VTM (NODXA member), Birgit/DG9WYL and Lutz/DL7VLA will arrive in Zambia on or about March 14th for a 3 week operation until April 7th. The callsigns that Holger, Birgit and Lutz will be using are 9I2Z, 9I2M and 9I2A, respectively. Their operations will be on all bands (including the WARC bands) and also operations on AO-13 satellite. This will be the first satellite operation from Zambia. All QSLs will go to Fritz, DL7VRO.

KP5, DESECHEO. AB4JI, KB4GYT, W4JKC, WA3YVN and VP2VE will be active from March 1-7. They will be on 10-160 meters, CW, SSB and RTTY; and possibly the RS-12 satellite. They will concentrate on the ARRL DX Contest, March 5-6. The callsign will be KP5/AB4JI. QSL via AB4JI. They are still looking for one more operator. Contact Robert, AB4JI, at 205-539-7665.

V3, BELIZE. Bobby, WB5B, and Mike, WA5TKC, will be active from February 19 to March 12 as V31BW and V31PP, respectively. They will operate from two locations, Bobby on South Water Caye (NA-080) and Mike in the rain forest area near Blue Creek. Mike will be operating 10-80 meters (SSB and RTTY) and Bobby mostly CW, 160-10 meters. V31BW will be active in both the ARRL DX Contests and the CQ WW 160 Meter Contest. QSL to home

calls. Both operators are providing video and data communications for the "Jason Project", headed by Dr. Robert Ballard (discoverer of the Titanic) in conjunction with the National Geographic Society. This will give school students in the U.S., Canada, Bermuda and the United Kingdom live educational "tours" from these locations.

VY1AU, HERSCHEL ISLAND DXPEDITION. Northern expeditioners will activate Herschel Island in the Beaufort Sea for the first time in Amateur Radio history. They will use the callsign VY1AU. The group will leave July 23rd from Inuvik where they will charter a float plane for Herschel. The team will be leaving the island on the 28th. Their 5 day operations will take place from Pauline Cove, a safe harbor on the east side of the Island. Herschel Island is the Yukon's first territorial park, complete with historic buildings and graveyards. Perched on the arctic edge of North America, Herschel's southern shore faces the mountainous Yukon mainland while the north shore is brutally exposed to the Arctic Ocean. The Island, 9 miles by 5 miles by 600 feet high is a mere six-tenths of a mile off the Yukon coast and accessible from mid-May to mid-September by boat or float plane. They hope to have two stations operational from a park building and use their generator. The Herschel Island DXpedition team: Bill/VY1AU, Brian/VY1BE, Richard/N6IV/KL7, Larry/KF6XC, Carl/VE8CF and John/NL7TB will handle the logistics/QSL manager duties. Operating SSB frequencies will be 21260, 14260, 14130 kHz and plus some activity on 40/80 meters. They will have a special event full-color QSL and also a video (VHS) tape of the whole event made available from NL7TB. QSL direct only to NL7TB.

XU, KAMPUCHEA. From the west coast statside, Sanyi, XU7VK, was heard active on 3522 kHz at 1524z, 7009 kHz at 1700z and one day on RTTY on 14083 kHz at 1705z. Sanyi will be active thru the end of February.

ZK1, SOUTH COOK ISLANDS. Seven members from the Glen Canyon Wireless Association will be active from Rarotonga, March 4-10. The group will also be active in the ARRL SSB DX Contest as ZK1AVY.

ZONE 2. Wayne, VE1CBK (CY0SAB), and Maurice, VE3YYR, will be active from February 22-28. Their main purpose is to operate in the CQ WW 160 Meter Contest, February 26-27. Before the contest they will be working all bands, but will concentrate on RTTY and SSB. They will also be on RS-12 satellite. QSL via VE3YYR. Wayne also mentioned that the CY0SAB cards are in the mail.

ZS9, WALVIS BAY. Ian, ZS9A, will be on 160 meters shortly before sunrise beginning February 14th. Look for him on 1815 kHz at or around 0400z.

ZY0SK AND ZY0SP, ST. PETER AND ST. PAUL ROCKS. After long delays trying to put these stations on the air, finally last weekend, the group ran into problems. Reports indicate that both stations lost their generators and had to resort to battery power. With battery power the group was only able to operate with 5 to 10 watts of power. This made them cut their operations short and they went QRT on February 11.

FAX YOUR DX INFORMATION NOW! Faxing is available Monday/Wednesday/Friday from 0430 to 2330z only. The number is 216-237-8208 and the FAX card is sharing the same phone line as BARF-80 BBS using a data/fax/phone switch.

Excerpts and distribution of The OPDX Bulletin are granted as long as OPDX/BARF80 receive credit. To contribute DX info, call BARF-80 BBS online at 216-237-8208 14400/9600/2400/1200/300 and leave a message with the Sysop or send InterNet Mail to: aq474@cleveland.freenet.edu or send BitNet Mail to: aq474%cleveland.freenet@cunyvm or send PRODIGY Mail to: DFJH48A or send a message via packet to KB8NW @ WA8BXN.OH.USA.NA

/EX

1477. Re: RAMSEY FX TRANSCEIVER (now long)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-13 23:57:54 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2jmeq2$lcm@news.acns.nwu.edu>
Source record: 271179

Commenting on Greg Bullough's tirade, Jeff Herman wrote:

>Can you imagine what your subscription/membership fees would be if QST
>didn't acccept advertising dollars?

From the audited financial statements for ARRL for 1992, in May 1993 QST:

The biggest revenue items in millions of US dollars: (the rest are peanuts)

Membership (incl accruals from life) 4.0
Pub Sales 3.7
Ad revenue 3.1

So ad sales represent 28.7% of revenue. So if we got the same
level of service, ignoring the savings from a slimmer QST, the
membership dues would have to rise to $38.60 per year. Not so bad.

However, I like the ads. So there.

>It is said that CW is the second most popular mode on HF, but scanning the
>bands I frequently count more CW QSOs than SSB QSOs.

yah!

Rajiv dit l dit
aa9ch l
r-dewan@nwu.edu ********** =
* rajiv aa9ch/m * =
* r-dewan @nwu.edu * l
* iambic cmos super2 * l
********* kwd ts50 tx bugcatcher * l
* *l
* *** *** *H
* * * * * *H
base* *kenwd850*vert*80mloop* *kent**
*** ***

1478. verifying subscription address

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 00:31:17 UTC
From: netguide@phantom.COM
Message-ID: <umoPHc2w165w@mindvox.phantom.com>
Source record: 271180

Is "ucsd.edu" the host site for those lists that were previously on the simtel20 site? Could you possibly verify the following addresses. I'd rather not subscribe and then have to unsubscribe. oh, by the way, it's for n update to the book Net Guide.

rec.radio.amateur.misc info-hams-request@ucsd.edu
rec.radio.amateur.packet packet-radio-request@ucsd.edu
rec.radio.amateur.policy ham-policy-request@ucsd.edu
rec.radio.info radio-info-request@ucsd.edu
rec.radio.shortwave swl-l-request@cuvmb.cc.columbia.edu

Thanks in advance. Of course, if you can only verify your list that too would be most appreciated.

--Kelly

********** Available in bookstores now! **********

NET GUIDE

ISBN: 0-679-75106-8
Price: $19.00
For more information, EMAIL TO: author@go-netguide.com
To place an order, VOICE CALL: 1-800-NET-1133
****

1479. callsign server info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 01:08:41 UTC
From: ah301@yfn.ysu.edu
Message-ID: <ah301-130294211517@129.228.248.119>
Source record: 271181

which port do I telnet to get to callsign server on
cs.buffalo.edu ?

thanks
jerry
n3rkd

1480. RB313 Semantics 3/7 - Coordinators

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 01:20:29 UTC
From: enge@almaden.ibm.COM
Message-ID: <199402140123.RAA05968@ucsd.edu>
Source record: 271182

Bid: $RACESBUL.313

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.313 RELEASE DATE: February 14, 1994

Subject: MGT - Semantics - Coordinator 3/7

COORDINATOR. This is probably the most misunderstood word in this field. It is a common title in California but prohibited in Hawaii government. It appears that most coordinators are facilitators and have no authority. For those coordinators who indeed have authority to provide direction and control, we feel they should have another title. In the future we shall provide you a very illuminating article written by a newspaper reporter on the public confusion over the title coordinator. To add to the confusion, some coordinators are really planners who are neither facilitators or managers.

EMERGENCY COORDINATOR OR "E.C.": The title of a volunteer appointed by the American Radio Relay League, an association of Amateur Radio operators who sponsor a special interest group called the ARES or Amateur Radio Emergency Service. The ARES provides vital health and welfare communications and support to disaster relief agencies such as the Red Cross, the Salvation Army and others. In some cases an ARES EC may develop an agreement specifying that ARES people will "switch hats" to provide RACES support to a local government agency. Where the EC is the RACES Radio Officer it takes an exceptionally well qualified person not to confuse those two distinctly different roles: the RACES is only Public Safety communications and the ARES is predominantly public service. The title Emergency Coordinator is also used by some jurisdictions in another context and has no connection with Amateur Radio.
(3 of 7. Continued)

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

1481. RB313 Semantics 3/7 - Coordinators

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 01:20:29 UTC
From: Roy Engehausen <enge@almaden.ibm.com>
Message-ID: <$racesbul.313.1994@ampr.org>
Source record: 271183
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Bid: $RACESBUL.313

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.313 RELEASE DATE: February 14, 1994

Subject: MGT - Semantics - Coordinator 3/7

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(3 of 7. Continued)

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

1482. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 04:30:15 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2jmuon$pii@network.ucsd.edu>
Source record: 271184

gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>I seem to recall that its an 8 bit system so
>the SNR is going to be around 27 db. It should be noted that hams
>consider the 20 db quieting level "full quieting" and thus perfectly
>acceptable audio quality.

Not around here. 20db quieting is the minimum acceptable for links that I and my friends engineer; we prefer to get 'FULL' quieting out of a radio, which I have often measured at 30-40db or better. That means that an 8-bit system is barely enough, and I would prefer to see 10 to 12 bits were I designing such a system from scratch.

Making multi-hop analog links sound good is difficult. Digital would be the answer if the bandwidth were available.
- Brian

1483. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 05:50:29 UTC
From: czito@nyx10.cs.du.edu
Message-ID: <1994Feb14.055029.26975@mnemosyne.cs.du.edu>
Source record: 271185

Bob.Albert@f943.n102.z1.fidonet.org (Bob Albert) writes:

>I copy all CW in block capitals. I have always done that, and am used
>to it, so that's what works for me. I can copy at almost any speed but
>can't write much faster than about 35 or 40 wpm so I end up just taking
>notes when in a QSO. 73 DE K6DDX

same as me except I use all lowercase letters! :)
After about 40wpm I just copy in my head and don't even bother unless I
write notes for <25wpm I wrtie it so I don't forget anything (it seems
slow....)
--
* Cory Zito * Email: CZITO@NYX10.CS.DU.EDU *
* AA9GB * In protest of .sigs this sig is blank *
* Saxophonist * *
* Student * *

1484. Daily Summary of Solar Geophysical Activity for 13 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 08:42:28 UTC
From: oler@rho.uleth.ca
Message-ID: <9402140842.AA14188@rho.uleth.ca>
Source record: 271186
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

13 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 044, 02/13/94
10.7 FLUX=097.8 90-AVG=106 SSN=072 BKI=4333 3553 BAI=024
BGND-XRAY=B2.5 FLU1=3.9E+06 FLU10=1.3E+04 PKI=4335 4554 PAI=028
BOU-DEV=052,023,028,031,038,075,075,034 DEV-AVG=044 NT SWF=00:000
XRAY-MAX= C1.3 @ 0245UT XRAY-MIN= B1.9 @ 1823UT XRAY-AVG= B4.2
NEUTN-MAX= +003% @ 2035UT NEUTN-MIN= -001% @ 1705UT NEUTN-AVG= +0.7%
PCA-MAX= +0.1DB @ 2040UT PCA-MIN= -0.3DB @ 0600UT PCA-AVG= -0.0DB
BOUTF-MAX=55359NT @ 0129UT BOUTF-MIN=55295NT @ 1832UT BOUTF-AVG=55336NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+062,+000,+000
GOES6-MAX=P:+122NT@ 1546UT GOES6-MIN=N:-080NT@ 0751UT G6-AVG=+084,+040,-032
FLUXFCST=STD:100,103,107;SESC:100,103,107 BAI/PAI-FCST=020,020,015/025,020,015
KFCST=3334 4433 3334 4433 27DAY-AP=020,022 27DAY-KP=4544 2333 3333 5533
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**SWEEP:IV=2@0051-0244-0429UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 12 FEB 94 was 24.2.
The Full Kp Indices for 12 FEB 94 are not available.
The 3-Hr Ap Indices for 12 FEB 94 are not available.

SYNOPSIS OF ACT

Solar activity was low. Two C1 x-ray events were
observed this period; the first was correlated with a SF flare
from Region 7668 (N08W17) with a maximum at 12/2346. Since the
flare, 7668 has shown some decay, particularily in the trailer
portion of the group. The second C1 event began at 13/0051Z,
maxed at 13/0244Z and finally ended at 13/0429Z. It was
optically uncorrelated. Culgoora reported a Type IV sweep with
start and end times at 13/0159Z and 13/0234Z respectively. One
new region was numbered this period -- Rgn 7671 (N11E75).

Solar activity forecast: solar activity is expected to be
low. Rgn 7668 and Region complex 7670 (N09E60) and rgn 7671
all have the potential to produce C-class activity.

At middle latitudes, the geomagnetic field has been mostly
unsettled to active with some minor storm conditions reported
during the past 24 hours. High latituds conditions have been
at mostly unsettled to minor storm levels with some stations
reporting major to severe storm conditions.

Geophysical activity forecast: the geomagnetic field is
expected to persist at mostly unsettled to active levels with
periods of minor to major storm conditions likely. Conditions
are expected to moderate to mostly unsettled on day three of the
forecast period.

Event probabilities 14 feb-16 feb

Class M 05/10/15
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 14 feb-16 feb

A. Middle Latitudes
Active 35/25/20
Minor Storm 15/05/05
Major-Severe Storm 05/01/01

B. High Latitudes
Active 40/30/25
Minor Storm 25/10/10
Major-Severe Storm 10/05/01

HF propagation conditions persisted below-normal over all
regions. Hardest hit continue to be the upper middle to polar
latitudes where occasional near-useless propagation conditions
have existed at some times of the day. No significant changes
are expected over the next 72 hours, although a very gradual
trend toward improving conditions is expected, particularly
after approximately 15 or 16 February. High latitudes will
require several additional days to recover from this rather
influential disturbance.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7666 N16W83 350 0040 HSX 02 001 ALPHA
7668 N08W17 284 0070 DAO 10 018 BET
7669 N06E44 223 0000 AXX 00 001 ALPHA

7670 N09E60 207 0000 AXX 00 001 ALPHA
7671 N11E75 192 0060 HSX 02 001 ALPHA
7667 S07W67 334 PLAGE
REGIONS DUE TO RET
NMBR LAT
7659 S13 150

LISTING OF SOLAR ENERGETIC EVENTS FOR 13 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0051 0244 0429 C1.3 IV
1056 1056 1057 140
2101 2101 2102 220

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 13 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
13/ 0051 0244 0429 LDE C1.3 218 2

INFERRED CORONAL HOLES. LOCATIONS VALID AT 13/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
12 Feb: 2337 2346 2354 C1.0 SF 7668 N07W03

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7668: 1 0 0 1 0 0 0 0 001 (100.0)
Uncorrellated: 0 0 0 0 0 0 0 0 000 (0.0)

Total Events: 001 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the

x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1485. Commercial Radio License Exam Opportunity ** Cambridge MA ** 12 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 09:43:29 UTC
From: w1gsl@ATHENA.MIT.EDU
Message-ID: <2jnh41$qoh@senator-bedfellow.MIT.EDU>
Source record: 271187
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sci.electronics,rec.boats

** MROP and GROL exams in Cambridge MA ** Sat. March 12th 1994 **

The MIT Radio Exam Team will conduct exams for the General
Radiotelephone Operators License and the Marine Radio Operators
Permit. The exams will be held at 10AM Saturday March 12th
in Cambridge MA at 77 Mass Ave in MIT Room 1-150.

A regular schedule of exams is planned for Cambridge MA. on the
second Saturday of odd numbered months. For more information call
Nick at 617 253 3776 (9-5).

There is a $35 examination fee. Bring the ** original ** and a
copy of any commercial license or proof of passing certificates
you want to claim credit for. Also bring 2 forms of picture
ID, a black pen and a pencil.

Copies of the question pool are available from the Government
Printing office or from W5YI at 1 800 669 9594.
This is probably the best study guide available for the moment.
A few copies are available for pickup in Cambridge.

The General Radio Telephone Operators License is required to
service transmitters in the aviation, maritime and international
radio services. A Maritime Radio Operators Permit is required to
operate radiotelephone stations aboard large ships and certain
aviation and coast stations.

At a later date exams will be available for the Commercial Radio
Telegraph operators licenses and the Global Maritime Distress and
Safety Systems (GMDSS) licenses. Amateur Extra Class operators may
be particularly interested in obtaining a commercial telegraph
license as they will receive credit for the 20 WPM 2nd class code exam.

The MIT Radio Exam Team operates under the auspices of the
National Radio Examiners COLEM, part of the W5YI group.

1486. Re: FCC Daily Digests for the

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 13:01:51 UTC
From: p01258@psilink.com
Message-ID: <2970316435.0.p01258@psilink.com>
Source record: 271188

>DATE: 13 Feb 94 14:21:00 GMT
>FROM: Steve Allen <steve.allen@brent.uucp>
>
>bruce@pixar.com (Bruce Perens) writes, and writes, and writes:
>[cable-tv, broadcast FM, commercial microwave, satellite pager
>drivel omitted...
>]
>
>Bruce: besides being 99.9% irrelevant to amateur radio, this is an
>incredible waste of bandwidth. If you feel a need to post this
>stuff, form your own newsgroup.
>-Steve N2WSA
>---
While I agree it is "99.9% irrelevant to amateur radio" it is "THE"
most interesting thread on this group.

- Tom -

==
Thomas J. Alessi - WB1L | INTERNET: TJA@Panix.Com
P.O. Box 16781, Stamford CT. 06905 | AmprNet: 44.88.6.35
203-969-1880(H) 203-977-5200(W) | ax.25: WB1L@KC2FD.#nli.ny.us
==

1487. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 13:10:00 UTC
From: jbloom@arrl.org
Message-ID: <1994Feb14.131000.8706@arrl.org>
Source record: 271189

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <bote.760946660@access1> bote@access1.digex.net (John Boteler) writes:
: >I have gotten a bug up my rear to configure our point-to-point
: >repeater linking system with digital paths ranging 20
: >to 40 miles apart.
[deleted]
: Well lets look at some numbers and see. Lets assume
: you want "broadcast" grade audio. That's a SNR of
: 50 db. Digital transmission regenerates bits so
: that above a certain threshold level the effective
: SNR is only the quantization error of the digital
: equipment itself. A crude way of looking at this
: is to consider this error as bit jitter at the lsb-1.
: So an 8 bit system would have a SNR of 10*log(2^9)=27 db.
: That's obviously not good enough. 16 bits yields a SNR of
: 10*log(2^17)=51 db which is close enough for our purposes.

Use 20*log(x), since we're talking about a voltage ratio. An easy rule
of thumb is 6 dB of SNR per bit of quantization. It's actually a tad
better than that, since the quantization error is not constant;
sometimes the error is a small fraction of one LSB, sometimes it's up
to half an LSB. 8 bits will give you about 50 or so dB of SNR.

: Now the Nyquist limit says we have to sample at a minimum
: of twice the highest frequency in the audio. If we assume
: that's 5 kHz, then our minimum sample rate is 10 kilosamples
: per second. That requires a very good brickwall filter, however,
: so sampling is usually done at a somewhat higher rate, say 3X
: or 4X the highest audio frequency. Lets pick 3X. So our required
: bit rate is 16*15,000=240 kb/s. That's not going to fit in a
: normal FM two way radio bandwidth, so we're going to have to
: resort to trickery.

Yes, you sample at that higher rate, but then you digitally filter with
a near-brick-wall filter and reduce the sample rate to very near the
Nyquist rate, via decimation. (Consider compact disks.) At the
receiving end you interpolate to raise the sample rate back to
something that can use reasonable reconstruction low-pass filters. So,
a more realistic analysis gives a transmitted 10 kHz sampling rate at 8
bits per sample, for 80 kbit/s.

: Codecs use various compression schemes to lower the effective
: bit rate. Delta modulation is one such trick, and LPC (linear
: predictive coding) is another. These are effective real time
: compression methods, but do suffer some artifacts. Or we can

: take a page from the newer high speed telephone modems and use
: LZW type on the fly lossless compression and complex modem
: encodings that use less than one baud per bit. Off the shelf
: modems can deliver up to 56 kb effective data throughput over
: voice grade channels wsing a base baud rate of 600 baud. That's
: not quite good enough though.

Even if you could make that degree of m-ary coding work on a radio
link, which I have my doubts about.

: Or we can abandon voice grade radios for the links and use purpose
: built digital radios with higher baud rates. If we take a 56 kb
: WA4DSY RF modem (GRAPES), and couple that with an on the fly
: compression scheme like LZW, we can easily get the required 240 kb/s
: throughput for broadcast grade audio without dealing with the timing
: artifacts of delta modulation or LPC. Occupied bandwidth would be
: less than 70 kHz.

In my experience, LZW doesn't compress speech all that well. You'll be
lucky to get a 2:1 compression; you certainly won't get 4:1. Worse, you
won't get that compression consistently. Some parts of the transmission
will be compressed more than others, leading to timing/buffering
problems. You really want a compression scheme that is tailored to
speech.

: If we can settle for less than perfection, however, Motorola has
: a codec scheme that they claim can fit a digital voice signal in
: the same bandwidth as a NBFM voice signal, IE 20 KHz. It won't
: work through off the shelf FM radios though, a purpose built
: radio is required, and it won't yield "broadcast" SNRs. I have
: the write up on it around here somewhere, but can't lay my hands
: on it right now. I seem to recall that its an 8 bit system so
: the SNR is going to be around 27 db. It should be noted that hams
: consider the 20 db quieting level "full quieting" and thus perfectly
: acceptable audio quality.

8 bits is entirely adequate (see above). I'm not familiar with the
Motorola system, but I suggest that it is probably *not* using a
lossless compression scheme. That means that you'll experience some
additional noise/distortion, beyond quantization noise.

: >I just received a catalog from Consumer Microcircuits
: >Ltd in the U.K. listing a CVSDM codec. I remember
: >playing with these in electronics lab in college;
: >would these provide a narrow enough digital signal
: >to shove through a radio system designed for 5KC
: >bandwidth given a band-limited audio input to the
: >codec?

: I don't know this codec. What are the specs? Note that
: typical telco "voice grade" codecs have a bit rate of
: around 16 kb/s by use of aggressive coding schemes.

: Using MSK methods, that could be transmitted in a
: 22.4 kHz channel. But they won't deliver the "broadcast"
: grade audio you apparently want.

I've done some playing with MX-COM's CVSD codec. While I haven't analyzed the SNR, "by ear" it produces reasonable reproduction at 32 kbit/s and audio I can stand to listen to (barely) at 16 kbit/s. At 64 kbit/s, its audio is entirely acceptable for amateur purposes. IMHO.

[deleted]
--
Jon Bloom KE3Z jbloom@arrl.org

1488. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 13:23:22 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb14.132322.4068@tellab5.tellabs.com>
Source record: 271190

In article <N4HY.94Feb9140932@harder.ccr-p.ida.org> n4hy@harder.ccr-p.ida.org (Bob McGwier) writes:
>

At first I didn't want to get into a Point/Counterpoint rebutal
but I was convinced to do so by others. Here are my comments

JWA= Jack Albert
RWM= Pobert W. McGwier

RWM

Howdy:

In a recent spate of messages, we have been told of the capabilities
of the hamblaster. It sounds rudimentary so far but I am sure that
over time the capabilities (new software development) will proceed
and its capabilities will be enhanced and it will make a very
interesting tool for amateur radio communications, experimentation,
and learning DSP. There will be alternatives as you will now be told.

JWA

For future expansion, the Hamblaster has an expansion connector.
Several add-ons will include, a better A/D-D/A, Packet switch,
real time tuning scope display driver and a microprocessor.

RWM

In other messages, John Alberts has told us of the lack of capabilities
of the Sound Blaster 16 with ASP. He is WRONG.

JWA

Not really, because I own one, I was refering to the
Soundblaster Pro. Any referances to the ASP version
was based on information from the "Ultimate Soundblaster
Book" that I purchased from a local book store. I was
unaware and the book didn't mention it's programming
capabilities. I believe my actual words where
"Im not shure but" .

RWM

I received my Sound Blaster developers kit via UPS yesterday at
last. It is easy to see how John could have made the mistake
he made. The manuals received in the kit describe two distinct

pieces of processing hardware. One is called the DSP and the
other is the ASP.

The DSP has all the limitations mentioned by John in his statements
concerning the capabilities of the Sound Blaster card (or lack thereof).
It is a proprietary gate array surrounding masks from other chip
developers to do stuff like DMA blocks of samples in and out, to convert PCM
to u-LAW, 2 or 4 bit ADPCM, CVSD, etc. It directs the flow of
MIDI commands, etc. It is a pretty neat thing in and of itself
but it is NOT what we want. We want a full blown DSP chip, with
a modified Harvard architecture and at least 16 by 16 bit -> 32 multiply,
accumulate, read new coefficient and data in one instruction time.
THE ASP is a real DSP chip and has all this. It is 512 words of off
chip program memory, 512 words of off chip data ram, 192 words of X RAM
on chip,128 words of Y ram on chip.

JWA

The Hamblaster comes with 32K of program/data memory.
It will be expandable to 32k of program and 32k of data
memory with a total os 64k words. More than you'll ever need!

Our packet modem software is 3K. It just won't fit in the
Soundblaster ASP 16.

X ram is program and sample data, Y RAM would be used for
filter coefficients. THIS IS A FULL BLOWN DSP CHIP. It
does NOT have the limitations John has told us the hamblaster
overcomes.

Indeed, on the A/D, D/A front, it is quite clear that the under
$300 SB16-ASP is quite a bit MORE CAPABLE than hamblaster.

JWA

New information places the Hamblaster at about $275.00

RWM

It has two channels (16 bits each), D/A, and A/D.
The sample rate is completely controllable by uploading a divisor to
the control register. The lowest available rate is 5 Khz and the
highest is 44.1 Khz. The processor runs at 12 MIPS so filters would
execute at around 25 MIPS. This is because it has the typical DSP
feature of multiply two numbers, read the next two, and accumulate the
last result while shifting the pointers in two instruction times.

JWA

That's great for HiFi work but for Ham use you only need an
8kHz sample rate and an 8 bit D/A-A/D. If you consider pipe-
lining the C25 also about runs 25 MIPS.

RWM

That is plenty fast. I will be able to do dual channel modems for this card. Since the thing does not also have a UART, or SIO, we will have to the HDLC and UART functions on the chip when required. Other DSP developers have done this all on chip (Finland DSP development group on the Motorola DSP56001). We will be able to do a lot.

John should be more careful when he makes flat statements about commercially available products. If he were a `real competitor' of Creative Labs, he could get into a bit of a hassle.

JWA

There's no way that a product made for Ham Radio will compete with a product that will sell in the millions. In the Ham market there just aren't enough sales to generate a reasonable profit! You'll never get rich selling to Hams.

RWM

I told John in a reply to his mail that I doubted the accuracy of his statements on the Sound Blaster16 with ASP. I was correct.

JWA

Not really. Because of the proprietary nature, I can't disclose the full picture. When it's released, A complete package update will be available.

RWM

The Sound Blaster 16 with ASP is available from many places for under $300. The developers kit is $99, available only from Creative Labs.

I think the Hamblaster's price will be competative! They will offer help to third party programmers.

I will be writing programs for the ASP and giving them away on your favorite ftp sites and through the ARRL download request service. These programs will be the basis of articles for QEX describing the algorithms and the operation of the sound blaster card in amateur radio applications. Phil Karn has devised a new link layer for packet, with FEC, etc. and I will be providing modems that use the ASP. I believe I can provide what the latest hamblaster announcements state and more in short order after I get the assembler for the ASP. I will do this as quickly as possible. I am a bit miffed that I stopped developing the Windows and DOS front ends and display stuff for the SB16 ASP after John's note because I thought the SB16 was too limited. Now it is full steam ahead.

JWA

Good Luck!

Programs for the Hamblaster will also be available on public domain disk or BBS's.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

"I'm a half breed"
"I can only breed through on side of my nose!"

Eddie Kantor

1489. ARLD009 DX news

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 13:34:24 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arld009.1994@ampr.org>
Source record: 271191
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ARL $ARLD009
ARLD009 DX news

ZCZC AE07
QST de W1AW
DX Bulletin 9 ARLD009
From ARRL Headquarters
Newington CT February 10, 1994
To all radio amateurs

SB DX ARL ARLD009
ARLD009 DX news

The items in this week's bulletin are courtesy of Steve, W9NUF; the Northern Illinois DX Association; Ed, KB7E; and the Ohio/Penn and Yankee Clipper Contest Club PacketCluster networks. Thanks.

PETER FIRST ISLAND. 3Y0PI has been very active and should remain so until about February 19. DXers bemoaning the tough winter of 1994, check this out. Last Saturday 3Y0PI had to QRT for 12 hours due to a storm that battered the team with 80 MPH winds and dumped five feet of snow on them. And this is during the Antarctic SUMMER/FALL.

Although some equipment was damaged, the team has made well over 20,000 Qs, more than 20 percent of their 100 Kilo-Q goal. Listen for them on CW, SSB, AmTOR, PacTOR and satellite. EME operations should commence soon. QSL CW via KA6V, SSB via AA6BB.

LACCADIVE ISLANDS. Geology students VU2STG and his newly licensed XYL are on an exploration and study assignment. During free time they operate VU7LI on SSB only. Please be patient as amateur radio is not the primary purpose for their visits to the Laccadives and equipment is minimal. QSL via VU2STG.

SOVEREIGN MILITARY ORDER OF MALTA. According to Luciano, I0JBL, the 1A0KM operation has been rescheduled for sometime in late February.

ANGOLA. D2EGH can be found on 14225 kHz at 2000z. QSL via CT1EGH. Listen for D2/AA4HU on 14225 kHz at 1745 and 2000z.

BANGLADESH. S21AM has been worked on 14185 kHz SSB at 1200z. QSL via Manju, PO Box 4000, Dhaka.

ETHIOPIA. ET3RA has been on 21250 kHz at 1600z. QSL via HB9CVB. ET3YU works CW on 14035 kHz between 1600 and 1700z.

ISRAEL. For the past two nights, Chicago area hams have worked 4X4NJ on 1832 at 0420z.

MAURITIUS. Jacky, 3B8CF, is a relatively easy catch on both 80 and 40 meters. Try 3506 kHz at 0200z and 7007 kHz at 0420z.

QATAR. A71BH can be worked on 14215 kHz around 1300z. QSL via OH6EEG.

FRENCH POLYNESIA. Walter, DJ0FX, is active as FO0PT from Moorea Island of the Windward Group, IOTA OC-046. This one should be on until February 19. Walter operates on all bands, mostly CW. Check the low end of 40 meters between 0730 and 1000z. QSL via the DARC Bureau.

SAN ANDREAS ISLAND. HK0/K1WGM has been worked on 160 meters around 1833 kHz at 0430z. Also check 80 meters on either 3505 or 3510 kHz between 0400 and 0600z. QSL K1WGM.

CAMBODIA. An operation by Laszio, HA0HW, is slated to begin in early April. The call signs XU9XA and XU0HW have been mentioned.

COSTA RICA. An operation is planned for February 17, 18 and 19 from Guanacaste Island, a new IOTA island off the northwest coast. Call signs will be K5MK/TI7 and TI2WLE/TI7. Try 14260 and 21260 kHz for SSB, and 40 kHz up from the bottom edge for CW. QSL via K5MK.

THIS WEEKEND ON THE RADIO. Indoor sports this weekend include the North American Sprint, Phone; the EA RTTY Contest; the New Hampshire QSO Party; and the YL OM Contest. For more information on these events, check pages 127 and 128 of January QST.
NNNN
/EX

1490. ARLP006 Propagation de KT7H

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 13:34:59 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlp006.1994@ampr.org>
Source record: 271192
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB PROP @ ARL $ARLP006
ARLP006 Propagation de KT7H

ZCZC AP20
QST de W1AW
Propagation Forecast Bulletin 6 ARLP006
From Tad Cook, KT7H
Seattle, WA February 11, 1994
To all radio amateurs

SB PROP ARL ARLP006
ARLP006 Propagation de KT7H

Conditions have been severely disturbed since February 6 due to a flare a few days prior. Recurring coronal holes are keeping the geomagnetic field jumping and this may continue for a few more days. HF propagation has been disrupted and may not quiet down until after mid-month.

Solar flux is rising, and should peak near 120 around February 22. Flux will probably remain above 100 until March 6.

Sunspot Numbers from February 3 through 9 were 62, 75, 76, 71, 72, 85 and 64, with a mean of 72.1. 10.7 cm flux was 97.9, 95.3, 93, 95, 95.9, 95 and 101, with a mean of 96.2.

The path projection for this week is from Dallas, Texas to Tonga. This is for February 15, assuming a flux of 105.

80 meters looks good from 0600 to 1330z, and 40 meters from 0530 to 1400. 30 meters should open from 0530 to 1500 and 20 meters from 0400 to 1030, with a possible additional opening around 1430. 17 meters should be good from 1730 to 0200, and 15 meters from 1800 to 0030. 12 meters should be open from 1900 to 0000, and 10 meters from 2000 to 2300.
NNNN
/EX

1491. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 13:42:33 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb14.134233.5427@tellab5.tellabs.com>
Source record: 271193

In article <1994Feb10.171218.7423@dtint.dtint.com> Allen Wallace <allen@dtint.dtint.com>
writes:
>In article <gdavis.760825204@griffin> Gary Davis, gdavis@griffin.uvm.edu
>writes:
>> I heard a strange story on the CBC last evening. The report was on
>>the increasing interest in nudism in the Winter months. To promote
>>this festive and relaxing activity additional interests where specified.
>>
>>There is, according to the CBC, a nudist amateur radio club.
>>
>>I am wondering where, how many members? Anybody know anything about this?
>

I wonder if nudest Hams use "rubber ducks"?

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

"I'm a half breed"
"I can only breed through on side of my nose!"

Eddie Kantor

1492. Amateur Radio Newsline #860 4 Feb 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 13:56:30 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <PztNjGG8yvh6053yn@dorsai.dorsai.org>
Source record: 271194
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

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Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #110 - POSTED 02/09/94

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CBBS twice monthly. For current information updates, please call

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Los Angeles (Instant Update Line)..... (805) 296-2407
Seattle..... (206) 368-3969
Seattle..... (206) 281-8455
Tacoma..... (206) 927-7373
Louisville..... (502) 894-8559
Dayton..... (513) 275-9991
Chicago..... (708) 289-0423
New York City..... (718) 353-2801
Melbourne, FL..... (407) 259-4479

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Thank You
NEWSLINE

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Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[860]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not *
* for transmission over amateur radio. Repeat, not for *
* broadcast. This is just a reminder that the address for *
* the Newsline Support Fund is Newsline, in care of Dr. Norm *
* Chalfin, K6PGX, Post Office Box 463, Pasadena, CA 91102. *
* Again, and as always, we thank you. That ends the closed *
* circuit with Newsline report number 860 for release on *
* Friday February, 4 1994 to follow. *
* *
* *

The following is a QST

The ARRL petitions for an lifetime ham radio ticket and a court says that a ham does have a right to a tower and antenna.

*****
LIFETIME HAM LICENSE PET

The ARRL has petitioned the FCC to make Amateur Radio operator licenses valid for life. The League says in its petition that there is nothing in the Communications Act of 1934 that would prevent such a license term for radio amateurs. It wants a lifetime operator's license to allow inactive amateurs to return

to the Service at the same class of license without the necessity for retesting.
This proposal will apply only to operator licenses, Amateur radio station licenses would still, by law, be limited to a 10-year term. A person with a lifetime operator license but no station license would not be permitted to operate a station of his own but would be able to operate from the station of another amateur. The League says that nothing in this proposal should have any effect on the FCC's call sign issuance program either as it currently exists or as proposed in the vanity call sign program.
The ARRL says that it is not proposing at this time to make this rule change retroactive. Rather it suggests the easiest way to implement it is simply to extend currently held operator licenses from 10 years to life. No rule making number has yet been assigned to this ARRL regulatory change request.

*****
TOWER VICTORY

A federal appeals court has found in favor of a Minnesota ham in the latest round of her three-year battle to install a tower and antenna.
Back in January of 1991 Sylvia Pentel, N0MRW, applied to the city of Mendota Heights for a zoning variance for a 68-foot crank-up tower. At the time, she was using a roof-mounted vertical which she was unaware, violated the city's zoning rules. The city denied her application for a tower but did grant Pentel a special-use permit to allow her to keep the vertical.
But that did not satisfy N0MRW. Pentel sued the city in U S district court. Her attorney John B. Bellows Jr, K0QBE argued that the ordinance restricting her tower and antenna was preempted by federal law. A law known as PRB-1 which recognizes the needs of both municipalities and amateurs radio operators. A law which requires a reasonable accommodation of the needs of radio amateurs.
When the district court found in favor of the city Pentel appealed. It was the United States Court of Appeals for the 8th Circuit that has now ruled that in establishing PRB-1 the FCC was attempting to strike a balance between the interests of municipalities and ham radio operators. The court noted that granting a special-use permit for Pentel's vertical was not an acceptable accommodation to the radio amateur under the terms of PRB-1 and ordered the city to try again.
The court did put some limit on its decision. It said that its finding does not mean that the city must necessarily grant Pentel's application for a tower as it stands. Rather, it stated the Mendota Heights Minnesota must make a reasonable accommodation to insure her interests as a radio amateur are protected.

*****
VAN SICKLE

A United States District Court in Texas has written the end to the story of Terry Van Sickle, WB5WXI by sentencing him to 90 days of home confinement, three years probation, fining him one thousand dollars and ordering that he undergo a group counseling program as directed by the probation office.
Van Sickle is the WFAA television news cameraman who had been accused by the Federal Bureau of Investigation of harassing customers at a Mc Donalds restraint drive-thru window last summer. He initially protested his innocence to the media. One newspaper even ran a two column feature about Van Sickle, quoting him as saying that the frequencies used by Mc Donalds are posted on computer bulletin boards and anyone could have been responsible.
But on October 18th Terry Van Sickle changed his story. He pleaded guilty to one count of violating Title 47, section 333 of the United States Code by willfully and maliciously interfering with radio communications. Sentencing was set for early January. At that time he faced a maximum term of a year in prison and $100,000 fine.
The lighter sentence of 90 days home confinement and probation falls under federal sentencing guidelines. It is mitigated by the fact that Van Sickle has also lost some fifteen thousand dollars worth of scanners, two-way radios and other gear that was confiscated at the time he was detained.
Van Sickle's troubles may not be over yet. There is every likelihood of FCC administrative action to strip him of any federally issued radio licenses. There is also the possibility of civil action against him by Mc Donalds Corporation to recoup any losses incurred as the result of his jamming of their radio system.

*****
QUAKE

Amateur Radio Emergency Service and Radio Amateur Civil Emergency Service operators are still involved emergency communication in the aftermath of last weeks 6.6 magnitude earthquake in Los Angeles' San Fernando Valley. Even though most normal lines of communications were restored within 48 to 72 hours, ham operators are still assisting police, fire, Red Cross and local emergency management officials with disaster assessment using local VHF and UHF communications.
As a result, all hams in the affected areas not involved in the emergency communications effort have been asked to give priority to meeting these emergency communications demands. These hams should not transmit on emergency net frequencies, except when directed to do so by net control stations. Also, priority is being given to outgoing messages since most amateurs in some affected areas are still unable to deliver incoming

messages until phone service is restored and roads are repaired. Health and welfare traffic was not accepted from the public until authorities in the affected areas indicate they are able to process such inquiries. Some emergency net operations are expected to continue for at least another two weeks.

*****
ARRL SAY NO TO NJ RADIO TAX

Officials of the American Radio Relay League have told the New Jersey Department of Environmental Protection and Energy that a state proposal to register and impose fees on radio transmitters and other RF sources was contrary to federal law. At least as the law is related to radio amateurs.
As reported several weeks ago, the New Jersey proposal exempted Amateur Radio stations at this time but leaves a door open for future regulation of hams and imposition of fees.
But ARRL General Counsel Chris Imlay, N3AKD says that only the FCC has the power to license and regulate radio transmitters.
Imlay says that applying the proposed regulations to amateurs would effectively preclude Amateur Radio communications in New Jersey.
By the way, the New Jersey Department of Environmental Protection and Energy has extended the deadline for comments on the proposal until February 22nd. Hams in New Jersey and the surrounding states are being encouraged to write the New Jersey legislature in opposition to the radio tax proposal.

*****
SAREX STS-60

This word just in. There will be three ham radio-licensed crew members aboard Space Shuttle Discovery, STS-60, scheduled for launch February 3rd. Commander Charles Bolden, KE4IQB, and Mission Specialist Ronald Sega, KC5ETH, have now received their Technician Class licenses. The third licensed crew member is Russian Cosmonaut Sergei Krikalev, U5MIR who is a Mission Specialist on the STS-60 SAREX flight.

*****
DX

In DX, word that The Lambda Amateur Radio Club will sponsor it's third DXpedition from March 5th to the 10th. Larc members are planning to operate on HF and OSCAR-13 Mode B and Mode S from the Caribbean island of Anguilla in British West Indies. The operators making the trip will be Jim Kelly KK3K, Don Bledsoe WB6LYI, Mark Wilcox KC3XC, Tom Hendrix KI4ZN, Howard Wyman W9BVD, Norm Gray KF7IK, James Keeth AF9A, and Wayne Schuler AI9Q. QSL for all operators is direct to their respective current Callbook addresses. By the way, this may be the first OSCAR-13 Mode S DXpedition for the record books.

*****
QRP-DX

Also, two QRP Nets located in the Pacific Northwest are now
available to help you to meet other low power enthusiasts
throughout the country. The North West QRP Club meets every
Monday evening at 03:00 UTC on 10.123 MHz. The Northwest QRP
Club Saturday morning Net can be found at 07:30 UTC on 3.561
MHz. If you are interested in receiving a free copy of their
NWQ Newsletter, please send a SASE to Bill Todd 4153 49th Ave.
Southwest, Seattle, Washington 98116.

*****
NAT

Two ARRL National Exam Days have been set for 1994. The
dates are May 14 and October 29. Details will be in February
issue of QST

*****
DOOB

A ham who ran last Novembers' New York City Marathon to
raise money for cancer research will be doing it again on the
west coast. Fred Doob, AA8FQ has announced that he will run in
the March 6th Los Angeles Marathon and will be on the air before
and during the race.
With backing from Icom America, Doob says that he will hold as
many QSO's as he can while running the course. He says he plans
to operate repeaters on 145.200, 146.925, 445.325 and 447.235
MHz. Fred will also try his luck on the national simplex calling
channel of 146.52 MHz. His frequency coordination is being
handheld by the Baldwin Hills Amateur Radio Club and if band
conditions warrant, he may try some 20 meter remote base
operation on 14.295 MHz as well.
AA8FQ's participation in the New York City Marathon raised
approximately $2500 that was donated to the Sloan Kettering
Memorial Cancer Center. This time the proceeds of sponsored
miles will benefit the Los Angeles Childrens Cancer Research
Fund. This organization is considered one of the leading
pediatric cancer research organizations in the country.
Hams interested in sponsoring miles to be run by Fred can
contact him at area code 216-721-2466. In the meantime, Newsline
wishes Fred Doob AA8FQ good luck in his next run to save lives.

*****

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< ^^^

< UUCP: Steve_Cole@islenet.com ==== steveny@lopez.marquette.mi.us >
< Fidonet: 1:278/712 US Mail: P.O. Box 396, New York, NY 10002 >
< Voice: +1 212 995-2637 >
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1493. Amateur Radio Newsline #861 11 Feb 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 13:56:35 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <I-tNjGG8yjw8053yn@dorsai.dorsai.org>
Source record: 271195
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

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Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

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Dayton..... (513) 275-9991
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New York City..... (718) 353-2801
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Thank You
NEWSLINE

****

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[861]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not for *
* air over amateur radio. Repeat, not for broadcast. This is *
* just a reminder that the address for the Newsline Support *
* Fund is Newsline, in care of Dr. Norm Chalfin, K6PGX, Post *
* Office Box 463, Pasadena, CA 91102. Again, and as always, *
* we thank you. That ends the closed circuit with Newsline *
* report number 861 for release on Friday, 02/11/94. *
* *
* *

The following is a QST

When the information super highway arrives, ham radio will be riding on it at the front of the pack. So says a high ranking FCC official on Newsline report number 861 coming your way.

*****
INFORMATION SUPER HIGHWAY

Ham radio definitely will play an important part in President Clinton's information super highway. So says FCC Private Radio Bureau Chief Ralph Haller, N4RH. Speaking on Saturday, February 5th at the 1994 Tropical Hamboree in Miami, Haller told the group that it's the inventive nature of radio amateurs that makes them

so important to the emerging information flow.

"The amateur service, I think is going to play a major role in the information super highway and the advancements that come online in the future. You're the people that have the practical knowledge of communications. You're the people that have come up with the innovative networks. Your packet data systems that are now very common in the commercial world.
I guess what I am saying to you is, while I am not particularly concerned about any more of your frequencies being in jeopardy at this time, because there is no plans for that. I am concerned that you continue to move forward and keep pace with the commercial side, so that the technologies you have on the air will in fact provide you all of the kinds of feature rich functions that are going to be available to the general public. In fact you ought to have even more features because you are more qualified, you know what else is available besides just a device that can only be operated by someone that is not sophisticated in communications. It is an exciting time. I hope you share that view with me. Because it really, I think, is going to make a difference in the way we live in the future." FCC Private Radio Bureau Chief, Ralph Haller, N4RH.

Haller also took note of the success of the expansion of public service activities as a result of the FCC action to change its rules governing business communications. N4RH singled out the recent New York City Marathon as a primary example of the ham radio success brought about by this regulatory change.

"I recently had the opportunity to visit the New York Marathon. And to watch how amateur radio communications actually made that event occur. Without it, it would not occur. It is hard perhaps, to think about, to believe that the city of New York Police Department is unable to communicate over the entire 26 miles of that marathon. The only communications that worked over the entire 26 miles of that race was the amateur communications. The amateurs provided medical support, provide physician information, provided a whole host of communications capabilities. In fact it goes so far as to this. It was an amateur radio transmission that in fact signaled start the race. It wasn't on police radio, it wasn't on anything else, it was amateur that was the only communications capability that provided an instant notification to everyone in all parts of that race. Pretty amazing what you people have done." Ralph Haller, N4RH.

N4RH says that this one rules change has forever expanded the public service abilities of the ham radio community.

*****
ARRL SAYS NO TO RF STANDARDS

The ARRL has told the FCC that a proposal to adopt new standards for exposure to radio frequency radiation should be terminated.
The League says that the proposal, which would change the Commission's guidelines to match those adopted by the American National Standards Institute and the Institute of Electrical and Electronic Engineers in 1992, was premature. It also asserts that the commission has an obligation to introduce this matter as an FCC notice of inquiry to allow a wider range of commentary.
The ARRL claims that the proposed standards were not properly delineated and not a proper basis for evaluating communications facilities. It also said that an FCC Report and Order in 1987 that concluded that amateur stations should be exempted from such RF exposure guidelines, because amateur stations operate only intermittently, and at low power levels, still applies. Only rarely, the League said, would amateur stations even exceed the proposed, more stringent 1992 standard.
The League wants the current FCC proceeding terminated in favor of more study by a more appropriate government agency, such as the Environmental Protection Agency. If not, then it says the obligation of he FCC is to issue a notice of inquiry.
The current proposal, in ET Docket 93-62, was made in the spring of 1993 and its comment deadline has been extended several times, most recently to January 25, 1994, based on a request by CBS Inc. The reply comment deadline is February 24th.

*****
SAREX

The STS 60 Shuttle Amateur Radio Experiment has successfully completed another first. At 10:42 UTC on February 6, Cosmonaut Sergei Krikalev, U5MIR, on board the space ship Discovery made contact with the House of Science and Technology for Youth in Moscow. This is the first time a cosmonaut on a U.S. space shuttle has communicated with a school group in Russia. Leonid Lebutin, UA3CR and Valery Agabekov, UA6HZ were the prime school coordinators for the contact. Six students were able to ask their questions to the crew on the Space Shuttle DIscovery. In addition, several cosmonauts were on hand to hear the communications and witness the event.

*****
SAREX PACKET QSL INFO

While voice contacts with the hams on Discovery have been scarce due to problems with the Wake Shield satellite experiment, the packet robot ham station has been quite busy. As we go to air just prior to landing, there have been several thousand automatic SAREX contacts made with hams from around the world reporting a booming packet radio signal from the shuttle.
For those of you who have heard or worked the STS-60 crew and wish to receive a QSL card you need to send your signal

report and an SASE or an envelope with International Reply Coupons to the QSL manager. This time its the ARRL. The address is STS 60 QSL, in care of the Educational Activities Division, The American Radio Relay League, 225 Main Street, Newington, Connecticut 06111.

*****
Anik E2 Lost in Space?

Still with satellite related news, word that Thursday January 20th was not a good day for Telesat Canada.
Within a 12 hour period they lost both of their $300 million geostationary satellites Anik E1 and E2. E1 was eventually recovered by switching to a backup momentum wheel but the E2 bird may be permanently disabled.
Both satellites are of the GE Series 5000 family of birds. Experts believe that electromagnetic disturbances in space may have caused the damage. Canadian radio and television broadcasting, telephone services, data carriers and even a national ham radio satellite repeater intertie have all been seriously affected. Some believe the transponder shortage will cause a rush toward the introduction of video compression on the surviving Canadian satellite. This would greatly enhance its throughput while at the same time making it unviewable by home satellite viewers.

*****
2 MET

Amateur Radio may have saved a life when Diana Carlson, KC1SP, used a local repeater to report a possible suicide attempt to police. Carlson, of Hudson, New Hampshire, was on her way to work in Concord, Massachusetts, the morning of January 10, when she and another motorist observed a man climbing the railing of the Merrimack Bridge. The man's auto was parked directly in front of Carlson.
While the other motorist talked to the man, Carlson first tried a call on 146.52, which she knew was sometimes monitored by the Westford, Massachusetts police. When no response came she switched to the 147.12 repeater in Billerica. There, Larry Garneau, N1QEZ, who was mobile, responded and passed the message to his wife, Virginia N1QFA, who telephoned police. An officer of the Tyngsboro Police arrived in time to pull the 27-year-old man from the railing of the bridge.
By the way, Diana Carlson comes from an all ham family. Her husband David is N1JYX, her son is KA1VWX, and her daughter is KA1VUA.

*****
STOLEN REPEATER

From England comes word that the GB3GF repeater operated by the Guildford UHF Repeater Group in England has been stolen. The radio gear was sited at Guildford near Surrey and was last heard on the air on December the 29th. Sometime between midnight and 8 am on the 30th, the entire installation was skillfully dismantled and removed from the site. The thieves even took the time to climb a fifty foot high tower to take the antennas as well.
The system was made up of a modified Pye Communications model F9U wall mounted base station, a Pye AE 450 F cavity filter and home made copper cavity circulator. It was crystalled to operate on the European RB 12 UHF repeater frequency pair of 433.300 MHz in and transmitted on 434.900 MHz. It also had an automatic Morse Code identifier of GB3GF every fifteen minutes.
While its doubtful that this machine will show up on North American shores, be aware that any leads in locating the repeater and those who took it are welcome. Any information should go directly to the Guildford Police Department. The telephone number from the United States is a long one. You dial 0114448 followed by the local number 331111. When you get an answer, ask for extension 3128.

*****
UK REPEATER DELINQUENCY

From the United Kingdom comes word that the Radio Society of Great Britain has issued an urgent advisory to twenty-four of that nations repeater trustees telling them to respond to a letter or loose the right to keep their systems on the air. This is because the British Radio Communications Agency abandoned the single repeater license to the RSGB and is now individually licensing each of the nations repeaters.
Actually, the RSGB repeater keepers license expired at the end of last November. Now the government has told the national society that it must have a letter requesting a Notice of Variation from each repeater license holder to keep the machines on the air. The society says that it has received all but two dozen of these requests, and it is urging the users of the repeaters that have not filed to urge the license holder to do so immediately. The RSGB says that its under increasing pressure from the Radio Communications Agency to let it know which repeaters have not filed for the required Notices of Variation. As far as the British Government is concerned, these systems are operating illegally without a proper license.

*****
PSA

The ARRL has some new Public Service Television commercials available to its Public Information Officers and Public Information Coordinators. The tapes feature astronaut Linda Godwin, N5RAX, and Nobel Prize-winning physicist Dr Joel Taylor, K1JT. The full-color PSA's include testimonials from Godwin and

Taylor in varying lengths for both commercial and public-access television use. Be sure to specify videotape format required by television station or cable television system when placing your order. If you are not certain, we strongly suggest that you call the TV station or cablecaster and ask what type of videotape they require.

*****
PSA TAPE FORMATS

By the way, it may be time for a quick lesson on how to get a public service spot on the air. Let's start off by saying that its getting a lot harder to these spots aired these days. Only a few years ago, TV stations were happy to have them to fill the gaps in late night time slots where no commercials had been sold. The advent of the long format commercial called the infomercial changed all of that. Infomercials are known as time buys and they supplant individual commercials in a given period. As a result, free time for PSA's is getting scarce.
Complicating things further is the kind of videotape you must submit to a TV station. A decade ago, that too was easy. Big stations required 2" quad tape while the little ones would accept the then popular 3/4 inch U-Matic. But its not that way anymore. Now a days commercials and PSA's are run by automated machinery that use cassette format tapes. As a rule of thumb, television stations that make their own cassettes require any commercial to be delivered to them on what is known as 1 inch type C open reel tape. But with manpower cutbacks and the introduction of even more automation, that trend is changing too. More and more stations now require you to submit 1/2 inch Betacam SP cassettes that can be placed directly into their automated tape players known as cart machines. This saves the station the cost of having to transfer the original you supply to a cassette that will fit their commercial playback machine. A small number still accept 3/4" tape but that number is shrinking daily as U-Matic and quad is replaced by Betacam SP as the defacto standard.
Complicating matters further is that some stations; mainly those affiliated with the National Broadcasting Company may require your submitting the PSA's on the Panasonic M2 video format while some Tribune and independent stations utilize the new D2 digital 19mm videocassettes for their Ampex built ACR 225 cart machines.
The majority of cablecasters are a lot more lenient than commercial broadcasters but even here its not like it used to be. While some will accept the older 3/4" U-Matic cassettes the vast majority now are switching over to the Super VHS. That's Super VHS and not the home type VHS we have in our houses. Except for undercover news stories, VHS is not acceptable for over the air broadcast and is rarely used any longer in cable transmission. VHS cassettes are used only for viewing purposes in offices to

see if the material in the PSA or commercial is acceptable for air.

*****
DX

In DX, word that Walis Island as ZS9DX was to be active by operators ZS6BRZ and ZS6WPX, but there have been no QSN reports. To date, the only activity seen from Walis has been by ZS9A on 21.335 MHz at 14:00 UTC. ZS9A also frequents 10 meters at various times.

*****
FORM 610

This important note to any ham who contributes time as a Volunteer Examiner. Beginning March 1st the FCC will accept only the new version of its Form 610. Information about the new 610 is explained on page 103 of the February QST
Those hams who serve under the ARRL VEC have been assured of having the needed materials before the implementation date. The latest issue of their VE Express newsletter includes a full size version of the new Form 610 and the ARRL VEC has also mailed bulk quantities of the new form to all of its 650 plus field stocked VE teams. The ARRL VEC recommends that its VE teams begin using the new form on February 12 to allow for sufficient turnaround time.
The W5YI national VEC is also getting supplies of the new form out to its VE teams very quickly and should have them in place by the time this newscast goes to air.
Its not known what action other VEC's have taken to provide their VE's with the new Form 610 prior to its implementation date. If you are not an ARRL or W5YI VE, and have not been restocked with new form 610's by your VEC, consider requesting the new version to be sent to you from that VEC right away. If these VEC's will contact us with their plans, we will be happy to pass along the information in future Newsline reports.

*****
BOSWELL OBIT

It's no exaggeration to say that one Alabama ham radio operator has touched thousands of lives. But you probably won't recognize his name. Nonetheless, friends of Ken Boswell, KB4BWO, were saddened at the news of his death in early January. This man has been considered an inspiration in their lives.
If there is one point everyone that met Ken Boswell agrees about, it's the smile. He always had one.
"He tried desperately to look and find the good in situations." Ron Arap, N4PHP.
Ron remembers the man who worked hard to help students at Bessemer State Technical College. That's where Boswell taught

electronics courses.
"If the student was interested, and applies themselves, he would go out of his way to help them." Ron Arap, N4PHP.
Boswell setup an amateur station at the college to build interest in ham radio. He was active in the Birmingham Amateur Radio Club. At the school fellow instructor Clarence Johnson deals with the loss of a close friend.
"He cared about people. He was a people kind of person. As a matter of fact the memory that I will probably have that will linger with me about Ken is just how much he really showed he really loved humanity. He got along well with his students. Ken was just the kind of person that get along with anybody. Ken met no strangers." Clarence Johnson, fellow instructor.
In his nearly thirty years in vocational education. Ken Boswell thousands of people a powerful tool, knowledge to make their lives better.
A special tribute may be in the works to honor Ken Boswell. Friends and co-workers want to set up a scholarship fund in his honor. Ken Boswell was 57 years old.

*****

For this week that is all from the Amateur Radio Newsline.
You can write to us at Post Office Box 463, Pasadena, CA 91102.

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< ^^^

1494. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 13:58:21 UTC
From: M.Willis@ee.surrey.ac.uk
Message-ID: <1994Feb14.135821.19246@ee.surrey.ac.uk>
Source record: 271196

In article <CL1p2x.8s2@news.Hawaii.Edu>, jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
|> In article <1994Feb11.001239.2842@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
|> >
|> >I can wait and recognize "the", but when it turns out to be the
|> >opening character group in "Thessalonian", I'm screwed. Dealing
|> >character by character on paper insures I get either correctly.
|> >
|>
|> Geez Gary, what kind of QSOs do you have? In 18 years I've never had
|> someone send that word to me; phooey - your QSOs sound MUCH more
|> interesting than mine.
|>
|> Jeff NH6IL

I remember sending the word sesquipedallian recently. Quite appropriate if you look it up. difficult not to get lost during the word.

Mike

1495. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 14:27:20 UTC
From: greg@netcom.com
Message-ID: <gregCL7xHL.154@netcom.com>
Source record: 271197

In article <CL5EDr.3CB@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>In article <1994Feb12.161053.4486@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>In article <CL1p2x.8s2@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>>>In article <1994Feb11.001239.2842@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>>>I can wait and recognize "the", but when it turns out to be the
>>>>opening character group in "Thessalonian", I'm screwed. Dealing
>>>>character by character on paper insures I get either correctly.
>>>
>>>Geez Gary, what kind of QSOs do you have? In 18 years I've never had
>>>someone send that word to me; phooey - your QSOs sound MUCH more
>>>interesting than mine.
>>
>>I've been claiming that all along, Jeff. The high information rate
>>of voice transmission allows complex ideas to be expressed quickly
>>enough to be interesting.
>>
>
>Now wait a minute! I meant CW QSOs - if folks are sending you words
>such as Thessalonian on CW THEN your QSOs are more interesting than
>mine.
>You never miss an opportunity to kick CW in the okole (Hawaiian word
>for what you sit on).

Then again, in this bigger, busier, faster, hurry-up world, we often miss the simple pleasure of spending a half hour passing the time on 15 Meter CW, at 7 WPM with a young (or old) novice for whom it's all so big and new. On a couple of watt transmitter and a DC receiver that cost me all of $35. ($35 HW-8s in perfect working order are, like lightning, something that the gods usually only bestow once, by the way.)

Okay, so I'm wierd. But I still think theirs something magical about tickling the ether with a simple signal on a cold night.

Then again, I'm in great company. :-)

CW is to SSB as fine cognac is to good beer. Both have their merits and pleasures, and both are acquired tastes. And it's okay to not care for either or both.

Greg

1496. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 14:43:21 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb14.144321.10990@tellab5.tellabs.com>
Source record: 271198

In article <N4HY.94Feb9140932@harder.ccr-p.ida.org> n4hy@harder.ccr-p.ida.org (Bob McGwier) writes:
>

I had some errors in my last post

I didn,t want to get into a "Point/Counterpoint" rebutal
but I was convinced by others to do so.

JWA= Jack Albert
RWM= Robert W. McGwier

RWM

Howdy:

In a recent spate of messages, we have been told of the capabilities
of the hamblaster. It sounds rudimentary so far but I am sure that
over time the capabilities (new software development) will proceed
and its capabilities will be enhanced and it will make a very
interesting tool for amateur radio communications, experimentation,
and learning DSP. There will be alternatives as you will now be told.

JWA

For future expansion, the Hamblaster has an expansion connector.
Several add-ons will include, a better A/D-D/A, Packet switch,
real time tuning scope display driver and a microprocessor.

RWM

In other messages, John Alberts has told us of the lack of capabilities
of the Sound Blaster 16 with ASP. He is WRONG.

JWA

Not really, because I own one, I was refering to the
Soundblaster Pro. Any referances to the ASP version
was based on information from the "Ultimate Soundblaster
Book" that I purchased from a local book store. I was
unaware and the book didn't mention it's programming
capabilities. I believe my actual words where
"Im not shure but" .

RWM

I received my Sound Blaster developers kit via UPS yesterday at
last. It is easy to see how John could have made the mistake

he made. The manuals received in the kit describe two distinct
pieces of processing hardware. One is called the DSP and the
other is the ASP.

The DSP has all the limitations mentioned by John in his statements
concerning the capabilities of the Sound Blaster card (or lack thereof).
It is a proprietary gate array surrounding masks from other chip
developers to do stuff like DMA blocks of samples in and out, to convert PCM
to u-LAW, 2 or 4 bit ADPCM, CVSD, etc. It directs the flow of
MIDI commands, etc. It is a pretty neat thing in and of itself
but it is NOT what we want. We want a full blown DSP chip, with
a modified Harvard architecture and at least 16 by 16 bit -> 32 multiply,
accumulate, read new coefficient and data in one instruction time.
THE ASP is a real DSP chip and has all this. It is 512 words of off
chip program memory, 512 words of off chip data ram, 192 words of X RAM
on chip,128 words of Y ram on chip.

JWA

The Hamblaster comes with 32K of program/data memory.
It will be expandable to 32k of program and 32k of data
memory with a total os 64k words. More than you'll ever need!

Our packet modem software is 3K. It just won't fit in the
Soundblaster ASP 16.

RWM

X ram is program and sample data, Y RAM would be used for
filter coefficients. THIS IS A FULL BLOWN DSP CHIP. It
does NOT have the limitations John has told us the hamblaster
overcomes.

Indeed, on the A/D, D/A front, it is quite clear that the under
$300 SB16-ASP is quite a bit MORE CAPABLE than hamblaster.

JWA

New information places the Hamblaster at about $275.00

RWM

It has two channels (16 bits each), D/A, and A/D.
The sample rate is completely controllable by uploading a divisor to
the control register. The lowest available rate is 5 Khz and the
highest is 44.1 Khz. The processor runs at 12 MIPS so filters would
execute at around 25 MIPS. This is because it has the typical DSP
feature of multiply two numbers, read the next two, and accumulate the
last result while shifting the pointers in two instruction times.

JWA

That's great for HiFi work but for Ham use you only need an
8kHz sample rate and an 8 bit D/A-A/D. If you consider pipe-

lining the C25 also about runs 25 MIPS.

RWM

That is plenty fast. I will be able to do dual channel modems for this card. Since the thing does not also have a UART, or SIO, we will have to the HDLC and UART functions on the chip when required. Other DSP developers have done this all on chip (Finland DSP development group on the Motorola DSP56001). We will be able to do a lot.

John should be more careful when he makes flat statements about commercially available products. If he were a `real competitor' of Creative Labs, he could get into a bit of a hassle.

JWA

There's no way that a product made for Ham Radio will compete with a product that will sell in the millions. In the Ham market there just aren't enough sales to generate a reasonable profit! You'll never get rich selling to Hams.

RWM

I told John in a reply to his mail that I doubted the accuracy of his statements on the Sound Blaster16 with ASP. I was correct.

JWA

Not really. Because of the proprietary nature,
I can't disclose the full picture. When it's
released, A complete package update will be available.

RWM

The Sound Blaster 16 with ASP is available from many places for under $300. The developers kit is $99, available only from Creative Labs.

JWA

I think the Hamblaster's price will be competative!
They will offer help to third party programmers.

RWM

I will be writing programs for the ASP and giving them away on your favorite ftp sites and through the ARRL download request service. These programs will be the basis of articles for QEX describing the algorithms and the operation of the sound blaster card in amateur radio applications. Phil Karn has devised a new link layer for packet, with FEC, etc. and I will be providing modems that use the ASP. I believe I can provide what the latest hamblaster announcements state and more in short order after I get the assembler for the ASP. I will do this as quickly as possible. I am a bit miffed that I stopped developing the Windows and DOS front ends and display stuff for

the SB16 ASP after John's note because I thought the SB16 was too limited. Now it is full steam ahead.

JWA

Good Luck!

Programs for the Hamblaster will also be available on public domain disk or BBS's.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

"I'm a half breed"
"I can only breed through on side of my nose!"

Eddie Kantor

1497. Re: FCC Daily Digests for the

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 14:45:00 UTC
From: parnass@cbnewse.cb.att.com
Message-ID: <CL7yB7.ILI@cbnewse.cb.att.com>
Source record: 271199

Bruce:

Thanks for the FCC postings. I share them with other people
on my project. If there is a better way to obtain them, please
let me know.
--
==========
Copyright 1994, Bob Parnass, AJ9S
AT&T Bell Laboratories - parnass@ih4gp.att.com - (708)979-5414

1498. 6 Meter Big Wheel Ant?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 14:51:57 UTC
From: henrys@netcom.com
Message-ID: <henrysCL7yMn.H1x@netcom.com>
Source record: 271200
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Has anybody ever seen the plans for a 6 Meter Big Wheel Antenna?

If so, please pass along the reference.

Thanks,

Smitty, NA5K

--

```
-------------------------------------------------------------------------
| Henry B. Smith - NA5K henrys@netcom.com |
| Dallas, Texas |
| |
| "I'm not sure I understand everything that I know" |
-------------------------------------------------------------------------
```

1499. Amelia Earheart was Codeless, unfortunately

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 15:22:57 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2jo50h$9kt@news.acns.nwu.edu>
Source record: 271201

From: The DX reflector
Subject: Amelia Earhart
From: ron.chester@lst.spacebbs.com (Ron Chester)
Date: Sat, 12 Feb 94 23:30:00 -0800

Tonight I saw the last half of a PBS show on Amelia Earhart which I believe most DXers would find interesting. (I missed the beginning, so don't know the name of the program).

According to the show, Earhart did not especially like radio communication, and did not get properly trained up on radio navigation. For her final around-the-world flight in 1937, she left her Morse Code key at home, as she had never managed to master the code. She also did not take along the airplane's trailing wire antenna, which she found hard to use.

The trip was successful for the first 40 days, until they got to the most difficult leg, which was the long flight over the Pacific from New Guinea to Howland Island. The program asserted that the failure of this leg was primarily the result of the lack of radio expertise on the part of both Earhart and her navigator, Frederick Noonan. Among other things, there was confusion on their part about what radio frequencies to use.

The Coast Guard had the cutter Itasca stationed at Howland, ready to assist her in finding the tiny island. As she approached Howland, they picked up and logged her radio signals as she asked for help. She was circling all around the vicinity of her destination, but was unable to spot the island, while running out of fuel. The Itasca heard all of this clearly on their radio, and transmitted back to her over and over on three different frequencies. But Earhart apparently never heard the Itasca signals, and eventually disappeared into the QRN, never to be seen or heard from again.

It was a fascinating account. Catch it if you see it in your TV listings.

-Ron
K9AGL

1500. Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 15:53:02 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940214075302_1@ccm.hf.intel.com>
Source record: 271202

Text item: Text_1

>A mailing I read is involved in a comparision of the speeds of
>printing and cursive writing. I decided to consult some experts.
>Michael A. Gauland gaulandm@tekig7.PEN.TEK.COM

Michael, I'm not a "high-speed CW op" but I can copy 60wpm in shorthand.
That's what I use for copying 15wpm code. Shorthand was designed for
keeping up with spoken words and works better than either printing or
script for copying CW. Each letter is only one stroke and strokes run
together in a smooth manner. There are also short forms of commonly used
words and I've invented a few new ones applying to Ham Radio.

73, Cecil, kg7bk (I do not speak for Intel on Internet)

1501. Re: HTX202 belt clip

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 16:04:05 UTC
From: hellman@cbnewsm.cb.att.com
Message-ID: <CL81z2.8JH@cbnewsm.cb.att.com>
Source record: 271203

>
> >: Is the belt clip of the HTX202 used as a heat sink or can it be operated
> >: without the belt clip attached?
>
>
>
> the belt-clip on the htx-202 is its heatsink.
>
> You have been warned.
>
> --
> __ /| | Doug Renze, N0YVW | Don't believe what your eyes are telling

wrong! the back of the HT (not the battery) is metal. That's the heat sink.

Shel Darack WA2UBK dara@physics.attt.com

1502. Winter Olympics Event Stations?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 16:34:11 UTC
From: pault@rambler.asd.sgi.com
Message-ID: <2jo963$cc@fido.asd.sgi.com>
Source record: 271204

Does anyone know if there are any special event stations
on HF for the winter olympics in Norway?

Thanks,
Paul Thilking
AA6QT

1503. Re: 6 Meter Big Wheel Ant?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 16:47:49 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2jo9vl$oui@hpscit.sc.hp.com>
Source record: 271205
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

In article <henrysCL7yMn.H1x@netcom.com>,
Henry B. Smith <henrys@netcom.com> wrote:
>Has anybody ever seen the plans for a 6 Meter Big Wheel Antenna?
>
>If so, please pass along the reference.
>
>Thanks,
>
>Smitty, NA5K

The Big Wheel was described in the ARRL VHF Manual a number
of years ago. I have an old copy (circa 1965) that has this
antenna and also the old halo mobile antennas in it. They
quit publishing omni-directional horizontally polarized antennas
when hams switched from AM-horizontal-simplex-mobile to
FM-vertical-repeater-mobile in the early 70's.

It's basically 3 loops a full wavelength long built like a
3 leaf clover. Much better than a halo, according to the book.
I think you drive the loops in parallel, but don't quote me,
I'm working from memory here.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

1504. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 17:43:46 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-140294124034@136.141.220.39>
Source record: 271206

In article <2je1pb$pbc@slinky.cs.nyu.edu>, jackson@longlast.cs.nyu.edu (Steven Jackson) wrote:

> So how many of you think I am UTC by learning on a computer?

Steve, if you're learning for the exams, your only problem is going to be convincing the volunteer examiners to let you copy on a computer. You should check in advance, preferably bring your own laptop (or even a full-size computer if they'll have room for it) although a _few_ VE's have a computer for their record-keeping and may let you use it. Again it's very important to check in advance with the VE's. Some may not want to deal with it at all, others will be accommodating.

For real speed, you'll be 'way ahead. Someday I'm gonna sit down at the computer for several weeks and actually learn to type Morse from the air. Operative word there is _someday_ :-).

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1505. Foot race across desert?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 17:50:02 UTC
From: jfh@netcom.com
Message-ID: <jfhCL86vF.tv@netcom.com>
Source record: 271207
Cross-posted to: misc.emerg-services,rec.radio.amateur.misc

I remember hearing about a foot race somewhere across the desert in Southern California and maybe Nevada. It's run by a police agency as a fundraiser for some charity, I think. They have solicited amateur radio volunteers in the past, but I heard about it only after the event (and I don't remember where).

Does anyone have more information about this event?

(Sorry about the excessively broad distribution, but my news poster won't let me restrict it to just California.)

--

Jack Hamilton USMail: POB 281107 SF CA 94128 USA
jfh@netcom.com Packet: kd6ttl@w6pw.#nocal.ca.us.na

1506. Re: 6 Meter Big Wheel Ant?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 17:54:08 UTC
From: rdixon@peri.acs.ohio-state.edu
Message-ID: <2jods0$4h3@charm.magnus.acs.ohio-state.edu>
Source record: 271208
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

In article <henrysCL7yMn.H1x@netcom.com>, henrys@netcom.com (Henry B. Smith) writes:
|> Has anybody ever seen the plans for a 6 Meter Big Wheel Antenna?
|>
|> If so, please pass along the reference.
|>
|> Thanks,
|>
|> Smitty, NA5K
|>
|> --
|> --
>	Henry B. Smith - NA5K henrys@netcom.com
>	Dallas, Texas
>	
>	"I'm not sure I understand everything that I know"
> --

I built several many years ago. Scaled the design up from two meter designs.
Used half inch electrical conduit for the elements. They worked great, but are
long since gone.

Bob W8ERD

1507. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 17:58:38 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-140294125424@136.141.220.39>
Source record: 271209

In article <13690@tekig7.PEN.TEK.COM>, gaulandm@tekig7.PEN.TEK.COM (Mike Gauland) wrote:

> A mailing I read is involved in a comparision of the speeds of
> printing and cursive writing. I decided to consult some experts.
> So, all you high-speed CW ops, which do _you_ use?
>
I have used, for years, upper/lower-case printing for anything that takes putting text onto paper by hand. Never could write cursive! But what comes out tends to have characteristics of cursive writing without the connecting lines.

As a result, I can write lower-case print-style characters without thinking about them, so that's what I use copying code. I think the real key _is_ using something you don't have to think about, because stopping to think about any aspect of your copy slows you down. (Again why I can't copy on a typewriter/computer.)

Even when, at slower speeds, I'm writing block capitals for legibility (few can read what I've written in the lower-case printing), I use the lower-case "e" because the block "e" just takes too long.

Would have replied sooner, but got snowed out of the computer!!

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1508. Yaesu Jacket

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 18:06:35 UTC
From: se51@trajan.nextlab.cs.qub.ac.uk
Message-ID: <1994Feb14.180635.7936@liberty.uc.wlu.edu>
Source record: 271210

Hi , Can anyone tell me where might get one of those cool looking jackets that Yaesu are giving away free with FT100's? I saw this in QST last month. I can't afford the radio but I could probably afford one of the jackets if anyone is willing to part with one!

73's De GI0SSA Keith.

Replies via email to se51@elegabalus.cs.qub.ac.uk
or ax25 : gi0ssa@gb7hmi.#63.gbr.eu

1509. Re: soldering PL-259 to coax

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 18:29:55 UTC
From: mcduffie@unlinfo.unl.edu
Message-ID: <2jofv3$guk@crcnis1.unl.edu>
Source record: 271211

wolfman@p-cove.UUCP (Aaron Smith) writes:

> I have had real good luck with a little 5 watt iron. All I do is let it
>heat up for a while, then hold it on the pl-259 and the coax shielding on
>the inside. If I wait like that for about a minute, and then melt the solder
>on the tip and let it run into the hold and wait another min, I get a
>real good connection.

Wow, Aaron! You must grow some big watts in your neck of the woods.

Seriously, you are better off using a large capacity heat source, such as the 250+ watt gun, because the longer you keep that heat on the connector, the more likely it is that the center conductor will migrate. My technique is to get it hot, melt the solder, and get it cooled down, as quickly as practical. By the way, if you use cheap connectors, you will also notice that the insulator that holds the center pin will melt and the pin will sag. Use Amphenol. Hold the cable and connector still until the end of the cable is cooled so the center won't migrate. Scotchkote, tape, and more Scotchkote to seal for outside connections.

GL and 73,
Gary (other one again!)

1510. * SpaceNews 14-Feb-94 *

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 18:31:26 UTC
From: kd2bd@ka2qhd.DE.COM
Message-ID: <9402141831.AA01474@ka2qhd.de.com>
Source record: 271212

SB NEWS @ AMSAT $SPC0214
* SpaceNews 14-Feb-94 *

BID: $SPC0214

=========
SpaceNews
=========

MONDAY FEBRUARY 14, 1994

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited distribution.

* STS-60/SAREX NEWS *
====================
Gustavo, LW2DTZ, has provided a copy of the packet transmissions he received from the SAREX experiment carried on Shuttle missiom STS-60 on 06-Feb-94 at 06:56 UTC during a pass over Buenos Aires, Argentina:

W5RRR-1>QST <UI>:
Greetings from the crew of STS-60! Our current altitude is 190 nautOTRO miles above the beautiful Earth that is the home for all of us. We are very busy with Spacehab experiments and hopefully today we will deploy the Wake Shield Facility.

W5RRR-1>QST <UI>:
Best wishes and poka!
Privet to MIR crew
Un afectuoso saludo a todos los radioaficionados hispanoamericanos desde el transbordador espacial Discovery. Nuestra mision continua en su tercer dia. hoy logramos avances importantes en la met

W5RRR-1>QST <UI>:
alurgia y la cristalizacion de
proteinas para usos medicos.

W5RRR-1>SAREX <UI>:
This is STS-60 SAREX Robot station W5RRR-1
onboard the Space Shuttle Discovery.

Those who have heard or worked the STS-60 crew and wish to receive a QSL card need to send your signal report and an SASE or an envelope and IRCs to the following address:

STS-60 QSL
Education Activities Division
ARRL

225 Main St
Newington, CT 06111
U.S.A.

In other STS-60 news, Yoshiro Yamada at the Yokohama Science Center in Japan reported observing STS-60 at a +1 magnitude on 06-Feb-94 at 05:43 JST from Yokohama.

Although several opportunities were available to see the Shuttle during the early morning hours from the east coast of the United States, observations in some areas were not possible due to thick cloud cover (and heavy snow!).

* DOVE POSTS FIRST CALLS *
==========
The first of 300 callsigns of amateurs who sent telemetry data to Junior PY2BJO in Brazil when DOVE was brought back on the air in December have been posted on the satellite downlink in between engineering data. The following was received by KA3AFY on Friday Feb. 4th, 1994 at 1606 UTC:

DOVE-1>BRAMST [00/00/00 02:38:32]:
4th Feb 1994

DOVE reports have been received from :

AA7WD AB6BC AD4FH CT1DNF CT1EAT CT1EEB
CT1ENC CT1ENQ CT1ERC CT1ETZ CT1EXL CT1EXT

These will change in 4 Days.

[vk7zbx]

Tune into DOVE to see if your call or the call of someone you know shows up on the telemetry being sent on 145.825 MHz. Telemetry data is no longer needed but signal reports, equipment being used to receive DOVE, and DOVE being received in classrooms would be appreciated by BRAMSAT and Junior PY2BJO owner of DOVE. Please send reports to:

Dr. Junior Torres De Castro (PY2BJO)
119 Macaubal
Sao Palo
Brazil 01254

Thanks to Jim White (WD0E) and the DOVE Team for making the bulletin information available. Consult your favorite tracking program or DOVE Watcher for orbit information. Keep your eyes to the skies!

[Info via Larry Lilly, KA3AFY, "DOVE Watcher"]

* ITAMSAT BBS OPENS *
==========
After the software crash occurred on the 7 December, the ITAMSAT (IO-26) Command team decided to delay the reloading of the code, to improve the onboard software and further analyze the Whole Orbit Data dumps, to better understand the satellite motion and operation. On 06-Jan-94, the final

version of the code was validated by the Command team and the BBS re-opened to all users. The housekeeping code (IHT ver 2.1) now has WOD capabilities and weekly data dumps will be taken without affecting the BBS operations. All users are reminded that the BBS callsign is ITMSAT-11 for Broadcast and ITMSAT-12 for uploads, and that the standard PB and PG ground software is needed for accessing the BBS. The downlink frequency is 435.867 MHz using BPSK at 1200 baud.

Enjoy ITAMSAT!

[Info via Alberto, I2KBD, of the ITAMSAT Command Team]

* NEW PICTURE ON AO-21 *
==========
The AO-21 satellite is transmitting a picture showing the launch of the satellite three years ago. The picture is in WEFAX format at 240 lpm. The current operating schedule is available in 1200 bps AFSK packet radio format every 10 minutes on the 145.987 MHz RUDAK-II downlink frequency:

RUDAK2>BEACON <UI>:
RUDAK-II Schedule: (down 145.987, up 435.016)
min/10 Beacon Mode
0..4 FM Repeater
5..7 WEFAX Picture
8..9 AFSK TLM

RUDAK2>BEACON <UI>:
++ Hi, this is the RUDAK-II experiment on AMSAT OSCAR 21 ++

[Info via Gustavo, LW2DTZ]

* OSCAR-13 BANDPASS *
==========
Ever wonder who is active on AMSAT-OSCAR-13? Sergio, IK5AAX, in Italy provides the following bandpass listing for the curious:

OSCAR 13 BANDPASS:

SATURDAY 05:
2238-145924 ZY0SK
2245-145915 A22BW
2312-145897 LI2OWG
2333-145912 8P6SM

SUNDAY 06:
0036-145899 TI5RLI
1904-145884 K4AK
2330-145888 ZY0SK

MONDAY 07:
0018-145899 TU2OJ
0759-145905 Z21HJ

[Info via Sergio, IK5AAX]

* FO-20 OPERATION SCHEDULE *
============================
The FO-20 operation schedule is follows. Analog transponder and digital
transponder will be ON for a week respectively as they were since last
December.

Analog mode:
09-Feb-94 07:15 UTC -to- 16-Feb-94 07:40 UTC
23-Feb-94 08:05 UTC -to- 02-Mar-94 06:40 UTC
09-Mar-94 07:05 UTC -to- 16-Mar-94 07:30 UTC
23-Mar-94 07:52 UTC -to- 30-Mar-94 08:15 UTC

Digital mode:
Unless otherwise noted above.

[Info via Kazu Sakamoto, JJ1WTK]

* THANKS! *
===========
Thanks to all those who sent QSL cards, letters, and messages of
appreciation regarding SpaceNews, especially:

HS1JAN KB2OPQ N2GJ DL3MFM AB4U IK5AAX VK5THA WA6LVE N0TCT
Dave Bondon

* FEEDBACK/INPUT WELCOMED *
===========================
Mail to SpaceNews should be directed to the editor (John, KD2BD) via any
of the following paths:

FAX : 1-908-747-7107
PACKET : KD2BD @ N2KZH.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College
Lincroft, New Jersey 07738
U.S.A.

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX
--
John A. Magliacane, KD2BD * /\/\ * Voice : 1-908-224-2948
Advanced Technology Center |/\/\/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
Brookdale Community College |\/\/\/| Internet: kd2bd@ka2qhd.ocpt.ccur.com
Lincroft, NJ 07738 * \/\/ * Morse : -.- -.. ..--- -... -..

1511. Re: Foot race across desert?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 19:02:51 UTC
From: byon@beach.csulb.edu
Message-ID: <2johsr$r45@garuda.csulb.edu>
Source record: 271213
Cross-posted to: misc.emerg-services,rec.radio.amateur.misc

In article <jfhCL86vF.tv@netcom.com>, Jack Hamilton <jfh@netcom.com> wrote:
>I remember hearing about a foot race somewhere across the desert in
>Southern California and maybe Nevada. It's run by a police agency as
>a fundraiser for some charity, I think. They have solicited amateur radio
>volunteers in the past, but I heard about it only after the event (and I
>don't remember where).
>
>Does anyone have more information about this event?
>

It is called the Challange Cup Relay Race - also know as the Baker to Vegas
race. It's a 120 mile relay race in 20 legs from Baker, in California,
through Pahrumph (sp) and on into Vegas. This year it will be held
on April 8-9. We (Orange County RACES) set up a communications system
for the use of a few county teams. It is an international event, run
by police officers. This is all off the top of my head, so I may be off
a bit, but I gan get you as much info as you would like.

--
Byon Garrabrant KD6BCH byon@csulb.edu

1512. Central Ohio ARES contact?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 19:25:16 UTC
From: mkb@cs.cmu.edu
Message-ID: <CL8BA6.29E.2@cs.cmu.edu>
Source record: 271214

Can anyone provide me with a contact for the Central Ohio ARES? I believe they are providing support for TOSRV this coming May, and I'd like to see if they need any riding volunteers.

Mike Blackwell -- ke3ig -- mkb@cs.cmu.edu

1513. Re: FCC Daily Digests for the

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 20:16:36 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CL8Dnq.CG8@ucdavis.edu>
Source record: 271215

Steve Allen (steve.allen@brent.uucp) wrote:

: Bruce: besides being 99.9% irrelevant to amateur radio, this is an
: incredible waste of bandwidth. If you feel a need to post this
: stuff, form your own newsgroup.
: -Steve N2WSA

Actually, Steve, Bruce asked the newsgroup if we wanted to have these posted here, and I for you replied that I thought they were a good idea. I like knowing what is happening at the FCC though I lknow it is of little use to many. There are a number of informational posts that are not of interest to all the amateurs in this newsgroup but that doesn't mean they should be run off.

Please keep posting the FCC digests.

Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* The only thing I can officially say for the University is: *
* What I say is in no way related to oficial University policy *
--

1514. Re: Copying High-Speed CW: Print or Scr

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 20:50:18 UTC
From: drs@ccd.harris.com
Message-ID: <1994Feb14.205018.641@ccd.harris.com>
Source record: 271216

Gilbert Baron (gilbaronw0mn@delphi.com) wrote:
: ,LT
: >A mailing I read is involved in a comparision of the speeds of
: >printing and cursive writing. I decided to consult some experts.
: >So, all you high-speed CW ops, which do _you_ use?
: >
: >
: >73,
: >mag
: >
: >--
: >Michael A. Gauland gaulandm@tekig7.PEN.TEK.COM
: >AA7JF (503) 627-5067
: >
: Printing is not feasabile above 25 WPM. You must learn to use cursive.

: Gil Baron, El Baron Rojo, W0MN Rochester,MN
: "Bailar es Vivir"
: PGP2.3 key at key servers or upon request

If you want to learn to receive cw for conversation, forget writing any of it down. You then need to think of words, not letters.
--

Doug Snowden
drs@ccd.harris.com
N4IJ

1515. Re: Amelia Earheart was Codeless, unfortunately

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 20:51:31 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CL8F9w.Bnq@news.Hawaii.Edu>
Source record: 271217

In article <2jo50h$9kt@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:
>From: The DX reflector
>Subject: Amelia Earhart
>From: ron.chester@lst.spacebbs.com (Ron Chester)
>Date: Sat, 12 Feb 94 23:30:00 -0800
>
>Tonight I saw the last half of a PBS show on Amelia Earhart which I
>believe most DXers would find interesting. (I missed the beginning, so
>don't know the name of the program).
>
>According to the show, Earhart did not especially like radio
>communication, and did not get properly trained up on radio navigation.
>For her final around-the-world flight in 1937, she left her Morse Code key
>at home, as she had never managed to master the code.
....

I'd state the obvious moral of this story, but we're not on .policy ....
[See? I'm able to muster a bit of restraint periodically (once a year).]

==========
Jeffrey Herman, NH6IL, jherman@hawaii.edu, who, in his spare time, cannibalizes
old TV sets to make QRP transmitters (CW of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500kc CW)

It is said that CW is the second most popular mode on HF, but scanning the
bands I frequently count more CW QSOs than SSB QSOs.
==========

1516. Re: which is better qrp band--30 or 40?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 21:00:10 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CL8FoA.Bs2@news.Hawaii.Edu>
Source record: 271218

In article <121020036@hpldsla.sid.hp.com> brunob@hpldsla.sid.hp.com (Bruno Bienenfeld) writes:
>You will be much better off by using 30m for followin reasons.
>
>40 is segmentaized e.m. different ITU zones can operate only on certain
>freq. or segments of the 40m band.
>40 has Broadcasts and other QRM working against QRP.
>On 40 "other" station can use 1KW so ham to ham QRM is a factor.
>
>30 is 'NEW' and same freq. for all ITU.
>Very little QRM
>On the edge of muf
>Max power is 100w

Or 200w output - more folks probably measure their output power than their input...

>Beam fix or rotatebl is feasable and in my opinion a must for QRP.
>
>Try it you may like it!!!!!

And you can use the 10.000000000000000000000000000000000 MHz beacons (all those frequency/time standard broadcasts) to check openings!

>from the log of AA6AD

==========
Jeffrey Herman NH6IL jherman@hawaii.edu, who, in his spare time, cannibalizes old TV sets to make QRP transmitters (CW, of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500 kc CW)

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.
==========

1517. Re: FCC Daily Digests for the

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 21:07:48 UTC
From: tweek@netcom.com
Message-ID: <tweekCL8G11.67L@netcom.com>
Source record: 271219

In article <CL7yB7.ILI@cbnewse.cb.att.com> posted to the Usenet Newsgroup(s)
rec.radio.amateur.misc
parnass@cbnewse.cb.att.com (Bob Parnass, AJ9S) writes:
>
>Bruce:
>
>Thanks for the FCC postings. I share them with other people
>on my project. If there is a better way to obtain them, please
>let me know.

Yes, I found them informative as well.

Maybe the other poster is partly right about them having "nothing"
(Not MUCH... see the Vanity Call Signs?) to do with Amateur Radio...
But I don't believe that a separate newsgroup needs to be created.

REC.RADIO.INFO might be fine for this purpose in that it can cater
to the entire rec.radio.* subdivisions.

tweek@netcom.com tweek@tweekco.uucp WWIVNet 1@511 DoD #MCMLX
I'd rather get my cable service from the phone company,
than my phone service from the cable company.

1518. MAJOR NEW HF RADIO PROPAGATION SOFTWARE ANNOUNCEMENT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 21:22:32 UTC
From: oler@rho.uleth.ca
Message-ID: <$stbl4045a.1994@ampr.org>
Source record: 271220
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

bid: $STBL4045A
NEW HF PROPAGATION SOFTWARE
PACKET RADIO REPORT
SOLAR TERRESTRIAL DISPATCH
(PACKET: VE6MGS@VE6MC.#EDM.AB.CAN.NOAM)
(INTERNET: COLER@SOLAR.STANFORD.EDU)

The Solar Terrestrial Dispatch
Ionospheric Support Branch

Proudly Releases

S K Y C O M V e r s i o n 1 . 0

High Frequency Ionospheric Signal Analyst

A New Standard in
Radio Communications Software

This significant software package is designed for high frequency (HF)
and very high frequency (VHF) radio communicators and/or listeners. This is
the ONLY major ionospheric software package we are aware of for personal
computers to thoroughly examine (in accurate detail) practically every
ionospheric parameter relavent to radio communications. It is a "MUST-HAVE"
for anyone involved in HF or refractive-VHF radio communications and will
almost certainly improve the productivity of all broadcasters.

Essentially, this software can be used as an ionospheric laboratory for
determining the effects of radio signals under a wide variety of solar and
geophysical conditions. It is very useful as a teaching tool, as well as an
analytical and predictive tool.

A complex dynamic model of the ionosphere is used to generate
exceptionally useful and accurate information regarding global ionospheric
conditions. Based on a corrected version of the most recent International
Reference Ionosphere (IRI) model - which produces realistic ionospheric
electron density profiles, SKYCOM dynamically alters the ionospheric profile
characteristics to more closely resemble profiles observed under actual
conditions.

This software has been a long time coming. We're pleased to announce a
few of the more significant features below:

* RAY TRACE SIGNALS THROUGH THE IONOSPHERE BET
ON THE EARTH.
* Learn the behavior of radio signals and see where and how signals are

refracted in the ionosphere.
* Visually study the effects of sporadic-E on radio signals. Observe how signals are refracted by sporadic-E.
* Simultaneously observe changes in the electron density as the signals are traced and refracted from one point to another.
* Examine the effects of signal convergence and divergence caused by ionospheric refraction.
* Study the behavior of signals as they penetrate into the various ionospheric layers (D, E, sporadic-E, F1, and F2 layers are all supported as well as TOP-SIDE ionospheric profiles up to 1000 km).
* Estimate effects of solar flares (minor or major) on the ionosphere and signals traversing the daylit sides of the ionosphere.
* Estimate the quality of any signal transmitted between any two points, under almost any set of circumstances. Quality figures are derived through the use of models that estimate the effects of: Geomagnetic Activity, SWFs, Sporadic-E, the Equatorial Anomaly, Regular Non-Deviative Absorption, the Winter Anomaly, Polar Cap Absorption, Deviative Auroral Absorption, etc.
* Determine circumstances which may result in very good, good, fair, poor, very poor, or even radio blackout conditions for any given path and for any given geophysical event.
* Determine accurate, rigorously ray-traced Maximum Usable Frequencies for practically any path.
* PRODUCE EXCEPTIONALLY DET
Determine exactly where your transmissions can be received on the Earth and the relative strength or quality of the received signals.
* PRODUCE IN-DEPTH COMPLEX GLOBAL MAPS OF IONOSPHERIC CHARACTERISTICS
These maps are similar to weather maps used by meteorologists and provide a wealth of information regarding the state of the ionosphere at any given date or time.
* Compute global maps of maximum usable frequencies for any time of day.
* Display global maps of ionospheric M-factors for 3000 km distances.
* Generate global maps of critical E or F2 layer frequencies.
* Display maps of solar zenith angles (elevation of the Sun).
* Generate global maps showing the maximum height of the F2 layer electron density.
* Produce unique transverse CROSS-SECTIONS of the ionosphere for any given path.
* Generate maps showing the geomagnetic DIP or inclination angles throughout the world.
* Display maps of the Total Field Intensity of the geomagnetic field.
* Also produce maps of Magnetic Latitude or Modified DIP angles.
* MIX AND MAT

SYSTEM REQUIREMENTS:

- IBM or compatible computer system (386 or better recommended).
- Math Coprocessor recommended, although not required.
- MSDOS 3.3 or higher.
- VGA graphics capabilities required. All graphics are VGA quality.
- 512 to 640 K of free memory.

FOR PRICING INFORMATION, CALL THE RECORDED MESSAGE (APPROXIMATELY 2 MINUTES)
BY DIALING: 403 756-2386. A SPECIAL LIMITED TIME INT
AVAILABLE *ONLY* THROUGH 31 MARCH 1994.

** END OF PACKET BULLETIN **

1519. Re: HT Recs out there?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 22:09:30 UTC
From: jdc2@acpub.duke.edu
Message-ID: <2josqq$c2e@news.duke.edu>
Source record: 271221
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Jesse,
I have a Kenwood TH78A, and I love it. I've also been out of the market for a year, but it was the best dual band radio I could find. I am also a college student, and I love having an HT. Try operating one with a speaker mic while riding a bike (with the HT in your backpack). That gets interesting.
The 78A might be a tad pricy (mine was upwards of 500 I think), but I also got some toys to go with it. I must admit a brand allegance to kenwood, but that's just me. I know you could not go wrong with a 78, so look into it if you get the chance. On a side note, it looks so cool that you probably won't get any dorks saying "hey, is that a CB?"
I'll keep the post short - mail me if you want more info

N5SKQ (J. Carter)

J. D. Carter - jdc2@acpub.duke.edu

1520. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-14 23:49:52 UTC
From: weltyrc@eng.auburn.edu
Message-ID: <weltyrc.940214174951@orville.eng.auburn.edu>
Source record: 271222

I trust they don't work much SSTV !?

kd4vzx

1521. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 00:09:12 UTC
From: ben@yosemite.sps.mot.com
Message-ID: <CL8oFC.n3K@oakhill.sps.mot.com>
Source record: 271223

In article <1994Feb12.022037.1025@megatek.com>,
Jim Campbell <jimc@megatek.com> wrote:
>In article <1994Feb10.171218.7423@dtint.dtint.com> Allen Wallace <allen@dtint.dtint.com>
writes:
>>
>>There might be, but I bet that they are all OMs and no YLs or XYLs!
>
> Close. There is a YL that checks in from Alaska on a fairly regular
>basis. The weeks when she shows up are the weeks we have more check-ins on the
>net. hmmmmmmm......

There have been one or two YL's besides her that have checked in as well.
IMHO, the number of YL's checking in is likely to be proportional to the
number of YL's that are hams rather than of those that are nudists.

--ben

--
Ben Thornton Amateur call: WD5HLS
Internet: ben@yosemite.sps.mot.com Motorola Inc., Austin, TX
Caution: Wearing clothes has been shown to cause permanent psychological
dependence on textiles. WEAR THEM AT YOUR OWN RISK.

1522. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 00:10:20 UTC
From: ben@yosemite.sps.mot.com
Message-ID: <CL8oH8.n4G@oakhill.sps.mot.com>
Source record: 271224

In article <debmooreCL0r4w.6E7@netcom.com>,
Bob Shilling <debmoore@netcom.com> wrote:
>Gary Davis (gdavis@griffin.uvm.edu) wrote:
>: I heard a strange story on the CBC last evening. The report was on
>: the increasing interest in nudism in the Winter months. To promote
>: this festive and relaxing activity additional interests where specified.
>
>: There is, according to the CBC, a nudist amateur radio club.
>
>: I am wondering where, how many members? Anybody know anything about this?
>
>
>Supposedly, 14.265mhz, 4pm,(pst); Thurs.
>Unfortunately, my antenna is marginal, and at that time of day all I
>get is hash on 20m, so I haven't been able to check in. Maybe I'll
>try again tonight.

We have been discussing the possibility of conducting a 40m version
of the net on a different evening... stay tuned to rec.nude for details.

--ben
--
Ben Thornton Amateur call: WD5HLS
Internet: ben@yosemite.sps.mot.com Motorola Inc., Austin, TX
Caution: Wearing clothes has been shown to cause permanent psychological
dependence on textiles. WEAR THEM AT YOUR OWN RISK.

1523. Re: callsign server info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 00:13:14 UTC
From: andy@clark.net
Message-ID: <2jp42q$ir3@clarknet.clark.net>
Source record: 271225

Jerry Sy (ah301@yfn.ysu.edu) wrote:
: which port do I telnet to get to callsign server on
: cs.buffalo.edu ?

It is port 2000. Therefore, your command is: open cs.buffalo.edu 2000

-k4adl

1524. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 00:13:24 UTC
From: ben@yosemite.sps.mot.com
Message-ID: <CL8oMC.4L@oakhill.sps.mot.com>
Source record: 271226

In article <CL2txF.8EJ@srgenprp.sr.hp.com>, Alan Bloom <alanb@sr.hp.com> wrote:
>Jim Campbell (jimc@megatek.com) wrote:
>: In article <gdavis.760825204@griffin> gdavis@griffin.uvm.edu (Gary Davis) writes:
>: >
>: >There is, according to the CBC, a nudist amateur radio club.
>: >
>
>: We meet on Thursday nights at 0000Z on 14.265Mhz +/- 10. ...
>
>: Tonight we started to formulate plans for a commemorative(sp?) QSL
>: card and/or certificate for Nude Recreation Week, which happens July 4-10
>: this year. Yes, the picture QSL will have nude people on it, just don't
>: expect any "centerfolds". ...
>
>How many people have received their free QSL card from K4NBN "No Bad News"?
>(He used to have a monthly ham ad in QST.) The nude lady in the QSL photo
>was indeed a kind of centerfold, although not the type you might expect.
>It was done as a promotion for a nudist colony in Georgia or somewhere.
^^^^^^
We don't do colonies... just parks and resorts :).

--ben

--
Ben Thornton Amateur call: WD5HLS
Internet: ben@yosemite.sps.mot.com Motorola Inc., Austin, TX
Caution: Wearing clothes has been shown to cause permanent psychological
dependence on textiles. WEAR THEM AT YOUR OWN RISK.

1525. Re: Yaesu FT-5100 packet connection

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 00:36:06 UTC
From: brian@positron.amd.com
Message-ID: <CL8po7.1rB@dvorak.amd.com>
Source record: 271227
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.equipment

Bill Plymale writes:

> I'm trying to interface a Yaesu FT-5100 to a MFJ-1270B TNC via
> the 5100's DATA IN/OUT jack. I constructed a connector based on
> the instructions in the 5100 manual. The problem is that the
> transmit audio level out of the TNC is way too low.

It may not be the audio from the TNC -- the 5100's data connection port has been changed recently. I own two 5100's -- one is a year old and one is a month old. The "old" 5100 works perfectly well with the TNC wired into the data port on the back of the radio. The "new" 5100 keys up the transmitter but doesn't provide any audio output when it transmits.

I called Yaesu about this and it seems that they've changed the data port on the back of the radio to allow direct 9600 baud connection. In doing this, they made it impossible to run 1200 and 2400 baud packet through the data port. Wiring directly to the mike connector does still work, so that's the "correct" way to do it now. The manuals haven't been updated to reflect the new hardware yet.

Bummer. Now I've got two "identical" radios and two distinctly different ways to plug in a TNC.

Brian McMinn N5PSS brian@amd.com

1526. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 00:51:41 UTC
From: kg7bk@indirect.com
Message-ID: <CL8qE6.Lxz@news.direct.net>
Source record: 271078

John W. Albert (jwa@tellabs.com) wrote:

: Several add-ons will include, a better A/D...
: ... for Ham use you only need an... 8 bit A/D.
: Jack Albert WA9FVP

Jack, if for Ham use you only need an 8 bit A/D then why will your add-ons include a better A/D? I have a direct conversion receiver and have found that an 8-bit A/D is not good enough for weak signal CW reception. With 8-bits of dynamic range, I spent all my processing power in scaling and avoiding saturation from strong signals. 16-bits gives me some needed headroom.

73, Cecil, kg7bk@indirect.com

1527. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 00:55:42 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2jp6ie$129@bigfoot.wustl.edu>
Source record: 271079

Steven Jackson (jackson@longlast.cs.nyu.edu) wrote:
: |> so I retyped the copy before sending it in to ARRL!)

: Question: I use SuperMorse 4.04 and I love the "Group" training under Learn.
: It looks like my first Amateur test is going to be at 20 WPM.

: How many people use typewriters or computers for copying code? Having learned
: to type a decade ago, I can now type at ~70 WPM. If I ever thought I was going
: to copy code at an obnoxious (;-) rate, I would definitely prefer to have a
: typewriter next to my radio. You don't even need an IBM Selectric.. even one
: from Naked Lunch will do.. it's a lot easier than writing, once you learn how
: to type.

: You can always practice with the "Solid" function on SuperMorse. It lets you
: type to code until you get a character wrong.
: --
: Steven Jackson New York University
: Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
: jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012
: "Not in my head.. so I don't have to think.." -- Nik Fiend

Here's a question for you. . .after copying by keyboard, can you copy
by hand still???? That was my problem. I worked my keyboard copying
up pretty well--onnly problem was that it became instinctive--and I
wouldn't be thinking what letter it was, rather, I'd just be typing.
So I did the copy thing and copied by hand.

--jesse

1528. Vision Impaired Ham needs help

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 02:23:02 UTC
From: henrys@netcom.com
Message-ID: <henrysCL8uME.8wB@netcom.com>
Source record: 271080

Today I spoke with Roy, W8SAG who is a vision impaired ham (age 75)
who lives in Colorado Springs, Colorado.

Roy does not have a computer, so I told him that I would do my best
to find out everything that I could about *talking* computers and
programs that can assist the blind ham.

If you know anything about *talking* computers, the software and
hardware, please Email me. I will pass the info along to Roy.

Thanks,

Smitty, NA5K

--
```
-------------------------------------------------------------------------
| Henry B. Smith - NA5K henrys@netcom.com |
| Dallas, Texas |
| |
| "I'm not sure I understand everything that I know" |
-------------------------------------------------------------------------
```

1529. Re: 440 MHz in Orlando - Open Repeaters??

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 02:35:56 UTC
From: bill@c3177208.ssr.hp.com
Message-ID: <CL8v7w.2Ey@c3177208.ssr.hp.com>
Source record: 271081

Don Edberg (edberg@netsun.mdc.com) wrote:

: Hello,
: I happen to be in Orlando, Florida on business (ignore signature) and I
: didn't bring my repeater directory. Are there any open repeaters here,
: and if so, what freqs? Either reply here or call my hotel 407-351-1000.
: Thanks and 73s.
: don N6CLP

Lemmesee -- most (if not all) of the 440 machines in Orlando use
a 103.5 hz tone for intermod purposes. Some machines of choice are:

442.075 AB4CQ Very High, East Orlando, Covers Daytona
to Leesburg to Lakeland and well south
of Melbourne.

443.100 WD4IXD Sea World Tower, use for initial or short
contacts, ragchew elsewhere

443.325 N4LOZ Good coverage, nice owner (Mid/West Orlando
as I recall)

442.700 WA4ULT Going to/from work repeater. Good coverage.

444.025 AB4CQ Ibid. Longwood, 350' or so, fair coverage
but nothing like the 442.075 machine.

There's four or five other machines, but I don't know their status,
some's up, some's down. 443.600, 443.700, 443.675, 443.275 may
be up (but then again...) I usually scan the list above.

Bill Chidester KE4WS
bill@hpuorfa.ssr.hp.com

1530. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 03:00:33 UTC
From: jramsey@delphi.com
Message-ID: <x8yqthx.jramsey@delphi.com>
Source record: 271082

Jon Bloom (KE3Z) <jbloom@arrl.org> writes:

>harmonic spectral purity requirements.) They promised to send us one of
>the new units as soon as it became available. (Normally, we only
>*purchase* Product Review items, but we decided that it would be hard
>for them to fine-tune a kit :-)
> We waited a couple of months, then called Ramsey. To make a long
>story short, we called *every* couple of months, but we never received
>the promised radio. Finally, we just bought one (through a third
>party). This is the unit we reviewed. In March of 1993, we contacted

And one wonders why we don't advertise in QST, it's the attitude of
history re-writers such as J.B. I was there, and the facts just ain't so.
I'd rather talk on the phone! But I had to respond to such talk. You see, the
ARRL couldn't get their kit to work! So we sent them an assembled unit.
Yes it did not meet the FCC specs for spurious - missing by about a db or
two (I'm at home and don't have notes handy). The ARRL missed the whole
point of the kit which was to promote kit building, etc,etc. Now. I'm
sure you are thinking, "but it didn't meet FCC!" True, but for a fascinating
contrast, look at the GLOWING review of the MFJ regen receiver! Guess it
doesn't spray RF.I do believe that MFJ has been quite a big QST advertiser, too.
No, you'll not see a Ramsey ad in QST. It was years ago that I was approached
by a QST ad director to advertise. He expounded how QST was looking out for the
amateur, requiring test units before accepting ads. I responded that they had
plenty of ad pages from DSI, a since defunct freq ctr mfg who sold trash and
was openly taking $$ for products they had no intention of shipping! Of this is
the virtue you speak? Well, DSI closed shop, took QST readers for hundreds of
thousands of dollars and even stuck that nice old ad director too!
Yes, I'm hot and seeing this kangoroo (sp?) court makes me long for my work-
bench rather than this CRT. I don't have the luxury of getting paid to
read and respond to everything here - but I do welcome phone calls to myself
at the office (716) 924-4560. Just ask for me.

1531. CELLULAR SURVEILLANCE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 03:02:50 UTC
From: bill.FIscher@t8000.cuc.ab.CA
Message-ID: <9402141902.A9592wk@t8000.cuc.ab.ca>
Source record: 271083

94-02-14

Finally, as the result of the efforts of a number of Internet gurus, we're able to tell you how to download a demo copy of the software that controls our Cellular Surveillance Interface, via e-mail. The program is entitled CELLDEMO.ZIP

Send an e-mail message to: ftpmail@decwrl.dec.com

Leave the subject line blank or use the word: file

In the body of the e-mail message, type the following six lines starting at line 1. Put YOUR e-mail address where is says your-email-address:

```
reply your-email-address
connect ftp.funet.fi
binary
uuencode
get pub/dx/software/msdos/rx-control/celldemo.zip
quit
```

Except for your e-mail address, type it EXACTLY the way it reads above. If you make any spelling or spacing mastakes, it won't work. Send it or mail it when you're sure it's correct.

Some time later you'll get a few pieces of e-mail. Two of these will each contain a portion of the demo program. The others are information only. Now you need to do some additional work. Edit the first of the two files you received to remove everything before the line that reads:

```
begin 444 ftpmail
```

This should now be line 1 of the file. Save the file.

The 444 refers to the number of lines in the two files, and ftpmail is the file name that you'll end up with when you combine them.

Edit the second file to remove everything before the line that begins with uppercase garbled text (similar to the text starting on line 2 of the first file). Save this file also.

Now you need a program called UUDECODE. If you don't have it, download and run the program UUE.EXE (or something similar) from a BBS in your area.

Now type: UUDECODE name-of-the-FIRST-file you received-and-edited

You'll now have a new file named FTPMAIL that is the sum of the two separate files your received and edited.

Rename this new file: celldemo.zip

Remember, celldemo.zip was the file you originally asked FTP to send you.

Now you need a program called PKUNZIP. If you don't have it, download and run the program PKZ204G.EXE from a BBS in your area.

Now type: PKUNZIP celldemo.zip

You'll now have four new files. Read the READ.ME file and then run the CSIDEMO program.

We realize that this was a lot of work. However, it didn't cost you anything except some time, and you now have a demo of the CSI unit. In addition, if this worked for you, you now know how to FTP any program, from anywhere, via e-mail. All you need to know is the FTP site, and the directory and name of the program you want. You may wish to save this FTP tutorial for future use.

Regards,

Bill Fischer Internet: bill.fischer@T8000.cuc.ab.ca

• SLMR 2.0 •

1532. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 06:05:44 UTC
From: mdf@vigard.mef.org
Message-ID: <1994Feb15.060544.8419@vigard.mef.org>
Source record: 271084

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>So an 8 bit system would have a SNR of 10*log(2^9)=27 db.

heywaitaminute. isnt the SNR a power ratio? you've
done a voltage ratio here ...

>per second. That requires a very good brickwall filter, however,
>so sampling is usually done at a somewhat higher rate, say 3X
>or 4X the highest audio frequency. Lets pick 3X. So our required
>bit rate is 16*15,000=240 kb/s.

but after your oversampling and filtering, you don't bother with
the "in-between" samples anymore ... you still end up transmitting
10kbps (in your example).

tho i would say that 8kilosamples/second @ 8bits is quite accepatable.
64kbps. using an ADPCM encoder you can chop this in half.

if you have a soundblaster, you can experiment with both sample rate
and resolution ... 4k samples/sec is too low, 6k is passable. fewer
than about 5 bits would probably make things very irritating.

>Or we can abandon voice grade radios for the links and use purpose
>built digital radios with higher baud rates. If we take a 56 kb
>WA4DSY RF modem (GRAPES), and couple that with an on the fly

or you could just get a pair of gunplexers. pricey, but you also
get the beginnings of a *very* high speed (>1Mbps) data link. voice/packet/
whatever.

price/performance/future: how much are gunplexers, how much are
the WA4DSY modem/radios and compare what both are eventually capable of.

as you might be able to tell, i like spending other people's money. :-)
--
Matthew Francey mdf@vigard.mef.org (or mdf%mstype@sq.com)
AX25: VE3RQX@VE3RZR.#SCON.ON.CAN GPS(NAD27): N43o34.210' W079o34.563' +0093m

1533. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 06:29:27 UTC
From: jschroe@eis.CAlstate.EDU
Message-ID: <Pine.3.89.9402142211.A4827-0100000@eis.calstate.edu>
Source record: 271085

```
subscribe
```

1534. Daily Summary of Solar Geophysical Activity for 14 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 07:09:25 UTC
From: oler@rho.uleth.ca
Message-ID: <9402150709.AA19695@rho.uleth.ca>
Source record: 271086
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

14 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

NOTE: Intense stratospheric warming and a strong anticyclone exists over
the North Atlantic and Europe. Warm air is spreading east.

Please also note the inclusion of greater than 2 MeV electron fluence
values (useful for monitoring satellite charging activity).

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 045, 02/14/94
10.7 FLUX=101 90-AVG=106 SSN=059 BKI=4433 3534 BAI=023
BGND-XRAY=B2.3 FLU1=6.2E+06 FLU10=1.7E+04 PKI=4443 3544 PAI=028
BOU-DEV=056,052,037,028,022,073,035,044 DEV-AVG=043 NT SWF=00:000
XRAY-MAX= B7.9 @ 0032UT XRAY-MIN= B2.0 @ 1749UT XRAY-AVG= B2.8
NEUTN-MAX= +003% @ 0945UT NEUTN-MIN= -001% @ 2105UT NEUTN-AVG= +0.6%
PCA-MAX= +0.1DB @ 1845UT PCA-MIN= -0.4DB @ 0440UT PCA-AVG= -0.0DB
BOUTF-MAX=55359NT @ 0416UT BOUTF-MIN=55304NT @ 1608UT BOUTF-AVG=55336NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+065,+000,+000
GOES6-MAX=P:+131NT@ 1727UT GOES6-MIN=N:-084NT@ 0648UT G6-AVG=+088,+040,-034
FLUXFCST=STD:100,105,105;SESC:100,105,105 BAI/PAI-FCST=020,010,015/020,012,018
KFCST=0115 5010 0005 5010 27DAY-AP=022,022 27DAY-KP=3333 5533 3553 4233
WARNINGS=*AURMIDWCH
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 13 FEB 94 was 39.6.
The Full Kp Indices for 13 FEB 94 are: 4+ 3+ 3o 5- 4- 5- 5- 4-
The 3-Hr Ap Indices for 13 FEB 94 are: 33 19 15 41 21 37 42 24
Greater than 2 MeV Electron Fluence for 14 FEB is: 3.6E+08

SYNOPSIS OF ACT

Solar activity was very low. Region 7671 (N10E65)
features a large, dark, spot extending over three degrees.

Solar activity forecast: solar activity is expected to be
very low.

STD: Region 7671 is associated with extremely intense Ca XV
emissions. The National Solar Observatory reported extremely
intense emissions as this region rotated around the east limb
on 12 February. Bad weather has prevented attempts to observe
emissions since then. C-class flares are possible from this
region. The threat for possible satellite anomalies may
continue for the next 2 or 3 days before electrons at greater
than 2 MeV fall back toward background levels.

The geomagnetic field has been at unsettled to minor storm
levels at mid-latitudes and major storm levels at high
latitudes. The storm which began 05 February continues at high
latitudes, but appears to have receded at mid-latitudes. The
energetic electron flux is elevated for the seventh day
in a row.

Geophysical activity forecast: the geomagnetic field is
expected to range from unsettled to minor storm for day one.
The field is expected to relax to mostly unsettled levels
for day two. A new coronal hole may disturb the magnetic field
on day three.

Event probabilities 15 feb-17 feb

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 15 feb-17 feb

A. Middle Latitudes
Active 35/25/30
Minor Storm 20/15/20
Major-Severe Storm 05/05/05

B. High Latitudes
Active 35/25/30
Minor Storm 25/15/20
Major-Severe Storm 05/05/05

HF propagation conditions continue to very slowly improve,
but are still well below normal, particularly on higher
latitude paths. Conditions are expected to remain below-normal
for at least the next 3 to 4 days. Another smaller coronal
hole related disturbance is expected to rejuvenate activity on
about 17 February, although it should primarily affect the
higher latitudes.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7668 N09W29 283 0050 CSO 09 011 BET
7669 N05E32 222 0000 AXX 00 001 ALPHA
7670 N08E48 206 0010 BXO 05 004 BET
7671 N10E65 189 0450 CHO 06 003 BET
7667 S07W80 334 PLAGE
REGIONS DUE TO RET
NMBR LAT
7659 S13 150

LISTING OF SOLAR ENERGETIC EVENTS FOR 14 FEBRUARY, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 14 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 14/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
13 Feb: 0051 0244 0429 C1.3

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 1 0 0 0 0 0 0 0 001 (100.0)

Total Events: 001 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
13 Feb: 0051 0244 0429 C1.3 IV

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.

All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1535. Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 08:25:58 UTC
From: Bob.Albert@f943.n102.z1.fidonet.org
Message-ID: <761366192.AA05048@mcws.fidonet.org>
Source record: 271087

Hey, it says here that you are a saxophone student. Tell me more! I play jazz...

Just to stay on topic, I discovered the problem with rf feedback in my hf setup; the TNC was picking it up and sending distorted audio to the rig. That didn't happen before the earthquake, so I'm trying to figure it out. 73 DE K6DDX

1536. Peter Jones Engineering address?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 08:40:01 UTC
From: epladsen@nyx10.cs.du.edu
Message-ID: <1994Feb15.084001.23247@mnemosyne.cs.du.edu>
Source record: 271088

I'm looking for the mailing address for Peter Jones Engineering, a
British company that manufactures straight keys and keyer paddles.

Thanks and cheerio,
Eric - N0MWG
--
epladsen@nyx.cs.du.edu 73 de Eric
Amateur Radio: N0MWG@w0ljf.co.usa.na

1537. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 08:47:20 UTC
From: bote@access3.digex.net
Message-ID: <bote.761301025@access3>
Source record: 271089

gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>bote@access1.digex.net (John Boteler) writes:
>>I have gotten a bug up my rear to configure our point-to-point
>>repeater linking system with digital paths ranging 20
>>to 40 miles apart.
>Well lets look at some numbers and see. Lets assume
>you want "broadcast" grade audio. That's a SNR of
>50 db.

I would likely find 35-40 db S/N to be acceptable,
considering that it would be consistent and additive
as it is now with analog links.

[enlightening quantitative analysis trimmed]

>Or we can abandon voice grade radios for the links and use purpose
>built digital radios with higher baud rates. If we take a 56 kb
>WA4DSY RF modem (GRAPES),

I am fortunate to live in the Washington, D.C. area,
the home of the AMRAD group. I understand they are renewing
interest and activity in digital point to point links
with the potential for a made-to-order band proposal
that I hear is in the works. The WA4DSY modem might
be a practical way to proceed.

>If we can settle for less than perfection, however, Motorola has
>a codec scheme that they claim can fit a digital voice signal in
>the same bandwidth as a NBFM voice signal, IE 20 KHz. It won't

This sounds worth investigating. I also heard through
the grapevine that one of the contenders in the
digital cellular telephony war has a one-chip voice
CODEC which might be useful.

>the SNR is going to be around 27 db. It should be noted that hams
>consider the 20 db quieting level "full quieting" and thus perfectly
>acceptable audio quality.

I agree with Brian, 20dB is hardly full quieting. Further,
the qualitative "type" of noise in the digital domain
would be distinctly different than the amplifier
noise heard in an FM receiver on weak signals.
That may or may not be a problem, but would
take some getting used to for the typical
ham repeater user.

>22.4 kHz channel. But they won't deliver the "broadcast"
>grade audio you apparently want.

I like audio fidelity, but I could be trained to
accept band-limited audio frequency response in
return for consistent S/N. Knowing that the noise
on the system would be roughly the same regardless
of the number of intermediate hops would be
a worthwhile trade.

At one time, we had grandiose plans to connect this
across some 5 states! Initial tests proved workable,
as long as each system operator carefully crafted each site.

All these posts on the topic have straightened out
my head on this, so maybe I'll resume my efforts
at Plan A: installing analog companders at each
hub site to minimize the effects of additive noise.
I'm sure glad I have a tube of NE570s in the shop! :)

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 47 days until Opening Day! Spring Training starts in 3 days!!!!

1538. Club or Hams in Malaga/EA wanted...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 10:23:51 UTC
From: t2372ca@cd1.LRZ-Muenchen.DE
Message-ID: <t2372ca.761307831@cd1>
Source record: 271090

Hi,

I'm looking for hams in Malaga being on holiday there in March/April.
Or ist there any local ham-radio club there ?

pse E-Mail info to me (or via PR)

73 s de Martin

| Martin Rast |
| Email: Martin.Rast@cd1.lrz-muenchen.de |
| AX.25: DL3RDR@DB0MWE.#BAY.DEU.EU AMPR-Net: dl3rdr@db0mws.ampr.org |
============Everyone is a foreigner, almost everywhere...=====================

1539. MFJ speaker/mics for Yaesu FT530

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 11:40:05 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCL9KEu.9qs@netcom.com>
Source record: 271091

I am considering getting an MFJ speaker/mic for my FT530 mainly due to the price.

How is the performance? I'm concentrating on the models which offer an earphone jack in the plug itself and some sort of alligator (sp?) clip for the belt. I'm also going for compactness. (Basically, a clip like Radio Shack mics in the size of the standard Yaesu MH-18A2B mics).

Keeping all of this in mind, how the does the net respond?

Thank much.

Scott

--

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==============================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
==============================================================================
```

1540. Index to the rec.radio.amateur.* Supplemental Archives

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 12:00:12 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/archives-1-761313608@unomaha.edu>
Source record: 271092
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/archives

The following is a list of informational files for this newsgroup
available via anonymous FTP from ftp.cs.buffalo.edu (currently at IP
number 128.205.32.9) or the Australian mirror at grivel.une.edu.au
(currently at IP number 129.180.4.7).

Questions to bowen@cs.buffalo.edu

1750m.band - misc info on the 1750m band
222xvtr.zip - PostScript code for KH6CP no-tune 222-MHz transverter
8085sys.zip - 8085 system software, from QEX 11/93 and 12/93
alinco_180t_mod - Alinco 180T modification for a TNC connection
ampr_coordinators - coordinators for packet IP addresses
antenna_refs - references for articles about antenna designs
antique_radio_info - misc info about antique radio collecting
arrl-logo.ps - ARRL logo in PostScript format
arrl_bib - bibliographies from ARRL literature (ASCII format)
arrl_digital_minutes - Minutes of the ARRL committee on digital comm.
arrl_fo_jobs - descriptions of some ARRL Field Organization jobs
arrl_info_service - announcement of the ARRLs trial information service
bbs_interface_specs - specifications for message passing protocol
cal_pd_freq - California police frequencies
callbook.tar.Z - sources for the marvin callsign server v1.3
canadian.Z - Canadian ham database in FCC format
carpet.loop.2 - Antenna for apartments and small spaces
clubcalls.Z - database of US ham clubs
comb6.zip - HF Propagation Predication program
docket_91-36 - information regarding the proposed scanner regs
dxcc-k2di - ARRL DXCC country list
dx_w2iol.dat - data for all country prefix, position, etc
dx_w2iol.doc - documentation for the above database
element_credit - rules about VE credit for earliers exams
elmers_admin - information about the elmers list (see below)
elmers_index - quick reference index of elmers
elmers_list - list of elmers on the network
exam_ops - info on exams and exam opportunities
faq_callsign - frequently asked questions about the callsign server
faq_ham_1 - frequently asked questions about ham radio (pts 1)
faq_ham_2 - frequently asked questions about ham radio (pts 2)
faq_ham_3 - frequently asked questions about ham radio (pts 3)
faq_packet - frequently asked questions about packet radio
faq_shortwave - frequently asked questions about shortwave
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fcc_part_97_1 - text of the FCC part 97 amateur regulations (part 1)
fcc_part_97_2 - text of the FCC part 97 amateur regulations (part 2)
fcc_part_97_3 - text of the FCC part 97 amateur regulations (part 3)
fft.com - EGA/VGA DOS command for spectral display (QST 1/92)
ffth.com - Hercules DOS command for spectral display (QST 1/92)
field_day_92 - field day rules for 1992
florida_antenna - Florida State antenna law info
guide2newsgroups - description of USENET newsgroups dedicated to radio
ham_sat_sum - summary of information needed to get on satellite
hams_on_usenet - list of ham operators and e-mail addresses on the net
hamstacks - information about the question pool stacks
handicap_waiver - info on obtaining a handicapped test waiver
hf_rigs - QST reviews of available HF rigs
ht_info - general information about commercial hand helds
icom_ic_w21at_mods - increases the number of bands on an Icom IC W21AT
intro_to_swl - info for aspiring short wave listeners
intro_to_scanners - info for aspiring scanner listeners
jlem.zip - Program, w/source, for 2kx8 ROM emulator (QEX 1/93)
j-poles - description of j-pole antenna made from twin-lead
lead_acid_batteries - essay on lead-acid batteries
license_plates - guide to ham calls on license plates
logos - PostScript logos for various ham organizations
mail_order - a database of electronic mail order shops
manufacturers - names and addresses of ham gear manufacturers
mav11.ps - postscript image of MAV-11 amplifier PCB (QEX 9/93)
mlhacker.zip - newsletters about the MiniSport Laptop Hacker
mods - directory containing radio modifications
motorola_ge_service_man - how to get service manuals for Motorola and GE rigs
nasa_select - places where you can hear NASA SELECT broadcasts
new_packeteers - helpful essays for new packeteers
newcomers - tips and hints for those new to amateur radio
nprm_93-85_text - text of docket 93-85 (message forwarding systems)
nprm_93-305_text - text of docket 93-305 (vanity call system)
packet_clubs - organizations you can get more packet info from
packet_gateways - list of gateways from packet to Internet
packet_header_standard - description of BBS message header standards
packet_misc - miscellaneous packet info
packet_software - list of packet software versions
phone_bbs_list - phone BBSs for ham related issues/software
pio_handbook - ARRL Public Information Officer's Handbook
pr_docket_92-136 - text of FCC PR Docket 92-136
qex1193.ps - Postscript image of 13cm preamp board, 11/93 QEX "RF"
qexfq194.zip - Pascal program for PC frequency counter, Jan 1994 QEX
qsl_bureau1 - information about the ARRL QSL bureau
qsl_bureau2 - "what should I do if" list for the QSL bureau
qst_prodrev - index of ARRL product reviews in QST
quest_pool_novice - novice question pool - good after 7/1/93
quest_pool_technician - technician question pool - good after 7/1/93
quest_pool_general - general question pool - good before 6/30/94
quest_pool_advanced - advanced question pool - good before 6/30/95

quest_pool_extra - extra question pool - good before 6/30/96
rfi_tips - good posting about RFI
sol_geo_data - desciption of daily solar geophysical broadcasts
sol_terra_terms - glossary of solar-terrestrial terms
sstv_wefax_info - general help for SSTV and WEFAX users
tasm.zip - table-driven assembler for weavrdsp.zip file
txt2eprm.zip - morse code ID generator programming utility (QEX 2/94)
usenet_purchases - tips on buying and selling via USENET
vlf_elf_references - references for info on VLF and ELF radio
weavrdsp.zip - src to "Weaver Method Modulator Using DSP" (QEX 9/93)

For readers of this newsgroup both new and experienced, these files are
a de-facto "Required Reading List" to provide definitive answers and
pointers to other sources for questions that come up in this forum.

This is also your archive, so any additional articles, guides, or small
PostScript graphics that you feel would enhance this collection are most
welcome. Submit to Devon via his E-mail address above.

Thanks go to Devon Bowen, KA2NRC, for providing diskspace and maintaining
these valuable archives, as well as all the authors who wrote and submitted
the information contained in them.

Additional archives out there that have /pub/ham-radio directories are
encouraged to "mirror" these files to provide redundant storage for these
documents. Some of these sites (which may or may not mirror
ftp.cs.buffalo.edu) include:

ucsd.edu 128.54.16.1 /hamradio
nic.funet.fi 128.214.6.100 /pub/ham
/pub/dx
csseq.cs.tamu.edu 128.194.2.20 /ham-radio
suntan.tandem.com 130.252.10.8 /hamradio
col.hp.com 15.255.240.16 /packet
talos.cs.buffalo.edu 128.205.32.9 /pub/ham-radio
bubba.business.uwo.ca 129.100.22.42 /hamster/ham
/hamster/tcpip
/hamster/mods
/hamster/view
vax.cs.pitt.edu 130.49.2.1 /pub/arrl8
/pub/ka9q
/pub/ncpa
/pub/tnc2
brolga.cc.uq.oz.au 130.102.128.5 /pub/ka9q
tomcat.gsfc.nasa.gov 128.183.10.100 /public
helios.tn.cornell.edu 128.84.241.2 /pub
wuarchive.wustl.edu 128.252.135.4 /mirrors/msdos/hamradio
/mirrors/msdos/packet
/mirrors/msdos/ka9q-tcpip
/mirrors/cpm/hamradio
/mirrors/cpm/packet
/mirrors/misc/hamradio

/mirrors/misc/packet
/mirrors/misc/ka9q-tcpip
gatekeeper.dec.com 16.1.0.2 /pub/net/ka9q
sun.soe.clarkson.edu 128.153.12.3 /pub/ka9q
sics.se 192.16.123.90 /archive/packet
/pub/packet-incoming
sabrina.dei.unipd.it 147.162.2.106 /pub/hamradio
uhunix2.uhcc.Hawaii.Edu 128.171.44.7 /incoming/ham-radio
caticsuf.cati.csufresno.edu 129.8.100.15 /pub/ham-radio
ftp.waseda.ac.jp 133.9.1.32 /pub/toumon/ham-radio
garfield.catt.ncsu.edu 152.1.43.23 /pub/hamradio
plan9.njit.edu 128.235.1.10 /pub/hamradio
sunee.uwaterloo.ca 129.97.128.196 /pub/radio
grivel.une.edu.au 129.180.4.7 /pub/ham-radio
uxc.cso.uiuc.edu 128.174.5.50 /pub/ham-radio
iraun1.ira.uka.de 129.13.10.90 /pub/ham-radio
nic.switch.ch 130.59.1.40 /software/hamradio
/software/mac/ham-radio
iesd.auc.dk 130.225.48.4 /ham-radio
akutaktak.andrew.cmu.edu 128.2.35.1 /aw0g (softkiss-mac)
?????????? 129.69.162.1 /pub (login as ftp
pkt cluster,usa callbook)
gandalf.umcs.maine.edu 130.111.112.21 /pub/ham-radio # ls -l NO !)
rtfm.mit.edu 18.70.0.209 /pub/usenet/news.answers/radio
tamu.edu 128.194.15.32 /pc-sig
ftp.geo.brown.edu 128.148.116.19 /pub/hamradio
ns.risc.net 155.212.2.2 /ham-radio
world.std.com 192.74.137.5 /pub/hamradio
ftp.fidonet.org 140.98.2.1 /pub/fidonet/ham
ftp.halcyon.com 192.135.191.2 /pub/fidonet/ham

Questions about FTP mirroring and access to appropriate software should be directed to me, or do an Archie search on the keyword "mirror."

For those without FTP access (and only those without FTP access, please), there is an FTP mail server at ftpmail@decwrl.dec.com (IP 16.1.0.1). Send the word "HELP" to this address for more information.

Additional documents on Usenet and other newsgroups may be obtained from rtfm.mit.edu (IP 18.70.0.209) via anonymous FTP or via mail server (send the word "HELP" to mail-server@rtfm.mit.edu).

The American Radio Relay League has recently made available a mail-server to distribute many of their informational documents in electronic form. Send E-mail to info@arrl.org with "HELP" in the message body for more information.

Yet another mail-server has been made available by Steve Harding, KA6ETB. Send E-mail to ham-server@grafex.sbay.org with "HELP" in the message body for more information.

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

1541. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 12:00:25 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-761313621@unomaha.edu>
Source record: 271093
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

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Posted-By: auto-faq 3.2.1.2
Archive-name: radio/personal-intro
Revision: 1.5 12/18/93 14:15:53
Changes: new mailing lists, .packet rmgroup, and .policy updates

(Note: The following is reprinted with the permission of the author.)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 18 September
1993 to add the mailing lists for the new rec.radio.amateur newsgroups, to
note the rmgroup of rec.radio.amateur.packet, and to officially retire some
(in)famous threads of discussion on rec.radio.amateur.policy.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
arrangement, but one was that the system was not supposed to be used for
commercial purposes. Since one of hams' favorite pastimes is swapping
gear, it was natural for hams to post messages about equipment for sale
to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use
restriction, and after some argument, a group was created specifically
```

for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize

this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, should be removed by September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas,

commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
===========================

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

1542. My HAMBLASTER note

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 12:54:38 UTC
From: n4hy@growler.ccr-p.ida.org
Message-ID: <N4HY.94Feb15125438@growler.ccr-p.ida.org>
Source record: 271125

The response to my note on the Soundblaster and Hamblaster cards has been overwhelming. The notes number in the hundred. I had no idea there was so much interest. I cannot possibly hope to answer all of these notes and I hope you will accept my apologies for not doing so.

I will keep the news groups posted as to what becomes available when.

Bob
--
Robert W. McGwier | n4hy@ccr-p.ida.org Interests: ham radio,
Center for Communications Research | scouts, astronomy, golf (o yea, & math!)
Princeton, N.J. 08520 | ASM Troop 5700, ACM Pack 53 Hightstown
(609)-279-6240(v) (609)-924-3061(f)| I used to be a Buffalo . . . NE III-120

1543. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 13:04:55 UTC
From: arog@BIX.com
Message-ID: <arog.761317495@BIX.com>
Source record: 271095
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

ez006683@chip.ucdavis.edu (Daniel D. Todd) writes:

>Is there a plan to allow search by geographical location. This would be
>most helpful.

>Thanks,
>Dan

>--
>*--*
>* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
>* Internet: ddtodd@ucdavis.edu *
>* Snail Mail: 1750 Hanover #102 *
>* Davis CA 95616 *
>*--*
>* I do not speak for the University of California.... *
>* and it sure as hell doesn't speak for me!! *
>*--*
>

While there isot all of the info there that I'd like to see,
as a free service, it has made my life a lot simpler.
It has the Lat and Long in the info with other basic
info that I can start with. This will reduce the time
that I have to spend with the Broadcasting-Cable Yearbook
by a bunch... and it has the *translators* listed as well
... which is a major boon. That alone is probably enough
to get a number of folks that I know that also do
broadcast engineering to 'go' for a system that has
a connection to the Internet.

In short, *THANK-You* (shouting intended)

Alan Ogden, w6spk
moderator of other.radio at BIX
arog@BIX.com

I wipe broadcast transmitter noses for fun and profit.

1544. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 13:15:25 UTC
From: Dave_Livesay@hpatc.hp.com
Message-ID: <2jqhtd$om@hpuerca.atl.hp.com>
Source record: 271096

In article <CKAM3v.I2M@zeno.fit.edu>, haga@zach.fit.edu (The Pyrotechnic) says:
>
>My god, ive been paitently waiting for my call sign to come in... it's been
>well over 9 weeks now, and it still hasn't arrived.... Does anyone know
>a number that i may call to check up to see if they have even issued it
>but maybe not have mailed it yet or something? im tired of waiting!!
>
>
>
>--
>Larry.....
>haga@zach.fit.edu
>
>***
>Hey, Uncle Charlie, I took my test and passed, I got my raido, Now, how long
>till I can TALK on it? already been 9 Weeks and counting
>***
>
I just received my Tech License I too back on October 24th, 1993. The
ARRL sent it ti the FCC on November 4th. I receive it on February 14th
1994. Thats a long time. I now need to go through this again wiht a tripplke
upgrade. I have since gottoon my Extra.

BE patient

KA8BYA/AE

1545. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 13:17:49 UTC
From: jm6033@pegasus
Message-ID: <2jqi1t$rer@pegasus.cc.ucf.edu>
Source record: 271097

Alan Bloom (alanb@sr.hp.com) wrote:

: How many people have received their free QSL card from K4NBN "No Bad News"?
: (He used to have a monthly ham ad in QST.) The nude lady in the QSL photo
: was indeed a kind of centerfold, although not the type you might expect.
: It was done as a promotion for a nudist colony in Georgia or somewhere.

: AL N1AL

I'm curious about nude QSL cards. Would anyone be offended if they
received a QSL card in the mail with nude people on it? Would it be
better to mail the card in an envelope? The envelope increases the
cost of mailing a QSL considerably, and cost a consideration when you
mail many cards.

John Meaker -=- kr4ah

Disclaimer - I am not responsible for the actions of
any Alpha-Hotels other than myself.

1546. Scandinavian Repeater Scene?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 14:17:00 UTC
From: david@stat.com
Message-ID: <1iLsHc4w165w@stat.com>
Source record: 271098

I might be traveling to Stockholm, Denmark, and Norway soon. Can anyone fill me in on the VHF/UHF repeater situation, frequencies, tone burst etc?

david

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

1547. Re: HT Recs out there? (TH78A)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 14:55:25 UTC
From: blood@austin.ibm.com
Message-ID: <CL9tGH.3KCs@austin.ibm.com>
Source record: 271099
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

A comment on the TH78A. I think it is a great radio with the following exceptions: 1: Cannot be used on external antenna on 2M due to horriffic intermod problems.
2: The battery release latch will occasionally trip when wearing on your belt, resulting in an unplanned battery drop test.

1548. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 15:14:44 UTC
From: galen@picea.CFNR.ColoState.EDU
Message-ID: <1994Feb15.151444.58484@yuma>
Source record: 271100

In article <x8yqthx.jramsey@delphi.com> jramsey@delphi.com writes:
>Yes, I'm hot and seeing this kangoroo (sp?) court makes me long for my work-
>bench rather than this CRT. I don't have the luxury of getting paid to
>read and respond to everything here - but I do welcome phone calls to myself
>at the office (716) 924-4560. Just ask for me.

Welcome to Internet (Bitnet, Compuserve, ...) the public forum for the 21st century, with no filtering by the news media.
I find myself using e-mail and news more and more, and the phone less and less.
I've built a few of Mr. Ramsey's kits. I liked and still use the 2m amp, and our research project sent two of the FX-440's to Uzbekistan for an RF data link. I did not check the spectral purity of the outputs, but the Uzbekis don't really use the 440 MHz range, so we don't forsee any problems.
After the local dealer had removed one of the circuit boards from one of kits, Mr. Ramsey FedEx'ed me a new board, no charge.

Galen, KF0YJ

1549. Noise Problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 15:17:26 UTC
From: William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM
Message-ID: <9401157613.AA761325446@smtpgty.anatcp.rockwell.com>
Source record: 271101

[dab@kaiwan.com] Doug Brandon [NF6H] writes:

For the past year or so, I've had a very bad noise problem while operating
on the HF bands. Since I've been a lot more active the past few months,
this is really starting to frustrate me. The noise is not a real choppy
sounding noise, but sounds more like VERY strong band noise. However
when I have this very loud noise, other stations within a few miles
have no noise. Neither of the two noise blankers turned up full blast
on my TS-930S do much good. I'm using a vertical antenna, so I can't
turn it to see which direction it's coming from. The noise is very
apparent on all HF bands from 1.8-28 MHz, 144mhz, as well as sparkles
on my cable TV. The noise doesnt seem to make it up to 450mhz though,
nice and quiet up there.

I have power lines directly in back of my house, but I don't think
they are the problem. I've had Southern California Edison come out a
few times over the past couple of years and they reported no problems.
The noise is not always there and varries in strength each time it
comes on. I think the noise is coming from some sort of appliance or
machinery from one of the neighbors' houses, but I have no idea how to
find it. It is a little baffling though, sometimes I won't hear the
noise for weeks, but is has been present this entire weekend 24 hours
a day.

Has anybody had experience tracking down and solving this type of
noise problem?

This sounds like a problem that drove me nuts for quite some time. Look for
a gas dryer or heater with an auto-igniter (as opposed to a pilot light). I
found my dryer will on occasion get stuck in a partially on condition at
the end of a cycle, causing the igniter to spark, but leaving the gas off,
the result is broad band noise and no TV (I'm too cheap for cable). :-)

I hope this helps. (By the way, since you are just up the road, I'm on the
Autonetics repeater during commute time, 145.915 (-) pl 136.5.)

73

Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI
(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com

```
---------------------------------------------------------------------
Who are you? * I am number 2. * Who is number 1? * You are number 6.
---------------------------------------------------------------------
```

1550. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 15:19:15 UTC
From: drx@chinet.chinet.com
Message-ID: <CL9uK4.M3s@chinet.chinet.com>
Source record: 271102

Quite frankly there are many people in amateur radio that I really don't want to see nude! There is just some things I don't need to know and I'm better off wondering than having all mysticism removed and scaring my mind!

--
Scott Whittle (drx) drx@chinet.chi.il.us

1551. Re: Noise Problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 15:36:50 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2jqq6i$glg@vixen.cso.uiuc.edu>
Source record: 271103

Sources of broadband noise in my house:
1. Light dimmers,
2. TV set,
3. Fluorescent lights.

Ignacy Misztal, NO9E, SP8FWB
ignacy@uiuc.edu

1552. Re: Golf Causes Cancer!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 16:00:28 UTC
From: edmitch@microsoft.com
Message-ID: <CL9wGs.9w9@microsoft.com>
Source record: 271104

I used to be a general aviation pilot. As a pilot,
I learned very quickly that there are three things
you can find near the end of any runway:
1) A high tension power line, obstructing the
approach course,
2) The local sewage treatment plant,
3) and the municipal golf course.

I wonder if there is a connection between golf courses,
power lines and sewage treatment plants! Maybe this explains
an increase in the cancer death rates of golf course
managers. Then too, maybe they all smoke cigarettes.

Then again, this is all so much conjecture, usually about
large percentile differences in very tiny numbers.

Ed Mitchell
KF7VY@N7FSP.WA.USA
edmitch@aol.com
edmitch@microsoft.com
"The opinions expressed are my own and not necessarily those of my employer."

1553. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 16:09:36 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb15.160936.23577@ke4zv.atl.ga.us>
Source record: 271105

In article <1994Feb14.131000.8706@arrl.org> jbloom@arrl.org (Jon Bloom (KE3Z)) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: In article <bote.760946660@access1> bote@access1.digex.net (John Boteler) writes:
>: >I have gotten a bug up my rear to configure our point-to-point
>: >repeater linking system with digital paths ranging 20
>: >to 40 miles apart.
>[deleted]
>: Well lets look at some numbers and see. Lets assume
>: you want "broadcast" grade audio. That's a SNR of
>: 50 db. Digital transmission regenerates bits so
>: that above a certain threshold level the effective
>: SNR is only the quantization error of the digital
>: equipment itself. A crude way of looking at this
>: is to consider this error as bit jitter at the lsb-1.
>: So an 8 bit system would have a SNR of 10*log(2^9)=27 db.
>: That's obviously not good enough. 16 bits yields a SNR of
>: 10*log(2^17)=51 db which is close enough for our purposes.
>
>Use 20*log(x), since we're talking about a voltage ratio. An easy rule
>of thumb is 6 dB of SNR per bit of quantization. It's actually a tad
>better than that, since the quantization error is not constant;
>sometimes the error is a small fraction of one LSB, sometimes it's up
>to half an LSB. 8 bits will give you about 50 or so dB of SNR.

Well I don't want to get into a big fight about comparing power spectra
ratios to voltage ratios, I'll just say that it's the power spectrum that
you hear. If you want to use voltage ratios instead, that's fine, but it
means I'll have to raise the "broadcast quality" number to the 90-100 db
range instead of the 45-50 db range.

>: Now the Nyquist limit says we have to sample at a minimum
>: of twice the highest frequency in the audio. If we assume
>: that's 5 kHz, then our minimum sample rate is 10 kilosamples
>: per second. That requires a very good brickwall filter, however,
>: so sampling is usually done at a somewhat higher rate, say 3X
>: or 4X the highest audio frequency. Lets pick 3X. So our required
>: bit rate is 16*15,000=240 kb/s. That's not going to fit in a
>: normal FM two way radio bandwidth, so we're going to have to
>: resort to trickery.
>
>Yes, you sample at that higher rate, but then you digitally filter with
>a near-brick-wall filter and reduce the sample rate to very near the
>Nyquist rate, via decimation. (Consider compact disks.) At the
>receiving end you interpolate to raise the sample rate back to
>something that can use reasonable reconstruction low-pass filters. So,

>a more realistic analysis gives a transmitted 10 kHz sampling rate at 8
>bits per sample, for 80 kbit/s.

I'll buy the digital filtering and decimation, and I'll even allow
that interpolation is acceptable at the Nyquist limit. I won't buy
into 8 bits, however. Whether you need a power spectrum ratio of
50 db, or a voltage ratio of 100 db, 8 bits still doesn't do it.
So we're back with a 160 kb/s data stream before compression.

>: Codecs use various compression schemes to lower the effective
>: bit rate. Delta modulation is one such trick, and LPC (linear
>: predictive coding) is another. These are effective real time
>: compression methods, but do suffer some artifacts. Or we can
>: take a page from the newer high speed telephone modems and use
>: LZW type on the fly lossless compression and complex modem
>: encodings that use less than one baud per bit. Off the shelf
>: modems can deliver up to 56 kb effective data throughput over
>: voice grade channels wsing a base baud rate of 600 baud. That's
>: not quite good enough though.
>
>Even if you could make that degree of m-ary coding work on a radio
>link, which I have my doubts about.

You can, but it has to be a well engineered full duplex link. Of
course if you had voice grade links that good to begin with, you
wouldn't need to be worrying about digital audio to improve SNR. :-)

>: Or we can abandon voice grade radios for the links and use purpose
>: built digital radios with higher baud rates. If we take a 56 kb
>: WA4DSY RF modem (GRAPES), and couple that with an on the fly
>: compression scheme like LZW, we can easily get the required 240 kb/s
>: throughput for broadcast grade audio without dealing with the timing
>: artifacts of delta modulation or LPC. Occupied bandwidth would be
>: less than 70 kHz.
>
>In my experience, LZW doesn't compress speech all that well. You'll be
>lucky to get a 2:1 compression; you certainly won't get 4:1. Worse, you
>won't get that compression consistently. Some parts of the transmission
>will be compressed more than others, leading to timing/buffering
>problems. You really want a compression scheme that is tailored to
>speech.

Yes, LZW is just an example of a compression scheme currently popular
for on-the-fly use in data modems. However, delta modulation can also
be "bursty" leading to time distortion of the audio, and a single
error can propagate for a significant time before the system recovers.
There are tricks that are helpful, however, if we know the nature of
speech, and we do. There are band gaps in the speech power spectrum,
and there are time characteristics to the key sounds that we can use
to tailor a compression scheme to minimize redundancy in the bit stream
without going to excessively lossy methods. We can also make use of
group and run length coding on partial samples of the spectrum before

merging them into the final bit stream, IE we know that a low frequency speech component is going to presist for several milliseconds so we don't have to transmit repetitive samples to reproduce it. (This requires a bit of tricky DSP, but it's doable.)

>: If we can settle for less than perfection, however, Motorola has
>: a codec scheme that they claim can fit a digital voice signal in
>: the same bandwidth as a NBFM voice signal, IE 20 KHz. It won't
>: work through off the shelf FM radios though, a purpose built
>: radio is required, and it won't yield "broadcast" SNRs. I have
>: the write up on it around here somewhere, but can't lay my hands
>: on it right now. I seem to recall that its an 8 bit system so
>: the SNR is going to be around 27 db. It should be noted that hams
>: consider the 20 db quieting level "full quieting" and thus perfectly
>: acceptable audio quality.
>
>8 bits is entirely adequate (see above). I'm not familiar with the
>Motorola system, but I suggest that it is probably *not* using a
>lossless compression scheme. That means that you'll experience some
>additional noise/distortion, beyond quantization noise.

Yes, the compression method is lossy. That, and the limitation of 8 bit sampling, is why I don't consider it capable of yielding a broadcast SNR.

>I've done some playing with MX-COM's CVSD codec. While I haven't
>analyzed the SNR, "by ear" it produces reasonable reproduction at 32
>kbit/s and audio I can stand to listen to (barely) at 16 kbit/s. At 64
>kbit/s, its audio is entirely acceptable for amateur purposes. IMHO.

The ear is rather easily fooled since most of us have poor sonic memory. Rapid A/B testing between the source audio and the reconstitued digital audio will quickly show the difference, however. An even better test is to feed a pair of headphones such that the original audio is in one channel, and the reconstituted signal is in the other. Shifts in the sound stage are an immediate clue as to defects in the reconstituted signal. We can use poor sonic memory to our advantage in communications links, but 8 bits isn't good enough to fool the ear under most conditions. 8 bits can fool the eye, 255 grey levels are sufficient for luminance video, but anything less than 12 bits is noticable to the ear, and 16 bits are required if that ear is trained and discerning.

As I mentioned, most amateurs consider a 20 db quieting, power ratio, sufficiently good for a communications channel. That's doable in 8 bits, but it won't meet the criteria of this discussion.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1554. WANTED: Manuals for Heathkit

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 16:30:32 UTC
From: FORRELL@130.187.198.34
Message-ID: <2jqtb8$lj3@cnn.sim.es.com>
Source record: 271106

Sorry if this has appeared before. Looking for original manuals or copies
of the following:

HEATHKIT IG-5282 Audio Generator
HEATHKIT IG-5280 RF Oscillator
HEATHKIT ??????? matching power supply for above units

I will gladly reimburse you for copy/postage costs.

73's
Fred Orrell
WB5NOE
Phone: 801-944-1332
Work: 801-582-5847 ext. 3420
EMAIL: forrell@sim.es.com

1555. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 16:36:13 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2jqtltINNkan@abyss.West.Sun.COM>
Source record: 271107

In article <x8yqthx.jramsey@delphi.com> jramsey@delphi.com writes:
>Yes, I'm hot and seeing this kangoroo (sp?) court makes me long for my work-
>bench rather than this CRT. I don't have the luxury of getting paid to
>read and respond to everything here - but I do welcome phone calls to myself
>at the office (716) 924-4560. Just ask for me.

Well, I spent an hour of my phone bill calling John Ramsey, long distance.
John says he doesn't have the luxury of getting paid to read and
respond to everything here. Aren't you self-employed, John? I don't
have the luxury of spending time on the phone at long distance rates
to try and talk to vendors. I buy the product, follow the directions
in the manual, and call it the way I see it. This is called being a
consumer. I quite nearly suggested at the time to John that he would
be well off spending $1k or so on good customer relations training,
if he'd listen.

By the way, be sure to read alt.radio.pirate; the FM-10 and AM-1 and the
broadband power amplifier (PA-1?) are very popular there. No one
on that newsgroup ever picks on Ramsey kits. :-)

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1556. Re: MFJ speaker/mics for Yaesu FT530

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 16:46:10 UTC
From: M14494@mwvm.mitre.org
Message-ID: <16F5EA585S85.M14494@mwvm.mitre.org>
Source record: 271108

>I am considering getting an MFJ speaker/mic...

I have one for my Yaesu. It works ok, but not great. The
sound quality is tinny and pitched toward the high end;
none of this is surprising considering the small size.
It's usable, and the small size is nice; an ok deal for
the money.

Mike, N4PDY

These are my opinions only

1557. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 16:46:12 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2jqu8k$96m@news.acns.nwu.edu>
Source record: 271109

In article <x8yqthx.jramsey@delphi.com>, <jramsey@delphi.com> wrote:
>Jon Bloom (KE3Z) <jbloom@arrl.org> writes:
>
>>harmonic spectral purity requirements.) They promised to send us one of
>>the new units as soon as it became available. (Normally, we only
>>*purchase* Product Review items, but we decided that it would be hard
>>for them to fine-tune a kit :-)
>> We waited a couple of months, then called Ramsey. To make a long
>>story short, we called *every* couple of months, but we never received
>>the promised radio. Finally, we just bought one (through a third
>>party). This is the unit we reviewed. In March of 1993, we contacted
>
>And one wonders why we don't advertise in QST, it's the attitude of
>history re-writers such as J.B. I was there, and the facts just ain't so.
>I'd rather talk on the phone! But I had to respond to such talk. You see, the
>ARRL couldn't get their kit to work! So we sent them an assembled unit.

I do not know how you read this, but to me it looks like bad news for
buildability of Ramsey Kits. And now imagine an average John Q. Ham
with a 200 watt soldering gun and acid core solder. :)

--------------------------------READ----------------------------------
Disclaimer: The following remarks apply to a version of the 2m
transceiver kit purchased more than two years ago. Since we are talking
history here, I think I had tell you a short version of my story.

I do not know about ARRL, but let me tell ya. My club purchased a kit in
Oct or Nov 1991. I was elected to put it together and I did. But I had
lots of difficulty in getting it to work. For a variety of reasons some
of which are detailed below. I was not the only one having difficulty.
For a while there were a number of people, including me, exchanging regular
postings on internet. I helped a couple of local hams too.

And why did I have difficulty?

i) For starters, I had difficulty getting all the parts. The kit had a
packet of critical capacitors for the tuned sections missing. Called and got
a packet but not the one I had requested. I took a whole month before
I had the parts.

ii) Partly because the crystals were of wrong load pf. I spent oodles of
time debugging the circuit and after narrowing it down to the crystal, I
called a tech at Ramsey. He told me about padding the crystal. What upsets
me is that they
1 knew about the problem,

2 did not replace the crystal
3 and did not even meet the minimum requirement of documenting the bug/fix
so that I wouldn't spend all my time re-inventing the wheel

iii) Partly because the instructions are excruciatingly detailed in parts
that matter little, such as bending and clipping resistor leads and are
completely deficient in tune-up and alignment. I will not forget the
receiver alignment section: (after some step)
(Approximately, I quote from memory...)

>>> If you are satisfied then you are done.

Heh! What if I am *not* satisfied? Sorry, the instructions have ended.

I ended up using a signal generator and a high impedance impedance probe
to align the first stage of the receiver. But before I could do that,
I had to replace the first mixer as it was kaput. I should have come
with a protective ring but instead it was loose in a bag with a whole
bunch of parts.

iv) Tuning the transmitter to put out 4 to 6 watts and not run away with
spurs and parasitics took a long time and the setting was knife edge.

And so on. I posted a lot and helped people a couple of years ago
using Internet. I do not have a copy of all the postings, but I am sure
they are archived somewhere.

The version I built was purchased more than two years ago by my club. They
intended to use it for packet. And so my remarks apply to that version.
We have since procured a Alinco Data RAdio and use that.

>Yes it did not meet the FCC specs for spurious - missing by about a db or
>two (I'm at home and don't have notes handy). The ARRL missed the whole
>point of the kit which was to promote kit building, etc,etc. Now. I'm
>sure you are thinking, "but it didn't meet FCC!" True, but for a fascinating
>contrast, look at the GLOWING review of the MFJ regen receiver! Guess it
>doesn't spray RF.I do believe that MFJ has been quite a big QST advertiser, too.
>No, you'll not see a Ramsey ad in QST. It was years ago that I was approached
>by a QST ad director to advertise. He expounded how QST was looking out for the
>amateur, requiring test units before accepting ads. I responded that they had
>plenty of ad pages from DSI, a since defunct freq ctr mfg who sold trash and
>was openly taking $$ for products they had no intention of shipping! Of this is
>the virtue you speak? Well, DSI closed shop, took QST readers for hundreds of
>thousands of dollars and even stuck that nice old ad director too!
>Yes, I'm hot and seeing this kangoroo (sp?) court makes me long for my work-
>bench rather than this CRT. I don't have the luxury of getting paid to
>read and respond to everything here - but I do welcome phone calls to myself
>at the office (716) 924-4560. Just ask for me.

And mine is (708) 491 2672 (off).
(708) 205 1914 (hm).

I do not know about others, but talking of follies and foibles of DSI and MFJ does not make Ramsey kits seem any better in my mind.

Rajiv
aa9ch
r-dewan@nwu.edu

PS. I am moving to Rochester NY this summer. Closer to home of Ramsey.

1558. Re: CELLULAR SURVEILLANCE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 17:31:34 UTC
From: phil@hansen.ncd.com
Message-ID: <2jr0tmree1@rosebud.ncd.com>
Source record: 271110

So what does it do?

In article <9402141902.A9592wk@t8000.cuc.ab.ca>, bill.FIscher@t8000.cuc.ab.CA writes:
|>
|> 94-02-14
|>
|> Finally, as the result of the efforts of a number of Internet gurus,
|> we're able to tell you how to download a demo copy of the software
|> that controls our Cellular Surveillance Interface, via e-mail. The
|> program is entitled CELLDEMO.ZIP

1559. Ramsey slams ARRL (was Re: RAMSEY FX TRANSCEIVER)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 17:34:44 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2jr13kINNkbv@abyss.West.Sun.COM>
Source record: 271111

In article <2jqu8k$96m@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:
>In article <x8yqthx.jramsey@delphi.com>, <jramsey@delphi.com> wrote:
>>Jon Bloom (KE3Z) <jbloom@arrl.org> writes:
>>
>>>harmonic spectral purity requirements.) They promised to send us one of
>>>the new units as soon as it became available. (Normally, we only
>>>*purchase* Product Review items, but we decided that it would be hard
>>>for them to fine-tune a kit :-)
>>> We waited a couple of months, then called Ramsey. To make a long
>>>story short, we called *every* couple of months, but we never received
>>>the promised radio. Finally, we just bought one (through a third
>>>party). This is the unit we reviewed. In March of 1993, we contacted
>>
>>And one wonders why we don't advertise in QST, it's the attitude of
>>history re-writers such as J.B. I was there, and the facts just ain't so.
>>I'd rather talk on the phone! But I had to respond to such talk. You see, the
>>ARRL couldn't get their kit to work! So we sent them an assembled unit.
>
>I do not know how you read this, but to me it looks like bad news for
>buildability of Ramsey Kits.

>>Yes it did not meet the FCC specs for spurious - missing by about a db or
>>two (I'm at home and don't have notes handy). The ARRL missed the whole
>>point of the kit which was to promote kit building, etc,etc. Now. I'm
>>sure you are thinking, "but it didn't meet FCC!" True, but for a fascinating
>>contrast, look at the GLOWING review of the MFJ regen receiver! Guess it
>>doesn't spray RF.I do believe that MFJ has been quite a big QST advertiser, too.
>>No, you'll not see a Ramsey ad in QST. It was years ago that I was approached
>>by a QST ad director to advertise. He expounded how QST was looking out for the
>>amateur, requiring test units before accepting ads. I responded that they had
>>plenty of ad pages from DSI, a since defunct freq ctr mfg who sold trash and
>>was openly taking $$ for products they had no intention of shipping! Of this is
>>the virtue you speak? Well, DSI closed shop, took QST readers for hundreds of
>>thousands of dollars and even stuck that nice old ad director too!
>>Yes, I'm hot and seeing this kangoroo (sp?) court makes me long for my work-
>>bench rather than this CRT. I don't have the luxury of getting paid to
>>read and respond to everything here - but I do welcome phone calls to myself
>>at the office (716) 924-4560. Just ask for me.

>I do not know about others, but talking of follies and foibles of DSI and MFJ
>does not make Ramsey kits seem any better in my mind.

When I returned John's call, he spent some time bad-mouthing the ARRL
and one other individual *by name*. I asked John not to use names, but
he insisted. I mean, a couple of high-profile customers have trouble

with his product, John's response is "they can't build kits". To actually mention people by name and say they can't build kits is poor customer relations. I contacted the other individual John bad-mouthed and asked for his side of the story; for what it is worth, this gentleman was at least as credible as John. It seems that, if you have nice things to say about Ramsey kits, John will say nice things about you. If you have any kind of trouble with Ramsey kits, you run the risk of being slandered.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1560. Re: Boring WWV Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 17:39:57 UTC
From: martin@datacomm.ucc.okstate.edu
Message-ID: <1994Feb15.173957.3323@osuunx.ucc.okstate.edu>
Source record: 271112

One day in the late seventies, I was tuned to the 10MHZ output for WWV and heard a strong aditional carrier appear on the frequency, almost at zero beat. The carrier lasted a few seconds and then was replaced by a male voice which said, "Hey! What time is it out there, WWV?" This was next followed by half a dozen or so hand-typed RTTY characters which were of the 850HZ shift variety. The transmitter, then left the frequency.

The voice and the RTTY were heterodyned against WWV so that the voice was audible although I think it was originally SSB. I bet this was a rogue operator of a military or commercial avaiation system who was fooling around.

If my memory serves me right, there was a 400HZ power supply whine on the audio like one might hear from an aircraft transmitter and the voice had that crisp, close-talked sound that usually comes from a headset microphone.

Martin McCormick WB5AGZ Stillwater, OK
O.S.U. Computer Center Data Communications Group

1561. SAREX on STS-62?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 18:00:21 UTC
From: mkb@cs.cmu.edu
Message-ID: <CLA20n.LFs.2@cs.cmu.edu>
Source record: 271113

Is a SAREX payload flying on the upcoming STS-62 flight?

thanks, Mike Blackwell -- ke3ig -- mkb@cs.cmu.edu

1562. Re: MFJ speaker/mics for Yaesu FT530

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 18:02:42 UTC
From: ggs@lanl.gov
Message-ID: <1994Feb15.172747.9285@newshost.lanl.gov>
Source record: 271114

In article <wy1zCL9KEu.9qs@netcom.com>, <wy1z@netcom.com> writes:
> Newsgroups: rec.radio.amateur.misc
> Path:
lanl!ncar!elroy.jpl.nasa.gov!sdd.hp.com!vixen.cso.uiuc.edu!howland.reston.ans.n
et!agate!library.ucla.edu!csulb.edu!csus.edu!netcom.com!wy1z
> From: wy1z@netcom.com (Scott Ehrlich)
> Subject: MFJ speaker/mics for Yaesu FT530
> Message-ID: <wy1zCL9KEu.9qs@netcom.com>
> Organization: NETCOM On-line Communication Services (408 241-9760 guest)
> Distribution: usa
> Date: Tue, 15 Feb 1994 11:40:05 GMT
> Lines: 21
>
>
> I am considering getting an MFJ speaker/mic for my FT530 mainly due to
> the price.
>
> How is the performance? I'm concentrating on the models which offer an
> earphone jack in the plug itself and some sort of alligator (sp?) clip
> for the belt. I'm also going for compactness. (Basically, a clip like
> Radio Shack mics in the size of the standard Yaesu MH-18A2B mics).
>
Forget the price save your money and buy the digital speaker for the 530
It in itself is reason to buy the 530 over an Icom or Kenwood. It is the
most convient handheld accessory I have ever owned.
> Keeping all of this in mind, how the does the net respond?
>
> Thank much.
>
> Scott
>
>
> --
>
==
> | Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
> | Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na
|
>
|--|
> | Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
> | the World - world.std.com pub/hamradio |
>
==

1563. Re: Copying High-Speed CW: Print or Scr

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 18:25:10 UTC
From: cro@maxcy2.maxcy.brown.edu
Message-ID: <1994Feb15.182510.16287@cs.brown.edu>
Source record: 271115

In article <9402130630592.gilbaronw0mn.DLITE@delphi.com>, gilbaronw0mn@delphi.com (Gilbert Baron) writes:

|> Printing is not feasabile above 25 WPM. You must learn to use cursive.

This is true if you want to copy everything in the QSO. However as you may do too, I usually copy in my head the conversation and jot notes on info such as report, name, etc. This is even more efficient and in my opinion easier.

Christopher Ogren NM1Z

1564. Re: callsign server info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 18:26:22 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLA37z.AGv@netcom.com>
Source record: 271116

In article <ah301-130294211517@129.228.248.119>,
Jerry Sy <ah301@yfn.ysu.edu> wrote:
>which port do I telnet to get to callsign server on
>cs.buffalo.edu ?
>
>thanks
>jerry
>n3rkd

telnet callsign.cs.buffalo.edu 2000

also

telnet electra.cs.buffalo.edu 2000

Same system.

Scott

--
```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
================================================================================
```

1565. Hamblaster Update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 18:40:50 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb15.184050.5841@tellab5.tellabs.com>
Source record: 271117

2-15-94

I hope that this will clear up a few questions about
the Hamblaster.

Several weeks ago I mentioned that the projected cost for
the board would be about $350.00. Well, it was just a
"guesstimate"! It appears that it will be more in the $275.00
range and could be as low as $250.00. This may still sound
high compared to the Soundblaster or other sound cards, but
you have to remember that it's made exclusivly for Ham Radio.
Willco may only sell a few hundred a month. They can't compete
with companies that sell over a million units a year.

The Hamblaster is not a software package. It requires a
special sound card that uses a Texas Instruments TMS320C25
DSP to run filters or audio demodulators. It can interface
to a TNC via a TTL digital port and replace the TNC's poor
filtering.

It's not compatible with other sound cards and it can
co-exist with them. I use my Soundblaster Pro and Hamblaster
together. I can, for example, run a filter on the the Hamblaster,
connect it's output the Soundblaster and record a CW signal using
the SB software under the Windows environment.

More "info"

1) External Power supply

I think one feature that separates the Hamblaster
from other sound boards is it's ability to run on
an external 12 volt supply. When a filter or modem
is loaded, you can turn off the computer and it
will stay active.

When it's connected to a PK-232, there's no need
to leave the computer on in order to keep the DSP
alive. Right now, my PK232/Hamblaster is runing
and it's been operating for about two weeks.

There still some developement work being done and
I'm told that the power supply will be on a small
PC board and sold as an option for about $20.00.

2) Adaptive (LMS) filter

There's ongoing developement in this area. We are
planing (I don't think this has been done before)
to add controls to the LMS algorithm.

3) Soundblaster incompatibility

As I said before,
The Hamblaster IS NOT soundblaster compatible.
It was designed that way so that it will run
independant of other sound boards. I can still
use my Soundblater to record sound, play music,
load software from the CD or use the MIDI interface.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

Why do they call them concetration camps?
When people go there, do they really concentrate?

1566. Morse code program for Macs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 18:53:24 UTC
From: jalexand@geohub.gcn.uoknor.edu
Message-ID: <2jr5n4$bps@constellation.ecn.uoknor.edu>
Source record: 271118

I have two friends who are studying for their 1-A test, but they have MacIntoshes. Are there any Morse code
programs available? Thank you for any input. J. C. Alexander

1567. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 19:33:48 UTC
From: lbrunson@rodgers.rain.COM
Message-ID: <9402152045.AA03433@rodgers.rain.com>
Source record: 271119

John Meaker (kr4ah) writes:
|
| I'm curious about nude QSL cards. Would anyone be offended if they
| received a QSL card in the mail with nude people on it? Would it be
| better to mail the card in an envelope? The envelope increases the
| cost of mailing a QSL considerably, and cost a consideration when you
| mail many cards.

There has been considerable discussion about the demography of the amateur radio community and how we can attract younger people to the hobby. Although nude QSL cards may attract teen-age boys to the hobby, I hope we don't have to resort to this method.

My son got his novice license when he was 11 and my daughter when she was 8. Regardless of what you may think about my moral values and religious convictions, I feel it is my responsibility to teach them to my children and help guide them through the difficulties of puberty which are before them. I would feel extremely offended if someone sent a nude QSL card to either of my kids. I do not wish either of my kids to be receiving nude photos in sealed envelopes, either.

My opinion is not up for debate here. Remember, the question is whether nude qsl cards may be offensive. I suspect that there may be some people who preach tolerance but will not tolerate my position on this issue. They may even be driven to challenge my beliefs. As this is not the issue, their comments are being redirected to /dev/null.

Best Wishes. Lowell (kc7dx)

1568. Re: Do NiMH Batteries Dev. Memories?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 19:43:16 UTC
From: alanb@sr.hp.com
Message-ID: <CLA6s5.F@srgenprp.sr.hp.com>
Source record: 271120

Bill Coleman (bcoleman@hayes.com) wrote:

: The best thing you can do about NiCd memory is to forget it.
^^^^^^ ^^^^^^^^^^
(I love it!)

On the subject of nicads, I have been reading all the magazine articles, Internet postings and old wives tales for many years trying to figure out the true story on nicad longevity. I eventually came to exactly the same conclusion as Bill:

: Two rules for long NiCd life: don't overheat them by overcharging; don't
: discharge them too deeply, or you may get cell reversal in the pack.

And under the "discharging too deeply" category, be careful of nicads that have sat (charged) on the shelf for a long time. Often one of the cells has discharged more than the others. To prevent cell reversal, always recharge such a battery pack before using.

AL N1AL

1569. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 20:15:14 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <761381597.F00002@ocitor.fidonet>
Source record: 271039

```
The following files were processed Tuesday 2-15-94:

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
ANART795.ZIP ( 5236 bytes) ANART Bulletin #795 02/06/9
ARLD009.ZIP ( 1853 bytes) ARRL DX Bulletin 0210/9
ARLP006.ZIP ( 822 bytes) ARRL Propagation Bulletin 02/11/9
BARTG014.ZIP ( 3743 bytes) BARTG Bulletin #014 Feb. 199
RSGB0213.ZIP ( 9146 bytes) RSGB Bulletin 02/13/9
RTDX0211.ZIP ( 1514 bytes) RTTY DX Bulletin 02/11/9

---------------------------------------------------------------------
22314 bytes in 6 file(s)

HAMSAT [ HAM: Satellite tracking and finding programs ]
---------------------------------------------------------------------
ARLS008.ZIP ( 870 bytes) ARRL Satellite Bulletin 02/08/94
SAREX Frequencie
OBS042.ZIP ( 5123 bytes) Amsat Orbital Elements #042 02/11/9

---------------------------------------------------------------------
5993 bytes in 2 file(s)

HAMSCAN [ HAM: Scanner Freqs and Freq database programs ]
---------------------------------------------------------------------
LASVEGAS.ZIP ( 655 bytes) Las Vegas Scanner Frequencie

---------------------------------------------------------------------
655 bytes in 1 file(s)

HAMSWL [ Shortwave Schedules and programs ]
---------------------------------------------------------------------
R_UKRAIN.ZIP ( 325 bytes) Ukraine SWBC Sked Autumn '93 to
Winter '9
V_TURKEY.ZIP ( 746 bytes) Voice of Turkey SWBC Sked through
03/27/9

---------------------------------------------------------------------
1071 bytes in 2 file(s)

HAMUTIL [ HAM: Radio operating aids ]
---------------------------------------------------------------------
CALLBOOK.LHA ( 136625 bytes) Call Book executables for Amiga'
CBD_A-O.LHA ( 959368 bytes) Callsign Data A through O for Amiga
callboo
CBD_P-Z.LHA ( 700543 bytes) Callbook Data P through Z for Amiga
callboo
```

```
---------------------------------------------------------------------
1796536 bytes in 3 file(s)

Total of 1826569 bytes in 14 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)
```

1570. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 20:30:16 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLA8yI.4Dy@netcom.com>
Source record: 271121

In article <2jqi1t$rer@pegasus.cc.ucf.edu>,
John W. Meaker <jm6033@pegasus> wrote:
>Alan Bloom (alanb@sr.hp.com) wrote:
>
>: How many people have received their free QSL card from K4NBN "No Bad News"?
>: (He used to have a monthly ham ad in QST.) The nude lady in the QSL photo
>: was indeed a kind of centerfold, although not the type you might expect.
>: It was done as a promotion for a nudist colony in Georgia or somewhere.
>
>: AL N1AL
>
> I'm curious about nude QSL cards. Would anyone be offended if they
>received a QSL card in the mail with nude people on it? Would it be

It would depend on who received it. Some people would feel offended,
others not.

>better to mail the card in an envelope? The envelope increases the
>cost of mailing a QSL considerably, and cost a consideration when you
>mail many cards.
>
> John Meaker -=- kr4ah
>
> Disclaimer - I am not responsible for the actions of
> any Alpha-Hotels other than myself.
>
>
>

--
```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
================================================================================
```

1571. Re: starting campus radio club faq, need info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 20:40:18 UTC
From: gt0265d@prism.gatech.EDU
Message-ID: <139056@hydra.gatech.EDU>
Source record: 271122

jrl2@cornell.edu (Jeffrey Luszcz) writes:
>Hello,
> I would like to start a FAQ for Collage Amateur Radio Clubs. If you know
>of a radio club on campus could you send me some info about it. IUm looking
>for

<< INFO DELETED >>

Well, I'd like to start with my own club, The Georgia Tech Amateur Radio Club (W4AQL). We are at Georgia Tech in Atlanta, and have undergrads, graduates, alumni, faculty and staff, and a few others as members. Our officials are:

Sponsor: Dr. Paul Steffes (paul.steffes@ee.gatech.edu)
President: Dave Kunkee K0DI (gt5830b@prism.gatech.edu)
VP: Jeff Tucker N9HZQ (tucker@eedsp.gatech.edu)
Treasurer: Dave Huggins N4RMM (david.huggins@gtri.gatech.edu)
Secretary: Carrie Carter N9JSR (carter@magnolia.gatech.edu)
Shack Steward: Mike Whaley KD4UGI (whaley@hibiscus.gatech.edu) (that's me!)
Shack phone: (404) 894-2971
Shack Address: Room E-180, Electrical Engineering Bldg, Georgia Tech

We have a repeater on 145.15 (input 144.55) located on the GT campus, with a remote site on 145.05 in Duluth, GA. Our shack is very well equipped, with 2 Kenwood TS-940S's, an icom and a Yaesu VHF rig (ferget the numbers) two Alpha 77 amps on the Kenwoods, and the following antennas: TH-6, 10,15,and 20 meter beams, 2m and 70cm satellite antennas, and 80 and 160 meter dipoles. We probably have more up there, but between the 3 towers I can't remember all of it :-)

GTARC was started by 1927 for sure, and we believe that it may have existed as early as 1911- we're still trying to corroborate that info. We have approximately 50 members or so, who operate on all bands and all modes, especially while contesting! The club has an email server at listserv@gitvm1.gatech.edu, or you can send mail to the club account at eew4aql@prism.gatech.edu. We would be very happy to hear from any interested folks out there, especially those who are or have been associated with Tech or the club.

>Even if you canUt answer all the questions, oh well, its a start. I will
>put the
>info on a ftp site and/or post if people are interested.
>Thanks,

>-Jeff Luszcz N2TIQ
>jrl2@cornell.edu
>Cornell Amateur Radio Club W2CXM

Well, there's the Rambling Wreck contribution. Good luck to you on this project--- and if anyone else out there wants to organize some sort of get-together between Tech and some other school (UGA excepted ;-) let us know!

73 de KD4UGI


```
*******************************************************************************
* Mike "Gator" Whaley K Chief of Aerospace Engineering *
* whaley@hibiscus.gatech.edu D George P. Burdell Engineering Inc. *
* gt0265d@prism.gatech.edu 4 *
* Georgia Tech Box 40265 U "Ipecac- isn't that a Genesis album?" *
* Atlanta, GA 30332 G --- Joel, MST 3K *
* (404) 206-0958 I *
*******************************************************************************
* I absolutely refuse to put a disclaimer here: All opinions expressed above *
* are EXACTLY what Georgia Tech would tell you, VERBATIM, with NO DIFFERENCES.*
*******************************************************************************
```


--


```
*******************************************************************************
* Mike "Gator" Whaley K V.P. of Aerospace Engineering *
* whaley@hibiscus.gatech.edu D George P. Burdell Engineering Inc. *
```

1572. John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 20:41:47 UTC
From: JMG@tntech.edu
Message-ID: <01H8X21VF1N6ECXSL5@tntech.edu>
Source record: 271123

Well I will say it flat out: John Ramsey is a liar. I caught him at it first hand and won't go near any of their products anymore.

I purchased one of the original 2 meter transceiver kits. I really like the way the instruction book was organized and you get to test one section before proceeding with the next. I did a real careful job with mine.

It didn't work correctly when I finished. I got a graduate student from the EE program here at the University who is a ham to help me. He found that the crystals weren't cut correctly (while building I noticed some of the components were fine.. many were trash.. the wire kept falling apart).

I called tech support .. spent a bunch of long distance time with a nice gentleman who seemed to know what he was talking about. He informed me that they had received a batch of bad crystals (think he said 400 or so) and they were forced to use them up (couldn't understand this). He told me some procedures to "pad" the crystals to bring them on frequency. My friend helped me get the rig going.. not perfectly..but I have been using it for packet for about 2 years now.. only had to mess with it 3 or for times.

Well I got so mad at this concept that I wrote Mr. Ramsey a nice letter. It was strong enough so that he paid for the phone call to call me. He wanted to know who the tech. was.. (sounded like he was going to fire him).. and INSISTED the tech lied and there was absolutely nothing wrong with the crystals.. he stated the extra instructions tell you how to pad the crystals... and in very technical terms proceeded to tell me this was normal.. I was a new ham with no background in electronics at the time.. he sure sounded full of it. I decided not to press the matter and told him I thought he should have just replaced the crystals.

At the time there were long discussions about MANY people exeperiencing the same difficulties I had... some people got their's to work right away (probably lucked out and got good crystals). There was also all types of problems in the alignment with having to stretch some of the coils way out of shape to get power out of the TX.

I recently heard that John Ramsey said some pretty bad things about me to a customer over the phone.. don't know where that came from.. think this guy is VERY disreputable.

Anyway, Ten Tec is suppose to come out with a nice 2 meter fm transceiver kit in the near future.

73

Jeff, AC4HF

1573. Re: Amateur Radio Newsline #861 11 Feb 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 20:42:16 UTC
From: dparker@netcom.com
Message-ID: <dparkerCLA9IH.215@netcom.com>
Source record: 271124

"I am concerned that you continue to move forward and keep pace with
the commercial side, so that the technologies you have on the
air will in fact provide you all of the kinds of feature rich
functions that are going to be available to the general public."
Ralph Haller N4RH, FCC

Dahhh you mean like 20 WPM CW as a requirement?

Dave Parker, KD6RRS

1574. Tone Burst Whistle?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 21:22:52 UTC
From: david@stat.com
Message-ID: <T95sHc5w165w@stat.com>
Source record: 271126

I have an ICOM 24AT which I would like to use with tone burst. Is there a way to do this easily?

I understand that someone sells a tone-burst whistle which immitates the tone to prevent internal modification of a radio.

Anyone heard or know where I can get one of these?

david

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

1575. Re: Hamblaster update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 21:37:52 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <CLAC34.Dq@cscsun.rmc.edu>
Source record: 271127

John W. Albert (jwa@tellabs.com) wrote:
: The Hamblaster Update

: Over the past several months I posted updates about a
: DSP "The Hamblaster" that Will Torgrim (N9PEA) and myself
: are developing.
:
: Several weeks ago I mentioned that the projected cost for
: the board would be about $350.00. It was just a
: "guessestmate". It looks like it will be more in the $275.00
: range and could be as low as $250.00. This may still sound
: high compared to the Soundblaster or other sound cards, but
: you have to remember that it's made exclusivly for Ham Radio
: and it won't have the volume (sales) of other sound cards.

Is it just me, or is anyone else wondering why we're being continually bombarded with a blatantly commercial posting? I'm glad they've taken the initiative to make a new piece of hardware for hams, but I don't think this is the proper forum for their continous ads disguised as status reports.
--
David Tiller | Network Administrator | Voice: (804) 752-7373 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
n2kau@wa4ong.va.usa.na | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
+++Arch-Conservative+++ | Ashland, Va 23005 | 77d 31' 32.19" W |

1576. Re: Noise Problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 22:13:29 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1994Feb15.221329.21882@rsg1.er.usgs.gov>
Source record: 271028

In article <2jqq6i$glg@vixen.cso.uiuc.edu>, ignacy@ux2.cso.uiuc.edu (Ignacy Misztal) writes:
|> Sources of broadband noise in my house:
|> 1. Light dimmers,
|> 2. TV set,
|> 3. Fluorescent lights.
4. Kids
5. Wife
6. Me after discovering 3 yr old reprogramming a scanner

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

1577. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 23:00:25 UTC
From: jholly@cup.hp.com
Message-ID: <CLAFwp.J8C@cup.hp.com>
Source record: 271029

lbrunson@rodgers.rain.COM wrote:
: John Meaker (kr4ah) writes:
: |
: | I'm curious about nude QSL cards. Would anyone be offended if they
: | received a QSL card in the mail with nude people on it? Would it be
: | better to mail the card in an envelope? The envelope increases the
: | cost of mailing a QSL considerably, and cost a consideration when you
: | mail many cards.

: There has been considerable discussion about the demography of the
: amateur radio community and how we can attract younger people to the
: hobby. Although nude QSL cards may attract teen-age boys to the hobby, I
: hope we don't have to resort to this method.

: My son got his novice license when he was 11 and my daughter when she was
: 8. Regardless of what you may think about my moral values and religious
: convictions, I feel it is my responsibility to teach them to my children
: and help guide them through the difficulties of puberty which are before
: them. I would feel extremely offended if someone sent a nude QSL card to
: either of my kids. I do not wish either of my kids to be receiving nude
: photos in sealed envelopes, either.

: My opinion is not up for debate here. Remember, the question is whether
: nude qsl cards may be offensive. I suspect that there may be some people
: who preach tolerance but will not tolerate my position on this issue.
: They may even be driven to challenge my beliefs. As this is not the
: issue, their comments are being redirected to /dev/null.

: Best Wishes. Lowell (kc7dx)

No, I don't think your out of place. Would one send a nude QSL to a foreign
country? I certainly hope not. In some counties they would be banned and
could get the recieving ham in trouble. Besides, what sort of image are
you presenting for the U.S.? If you would not send one to a foriegn country,
why send one to a U.S. ham. Some would definitely be offended, othere would
think you a jerk at best. Go get a W4MPY or WA6AHF QSL, or one with you
full dressed in your shack with your dog/cat/bird/snake.

Jim, WA6SDM
jholly@cup.hp.com

1578. CFV: sci.geo.satellite-nav

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 23:20:49 UTC
From: rdippold@qualcomm.com
Message-ID: <sci.geo.satellite-nav-CFV1@uunet.uu.net>
Source record: 271030
Cross-posted to: news.announce.newgroups,news.groups,rec.autos.tech,rec.backcountry,rec.boats,rec.radio.amateur.misc,sci.aeronautics,sci.engr.civil,sci.space.tech,rec.aviation.products,rec.aviation.piloting,sci.geo.geology

```
FIRST CALL FOR VOTES (of 2)
unmoderated group sci.geo.satellite-nav

Newsgroups line:
sci.geo.satellite-nav Satellite navigation systems, especially GPS.

Votes must be received by 23:59:59 UTC, 8 March 1994.

After this CFV appears on news.announce.newgroups, it will be posted
to the GPS Digest <gps-request@tws4.si.com>.

This vote is being conducted by a neutral third party. For voting
questions only contact rdippold@qualcomm.com. For questions about the
proposed group contact Andy Arkusinski <arkusinski_andy@si.com>.

CHARTER

This will be an unmoderated newsgroup.

SCI.GEO.SATELLITE-NAV was chosen because the focus of this group is on
navigation. The SCI.SPACE hierarchy deals with various aspects of
space exploration and use, but this newsgroup deals mostly with
terrestrial applications. The fact that the space segment is in space
is almost incidental to the focus of the newsgroup.

SCI.GEO.SATELLITE-NAV will allow a centralized location for discussion
of global navigation satellite systems (GNSS). The charter
specifically includes the US Global Positioning System (GPS) and
Russian GLONASS, but is also open to discussion of other existing and
future satellite positioning systems.

Some topics that fall under this newsgroup charter are:
* Technical aspects of GNSS operation.
* User experiences in the use of GNSS.
* Information regarding GNSS products.
* Discussion of GNSS policy (such as GPS
selective availability).
* Extensions to basic GNSS technology, such as
differential GPS and pseudolites.
* Navigational uses of satellite systems whose primary
purpose is not navigation, such as a communication
satellite net.

Examples of topics that would not fall under the group charter are:
* Other satellite systems such as communications and
```

intelligence gathering, except for navigational uses of
such systems.
* Discussion of space policy in general.
* Discussion of areas that may use GNSS, such as
surveying, sailing, or aeronautics, except as they
directly relate to use of GNSS.

GPS, in particular, has turned out to be a technology with a great deal of synergism with many fields. GPS is used, not only for military positioning which was the original purpose, but in applications as diverse as entomology and film making. A major intent of this newsgroup is to share the uses to which GNSS technology is being put, thus inspiring even more innovative uses.

While part of the SCI.GEO hierarchy, this newsgroup does not exclude non-terrestrial uses of satellite navigation. Use of GPS to determine space vehicle position is within the charter.

This group is also intended to function as a resource for newcomers, who can post their questions and receive help from others who have passed that way before.

Rationale: There is no single newsgroup where information on GPS and other satellite navigation systems can be found. Questions are often posted in newsgroups such as sci.electronics, rec.aviation, and sci.aeronautics. To address this lack, the mailing list GPS Digest was started about a year ago, and now has over 400 subscribers.

Recently we attempted to convert GPS Digest from a moderated weekly newsletter to an unmoderated reflector. Submissions, which had been running at 2-3 per week, immediately picked up to 15 the first day. Our resources were overloaded, and the Digest is back to the original format. Many readers indicated the real-time response was helpful and suggested the formation of a newsgroup.

The RFD and CFV will be posted to the GPS Digest mailing list as well as Usenet newsgroups. Only those readers with access to Usenet should cast votes (for or against) formation of the newsgroup.

HOW TO VOTE

Send MAIL to: voting@qualcomm.com
Just Replying should work if you are not reading this on a mailing list.

Your mail message should contain one of the following statements:
I vote YES on sci.geo.satellite-nav
I vote NO on sci.geo.satellite-nav

You may also ABSTAIN in place of YES/NO - this will not affect the outcome. Anything else may be rejected by the automatic vote counting program. The votetaker will respond to your received ballots with a personal acknowledgement by mail - if you do not receive one within several days, try again. It's your responsibility to make sure your vote is registered correctly.

Only one vote per person and per account will be counted. Addresses and votes of all voters will be published in the final voting results list.

1579. FT980/FTV-901R.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-15 23:52:43 UTC
From: t1terryb@cascade.ens.tek.com
Message-ID: <2jrn8b$m17@cascade.ens.tek.com>
Source record: 271031

Return-Path: pnet01!crash!hatch.socal.com!pro-palmtree!pro-janin!jestevez@crash.cts.COM
Date: Sun, 13 Feb 94 09:48:33 PST
From: jestevez@pro-janin.cts.COM (Joseph Estevez)
Subject: Re: FT980/FTV250.

I had sent out a request for infomation regarding using a transverter
with my FT980 transceiver and got a very interesting response back from
Joseph. Thanks very much Jo. Thought I would share it with the net.

>A better choice for a Transverter for the FT-980 is the Yaesu FTV-901R, if
>you can find one. This transverter is more of what Yaesu was planning to
>design for the FT-980 Transceiver.

I was wondering if this transverter was designed specifically to go with
a particular Yaesu transceiver like th FT980 or FT-one, etc? Was it in
production very long...make my job of finding one easier?

>All it takes is a few parts modification to make it works with the FT-980
>Transceiver, and you'll cover from 1.8-450-Mhz with just one radio.
>Satellite is a dandy with this set-up. This is the set-up that I'm using
>to work OSCARs Satellites, local repeaters, SSB VHF, etc.

Does the FTV-901R take different module to cover 2 meters, 70 Cmtrs, etc.
or does it just cover 50-54, 144-148, 220-222, 432-450 Mhz ham bands
just like it comes?

>The parts needed can be ordered from Yeasu, with a schematic. The
>operating instructions are in Japanese, but it can be traslated very
>easily.

>It's been many years since I did the modification on my radio. When I
>started, Yaesu didn't even had any information on it. I was offered a job
>at Yaesu for this (worked for 2-years for them). I was the first one on
>the FT-980 Transverter, because the company never continue the completion
>of the Transverter project.

>You cannot control the FTV-250 from the FT-980. But with the FTV-901R, the
>FT-980 Transceiver controls the FTV-901R Transverter. All of this for only
>about 1 or 2 Transistors, 5 Resistors, re-wiring the connectors on the
>FTV-901R, and making the cable from the FT-980 to the FTV-901R. Total cost
>about $5.00 dollars; with inflation and mail order from Yaesu... maybe
>about $7-to-$10 dollars.

>The end results is a Transverter that it match the FT-980 Transceiver, as
>intended by Yaesu, controlled by the FT-980 (yes the radio control the
>transverter), and a better set-up than the FTV-250.

>Good luck!
>Joseph Estevez, WB6SCT

Thanks,
Terry Burge
KI7M

ProLine: jestevez@pro-janin
Internet: jestevez@pro-janin.cts.com
UUCP: crash!pro-janin!jestevez

1580. Looking for phs300.zip

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 00:11:56 UTC
From: wpenney@morgan.ucs.mun.ca
Message-ID: <wpenney.761357516@morgan>
Source record: 271032
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.misc

Good day All. I'm looking for a packet related program mantioned in '73 magazine named :

'phs300.zip'
Does anyone out there in net land know where I could find it (ftp?)?

E-mail me any replies.

wpenney@morgan.ucs.mun.ca

Thanks...

1581. standard C120 HT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 00:16:58 UTC
From: swain_i@kosmos.wcc.govt.nz
Message-ID: <1994Feb16.001658.1@kosmos.wcc.govt.nz>
Source record: 271094

Hello there i'd like some mods for the C120 standard HT... As I have been told there are a few things that can be done by holding keys down which I have tried but it didn't work so maybe there is a diode to lift any ideas help!

73, Ian ZL2IAS

1582. ANARTS RTTY NEWS796 13/02/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 00:31:59 UTC
From: dave@eram.esi.com.au
Message-ID: <5192@eram.esi.com.au>
Source record: 271033
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS NEWS796 13/02/94

Sunday Transmission Schedules.
3.545 MHz 0930 UTC VK2BQS (Jim)
7.045 MHz -3 0030 UTC VK2CTD (Col)
14.070 MHz (amtor/fec) 0030 UTC VK2DPM (Alan)
14.091 MHz 0030 UTC VK2BQS (JIM)
146.675 MHz 0030/0930 UTC VK2JPA (PAT)
144.850 MHz (ax25 bbs) VK2JPA AT VK2RWI
146.675 MHz (rtty mmbbs/repeater) VK2RTY

Views expressed in this news bulletin are not necessarily
those of the Broadcast Officer, the Relay Officers, or of the
Society.

A reminder for the Gosford - Central Coast Field Day

Don't forget the Central Coast Field Day on 27th February, at
the prestige venue of the Wyong Racecourse in Howarth St.
Wyong.

There you will meet the committee of ANARTS -- Col VK2CTD,
President, Jim VK2BQS, Vice-President, Alan VK2DPM, Treasurer,
and Pat VK2JPA, Broadcast Officer, will be floating around
somewhere with a video camera. (I am also a member of the
Gladesville Amateur Radio Club specialising in ATV. Pat)

Don't forget to enter the Morse contest ANARTS will be running
again. It was such a success last year that it will be a
feature of the stand again this year. Polish your sending and
receiving skills and come along and participate in this most
historic method of amateur digital transmission.

See you there.

RTTY Digital Journal in new hands

The RTTY Digital Journal has been sold to the American Digital
Radio Society (ADRS). This society has made a statement of its
aims, as below -

The principal goal of the American Digital Radio Society
is to advance digital technology as it applies to Amateur

Radio and to promote the wisest use of the digital portion of the amateur radio spectrum. The ADRS best serves the global fraternity by enhancing the opportunities for all who chose to explore the digital modes.

The editor is unchanged, being Dale Sinner W6IWO, but both the publisher, Jim Mortenson N2HOS, and Director of Marketing, Jay Townsend, WS7I are new to the publication.

All the regular features are continuing, so really only the ownership has changed. It is seen as the voice of the digital radio fraternity, may it flourish and be heard.

Some news from VK6

It was sad to note, the resignation of RON,VK6RF from the group. Ron has been a long time member of W.A.A.D.C.A , a supporter of R.T.T.Y. and the sunday morning broadcasts. It is hoped you continue to listen , and report in on occasions please RON.

A new PACKET RADIO user port is to be installed at WIRELESS HILL PARK. The operating frequency will be 144.825. This will supplement the users on this channel , as well as provide better traffic loading between channels.

R.T.T.Y. MAIL BOX

The Technical Officer JOE VK6ZTN still has to find the time from his busy schedule to modify the fm 880 transceiver for the R.T.T.Y. mailbox to become operational.

Finally a big THANK YOU TO PHIL VK6ADF .
Phil has had to resign from the committee of W.A.D.C.A. due to other committments , Phil has been a tireless worker
for the group . your absence will be surely be missed Phil.

supplied by Clem VK6CW

DARC HF RTTY Contest

Date: February 19-20, 1994

Sponsored by Deutscher Amateur-Radio-Club e V.

Contest period: Part 1: Third full weekend in February (Feb. 19-20 1944).

Part 2: Third full weekend in July (Jul 15-16 1994)

Part 1: Saturday: on 20, 15, and 10M, from 1000Z to 1600Z (6 hours).

Part 1: Sunday: on 80 and 40M, from 1400Z to 2000Z (6 hours).

Mode: RTTY (Baudot) only

Bands: 80, 40, 20, 15, and 10M

Classes: A - Single op. B - Multi-op C - SWL

Exchange: USA stations: send RST + QSO nr. + name + state

All others: send RST + QSO nr. + name

More next week

IPS weekly report
---
4 - 10 February 1994
Issue no.: 06

CONTINUED NEXT PAGE

--- End of messsage #56768 to RTTY from VK2BQS ---

From : VK2BQS
To : RTTY@VKNET
Type/status : B$
Date/time : 13-Feb 12:52
BID (MID) : 10435_VK2DAA
Message # : 56767
Title : ANARTS NEWS796 13/02/94 PAGE 3/5
Path: !VK2AAB!VK2DAA!

ANARTS NEWS796 13/02/94 PAGE 3/5

IPS Continued.
Date of issue: 4 February 1994

Date 04 05 06 07 08 09 10
10cm 95 93 95 96 95 101 94
A 10 21 39 45 42 32 (27 estimated)
T 43 50 -04 -31 -24 21 -04

Summary of activity

Solar activity was very low 4th-9th February, and low on 10th. No flares were reported during this period.

The geomagnetic field at Learmonth (WA) on 4th was mostly quiet with unsettled to active conditions during local night, on 5th was quiet to unsettled, on 6th-7th mostly at storm levels. The field was at active to minor storm levels mostly during local night on 8th-10th February.

Ionospheric F2 critical frequencies at Sydney on 4th-5th were
near predicted monthly values to up to 30 per cent enhanced,
then becoming near predicted monthly values to up to 30 per
cent depressed during the remainder of the period.

Comment:
Strong magnetic storm activity was observed during Feb 6-8.
This activity arrived a day earlier than expected and was
stronger than expected. Storm was due to a coronal hole.

Forecast for the next week (11 - 17 February)

Solar : Low to moderate.

Geomagnetic: Active due to a coronal hole.

Ionospheric: Degraded HF communications expected all week.
MUFs are expected to be 10-15 per cent depressed
on IPS predicted monthly values.

Courtesy of IPS Radio and Space Services

VK2SG RTTY DX NOTES 4 FEB 94

VK2SG RTTY DXNOTES FOR WEEKENDING 4 FEB 1994 (BID RTDX0204)

MAKE A NOTE: TWO RTTY CONTESTS FOR THE MONTH OF FEBRUARY. 12-
13 FEBRUARY IS THE EA WW RTTY CONTEST, SPONSORED BY THE
SECCION TERRITORIAL COMARCAL DE ARANDA DE DUERO AND THE DARC
HF RTTY CONTEST, 19-20 FEBRUARY, SPONSORED BY DEUTSCHER
AMATEUR RADIO CLUB, DARC. FOR INFORMATION, JANUARY 1994 RTTY
JOURNAL.

OUR INFORMATION THIS WEEK CAME FROM: 9X5LJ, DJ3IW AND THE
CENTRAL-EUROPE DX CLUSTER NODE DB0SPC, I5FLN, IK5AAX AND THE
IK5PWJ PACKET CLUSTER, KE6XJ, W2JGR AND THE NJ0M NODE THE
TWIN-CITIES DX PACKET CLUSTER, W5KSI AND ZS5S. THANK YOU ALL
FOR YOUR ASSISTANCE.

BANDPASS
FRIDAY 28
0728-14086 FK8BG 1517-14087 YB3AQF
1519-14080 9H1ET 2048-21085 ZD7SM
2121-14089 TZ6FIC QSL F6KEQ 2310-14084 KG4HG
2321-14089 V50CM

SATURDAY 29
0652-21073 J28BM ARQ 0652-21073 4X1CG
0707-14084 TR8MD 0719-14084 C91AI QSI CT1DGZ
1141-14083 UN7LR 1239-14085 UZ9CWA
1330-14087 GM0BU 1338-21086 S59F INVERTED
1340-14089 KP4G 1565-21084 ZS9A
1557-21086 3B8FT 1611-21079 TY1PS

1938-21085 ZD7SM 2057-14084 CN8NP
2058-14090 VK2KM 2320-14089 V50CM

SUNDAY 30
0735-14086 UN7LR 0906-21090 ZL1VT
0956-21088 C91AI 1025-28081 V50CM
1113-14081 ER1PE 1126-21087 UN5PR
1241-28083 TZ6FIC 1304-21080 ZD7DP
1509-21086 CU3EM 1511-21088 UX8YA
1550-210!0 9H1ET 1629-14086 SV5AZP

MONDAY 31
0713-14084 KN4DOG/KH2 0820-14088 YL3FW
1118-14089 HI8BG 1145-14086 ER1PE
1803-21082 C91AI 1928-14079 C91AI

TUESDAY 1
0738-14084 FK8BG 0915-14089 YL3FW
1512-14083 T9S 1907-14084 P43WLP
1945-14088 V50CM

WEDNESDAY 2
0654-14085 UR3UT 0706-21070 SU1CR ARQ
0951-14087 FY5FJ 1539-21088 J28BM
1542-14085 EA8EA 1719-14082 UR3UW
1723-14082 9X5HG FEC 1732-14080 4Z5BK
1994-14083 CX3ABE

THURSDAY 3
1515-14085 UT5DX 1901-21085 ZD7SM

NOTES OF INTEREST.

PETER 1ST, 3Y0PI. AT THIS TIME, BAD NEWS ON RTTY AND SATELLITE OPERATION. TONY, WA4JQS ANNOUNCED THAT THE TNC FOR RTTY AND SATELLITE OPERATION WAS BROKEN AND IN PIECES TRYING TO FIX IT. HE THINKS IT GOT SQUASHED WHEN IT WAS LOADED ON THE BOAT IN THE SLING. LETS HOPE FOR THE BEST. KYFC

S.M.O.M., IA0KM, THE SCHEDULED ACTIVITY FROM S.M.O.M. HAS BEEN POSTPONED DUE TO PROBLEMS AND BEING THAT THE FOCUS WILL BE ON PETER I. 1A0KM OPERATION IS NOW SCHEDULED FOR THE SECOND PART OF FEBRUARY

FOR NEXT WEEK'S BULLETIN, SEND YOUR BANDPASS AND NOTES OF INTEREST TO JULES, W2JGR AT W2TKU.#SRQ.FL.USA.NA

REMEMBER, DX DON'T SLEEP.
GL DE BOB, WB2CJL AT W5KSI.#NOLA.LA.USA.NA

[via HF AMTOR]

Coming events

1994

February 27th FIELD DAY

19th-20th DARC HF RTTY
Contest

March 19th-20th BARTG WW RTTY
Contest

April 16th-17th SARTG WW AMTOR
Contest

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President (Col) VK2CTD or the Secretary (Pat) VK2JPA @ VK2RWI.

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or by packet to VK2JPA @ VK2RWI.

Email addresses for the Broadcast Officer are :

patl@extro.ucc.su.oz.au or VK2JPA @ VK2OP nsw.aus.oc

The Society welcomes news items on any digital subjects from anywhere in the broadcast footprint. We know we reach ZL and many South Pacific islands. We are looking forward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer
That concludes ANARTS NEWS796 13/02/94.

Inserted by VK2BQS Jim Vice-President ANARTS.

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

1583. Schematic for Heathkit HW-2036A Needed

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 00:39:31 UTC
From: William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM
Message-ID: <9401157613.AA761359171@smtpgty.anatcp.rockwell.com>
Source record: 271034

I seem to have caused serious injury to a Heathkit HW-2036A. I have all the documentation EXCEPT the schematic, which is, of course, what I need the most to fix the beast. :-) Does anyone out there have a schematic for this radio they would kindly copy for me? I will, of course, pay reasonable copy/mailing costs.

I've made some mods that will make this a great packet radio if I can get it back on line. :-)

Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI
(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com

---
Who are you? * I am number 2. * Who is number 1? * You are number 6.

1584. FT-530 Firmware Problems (epilogue)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 01:38:07 UTC
From: RGS@gfimda.UUCP
Message-ID: <940215203807.222c@gms.mh.wp.kgf.com>
Source record: 271035

This is a post of an item I deposited on Compu$erve's HAMNET forum:

Well I just received my re-repaired FT-530 back today. As I had promised earlier, here is the finally summary of what was done and the cost if it is out of warranty. Please note that my radio is Lot #16. All FT-530's that I have played with suffer from the DTMF code squelch problem:

1) Page Acknowledgment will not turn on:

Item G2070088 (Diode 1SS302 TE85R) was installed. Price 23 cents.
Labor $50. Shipping $6.58.

Note: I believe the Page Acknowledgment may be a problem only if the radio has had the receive range extended by removing the jumper on pad 13. After talking to several other hams, it would seem to be that only those radios that were modified suffer from this (not conclusive). The fact that a diode needs to be added would seem to confirm this.

2) DTMF code squelch only decodes first 2 digits:

"REPLACED DEFECTIVE CPU IC, ADJUSTED AND TESTED UNIT'S OPERATIONS TO FACTORY SPECIFICATIONS." That's what the work order says!
Labor $150. Shipping $5.99.

I have tested the radio so far and it seems to work fine. In fact, 2-meter sensitivity seems better than it was before!

Robert de N2JTX

1585. Ham Radio FTP area on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 04:00:11 UTC
From: wy1z@netcom.com
Message-ID: <rec.radio.info-ham.radio.ftp_761371209@ve6mgs.ampr.ab.ca>
Source record: 271036
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info,rec.radio.scanner

This is a periodic reminder that the Boston Amateur Radio Club maintains an FTP area on world.std.com (192.74.137.5) in pub/hamradio.

This area is accessible via: anonymous ftp, gopher, and World Wide Web (and possibly other methods I'm not yet aware of). World is not *fsp*-able yet (I asked them).

Via Gopher, the easiest path to the area is by selecting the following from World's main menu:

18. Membership and Professional Associations

3. Boston Amateur Radio Club

And go from there...

Please feel free to browse through the area.

If anyone has any questions about it, please do not hesitate to e-mail me.

Also, up-to-date copies of the files on the ARRL's information server (info@arrl.org) are available in the directory pub/hamradio/ARRL/Server-files.

All text files are uncompressed, so they are both retrievable and viewable via Gopher and World Wide Web. (If you have any troubles with any text file, please e-mail me).

Source code for programs is always welcome. It can permit people to use those programs on other computers with other operating systems.

Scott

1586. Re: DSPs are hot

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 04:08:44 UTC
From: trier@odin.ins.cwru.edu
Message-ID: <2js68c$kc4@usenet.INS.CWRU.Edu>
Source record: 271037

In article <CKK8Lz.3zG@news.direct.net>,
Cecil Moore <kg7bk@indirect.com> wrote:
>Because none of the programming is hardwired in, DSP-based products
>are infinitely upgradable. ... Just download a new version of the code
>to the DSP from a BBS or a floppy disk.

Sometimes I wonder just how PC Magazine manages to survive. This is an
over-simplification. _Some_ DSP-based products keep their software in
RAM or EEPROM. Many use EPROM, and some use mask-programmed ROM.

Stephen

--
Stephen Trier KB8PWA Dave: [H]as anyone ever met a Zamboni driver?
Other: trier@ins.cwru.edu Mike: The next version of OS/2 will include a
Home: sct@po.cwru.edu Zamboni driver. Let's see Microsoft top that!
(dave@cs.arizona.edu & miked@vnet.ibm.com)

1587. Re: call book typo... sorry

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 04:14:59 UTC
From: trier@odin.ins.cwru.edu
Message-ID: <2js6k3$kok@usenet.INS.CWRU.Edu>
Source record: 271038

In article <1994Feb3.082750.23616@usl.edu>,
Morrison Charles F <cfm1471@ucs.usl.edu> wrote:
>>cs.buffalo.edu 2000 or 128.205.32.2
>>
>>again, the word 'callsign' was not needed here. sorry for the trouble.

If they recommend using the word "callsign", I'd use it. There is no guarantee cs.buffalo.edu and callsign.cs.buffalo.edu will be the same computer in the future. Likewise, there is no guarantee it will retain the IP address you list above.

In general, when there is a special alias created for a service, it's wise not to defeat the purpose of the alias by using an alternate name.

Stephen

--
Stephen Trier KB8PWA Dave: [H]as anyone ever met a Zamboni driver?
Other: trier@ins.cwru.edu Mike: The next version of OS/2 will include a
Home: sct@po.cwru.edu Zamboni driver. Let's see Microsoft top that!
(dave@cs.arizona.edu & miked@vnet.ibm.com)

1588. FT530 dtmf decoding

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 04:28:51 UTC
From: mladair@mtu.edu
Message-ID: <2js7e3$pgq@pace1.cts>
Source record: 271040

Found this on the net quite a while back and havn't seen it
since, so I thought people might be interested.

Don't blame me if it doesn't work. I don't even own a 530.
(Wich I did tho!)

Matt Adair N8SHA
mladai@mtu.edu

DTMF Decoding

A nifty little "feature" that isn't mentioned in the manual.
Steps to follow:

1) tune to the freq you want to monitor and turn on the code squelch
2) press Function-Page(Code) to select a code memory
3) dial up to memory #7
4) watch the dtmf's scroll by as they are heard by the radio!

1589. UHF repeater antenna bug

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 05:00:00 UTC
From: Dave.Hockaday%f160.n151.z1@psybbs.durham.nc.us
Message-ID: <761466217.AA09706@psybbs.durham.nc.us>
Source record: 271041

To: ALL
Subj: REPEATER ANTENNA PROBLEMS...

I have a situation on a UHF repeater installation that has me
puzzled. I could certainly use any input that might be out there...
Here are the system specifics...Antenna: Anli A-1000 (looks like the
Diamond x-500 inside and out). We have one of these antennas down in
Wilson, NC on the 147,30+ repeater and it performs very nicely on VHF.
It was quite an improvement over a sick 4 bay dipole array that was
up....Feedline: 200 feet of Andrews Heliax 7/8". The feedline is
terminated with a UHF connector on the bottom, a jumper of RG-225
connects the lower end of the hardline to the duplexers. The upper end
of the heliax is terminated with a type N connector. Another short
jumper (about 2 feet long) of RG-225 connects the hardline to the
antenna. The antenna is mounted on top of a 150 foot tower.
At the duplexers, looking up through the first rg-225
jumper/hardline/jumper/antenna I see about 22 watts out with about 5
coming back(!!). This is measured with a URM-120 mil-spec directional
wattmeter...a Daiwa uhf swr meter sees about 2.5:1(!). Now, if I move
the URM-120 to the hardline input (immediately after the first jumper)
I see about 28 watts out with 3 coming back and about 1.7:1 on the
Daiwa. I climbed the tower, terminated the hardline at the top with a
50 ohm dummy load that's good to 1 ghz, came back down, pumped 20 watts
on UHF directly into the hardline at the bottom. I measured about 11
watts making it out the top (the specs for at 450 mhz are about
2.8db/200 ft)...about right for the length...It seems to me that the
feedline impedance is more like either 38ish or 75ish ohms with that
type of response...The antenna measures flat at the feedpoint, but the
rest of the system is a bit nutty. With the reflected power at
the duplexers, I'm having a little desense.
Any ideas on the problem?? It really has me stumped...Oh yeah, if I
vary the length of the jumper at the top between the hardline and
antenna, the reflected power and swr at the bottom runs all over the
place!! Please help if you have any input. 73 de WB4IUY

X OLX 2.2 X "What ?!? This isn't the file section ?!?"

1590. Re: FCC Daily Digests for the

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 05:06:56 UTC
From: phil@w3eax.umd.edu
Message-ID: <2js9lg$rd9@hecate.umd.edu>
Source record: 271042

Steve,

A wise man once said "Opinions are like assholes, Everybodys got one."
I find the posts interesting and informative. Just because you
have been granted an Amatuer license that doesn't mean that shouldn't
be aware of what is going on with NONamatuer radio services.

If you find the posts "less than suitable" for your taste then
simply skip thhe NEXT post. (That takes less bandwidth than your flame
and my flame extinguisher)

73
73 Phil

1591. I8YGZ callbook address?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 05:35:23 UTC
From: slay@netcom.com
Message-ID: <slayCLAy70.B7v@netcom.com>
Source record: 271043

I wonder if some kind individual would take a look/see at the
international callbook and let me know the address for
I8YGZ. I understand he is QSL manager for ER7Z whom I *think*
is/was a Moldovan (RO/UO) station.

Please reply to my e-mail address: slay@netcom.com

I will remove this posting upon receiving a reply. Thanks.
73 de Sandy WA6BXH/7J1ABV WA6BXH@N0ARY slay@netcom.com

1592. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 05:56:18 UTC
From: kg7bk@indirect.com
Message-ID: <CLAz5v.Iss@news.direct.net>
Source record: 271044

JEFF M. GOLD (JMG@tntech.edu) wrote:
: Well I will say it flat out: John Ramsey is a liar.

Jeff, a psychologist will tell you that anyone who says a person is a "thing" rather than saying a person acted in a certain manner under certain circumstances, has at least abandoned objectivity and at worst, abandoned rationality. I think I've seen these exact words before. Do you have this file stored on your disk drive somewhere?

: I purchased one of the original 2 meter transceiver kits.

I did, also. For those who don't know, we are talking about the earlier FTR-146, Ramsey's first 2m transceiver, which they stopped shipping *two years ago*. I don't know why Jeff keeps beating a dead horse. My good friend, Don, KE6AJH, still uses that FTR-146 and it works great. The present FX-146 incorporates some of my suggestions for improving the FTR-146. But my approach was not, "you idiots don't know your ass from..."

: It didn't work correctly when I finished.

Mine didn't either... kits rarely do. I never did get the controlled-carrier modulation working right on my HeathKit DX-40 and Heath was completely unsympathic and unresponsive... and I learn more when the kit doesn't work.

: I called tech support.

I wrote a letter explaining in objective terms what the problem was. I got an immediate helpful response from Ramsey's technical support group.

: At the time there were long discussions about MANY people exeperiencing
: the same difficulties I had.

I encountered every one of the difficulties that you did and Ramsey (the company) bent over backwards to help me solve them. That's where the idea of EPROMs for frequency control came from. The offset is done in the EPROMs and the offset oscillators are not used.

: ...having to stretch some of the coils ...to get power out of the TX.

Jeff, if you don't have a variable cap, how else are you supposed to adjust a tuned circuit? I have been stretching and squeezing coils for 40 years. Air wound inductors are variable inductors, you know.

: ... don't know where that came from..
: Jeff, AC4HF

I'll bet a lot of readers of your posting know where it came from. Seems like a self-evident primary to the most casual gentleman observer. If

you called a Texan a liar, I would worry about your health.

John Ramsey and I have never met in person. We have exchanged letters and e-mail and I perceive him to be a friendly, helpful, and assertive businessman who is trying to make a living at his hobby. I personally learned a lot from the FTR and FX transceivers and own four of them. I've tuned up a dozen others and the owners are happy with them. I put an 80C51 in mine and now have all the features that a Japanese transceiver has... encoder tuning, digital display, selectable offset, selectable PL, 16 memories, IBM-PC control, etc... all for less than $200. Thanks, John, you have at least one satisfied and grateful customer.

73, Cecil, kg7bk@indirect.com

1593. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 06:50:19 UTC
From: kevin@beacons.cts.com
Message-ID: <1994Feb16.065019.1304@beacons.cts.com>
Source record: 271045

In article <1994Feb13.144554.14280@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>
>OK, Alan, I understand what you're saying. My mental "FIFO", however,
>is 3 characters or less deep. And that doesn't matter whether the
>characters are input via aural Morse, visual flash cards, or spoken
>phonetics. Once the depth exceeds 3, the oldest character is gone off
>the stack. Attention span deficit, poor short term pattern memory,
>or something.

The depth of my "mental FIFO" seems to be related more to time than to the number of state changes. That is, the faster the CW, the further behind I can recollect, or "play back", in my head. I can notice improvements in this ability after merely finding some 35 wpm folks on 40 meters and listening to them while I do other things. It is your subconscious mind which must keep the FIFO full, while your conscious mind pieces the words together.

Boy I hope the folks in sci.cognitive or whatever don't read this thread! ObDisclaimer: This is my own personal observation about what my own brain seems to do.

>...my natural text reading speed has been around 1000 WPM since first
>grade. Slow is just no go for me, my mind races so far ahead considering
>contextual pathways that I lose the thread of meaning if the input is
>less than about 120 WPM.

Well Gary, it sounds like SHSM is the answer for you ;-)

(Super High Speed Morse for those who didn't guess it)

____
| ___ |
Kevin Sanders, KN6FQ | o o _/ o o | Try Boatanchors
kevin@beacons.cts.com | o o @ o o | For A Real Lift
|_____________|

1594. Daily Summary of Solar Geophysical Activity for 15 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 06:53:39 UTC
From: oler@rho.uleth.ca
Message-ID: <9402160653.AA23935@rho.uleth.ca>
Source record: 271046
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

15 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 046, 02/15/94
10.7 FLUX=103.8 90-AVG=106 SSN=059 BKI=4333 4334 BAI=019
BGND-XRAY=B2.1 FLU1=5.5E+06 FLU10=1.4E+04 PKI=4333 5333 PAI=018
BOU-DEV=040,031,027,025,042,031,023,040 DEV-AVG=032 NT SWF=00:000
XRAY-MAX= C1.8 @ 0757UT XRAY-MIN= B1.9 @ 2359UT XRAY-AVG= B3.2
NEUTN-MAX= +003% @ 0855UT NEUTN-MIN= -002% @ 2220UT NEUTN-AVG= +0.3%
PCA-MAX= +0.1DB @ 2120UT PCA-MIN= -0.3DB @ 0510UT PCA-AVG= -0.0DB
BOUTF-MAX=55350NT @ 0507UT BOUTF-MIN=55313NT @ 1944UT BOUTF-AVG=55337NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+064,+000,+000
GOES6-MAX=P:+125NT@ 1839UT GOES6-MIN=N:-071NT@ 0930UT G6-AVG=+087,+040,-031
FLUXFCST=STD:105,105,110;SESC:105,105,110 BAI/PAI-FCST=010,015,020/012,015,020
KFCST=0005 5010 1111 1111 27DAY-AP=022,012 27DAY-KP=3553 4233 3333 3232
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 14 FEB 94 was 38.1.
The Full Kp Indices for 14 FEB 94 are: 4+ 4o 4o 3o 3o 5+ 4- 4+
The 3-Hr Ap Indices for 14 FEB 94 are: 34 30 29 16 16 55 23 31
Greater than 2 MeV Electron Fluence for 15 FEB is: 8.8E+08

SYNOPSIS OF ACT

Solar activity was low. Region 7671 (N10E52) produced a
C1/SF at 15/0757Z.

Solar activity forecast: solar activity is expected to be
low. Region 7670 (N11E38) and Region 7671 have slight M-class
flare potential.

The geomagnetic field has been at unsettled to active
levels at mid-latitudes for the past 24 hours. Some high
latitude stations reported severe storm conditions for the

period 15/1200-1500Z. Energetic electron fluxes have been at elevated levels since 07 Feb. One historic note regarding the past ten days. A-Fredericksburg values have exceeded 20 since 05 Feb 94. This has only occurred two other times since 1957 (beginning 27 Mar 1984 and 04 Jun 91).

Geophysical activity forecast: the geomagnetic field is expected to be unsettled. A coronal hole may bring a return to storm conditions on day three.

Event probabilities 16 feb-18 feb

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 16 feb-18 feb

A. Middle Latitudes
Active 25/30/30
Minor Storm 15/25/25
Major-Severe Storm 05/01/01

B. High Latitudes
Active 25/30/30
Minor Storm 15/25/25
Major-Severe Storm 05/05/05

HF propagation conditions continue to show signs of improvements, particularly over the low and middle latitude regions. However, high and polar latitudes are still experiencing poor to occasionally very poor propagation. Improvements should continue until about 17 February when effects from the second coronal hole noted above should herald a return to slightly more disturbed conditions.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7668 N08W43 284 0020 BXO 08 006 BET
7669 N06E19 222 0000 AXX 01 002 ALPHA
7670 N10E37 204 0020 BXO 06 006 BET
7671 N10E52 189 0450 CHO 06 005 BET
REGIONS DUE TO RET
NMBR LAT
7659 S13 150

LISTING OF SOLAR ENERGETIC EVENTS FOR 15 FEBRUARY, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 15 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 15/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
62 S49E25 S49E25 N15W12 N16W02 244 ISO NEG 029 10830A
63 N07E67 S24E60 N01E45 N07E67 194 ISO POS 008 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
14 Feb: 0023 0032 0038 B7.9
0722 0725 0729 B4.4

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 002 (100.0)

Total Events: 002 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep

```
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **
```

1595. Facility assessment forms for ham radio operations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 08:07:42 UTC
From: bihler@netcom.com
Message-ID: <bihlerCLB58v.Lwn@netcom.com>
Source record: 271047
Cross-posted to: misc.emerg-services,rec.radio.amateur.misc

I'm part of a newly formed ham/amateur radio emergency communications response group. One of the first things we've decided that we need/want to do is an assessment of our primary and secondary communication response points (and then work out from there).

Towards that goal we're trying to develop a form that will document the salient issues for us. For example:
. directions to the site
. possible problems: bridges/overpasses, flood plain
. resources available: power, antennas, radios...
. issues of concern: where and how to run cables, RF interference...

We have a pretty good start at what we think should be on the form, but we're wondering if anyone else has already done a similar type form and if they'd be open to sharing it with us?

Thanks much.
Steve Bihler, N7RYO
email: bihler@netcom.com

1596. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 10:21:21 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb16.102121.27897@ke4zv.atl.ga.us>
Source record: 271048

In article <2jqi1t$rer@pegasus.cc.ucf.edu> jm6033@pegasus (John W. Meaker) writes:
>
> I'm curious about nude QSL cards. Would anyone be offended if they
>received a QSL card in the mail with nude people on it? Would it be
>better to mail the card in an envelope? The envelope increases the
>cost of mailing a QSL considerably, and cost a consideration when you
>mail many cards.

It rather much depends on what the nude people look like. Some people
shouldn't appear in public nude. Ugh!

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1597. W6GO QSL MGR LIST-ACCESS?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 11:56:33 UTC
From: michaela@freenet2.scri.fsu.edu
Message-ID: <2jt1lh$k9@freenet3.scri.fsu.edu>
Source record: 271049

What access is there for the W6GO QSL manager's list? [Keep it simple, please. I am new at this computer stuff.]

Michael Christie, K7RLS
Crawfordville, Florida

1598. ARRL Letter Feb 10 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 12:29:12 UTC
From: marcbg@netcom.com
Message-ID: <$arll0210.1994@ampr.org>
Source record: 271050
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

The ARRL Letter Vol. 13, No. 3 February 10, 1994
US, Russia give shuttle last-minute lift, agree to reciprocal, 3rd party privileges
Russian and American amateurs aboard last week's space shuttle were able to carry out some of their operating plans only thanks to a last-minute pact between their two countries, who finalized temporary third party and reciprocal operating agreements just after the shuttle lifted off.
On February 3 the US Department of State and the Russian Ministry of Post and Telecommunications each approved the temporary arrangements, which allowed cosmonaut Sergei Krikalev, U5MIR, to contact, on February 6, the House of Science and Technology for Youth, in Moscow.
The contact was retransmitted in Russia on HF and VHF, according to the ARRL SAREX Working Group.
After the two countries approved the arrangements, it still was necessary to obtain a Special Temporary Authorization from the FCC (since operating from the shuttle is viewed the same as operating from US soil). The ARRL contacted the FCC's Personal Radio Branch, and the STA was granted on February 4.
Permanent reciprocal operating and third party agreements between the US and Russia have been in negotiations for several years.
Krikalev's school contact was the first by a cosmonaut from a US space shuttle. Russian coordinators for the event were Leo Labutin, UA3CR, and Valery Agabekov, UA6HZ. During the contact, Aleksandr Kaleri, U8MIR, spoke to Krikalev from the school, and several other cosmonauts were on hand. Six Russian students were able to ask questions of the shuttle astronauts.
In addition to schools contacted, the shuttle's robot packet station had logged nearly 2000 contacts as of February 7.
The Associated Press reported this story on Friday evening, February 4, noting that failure to obtain the agreements could have rendered illegal not only Krikalev's contact with the Moscow school but also an amateur-band contact between him and the Russian Mir space station.
The US continues to pursue permanent reciprocal operating and third party agreements with Russia and hopes to conclude them with a signing ceremony later this month in Washington, the State Department said in announcing the temporary shuttle agreements.
US astronauts aboard the shuttle are Charles Bolden, KE4IQB, and Ronald Sega, KC5ETH.
RF exposure plan wrong-headed, League says
The ARRL has told the FCC that a proposal to adopt new standards for exposure to radio frequency radiation should be terminated.

The League said that the proposal, which would change the Commission's guidelines to match those adopted by the American National Standards Institute (ANSI) and the Institute of Electrical and Electronic Engineers (IEEE) in 1992, was premature, and more properly should have been introduced as an FCC notice of inquiry.

The ARRL said that the ANSI-IEEE standards were not properly delineated and not a proper basis for evaluating communications facilities. Under the proposal, the new standards would replace less stringent standards adopted in 1982.

"The Commission's handling of this proceeding," the League said, "is not conducive to a fair determination of which RF exposure standard, if any, should replace the 1982 ANSI standard, on which most of the current communications systems in operation in the United States are based."

The League said that an FCC report and order in 1987 that concluded that amateur stations should be exempted from such RF exposure guidelines, because amateur stations operate only intermittently, and at low power levels, still applies. Only rarely, the League said, would amateur stations exceed even the proposed, more stringent 1992 ANSI-IEEE standard.

According to the ARRL, the FCC's notice of proposed rule making has five main shortcomings:

* It doesn't actually propose rule changes, or suggest anything on which to base substantive comments;
* It asks for comments not on the 1992 RF exposure guidelines themselves but rather on how to implement them;
* It suggests that the Commission has not decided to adopt the 1992 ANSI standard, yet offers no other standard as an alternative;
* It discusses a standard -- the 1992 ANSI-IEEE standard -- that is not readily available to the public for review;
* It addresses a subject that is, according to the Commission itself, beyond the Commission's expertise to deal with.

The League said that the FCC's proceeding should be terminated in favor of more study, by a more appropriate government agency, such as the Environmental Protection Agency, or else by an FCC notice of inquiry. The Commission's NPRM is, the League said, actually "in the nature of" a notice of inquiry.

Based on the 1978 National Environmental Policy Act, which granted exclusions to some "routine" environmental processing, the Commission in 1987 said the following:

"Regarding amateur radio facilities, no specific evidence has been submitted that these facilities present a significant risk to the public that would warrant routine environmental evaluation. While hypothetically, RF radiation limits could be exceeded in a few instances, such situations apparently seldom occur in actual operation.

"Furthermore, because amateur stations are not individually licensed by frequency, modulation, power output, or location, it would not be administratively feasible to evaluate amateur applications for this environmental factor.

"Consequently, we find that amateur radio operators, at the time of

licensing, should not be required to routinely submit environmental information concerning exposure to RF radiation. Nevertheless, as an added precaution, we agree with [the League] that operator education would help to assure compliance with ANSI guidelines. In that connection, RF radiation safety questions are being incorporated into amateur examination study guides."

The League said that even before that exemption was granted, it had taken an aggressive approach toward education of amateurs about RF exposure.

Finally, the League said that if the FCC does decide to adopt a standard to replace the 1982 standard, it should not be the 1992 ANSI-IEEE standard, because it is "arbitrary on its face," and that some of the 1992 standards would be practically impossible to assess for either commercial or amateur facilities.

The League said that most amateur installations use antennas from 40 to 100 feet above ground, producing, according to the Commission's own measurements, minimal energy at ground level.

The possible exceptions, the League said, are where amateurs are forced to use indoor antennas because of restrictive land-use covenants that prevent outdoor antennas.

Many of the League's arguments to the FCC proposal paralleled those made last month at a hearing in New Jersey concerning a proposal to register and tax RF sources. In both instances, the League said that the infinite variety of amateur installations, and their ability to change configuration with something as simple as rotating a directional antenna, made "routine environmental processing" of amateurs nonsensical.

This FCC proposal, in ET Docket 93-62, was made in the spring of 1993, and its comment deadline has been extended several times, most recently to January 25, 1994, based on a request by CBS Inc. The reply comment deadline is February 24, 1994.

Ga. bill would outlaw restrictive covenants

A bill introduced in the Georgia legislature that would eliminate the effect of restrictive property covenants on amateurs is believed to be the first of its kind, according to ARRL Georgia Section Manager Jim Altman, N4UCK.

The bill, H.B. 1134, would prevent all new and renewed covenants from regulating, controlling, or restricting antennas owned and operated by licensed amateurs in the state.

Altman said that, in Georgia, all restrictive covenants have a life of 20 years, but can be renewed. This law, in banning new and renewed covenants, would leave existing covenants in place until their natural expiration, and prevent new ones. Over the next 20 years, all existing covenants would disappear.

The bill was initially referred to the State Bar committee on real property law, which gave the measure a "do pass" recommendation.

The bill mentions that Amateur Radio is federally created and protected, in part to provide emergency communication; that local zoning laws are partially preempted by an FCC declaration; that local zoning authorities do have the power to ensure the safety and "appropriateness" of antenna installations: and that restrictive covenants on antennas are

a "serious frustration" of amateurs' role in emergency communication.
The new bill would add the following subsection to Georgia law on covenants:
No covenant shall control, regulate, or restrict the installation of antennas within the subdivision by federally licensed amateur radio operators.
Amateurs in Georgia are urged to contact their state legislators and ask for their support of H.B. 1134. For more information, contact Altman or the Regulatory Information Branch at ARRL Headquarters.
VANITY CALL SIGN EXTENSION SOUGHT
The ARRL has requested an extension of the comment deadline on an FCC proposal to establish a "vanity" call sign system.
The FCC's Notice of Proposed Rule Making, in PR Docket 93-305, was released December 29, 1993, with a comment deadline of March 7, 1994.
The League immediately published the NPRM, in its entirety, in February 1994 QST, asking members to make their views on the matter known to their directors.
In its request for an extension of time for comments, until April 21, 1994, the ARRL said that enabling amateurs to choose a call sign was a great opportunity and a "difficult administrative process for the Commission.
"The allocation of a scarce resource, such as preferred call signs, raises distinct issues of fairness," the League said.
"Of particular concern is the establishment of a system of priorities for applicants for special call signs," the League said.
The League also said that the March 7 comment deadline simply did not allow enough time for ARRL members to express their views on the proposal and for the ARRL board to then formulate a position, and that legislation pending in the Congress could affect the way by which the FCC could charge fees for call sign requests.
BRIEFS
* Beginning March 1 the FCC will accept only the new version of its Form 610, as explained in February and March QST "Exam Info."
The current ARRL-VEC newsletter, VE Express, includes a full-size version of the new Form 610, and the ARRL-VEC has sent bulk quantities of the new form to all of its 650-plus "field stocked" VE teams, recommending that they begin using the new form on February 12, to allow sufficient turnaround time.
Copies of the new 610 form are available for an SASE from ARRL Headquarters.
* Contest operators once again will have the chance to swap lies about their QSO rates at the 2nd Annual Dayton Contest Dinner. It's the Saturday evening of the HamVention, April 30, 1994, at 6:30 PM at the Stouffer Center Plaza Hotel. Cost is $25 per person and reservation deadline is April 10, 1994. Send check and SASE to North Coast Contesters Dayton Dinner, PO Box 59, New Bedford PA 16140.
* On January 15 Ian Suart, GM4AUP, was installed as the 60th president of the Radio Society of Great Britain, succeeding Peter Chadwick, G3RZP. The new RSGB executive vice president is Clive Trotman,

GW4YKL. The RSGB said that "although the EVP frequently becomes president for the following year, this is not decided until the autumn."
* On January 26 the FCC granted the ARRL-VEC an extension of time to provide financial information concerning reimbursement arrangements for volunteer examiners. Last fall the FCC asked all VECs to provide such information for 1993, with a deadline of the end of January.
The ARRL said that its auditing firm will not complete its work on the League's 1993 finances until sometime in March, and the ARRL wished to wait until the audit is complete.
The League said it assumed that the other VECs would be given the same accommodation.
The FCC extended the deadline to March 31, 1994.
* Russia has reserved new call sign blocks as follows: R1MVA-R1MVZ for Malyj Vysotskij Island; R1FJA-R1FJZ for Franz Josef Land; and R1ANA-R1ANZ for Antarctica. These replace the 4J/4K call signs previously used, which are no longer available to Russia. The new call signs may not immediately be put into use.
* Here's a list of countries who joined the International Telecommunication Union in 1993: Czech Republic; Georgia; Slovakia; Kazakhstan; Micronesia; The Former Yugoslav Republic of Macedonia; Turkmenistan; Eritrea; Andorra. The ITU now has 182 members.
* The average cost of a hard cover technological book is now $48.83, according to Publisher's Weekly. The cost of the ARRL Handbook? -- $25. The Handbook has sold more than six million copies since Ed Handy, W1BDI, wrote the first one in 1926.
* The commander for space shuttle and SAREX flight STS67 in early 1995 will be Steve Oswald, KB5TSR. He will join SAREX veteran Payload Specialist Ron Parise, WA4SIR.
* The FCC has tallied some numbers on the Volunteer Examiner system since its 1984 debut, through late 1993: number of VE sessions, 56,485; number of people attending: 640,453; number of examination elements administered: 1,052,269.
* In the days following the January 17 earthquake near Los Angeles, amateurs were active in support of public service agencies and the Red Cross through both the Radio Amateur Civil Emergency Service (RACES) and the Amateur Radio Emergency Service (ARES), according to ARRL Los Angeles Section Manager Phineas J. Icenbice Jr, W6BF. If you have photos and/or stories about amateurs in action following the quake, please send them to Rick Palm, K1CE, at HQ.
* A call for papers has been issued for the 13th ARRL Digital Communications Conference, with a deadline of June 20, 1994. The conference will be held August 19 to 21 in Bloomington, Minnesota, and its theme is "Digital Communications -- Amateur Radio of Today&#65533; and the Future." Submit papers to Maty Weinberg at ARRL HQ.
* Broadcast professionals are invited to visit the ARRL Amateur Radio booth at the annual convention of the National Association of Broadcasters, March 21 to 24 in Las Vegas. The League will be in Booth 2703.
* New amateur satellite Korean Oscar 25 (KO-25) became available for use on February 1. The satellite, launched last fall and originally

designated KITSAT-B, has been under test since then. "We hope you enjoy our new star in space," said Hyungshin Kim, a staff member of the satellite's sponsor, the Korean Advanced Institute of Science and Technology. More information on KO-25 was in October 1993 QST, page 98.
* Tom Hogerty, KC1J, has been named Special Projects Manager at ARRL Headquarters. Building on his success in the clearance of the DXCC backlog last year during his tenure as DXCC manager, Tom's first project will be to investigate how services to members are rendered and how they can be improved..
The new DXCC Manager is Bill Kennamer, K5FUV, who joined the staff in June 1992. Bill also conducts the QST "How's DX?" column.
10 years ago in The ARRL Letter
The FCC clarified new rules under which Novice examinations were given regarding who was eligible to administer those exams. The FCC opened 144.5 to 145.5 MHz to RACES operations during declared emergencies, a move favored by the League because it would allow ARES operators to participate in RACES communications with their existing 2meter equipment. Two years after their debut, cordless telephones were assigned 10 duplex channels at 46 and 49 MHz while the FCC sought "a permanent home for these devices." Early cordless phones operated near 160 meters, causing headaches for their users and Top Band operators alike.
2 meters a life saver
Amateur Radio may have saved a life when Diana Carlson, KC1SP, used a local repeater to report an apparent suicide attempt to police.
Carlson, of Hudson, New Hampshire, was on her way to work at GenRad in Concord, Massachusetts, the morning of January 10, when she and another motorist observed a man climbing the railing of the Merrimack Bridge, which leads into the city. The man's auto was parked directly in front of Carlson.
While the other motorist talked to the man, Carlson first tried a call on 146.52, which she knew was sometimes monitored by the Westford, Massachusetts, police, then switched to the 147.120 repeater in Billerica. Larry Garneau, N1QEZ, who was mobile, responded and passed the message to his wife, Virginia Garneau, N1QFA, who telephoned police.
An officer of the Tyngsboro Police arrived in time to pull the 27-year-old man from the railing of the bridge.
"The policeman jumped out and hurriedly ran to the man, grabbed his arm and pulled him back onto the bridge," Carlson said. "My heart is in my throat&#65533; and then it's over. All of this, from first call to the rescue, took less than five minutes."
Carlson's husband David is N1JYX, her son is KA1VWX, and her daughter is KA1VUA.
Shipping Shipping
The ARRL shipping department has moved to a new, offsite leased warehouse. The League's list of titles, including books and supplies such as maps and logbooks, has grown to more than 150 since the Headquarters building was expanded in 1978, and the weight finally became more than the present building could accommodate. "The Handbook alone weighs more than five pounds," Circulation Manager Debra Jahnke said, "and we store

and ultimately ship more than 20,000 of them a year."
The new warehouse, about half a mile from HQ, has 9800 square feet, compared to 6200 formerly devoted to shipping and storage at HQ (and the new warehouse is on the first floor of its building!). "We expect much more efficient inventory control," Jahnke said. "We used to have to store books at not only a rented off-site facility in Connecticut but also at an R. R. Donnelley warehouse in Indiana."
The ARRL shipping department moves out more than 500,000 pounds of publications a year.

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==========
Marc B. Grant Voice Mail: 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com
==========

1599. Re: Copying High-Speed CW: Print or Scr

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 12:45:37 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9402160744591.gilbaronw0mn.DLITE@delphi.com>
Source record: 271051

>Gilbert Baron (gilbaronw0mn@delphi.com) wrote:
>: ,LT
>: >A mailing I read is involved in a comparision of the speeds of
>: >printing and cursive writing. I decided to consult some experts.
>: >So, all you high-speed CW ops, which do _you_ use?
>: >
>: >
>: >73,
>: >mag
>: >
>: >--
>: >Michael A. Gauland gaulandm@tekig7.PEN.TEK.COM
>: >AA7JF (503) 627-5067
>: >
>: Printing is not feasabile above 25 WPM. You must learn to use cursive.
>
>: Gil Baron, El Baron Rojo, W0MN Rochester,MN
>: "Bailar es Vivir"
>: PGP2.3 key at key servers or upon request
>
>
>
>
>If you want to learn to receive cw for conversation, forget writing any of
it
>down. You then need to think of words, not letters.
>--
>
>Doug Snowden
>drs@ccd.harris.com
>N4IJ
>
>
>
I agree with that, however if you wish to prove your speed in any test or
competition then you must transcribe in some way. It may be typwriter or
cursive or what have you but it must be done. I would not say it is
impossible, one guy at least has done it at soething like 78 wpm.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

1600. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 13:00:55 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb16.130055.21938@tellab5.tellabs.com>
Source record: 271052

In article <CL8qE6.Lxz@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>John W. Albert (jwa@tellabs.com) wrote:
>
>: Several add-ons will include, a better A/D...
>: ... for Ham use you only need an... 8 bit A/D.
>: Jack Albert WA9FVP
>
>Jack, if for Ham use you only need an 8 bit A/D then why will your add-ons
>include a better A/D? I have a direct conversion receiver and have found
>that an 8-bit A/D is not good enough for weak signal CW reception. With
>8-bits of dynamic range, I spent all my processing power in scaling and
>avoiding saturation from strong signals. 16-bits gives me some needed
>headroom.

The Hamblaster has a 14 bit A/D. The add-on (I don't have the details
about this) may use a sigma-delta A/D. There may even be a super fast
sampler to do I.F. processing in the works.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

Why do they call them concetration camps?
When people go there, do they really concentrate?

1601. Need Info. on exam schedules in New Delhi, India

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 13:29:02 UTC
From: kpm@atl.hp.com
Message-ID: <2jt72u$u0@hpuerca.atl.hp.com>
Source record: 271053

A friend of mine would like to get his first Amateur Radio license in New Delhi, India. He requested the Amateur Radio Institute, Hyderabad, India to send him the information. He only received study materials but no exam schedule. Since Amateur Radio exams are held very infrequently and location varies every year. He would like to get in touch with Amateur Radio operators in New Delhi area. If someone on the net has an International Call Sign directory and can look up 3-4 names, addresses, phonenumbers and callsigns and email it to, will help my friend get one step closer to becoming a HAM.

Best Regards,
Kaushik Mehta (KE4IHB)

1602. Re: Club Stn. U of Illinois??

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 13:49:28 UTC
From: wkinning@nyx10.cs.du.edu
Message-ID: <1994Feb16.134928.6209@mnemosyne.cs.du.edu>
Source record: 271054

Keith Poole <kp2a+@andrew.cmu.edu> writes:

>Is there an amateur radio club station at the University of Illinois at
>Urbana-Champaign? If so, is it possible for visitors to use it on HF?

>Thanks.

>Keith Poole K7MOA/3

Yes, the name of the club is the Synton Amateur Radio Club, and their
E-mail address is synton@uiuc.edu. They used to have (still do ?) Friday
night informal get togethers and work some HF, so that would be a good
time to stop by and see the club. Otherwise you'd need to organize a
sched with a club member to use the station.

Warren Kinninger, N9MLK
wkinning@nyx.cs.du.edu

1603. Help me find quartz for TV station in Novosibirsk

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 13:50:16 UTC
From: Al-r Mainichev <main@msib.nsk.su>
Message-ID: <AAOIYOjmC5@msib.nsk.su>
Source record: 271055
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi, world!

Anybody know where can I find a few quartz resonators for
governmental TV station in Novosibirsk, becouse component plants in
Russia are stay or closed and component distributors demand minimal order
in $1000.

Please, help me find quartz

Freq Q-ty
98,217 MHz 1
48,972 ... 1
49,986 1
50,388 1
50,791 1
52,000 1
52,201 1
52,590 1
53,368 1
44,333333 1
5,13550 8 <-- urgent & urgent
5,040 2 <--

98,217 KHz 2

Please, answer me directly by e-mail, because I don't follow
this newsgroups.

Thanks,

Alexandr N.MAINICHEV /Telex: (64)412062 OCTET SU,
/ BOX 50516
Dipl.Physic. / POST BOX 82, / main@msib.nsk.su
Director of / NOVOSIBIRSK-90, / Fax:(383 2) 35 68 11
"Agency MicroSib" / 630090, RUSSIA / Ph :(383 2) 35 44 28

1604. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 14:03:26 UTC
From: wvhorn@magnus.acs.ohio-state.edu
Message-ID: <2jt93e$ds9@charm.magnus.acs.ohio-state.edu>
Source record: 271056

In article <2jqi1t$rer@pegasus.cc.ucf.edu>,
John W. Meaker <jm6033@pegasus> wrote:

> I'm curious about nude QSL cards. Would anyone be offended if they
>received a QSL card in the mail with nude people on it? Would it be
>better to mail the card in an envelope? The envelope increases the
>cost of mailing a QSL considerably, and cost a consideration when you
>mail many cards.

Even the *thought* of receiving a QSL card with a nude picture of the average
ham on it is enough to offend me. I mean, seriously, folks. Leaf through
any QST of recent (or even ancient) vintage, look at the pictures of the
hams and imagine seeing them nude.

It's enough to make one take up needlepoint.

---Bill VanHorne

1605. Re: A code speed question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 14:05:08 UTC
From: jackson@cs.nyu.edu
Message-ID: <2jt96k$75m@longlast.cs.nyu.edu>
Source record: 271057

In article <2jp6ie$129@bigfoot.wustl.edu> jlw3@cec3.wustl.edu (Jesse L Wei) writes:

>Here's a question for you. . .after copying by keyboard, can you copy
>by hand still????

I have actually never copied a single character by hand yet. I am still very new to learning the code and every second has been spent on the computer. I received my first bad mark for handwriting in the second grade and was programming computers by the sixth. The writing has only gotten worse and the typing has moved to 70wpm since then.

Maybe I'll bring a notebook computer with me, accompanied by a little begging. :-)

Steve
--
Steven Jackson New York University
Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012
"Not in my head.. so I don't have to think.." -- Nik Fiend

1606. Re: FCC: Whats taking so long????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 14:42:41 UTC
From: randolph@est.enet.dec.com
Message-ID: <CLBnsI.L4v@ryn.mro.dec.com>
Source record: 271058

Yet another data point... took the General and Advanced tests in December, just got the license on Monday... just about 11 weeks. The amazing part is I can still copy at 13 wpm after this much time!

-Tom R. N1OOQ (no longer /AA) randolph@est.enet.dec.com

1607. Need Ham related clip art

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 14:57:31 UTC
From: hendra.gary@ssvax1.ssd.loral.com
Message-ID: <hendra.gary-160294065540@mac2199.ssd.loral.com>
Source record: 271059

I am the newsletter editor for the South Peninsula Amateur Radio Klub
(SPARK).
I'm looking for ham related clip art to use in the newsletters. If you
know where I
can get some, preferably in the public domain, free, etc, please let me
know by
e-mail. I can get things via anonomous ftp. I can also convert most
encoding formats
that might be used in e-mail attachments.

Thanks, and 73.....Gary, WA6SUW

1608. ARLB019 Instant license opposed

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 15:29:37 UTC
From: w1aw-list-approval@WORLD.STD.COM
Message-ID: <$arlb019.1994@ampr.org>
Source record: 271060
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

SB QST @ ARL $ARLB019
ARLB019 Instant license opposed

ZCZC AG83
QST de W1AW
ARRL Bulletin 19 ARLB019
From ARRL Headquarters
Newington CT February 15, 1994
To all radio amateurs

SB QST ARL ARLB019
ARLB019 Instant license opposed

Instant license opposed

In reply comments to the FCC on a proposal for instant operating authority for new amateur operators, PR Docket 93-267, the ARRL said that, ''almost without exception,'' groups and individuals who had responded to the proposal agreed with the League that the idea should be shelved in favor of electronic filing of license applications with the FCC.

The ARRL said that the mechanisms for such electronic filing of Form 610s ''cannot be more than a few months away at worst.''

The League said that the FCC plan would invite abuse because, among other reasons, ''The Commission itself suffers an inability to stem the tide of unlicensed operators in any radio service, because of limited enforcement resources.''

In response to a counter proposal by the W5YI-VEC, that the FCC's plan be modified to avoid abuse by having volunteer examiners assign temporary call signs from blocks allocated to them by the FCC, the League said this would be an unbearable burden and responsibility on the VEs.

The League said that, at any rate, the Communications Act gives no basis for the FCC to delegate call sign assignment authority, including determining a licensee's basic qualifications, which VEs would have no way of doing.

The League once again asked that the proceeding be terminated in favor of electronic filing as soon as feasible.
NNNN
/EX

1609. ARLB018 Study eyes 2300 MHz

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 15:30:23 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlb018.1994@ampr.org>
Source record: 271061
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.info

SB QST @ ARL $ARLB018
ARLB018 Study eyes 2300 MHz

ZCZC AG82
QST de W1AW
ARRL Bulletin 18 ARLB018
From ARRL Headquarters
Newington CT February 15, 1994
To all radio amateurs

SB QST ARL ARLB018
ARLB018 Study eyes 2300 MHz

Study eyes 2300 MHz

A preliminary plan from the National Telecommunications and Information Administration (NTIA) for reallocating government frequencies to non-government uses does not go far enough in responding to the will of Congress in protecting the needs of amateurs, the ARRL says.

Specifically affected would be the 2300 to 2450 MHz band. The preliminary plan would transfer some of that band to new non-government uses, which would not necessarily result in the loss of frequencies for amateurs, but amateur sharing could be more difficult than it now is with government users.

NTIA proposes to leave 2400 to 2402 and 2417 to 2450 MHz as now allocated, in part to permit continued amateur and, especially, amateur satellite operation. 2390 to 2400 and 2402 to 2417 MHz would be made available for new non-government services as early as August 1994, and 2300 to 2310 MHz would be made available later, under the NTIA plan.

In 1990 the ARRL commented to the NTIA when a study of domestic telecommunications infrastructure was begun. At that time, the League said that Amateur Radio's role of education and public service depended on it not being taken for granted in its modest spectrum needs.

In late 1992 the NTIA issued a notice of inquiry asking spectrum users what their future needs would be, and the League responded with a list, including ''continued or upgraded access to 2300 MHz for both terrestrial and satellite uses.''

The plan is the proposed implementation of a reallocation of spectrum from government to non-government use mandated by Congress last year.

A public comment period on the plan runs until May 1994.
NNNN
/EX

1610. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 16:00:09 UTC
From: ben@yosemite.sps.mot.com
Message-ID: <CLBr49.Knx@oakhill.sps.mot.com>
Source record: 271062

In article <1994Feb16.102121.27897@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
>In article <2jqi1t$rer@pegasus.cc.ucf.edu> jm6033@pegasus (John W. Meaker) writes:
>>
>> I'm curious about nude QSL cards. Would anyone be offended if they
>>received a QSL card in the mail with nude people on it? Would it be
>>better to mail the card in an envelope? The envelope increases the
>>cost of mailing a QSL considerably, and cost a consideration when you
>>mail many cards.
>
>It rather much depends on what the nude people look like. Some people
>shouldn't appear in public nude. Ugh!

OK, OK, we promise to depict only "beautiful" humans who happen to be nude...

:)

--ben
--
Ben Thornton Amateur call: WD5HLS
Internet: ben@yosemite.sps.mot.com Motorola Inc., Austin, TX
Caution: Wearing clothes has been shown to cause permanent psychological
dependence on textiles. WEAR THEM AT YOUR OWN RISK.

1611. Nude QSL or HAMFEST?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 16:05:23 UTC
From: gdavis@griffin.uvm.edu
Message-ID: <gdavis.761414723@griffin>
Source record: 271063

Ofcourse, I can't speak for everyone, but people who understand
that being Nude does not in and of itself mean SEX are those that
most likely understand the nudist philosophy.

If we (men or women) are over forty, we are very fortunate if Isaac
Newton (gravity) hasn't taken over the tummy.

The reason kids are so cazy about nudism or at least photos is that
in their entire life they have been taught a kind of false modesy.
" My body is dirty" or "Somebody will criticize my body if I'm nude".

I guess in american society, which will not allow nudism on TV or even
the press, why should I be surprised if most licensed hams equate nude
bodies with sex and if you don't have the body of a greek God, for
God's sake keep your clothes on.

In Europe, general nudism is better acceppted and everyone is NOT
expected to have the body of a greek God.

In many ways American's have a very juvenile and puritanical view
of our birthday suit.

I say, if you want to take it off... well... why not?

73 Gary... Buffing in Vermont is soooo hard in winter!

--
******** Gary E. Davis***** WQ1F *****
The most common of all follies is to believe passionately in the
palpably not true. It is the chief occupation of mankind.-H.L.Mencken

1612. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 16:25:06 UTC
From: ben@yosemite.sps.mot.com
Message-ID: <CLBs9u.KyG@oakhill.sps.mot.com>
Source record: 271064

In article <CLAFwp.J8C@cup.hp.com>, Jim Hollenback <jholly@cup.hp.com> wrote:
>lbrunson@rodgers.rain.COM wrote:
>
>: There has been considerable discussion about the demography of the
>: amateur radio community and how we can attract younger people to the
>: hobby. Although nude QSL cards may attract teen-age boys to the hobby, I
>: hope we don't have to resort to this method.
>
>: My son got his novice license when he was 11 and my daughter when she was
>: 8. Regardless of what you may think about my moral values and religious
>: convictions, I feel it is my responsibility to teach them to my children
>: and help guide them through the difficulties of puberty which are before
>: them. I would feel extremely offended if someone sent a nude QSL card to
>: either of my kids. I do not wish either of my kids to be receiving nude
>: photos in sealed envelopes, either.
>
>: My opinion is not up for debate here. Remember, the question is whether
>: nude qsl cards may be offensive. I suspect that there may be some people
>: who preach tolerance but will not tolerate my position on this issue.
>: They may even be driven to challenge my beliefs. As this is not the
>: issue, their comments are being redirected to /dev/null.

Your opinion is quite cheerfully respected.

>
>: Best Wishes. Lowell (kc7dx)
>
>No, I don't think your out of place. Would one send a nude QSL to a foreign
>country? I certainly hope not. In some counties they would be banned and
>could get the recieving ham in trouble. Besides, what sort of image are
>you presenting for the U.S.? If you would not send one to a foriegn country,
>why send one to a U.S. ham. Some would definitely be offended, othere would
>think you a jerk at best. Go get a W4MPY or WA6AHF QSL, or one with you
>full dressed in your shack with your dog/cat/bird/snake.

I don't think that anyone would be sent a QSL with nude people depicted on
it unless they specifically wished to receive it. Whatever else you may
think, nudists and naturists generally respect others' desire to avoid
seeing other nude people.

Having said that, however, you may wish to consider the fact that there
is nothing inherently shameful about the nude form. Many European countries
have already discovered this. The image of the U.S., to many who live in
these countries, is one of extreme puritanism when it comes to nudity.

Of course there are still countries who are not quite as tolerant, but they would not be sent any QSL's with nudity on them.

--ben
--
Ben Thornton Amateur call: WD5HLS
Internet: ben@yosemite.sps.mot.com Motorola Inc., Austin, TX
Caution: Wearing clothes has been shown to cause permanent psychological dependence on textiles. WEAR THEM AT YOUR OWN RISK.

1613. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 16:45:16 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLBt7H.K16@ucdavis.edu>
Source record: 271065

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <2jqi1t$rer@pegasus.cc.ucf.edu> jm6033@pegasus (John W. Meaker) writes:
: >
: > I'm curious about nude QSL cards. Would anyone be offended if they
: >received a QSL card in the mail with nude people on it? Would it be
: >better to mail the card in an envelope? The envelope increases the
: >cost of mailing a QSL considerably, and cost a consideration when you
: >mail many cards.

: It rather much depends on what the nude people look like. Some people
: shouldn't appear in public nude. Ugh!

'Tis true I are one. :-)

Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* The only thing I can officially say for the University is: *
* What I say is in no way related to oficial University policy *
--

1614. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 16:50:46 UTC
From: jimc@megatek.com
Message-ID: <1994Feb16.165046.393@megatek.com>
Source record: 271066

In article <2jrovm$qss@reznor.larc.nasa.gov> kludge@grissom.larc.nasa.gov (Scott Dorsey) writes:
>In article <CLAFwp.J8C@cup.hp.com> jholly@cup.hp.com (Jim Hollenback) writes:
>>
>>No, I don't think your out of place. Would one send a nude QSL to a foreign
>>country? I certainly hope not. In some counties they would be banned and
>>could get the recieving ham in trouble. Besides, what sort of image are
>>you presenting for the U.S.? If you would not send one to a foriegn country,
>>why send one to a U.S. ham. Some would definitely be offended, othere would
>>think you a jerk at best. Go get a W4MPY or WA6AHF QSL, or one with you
>>full dressed in your shack with your dog/cat/bird/snake.
>
>Come on, nobody is forcing QSL cards on the world. If you, as a nude ham,
>have a nude QSL card, you should by reasonable standards of politeness,
>inform the person on the other end during your QSO. If he objects, send
>him a non-nude QSL. If you're doing serious DX and you don't have time
>to inform anyone of this, you ought to either slow down and do some
>ragchewing or send a non-nude one out by default. Sheesh. This is a
>non-issue that isn't worth debating here.
>--scott
> (who isn't nude, although his transmitter is. Need to put the cover
> back on before doing any serious ragchewing...)
>--
>"C'est un Nagra. C'est suisse, et tres, tres precis."

Thanks, Scott.

I think something that is getting missed here is the fact that the particular QSL card in question is commemorating something call Nude Recreation Week. The stations that would be mailing the QSL card will definitely, absolutely, plainly. (etc) inform the other station that the QSL card has a picture of nude people on it. The setting will most likely be families at the beach, a lake, river, or similiar setting. It will *not* have anything "suggestive" or "lewd" or anything like that at all.

I don't want to ignite any debates about minors seeing the photo against their parent's wishes, but I think if the parents were to see the picture first, they would see that there isn't really anything to worry about on this one (I could be biased, of course). If they're old enough to ask about why these families aren't wearing any clothes, they're old enough to be told that some people choose not to wear clothes. Nudists/naturists know this is *not* an issue dealing with sexuality. Just as the one guy was implying, that is a matter to be handled within the family. (most nudists/naturists have no interest in interfering with family moral teachings -- just don't take away our nude beaches! :^)

Foreign hams will be informed what's up with the QSL card as well. It's true that some of the countries are more strict about what arrives in the mail, but the ham that is to receive the QSL card can determine for themselves if it's ok to receive it or not. They don't need anybody over here making that decision for them, thank you.

There isn't going to be any "suprises" in the mail. If you want to work one of the stations involved but don't want the nude QSL card, you'll be given the opportunity to say so. What's the big deal?

73,
-jim

--
Jim Campbell "The Tye-Dye Guy" | "Remember to tweet!"
jimc@megatek.com | When in doubt, you're probably
WB6ZPB NSS ASA TNS | unsure about something

1615. FT-5100 vs. TM-732A - Recommendations?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 17:03:24 UTC
From: peterson@physc1.byu.edu
Message-ID: <1994Feb16.100324.1373@physc1.byu.edu>
Source record: 271067
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

The Amateur Radio Club here at BYU is considering purchase of a new dual-band mobile system for general use as well as for emergency communications. We have looked at the range of radios available and it appears that the front runners are the Yaesu Ft-5100 and the Kenwood TM-732A (possibly the Kenwood TM-742A but the price is a little high). These radios all have the dual in-band receive and the cross-band repeat functions. The Yaesu also has the data jack (recently discussed as really nice for 9600 baud but useless for 1200 baud packet) that is appealing. However, the ads never talk about such things as intermod problems and quirks in operation. I would appreciate any feedback from anyone - both positive and negative - on these radios. Especially if you have used both of them. The RF environment is not extreme in this area but is getting worse so intermod and imaging problems are a concern.

Thanks for any help and information you can provide.

Bryan Peterson, ki7td
peterson@physc1.byu.edu
Brigham Young University Amateur Radio Club

1616. Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 17:04:14 UTC
From: patrick_tatro@stortek.com
Message-ID: <patrick_tatro.27.7C558180@stortek.com>
Source record: 271068

When practicing for my code test I use the Morse Academy software on my computer. I'm finding my keyboard code speed is now 14wpm but my paper code speed is still at about 10 to 11wpm.

Would the VEC's kick me out if I brought a laptop to a code test session or should I wait until my paper speed catches up to my keyboard speed?

Opinions requested.

73's
Patrick Tatro N0WCG

1617. Looking for Sigma Design Associates...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 17:13:04 UTC
From: ydupont@Qc.Bell.CA
Message-ID: <CLBuHt.Mox@on.bell.ca>
Source record: 271069

In a past article in the October 92 issue of 73 Magazine there was a reference to a company named "Sigma Design Associates" located at 22150 Berkeley Court, Los Altos CA. They had a kit which can be used with software to emulate a TNC at a very low cost.

Does anyone have phone or fax number of that company?
Or does anyone know if that company still exists or has moved???
I tried directory assistance without success...

Thanks,

Yvan - VE2YDU

Bell SYGMA, Telecom Solutions
30 Renaud, Loretteville (Qc) CANADA G2A 2K7
TEL: 418-843-7564 FAX: 418-842-9559
Internet: ydupont@Qc.bell.CA HAM: VE2YDU

Disclaimer: The opinions expressed here are mine and not my employer's.

1618. Iambic keyer paddles

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 17:30:26 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Feb16173026@mipgsun.mipg.upenn.edu>
Source record: 271005

I am told that in general, right handed operators use the right paddle for the dash while the left paddle is used for the dit. OK no problem so far.

Is there a rationale behind this convention?

If right handed people use their right hand to send code, why do they do this? It seems to me that it would be much more convenient to send code with the left hand so that the right hand is kept free to copy incoming code. This is the same logic that is used with baseball mitts. Is it that strictly right handed people can not do this?

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

1619. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 17:31:15 UTC
From: jbloom@arrl.org
Message-ID: <1994Feb16.173115.8288@arrl.org>
Source record: 271070

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <1994Feb14.131000.8706@arrl.org> jbloom@arrl.org (Jon Bloom (KE3Z)) writes:
: >Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: >: In article <bote.760946660@access1> bote@access1.digex.net (John Boteler) writes:
: >: >I have gotten a bug up my rear to configure our point-to-point
: >: >repeater linking system with digital paths ranging 20
: >: >to 40 miles apart.
: >[deleted]
: >: Well lets look at some numbers and see. Lets assume
: >: you want "broadcast" grade audio. That's a SNR of
: >: 50 db. Digital transmission regenerates bits so
: >: that above a certain threshold level the effective
: >: SNR is only the quantization error of the digital
: >: equipment itself. A crude way of looking at this
: >: is to consider this error as bit jitter at the lsb-1.
: >: So an 8 bit system would have a SNR of 10*log(2^9)=27 db.
: >: That's obviously not good enough. 16 bits yields a SNR of
: >: 10*log(2^17)=51 db which is close enough for our purposes.
: >
: >Use 20*log(x), since we're talking about a voltage ratio. An easy rule
: >of thumb is 6 dB of SNR per bit of quantization. It's actually a tad
: >better than that, since the quantization error is not constant;
: >sometimes the error is a small fraction of one LSB, sometimes it's up
: >to half an LSB. 8 bits will give you about 50 or so dB of SNR.

: Well I don't want to get into a big fight about comparing power spectra
: ratios to voltage ratios, I'll just say that it's the power spectrum that
: you hear. If you want to use voltage ratios instead, that's fine, but it
: means I'll have to raise the "broadcast quality" number to the 90-100 db
: range instead of the 45-50 db range.

Ummm... 50 dB is 50 dB whether expressed as a voltage ratio or a power
ratio. That's precisely why we use 20 as the coefficient when
calculating decibels on the basis of voltage ratios. That is:

power ratio = [(V1)^2 / R] / [(V2)^2 / R] = (V1/V2)^2

so, in dB,

dB = 10*log[(V1/V2)^2] = 2*10*log(V1/V2) (by properties of logarithms)
= 20*log(V1/V2)

To talk about a "power dB" as separate from a "voltage dB" is
meaningless, *unless* the two voltages you are comparing occur across
different impedances, which is not the case here. Your statement makes
no sense.

So, what's enough SNR, 50 dB or 100 dB? I suggest it's 50 dB. A compact disk gives you about 90 dB, and I'd hate to think we need better than CD quality on our voice links!

Of course, to realize the 50-dB SNR from the 8-bit system, the signals have to use all of the available signal range. If you use less, the SNR is reduced proportionally, as the signal is closer to the noise floor. That probably argues for something on the order of a 12-bit converter for "overhead." But with good ALC ahead of the A/D, 8 bits might be acceptable.

--

Jon Bloom KE3Z jbloom@arrl.org

1620. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 17:36:32 UTC
From: jbloom@arrl.org
Message-ID: <1994Feb16.173632.8540@arrl.org>
Source record: 271071

jramsey@delphi.com wrote:
: Jon Bloom (KE3Z) <jbloom@arrl.org> writes:
:
: >harmonic spectral purity requirements.) They promised to send us one of
: >the new units as soon as it became available. (Normally, we only
: >*purchase* Product Review items, but we decided that it would be hard
: >for them to fine-tune a kit :-)
: > We waited a couple of months, then called Ramsey. To make a long
: >story short, we called *every* couple of months, but we never received
: >the promised radio. Finally, we just bought one (through a third
: >party). This is the unit we reviewed. In March of 1993, we contacted
:
: And one wonders why we don't advertise in QST, it's the attitude of
: history re-writers such as J.B. I was there, and the facts just ain't so.
: I'd rather talk on the phone! But I had to respond to such talk. You see, the
: ARRL couldn't get their kit to work! So we sent them an assembled unit.

No, as I said before, it *did* work, but didn't meet spectral purity requirements. *That's* why we requested an assembled unit--which also didn't meet the requirements and worked just like the one we built.

By the way, when I was doing the phone calling (eventually I turned it over the the Product Review editor), I spoke not to you, but to one of your employees. So I'm not sure how you can claim first-hand knowledge. Of course, it may be that your employee was telling me one thing and telling you something different.

: Yes it did not meet the FCC specs for spurious - missing by about a db or
: two (I'm at home and don't have notes handy). The ARRL missed the whole
: point of the kit which was to promote kit building, etc,etc. Now. I'm
: sure you are thinking, "but it didn't meet FCC!" True, but for a fascinating
: contrast, look at the GLOWING review of the MFJ regen receiver! Guess it
: doesn't spray RF.I do believe that MFJ has been quite a big QST advertiser, too.

As for the MFJ receiver, the RF amplifier in the front end probably keeps the radiation down to an insignificant level.

Our obligation in Product Review is to present all the relevant facts our members might want to know about a product. The failure to meet spectral purity requirements (by more than "a dB or two," by the way) certainly falls into the category of "relevant facts," as does the demonstrated receiver strong-signal performance. Also in that category, for a kit, is information about the quality of the assembly instructions and manual, which we said were good. Sure, we covered product performance, not only the building itself, because in the end, the buyer wants the enjoyment of building *and* the performance.

Whether or not a manufacturer advertises in QST has no bearing on whether a product is selected for review. I don't imagine you'll believe that, but it's true. To keep it that way is one reason why the person who selects what will be reviewed and the person in charge of advertising are two different people who work in wholly separate branches of the HQ organization.
--
Jon Bloom KE3Z jbloom@arrl.org

1621. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 17:38:21 UTC
From: t1terryb@cascade.ens.tek.com
Message-ID: <2jtlmd$9a8@cascade.ens.tek.com>
Source record: 271072

>
>him a non-nude QSL. If you're doing serious DX and you don't have time
>to inform anyone of this, you ought to either slow down and do some
>ragchewing or send a non-nude one out by default. Sheesh. This is a
>non-issue that isn't worth debating here.
>--scott

Do you suppose this might be away of increasing percentage of QSL
returns? I suppose if all else fails, you might try it!
(smiley)

Terry, KI7M

1622. Re: Nude QSL or HAMFEST?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 17:53:32 UTC
From: wvhorn@magnus.acs.ohio-state.edu
Message-ID: <2jtmis$f9f@charm.magnus.acs.ohio-state.edu>
Source record: 271073

In article <gdavis.761414723@griffin>,
Gary Davis <gdavis@griffin.uvm.edu> wrote:

>I guess in american society, which will not allow nudism on TV or even
>the press, why should I be surprised if most licensed hams equate nude
>bodies with sex .....

Has the ARRL done a survey on this? I think we need some data.

.................and if you don't have the body of a greek God, for
>God's sake keep your clothes on.

Words to live by, Lloyd. Words To Live By.

---Bill VanHorne

1623. Re: Hosstraders

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 18:24:52 UTC
From: rrossi@vnet.IBM.COM
Message-ID: <199402161827.KAA27993@ucsd.edu>
Source record: 271074

Could someone please post the dates for this year's Hosstraders Hamfest in Rochester, NH?

Ron Rossi

/===/
/ IBM Microelectronics Internet: rrossi@vnet.ibm.com /
/ H/P ASIC SRAM Design VNET: RROSSI at BTVLABVM /
/ Dept N93 Bldg 861-2 Voice: 802/769-7477 /
/ 1000 River Road RF: N1PBT/AG /
/ Essex Junction, VT 05452-4299 /
/ /
/ "I work for IBM, I don't represent its views!" /
/ /
/===/

1624. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 18:26:40 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb16.182640.13716@tellab5.tellabs.com>
Source record: 271075

In article <1994Feb16.130055.21938@tellab5.tellabs.com> jwa@tellabs.com (John W. Albert) writes:
>In article <CL8qE6.Lxz@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>>John W. Albert (Myself) (jwa@tellabs.com) wrote:
>>
>
>The Hamblaster has a 14 bit A/D. The add-on (I don't have the details
>about this) may use a sigma-delta A/D. There may even be a super fast
>sampler to do I.F. processing in the works.
>
I was wrong about the I.F. processing It will require a different
DSP like the SPROC processor.

>
>
>
>---
> Jack Albert WA9FVP Fellow Radio Hacker
> Tele (708) 378-6201
> Tellabs Operations, Inc. FAX (708) 378-6721
> 1000 Remington Blvd. jwa@tellabs.com
> Bolingbrook, IL 60440
>
> Why do they call them concetration camps?
> When people go there, do they really concentrate?

1625. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 18:32:31 UTC
From: ham@wam.umd.edu
Message-ID: <2jtorv$6fv@cville-srv.wam.umd.edu>
Source record: 271076

Patrick Tatro <patrick_tatro@stortek.com> wrote:
>
>Would the VEC's kick me out if I brought a laptop to a code test session or
>should I wait until my paper speed catches up to my keyboard speed?
>
>Opinions requested.

While I wouldn't kick you out, I don't know how others would feel. In my opinion, how you transcribe your code is your business, not anyone else's. If you have to have a laptop there to copy, so be it. But you'd better be able to show me the difference between an AR, SK, BT, and DN prosign. Obviously, BT would be like "--" and DN would be "/". But how about SK and AR?

What if your battery were to run out on you?

Scott NF3I I've seen KK3F do 40 wpm on a BRAILLE keyboard with perfect copy for minutes at a time.

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 123 QSLed on dipoles __________| Dipoles! Antenna!

1626. Re: Noise Problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 18:37:23 UTC
From: M.Willis@ee.surrey.ac.uk
Message-ID: <1994Feb16.183723.7187@ee.surrey.ac.uk>
Source record: 271077

Get a medium wave receiver, tune it to a clear channel and go about looking for the source of the noise. It may be a bad joint in a power line, it could be a faulty appliance but it is most likely to be a computer.

Check out for sentral heeting controllers, theft alarms etc. If you get really frustrated, try turning off all the ac power and running the rig off a car battery.

If you can isolate your own house, prey for a power cut.

I assume you don't live near a welding shop.

Mike

1627. Why I've been posting the FCC Daily Digests

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 18:42:22 UTC
From: bruce@pixar.com
Message-ID: <1994Feb16.184222.6352@pixar.com>
Source record: 270978

> From: steve.allen@brent.uucp (Steve Allen)
> bruce@pixar.com (Bruce Perens) writes, and writes, and writes:
> [cable-tv, broadcast FM, commercial microwave, satellite pager
> drivel omitted...]
>
> Bruce: besides being 99.9% irrelevant to amateur radio, this is an
> incredible waste of bandwidth. If you feel a need to post this
> stuff, form your own newsgroup.
> -Steve N2WSA

Steve,

Since some of the logic behind my posting the FCC Daily Digest might not be obvious, I'll take this opportunity to explain it.

First, I agree that 99.9% of the material is not directly relevant to Amateur Radio. However, that material does teach some lessons that I feel are very important to Amateur Radio at this moment.

First, look how small and unimportant Amateur Radio is in the FCC's daily operations. Of course they'd be spending time on broadcasters, but look how much importance is attached to common carriers, land mobile, personal communication services other than Amateur Radio, etc. We indeed do seem to take up only 00.1% of the FCC's operations. I feel this gives us a feeling for the broad view of the FCC. It's certainly given me some feeling for the importance they place on some of the competitors for our frequency spectrum and their enforcement time.

You might also gain some insight into the way such things as enforcement and rule-making are handled from the way they happen daily in other services. Since I'm planning on filing an STA for an experimental use of the amateur service, reading this material has been important to me. When I need more in-depth information, the phone number for the FCC contact is right there.

I have had some concern about the use of bandwidth and the appropriateness of rec.radio.amateur.misc as a forum for this material. For that reason, I surveyed the newsgroup readers, and the result was almost 100% approval for the postings, with a few comments that I might edit the material, add explanations to it, or cross-post it to different groups. By the way, net readers who are concerned with constitutional issues in broadcasting, etc. have been dropping by rec.radio.amateur.misc to get these articles.

Editing the FCC Daily Digest to remove material unrelated to Amateur Radio would place unreasonable demands on my time and put me in the position of possibly mis-representing the FCC. No way. I wish others would comment on

some of the material in the Digests, since there are some real experts reading this newsgroup.

Fortunately, FCC.GOV is now online and they will soon start distributing this material themselves, so the Daily Digest postings will soon disappear from rec.radio.amateur.misc and come to those who are interested in a more convenient form. The administrator at FCC.GOV is busy configuring his system, and will post announcements when the system is ready to provide you service. Please don't bother him until then.

For the curious, until FCC.GOV is fully operational you can access the FCC bulletin board directly this way:

telnet fedworld.gov
(set up your login, and get to a prompt)
/GO FCCSTATE

I find that Fedworld is running at full capacity most of the time, and thus it's easiest to get to the BBS late at night.

Bruce Perens

1628. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 18:54:15 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2jtq4nINNl22@abyss.West.Sun.COM>
Source record: 270979

In article <CLAz5v.Iss@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>JEFF M. GOLD (JMG@tntech.edu) wrote:
>
>: I purchased one of the original 2 meter transceiver kits.
>
>I did, also. For those who don't know, we are talking about the
>earlier FTR-146, Ramsey's first 2m transceiver, which they stopped
>shipping *two years ago*. I don't know why Jeff keeps beating a dead horse.
>My good friend, Don, KE6AJH, still uses that FTR-146 and it works great.
>The present FX-146 incorporates some of my suggestions for improving the
>FTR-146. But my approach was not, "you idiots don't know your ass from..."

The implication is that Jeff's approach was this. Do you knoe something we
don't?

>: It didn't work correctly when I finished.
>
>Mine didn't either... kits rarely do. I never did get the controlled-carrier
>modulation working right on my HeathKit DX-40 and Heath was completely
>unsympathic and unresponsive... and I learn more when the kit doesn't work.

Excuse me? In the 20 or so years I've been building kits, especially Heathkits,
I've had at least 90% of them work from the moment the power was turned on.
This includes the Heathkit dot matrix printer I built with both electronic
and mechanical assembly.

>: ...having to stretch some of the coils ...to get power out of the TX.
>
>Jeff, if you don't have a variable cap, how else are you supposed
>to adjust a tuned circuit? I have been stretching and squeezing coils
>for 40 years. Air wound inductors are variable inductors, you know.

Err... settle down Cecil; I think Jeff is mentioning that the assembly
manual didn't say you needed to stretch the coil.

Settle down, Cecil. Jeff had a certain experience that differed from yours.
I will say, flat out, that John Ramsey indeed bad-mouthed Jeff Gold by
name during a phone call with me despite the fact I asked him not to do so.
This is *not* good business, no matter how much of a fan you are. This appears
to be why Jeff felt compelled to make his post.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1629. Baycom and TFPCX

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 18:56:56 UTC
From: groverc@gvgadg.gvg.tek.com
Message-ID: <8335@gold.gvg.tek.com>
Source record: 270980
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

I need English documentation for the program TFPCX.

This is a piece of software that lets one use GraphPac
with a tnc in kiss mode or with a Baycom module.

Any help appreciated.

73

Grover, WT6P

1630. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 19:45:35 UTC
From: greg@netcom.com
Message-ID: <gregCLC1K1.w9@netcom.com>
Source record: 270981

In article <x8yqthx.jramsey@delphi.com> jramsey@delphi.com writes:
>
>And one wonders why we don't advertise in QST, it's the attitude of
>history re-writers such as J.B. I was there, and the facts just ain't so.

I have no doubt that there was some mis-communication. Only a very
stupid business would snub *the* trade publication, on purpose. Seems
to me that *BOTH* John and Jon have a bit of a tendency to handle
negative feed-back defensively, as opposed to trying to figure out
why someone got the impression they did from their respective organizations.

>I'd rather talk on the phone!

Actually, John, there have been a couple of stories related concerning
phone conversations that net.hams have had with you. Some have been
satisfactory to your customers. Others apparently have not.

> But I had to respond to such talk. You see, the
>ARRL couldn't get their kit to work!

Not exactly a ringing endorsement of the product, or a reason to recommend
it to a newcomer, is it?

> So we sent them an assembled unit.

...which ought to have worked perfectly...

>Yes it did not meet the FCC specs for spurious - missing by about a db or
>two (I'm at home and don't have notes handy).

The point is, what is (by your account) your best effort yielded a
rig which was illegal to use on the air. That (by your account) it
was a Ramsey-completed unit only makes the company look worse.

> The ARRL missed the whole
>point of the kit which was to promote kit building, etc,etc.

I don't think I understand... ...do you mean that you intend for
us to build your products, but not USE them? Or do you feel that your
service to the amateur community in providing kits for hands-on
training overrides your obligation to provide a legal and
functional product? I mean, generally, when I see an ad for an
'Amateur 2-meter Transceiver' and that is a new item, I expect
that it will meet the standards for use on that band. Is that
an unreasonable expectation?

> Now. I'm
>sure you are thinking, "but it didn't meet FCC!"

Yes. Correct. Damn straight. Because that, John, is the bottom line. It is not QST's responsibility that your product didn't come up to the standards that *ALL* amateur equipment is measured against. And they have not wronged you by pointing it out. On the contrary, they have done more than they had to by giving you the opportunity to take corrective action, and offering a limited endorsement, rather than outright panning it. And, it is worth noting, they held back on reviewing your initial product, which also showed some defects. They've really been pretty good to you. Not a few of us would have preferred them *NOT* to cut Ramsey such slack.

> True, but for a fascinating
>contrast, look at the GLOWING review of the MFJ regen receiver! Guess it
>doesn't spray RF.I do believe that MFJ has been quite a big QST advertiser, too.
Interesting question, but I can't help thinking that you're trying to distract from the issue of *your* product. And of course I would note that I have seen at least one 'GLOWING' review of your product in a magazine in which YOU advertise. A review/article which, by the way, missed some of the pitfalls.

>No, you'll not see a Ramsey ad in QST. It was years ago that I was approached
>by a QST ad director to advertise. He expounded how QST was looking out for the
>amateur, requiring test units before accepting ads. I responded that they had
>plenty of ad pages from DSI, a since defunct freq ctr mfg who sold trash and
>was openly taking $$ for products they had no intention of shipping! Of this is
>the virtue you speak? Well, DSI closed shop, took QST readers for hundreds of
>thousands of dollars and even stuck that nice old ad director too!

So how does all of that explain why *your* ads aren't there? Have you refused to cooperate? What does DSI have to do with your company?

>Yes, I'm hot and seeing this kangoroo (sp?) court

Indeed. Seems as though you don't have much of a regard for your customers' opinions. My impression is that the FX kits have been described here as sometimes problematic, and sometimes very good. Note has been taken of hard data supplied by the ARRL. And subjective performance evaluations have been shared. And you yourself seem to hint that you regard them as more educational than functional (the 'point' above).

The only time it got really personal seems to have been in the descriptions of a couple of individuals' encounters with you by telephone.

Unfortunately, the manner of your posting tends to lend credence to the implication that your resonse to concerns about the quality of the FM transceiver lines is a bit on the, well, 'defensive' side.

> makes me long for my work-
>bench rather than this CRT.

Probably not a bad idea. While you're there, perhaps you might look into the challenge of producing a kit from which it is possible for average (or lesser) builders to get consistent results. If it were me, I guess I'd look into offering the option of pre-assembled rf sections,

Admittedly, this is a tough problem, tougher than it was at the time Heathkit had to face it. But if the kit industry is to be viable as more than a curiosity, face it it must.

> I don't have the luxury of getting paid to
>read and respond to everything here - but I do welcome phone calls to myself
>at the office (716) 924-4560. Just ask for me.

John, you seem to want things... ...the reviews, how you talk to customers, how your products are discussed, to be on your terms. With respect, I don't think that's a realistic expectation.

Greg

1631. Re: Facility assessment forms for ham radio operations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 19:51:30 UTC
From: ronk@cascade.ens.tek.com
Message-ID: <2jttg2$sni@zephyr.ens.tek.com>
Source record: 270982
Cross-posted to: misc.emerg-services,rec.radio.amateur.misc

In article <bihlerCLB58v.Lwn@netcom.com>, bihler@netcom.com (Steve Bihler) writes:
|> I'm part of a newly formed ham/amateur radio emergency communications
|> response group. One of the first things we've decided that we
|> need/want to do is an assessment of our primary and secondary
|> communication response points (and then work out from there).
|>
|> Towards that goal we're trying to develop a form that will document
|> the salient issues for us. For example:
|> . directions to the site
|> . possible problems: bridges/overpasses, flood plain
|> . resources available: power, antennas, radios...
|> . issues of concern: where and how to run cables, RF interference...
|>
|> We have a pretty good start at what we think should be on the form, but
|> we're wondering if anyone else has already done a similar type form and
|> if they'd be open to sharing it with us?

When you get the form done, can you post it to the net? I for one would
like to see it and maybe use it.

--
Thanks,
Ron Kirkpatrick
News Administrator/Postmaster
Tektronix, Inc
503-627-6707

1632. wireless cable frequencies.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 20:04:53 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199402162012.MAA14896@ucsd.edu>
Source record: 270983

somewhere i thought i had info on where the wireless cable guys were supposed to be located. can't find it now -- certainly someone here has the information - more out of curiosity than anything else -- we know the format of transmission to be relatively secure.

the wireless catv guys are using a wide variety of antennas around here and we're trying to figure out exactly why 2 houses side by side would need vastly different antennas...unless there's more to it that just that.

early reports indicate that the wireless cable guys are beating the local CATV outlet (time-warner) on both quality of delivered picture (we have yet to see how it looks in the rain) & on price (free disney, no junk shopping channels and a minimum of bible thumpers for about a buck less).

thanks,

bill wb9ivr%pubs%genav.mlb@ns14.cca.cr.rockwell.com

1633. Communications links with Sarajevo

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 20:09:41 UTC
From: slm@world.std.com
Message-ID: <CLC2o6.7xu@world.std.com>
Source record: 270984

Even the biggest supporters of ham radio will admit that it can't substitute for a conventional telecommunications network; hams can't be expected to take the place of regular phone and postal service indefinitely.

Yet that is what the hams of Bosnia-Herzegovina have been trying to do for almost two years now. Serbian nationalists besieging Sarajevo, cut off postal service in April, 1992, and cut off telephone lines to the city in July, 1992. Sarajevans have been under a communications blockade ever since.

So, for this city of more than 300,000 people, there is virtually no way for them to contact loved ones outside. And, people in the rest of the world with family and friends in Sarajevo have almost no way to find out if their loved ones are OK.

As a result, the few hams able to still operate in Sarajevo are overwhelmed with requests to try to pass messages in and out of the besieged city. They are doing heroic humanitarian work, but this can't substitute for restoration of phone lines. They really need our help to try to get their regular phone links back.

It turns out that the telecommunications equipment which could restore phone service between Sarajevo and the rest of the world IS SITTING IN A WAREHOUSE IN DALLAS, TEXAS, BECAUSE THE UNITED NATIONS HIGH COMMISSIONER FOR REFUGEES REFUSES TO ALLOW IT TO BE FLOWN INTO SARAJEVO AIRPORT. The reason? U.N.H.C.R. says the equipment isn't "humanitarian aid!!!!"

I think hams more than anyone understand that providing communications during times of crisis is in fact a great humanitarian issue.

Several U.S. Congressmen, including Rep. Edward Markey, chairman of the House Subcommittee on Telecommunications and Finance, are working to try to get the U.N.H.C.R. to reverse its decision and allow the equipment to be flown into Sarajevo's airport (which is under U.N. control).

Markey's office is trying to get as many people as possible to contact their senators and congress(wo)men by Tuesday, Feb. 22, and ask them to co-sign a letter to the U.N. High Commissioner for Refugees urging that the equipment be allowed in.

I am hoping that some hams might consider helping this effort -- and our colleagues under siege in Sarajevo -- and make a few calls to your legislators urging them to sign onto the letter. The text of the letter, and Markey's correspondence to other Members of

Congress, is below (taken from soc.culture.bosna-herzgvna).
If you know who your representatives are but don't have their
phone number, you can call the Capitol switchboard at 202-224-3121.

Thank you.

73, Sharon KC1YR

This is the letter that Congressman Markey is asking his
Congressional colleagues to sign (and that you should ask your
legislators to sign):

Ms. Sadako Ogata
United Nations High Commissioner for Refugees
Case Postale 2500
CH 1211 Geneve 2 Depot

Dear Commissioner Ogata:

We understand that the UNHCR has rejected a request to permit
transport of telecommunications equipment into Sarajevo submitted
on behalf of the Bosnian government by Mr. Muhamed Sacirbey, Bosnian
Ambassador to the United Nations. As concerned Members of the United
States Congress, we are writing to urge you to reconsider this
decision and end the communications black out in this besieged city.

Although we respect the need to monitor closely all shipments into
the Bosnian capital, we firmly believe that the telecommunications
equipment constitutes humanitarian aid and should be airlifted at
the earliest possible opportunity. Because telephone links have been
severed by Serb militants throughout the 22 month siege, those with
relatives and friends in Sarajevo are left to agonize daily over the
possibility that their loved ones have been injured or killed by the
relentless shelling of the city. Additionally, the total lack of
communications equipment further isolates the residents of Sarajevo
and prevents rapid access to emergency services. In fact, similar
equipment is currently supporting humanitarian missions in Somalia
and other areas. Therefore, we believe that this shipment to Sarajevo
does constitute humanitarian aid, and lifting the ban on the
transportation of telecommunicatoins equipment would be a humane action.

We urge you to allow the telecommunications equipment to be shipped
to Sarajevo. Thank you for your prompt attention to this matter.

Sincerely,

And this is the letter Congressmen Markey and John Dingell are sending
to their colleagues.

RESTORE SARAJEVO'S LINK TO THE WORLD
February 14, 1994

Dear Colleague:

Last week, the international community watched in horror as scenes from the bombed-out marketplace in Sarajevo were beamed into homes around the world. For those with relatives and loved ones in the Bosnian capital, these images were even more frightening. Because telephone links have been severed by Serb militants throughout the 22 month siege, relatives and friends were left to agonize for hours and even days over the possibility that their loved ones were injured in the blast.

While residents of Sarajevo suffer under a total communications blackout, the telecommunications equipment needed to lift this informational embargo sits, packed and ready to go, in a warehouse in Dallas, Texas. The United Nations High Commissioner for Refugees, which controls shipments into the Sarajevo airport, has refused to allow the equipment to be delivered on the grounds that the materials do not constitute humanitarian aid. If relieving the anguish of thousands of Bosnians and their loved ones outside of Sarajevo does not qualify as humanitarian aid, then we do not know what does.

The U.S. Department of State, which has the authority to recommend to UNHCR that the equipment be sent, has refused to intervene because it was advised by the Defense Department that the materials could have military value. Clearly, the export of materials with a potential dual use should be carefully controlled. Within the United States government, the Commerce Department strictly regulates the export of American products with military applications. The claim that the telecommunications equipment bound for the Bosnian capital constitutes military assistance, however, is completely groundless. In fact, the identical equipment which UNHCR is denying Sarajevo can be shipped without a special export license to Iran, Iraq, China, Syria, and Pakistan, among others. If this equipment is so dangerous, why does the U.S. government allow it to be exported so widely while refusing to send it to Sarajevo, a city under siege with virtually no means to defend itself?

As NATO prepares for possible airstrikes, further shelling of Sarajevo by Serb forces is likely. Unless the UNHCR permits the transfer of this telecommunications equipment immediately, Sarajevans and their loved ones outside the city will be subjected again and again to the agonizing uncertainty resulting from a preventable communications embargo. After almost two years of bitter siege, Sarajevo's residents have been deprived of all civil, personal, and social rights. Everything that makes for regular urban living has already been taken away from Sarajevo and its citizens, and still the UNHCR continues to deny Sarajevans one of the most basic of all rights, the right to talk to each other. While we agree that UNHCR must monitor shipments into Sarajevo, we find some of their decisions rather curious. For example, the UNHCR blocked a shipment of surplus underwear headed for the Bosnian capital because of supposed military applications.

Lifting the ban on telecommunications would be a humane action, especially considering the inhumane inaction which has characterized the international community's response to this bloody conflict up to this point. If you are interested in signing the attached letter to the United Nations High Commissioner for Refugees, Ms. Sadako Ogata, urging her to permit the transfer of the telecommunications equipment, please contact Mark Bayer of Representative Markey's office at 5-2836 by the close of business on Tuesday, February 22.

Edward J. Markey
John D. Dingell

--
electronic address: slm@world.std.com

1634. Ten Tec PM2A

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 20:26:20 UTC
From: JMG@tntech.edu
Message-ID: <01H8YFY717M6ECYLWS@tntech.edu>
Source record: 270985

Anyone have a Ten Tec PM2A manual they could copy? I will pay duplication and shipping.

thanks

73

Jeff, AC4HF

1635. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 20:32:05 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLC3pH.GoM@news.Hawaii.Edu>
Source record: 270986

In article <CLAz5v.Iss@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>JEFF M. GOLD (JMG@tntech.edu) wrote:
>: Well I will say it flat out: John Ramsey is a liar.
>
>Jeff, a psychologist will tell you that anyone who says a person is
>a "thing" rather than saying a person acted in a certain manner under
>certain circumstances, has at least abandoned objectivity and at worst,
>abandoned rationality. I think I've seen these exact words before. Do
>you have this file stored on your disk drive somewhere?
>

Oh no. Cecil, are you going to be the net.psychologist and analyze what we say and how we say it? These newsgroups aren't science journals - were not turning out research papers on here. Most are at work and in a hurry, and will type out their comments as if they were speaking to someone. Jeff got his point across - we understood what he said quite clearly, and I don't think anyone (except you) cares how he said it:

1. Joe is a liar
2. Joe has lied in the past
3. Joe frequently lies
4. Joe is currently lying
5. Joe will continue to lie

I think 1. encompasses all the others quite nicely.

Oh, by the way: I am a mathematics lecturer - isn't `lecturer' a thing just like `liar'.

Jeff NH6IL

1636. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 20:46:44 UTC
From: ben@yosemite.sps.mot.com
Message-ID: <CLC4Dw.10E@oakhill.sps.mot.com>
Source record: 270987

In article <2jt93e$ds9@charm.magnus.acs.ohio-state.edu>,
William VanHorne <wvhorn@magnus.acs.ohio-state.edu> wrote:
>In article <2jqi1t$rer@pegasus.cc.ucf.edu>,
>John W. Meaker <jm6033@pegasus> wrote:
>
>> I'm curious about nude QSL cards. Would anyone be offended if they
>>received a QSL card in the mail with nude people on it? Would it be
>>better to mail the card in an envelope? The envelope increases the
>>cost of mailing a QSL considerably, and cost a consideration when you
>>mail many cards.
>
>Even the *thought* of receiving a QSL card with a nude picture of the average
>ham on it is enough to offend me. I mean, seriously, folks. Leaf through
>any QST of recent (or even ancient) vintage, look at the pictures of the
>hams and imagine seeing them nude.

So, explain to me just how it is that someone is somehow a different person
simply because they wear no clothing. The difference is only in the eye
of the beholder...

--ben

--
Ben Thornton Amateur call: WD5HLS
Internet: ben@yosemite.sps.mot.com Motorola Inc., Austin, TX
Caution: Wearing clothes has been shown to cause permanent psychological
dependence on textiles. WEAR THEM AT YOUR OWN RISK.

1637. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 21:09:16 UTC
From: chuckb@tc.fluke.COM
Message-ID: <CLC5Fo.Irp@tc.fluke.COM>
Source record: 270988

I received a QSL card from Japan that had a nude photo of a woman. That one always gets comments when people look through my QSL card collection.

--
Chuck Bowden / WB7R / chuckb@tc.fluke.com / (206) 356-6228
Fluke Corporation / MS 232E / PO Box 9090 / Everett WA 98206-9090

1638. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 21:15:55 UTC
From: kg7bk@indirect.com
Message-ID: <CLC5qK.BuD@news.direct.net>
Source record: 270989

John W. Albert (jwa@tellabs.com) wrote:
: >: ... for Ham use you only need an... 8 bit A/D.

: The Hamblaster has a 14 bit A/D.
: Jack Albert WA9FVP

I'll rephrase my question... if "for Ham use you only need an... 8 bit A/D",
why does the Hamblaster have a 14 bit A/D?

73, Cecil, kg7bk@indirect.com

1639. Re: Nude QSL or HAMFEST?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 21:19:24 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLC5wD.Hr1@news.Hawaii.Edu>
Source record: 270990

In article <gdavis.761414723@griffin> gdavis@griffin.uvm.edu (Gary Davis) writes:
>
>In many ways American's have a very juvenile and puritanical view
>of our birthday suit.
>
>I say, if you want to take it off... well... why not?

But please, stay indoors.

I've quit going to Waikiki Beach not for puritanical reasons but
because seeing all those tourists with their stomachs hanging
down to thier knees is just plain nauseating. You folks from the
Mainland (your side of the Pacific) don't seem to take very good care
of yourselves!

As someone else pointed out, look at the photos in QST; do you really
want to see those folks nude? Our view is not necessarily juvenile
or puritanical - it is just that we don't take delight in looking
at things that are not appealing. Do you frequent art gallaries?
Certainly you'll see paintings that don't appeal to you; yet no
one would dare say that you're juvenile or puritanical.

Okay, I'll shut up since this has nothing to do with .misc.

Jeff NH6IL

1640. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 21:29:48 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLC6Dp.Hz6@news.Hawaii.Edu>
Source record: 270991

In article <1994Feb16.130055.21938@tellab5.tellabs.com> jwa@tellabs.com (John W. Albert) writes:
>In article <CL8qE6.Lxz@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>>John W. Albert (jwa@tellabs.com) wrote:
>>
>>: Several add-ons will include, a better A/D...
>>: ... for Ham use you only need an... 8 bit A/D.
>>: Jack Albert WA9FVP
>>
>>Jack, if for Ham use you only need an 8 bit A/D then why will your add-ons
>>include a better A/D? I have a direct conversion receiver and have found
>>that an 8-bit A/D is not good enough for weak signal CW reception. With
>>8-bits of dynamic range, I spent all my processing power in scaling and
>>avoiding saturation from strong signals. 16-bits gives me some needed
>>headroom.
>
>The Hamblaster has a 14 bit A/D. The add-on (I don't have the details
>about this) may use a sigma-delta A/D. There may even be a super fast
>sampler to do I.F. processing in the works.

You know, this IS starting to sound like an ad. The above exchange
could have been conducted via email; it sounds a bit contrived,
doesn't it?

Jeff NH6IL

1641. Re: Yaesu Jacket

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 21:30:00 UTC
From: fms@sw.stratus.com
Message-ID: <2ju38p$c3p@transfer.stratus.com>
Source record: 270992

se51@trajan.nextlab.cs.qub.ac.uk (J Keith Stevenson) writes:
> Hi , Can anyone tell me where might get one of those cool looking jackets
> that Yaesu are giving away free with FT100's? I saw this in QST last
> month. I can't afford the radio but I could probably afford one of the
> jackets if anyone is willing to part with one!
>

You might try contacting Yaesu directly and asking. I was lucky enough to win a snazzy-looking Icom jacket last year, which, had it not had my callsign on it and been a size or two too small, might have become my husband's jacket. :-) I talked to someone at Icom who told me how to order a jacket directly. So now my husband and I match!

73 de Faith N1JIT

p.s. if anyone orders a jacket from Icom, they'd better be prepared to do some serious waiting -- it takes several months for it to come in. I think they have to grow the cotton first... :-)

--
Faith M. Senie InterNet: fms@vos.stratus.com
Stratus Computer, Inc. InterNet: fms@hoop.sw.stratus.com
55 Fairbanks Blvd. Pkt Radio: n1jit@wa1phy.ma.usa.na
Marlboro, MA 01752 Phone: (508)460-2632

Curiosity doesn't flourish among the burned-out...

1642. Re: What the heck are these?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 21:35:01 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-160294163501@k4dii.ksc.nasa.gov>
Source record: 270993

In article <45@ted.win.net>, mjsilva@ted.win.net (Michael Silva) wrote:
> I've got a bag full of 3-pin semiconductors, small-transistor
> sized. They are marked either "U1994" or "U1837E". For some
> reason I think they might be RF JFETs. Anyone know what they are
> and what they might cross to? The manufacturer's logo looks like
> the bottom half of an 8-sided compass rose (4 polygons). Thanks.

Mike-

These are both N-Channel JFETs, manufactured by Teledyne Semiconductor. I found them in an old "selector guide" dated 1973. It lists Teledyne at 1300 Terra Bella Avenue, Mountain View, California 94040, Phone (415)968-9241. However, in 20 years, the company could have moved or gone out of business!

The U1837E is listed as a member of the "2N4391 Family" General-Purpose Switch, in the plastic package category. No lead configuration was given, however. Its data is:

rDS(ON)(Max.) 30 ohms
VGS(OFF) (Min.-Max.) 5.0-10 V
ID(OFF)(Max.) 0.2 nA
Ciss(Max.) 16 pF
Crss(Max.) 5 pF
BVGSS(Min.) 40 V
IDSS(Min.-Max.) 30---mA

Typical Characteristics curves for the 2N4391 family, are shown for Yfs, rDS(ON), IDSS and ID.

The U1994E (rather than the non-E) is listed as a member of the "2N4416 Family" VHF RF Amplifier - 400 MHz, in the plastic package category. Its data is:

Yfs(Min.-Max.) 4,500-7,500 micromhos
IGSS(Max.) 100 pA
VGS(OFF)(Min.-Max.) ----6 V
IDSS(Min.-Max.) 5-15mA
BVGSS(Min.) 30 V
Ciss(Max.) 4 pF
Crss(Max.) 1.0 pF
400 MHz N.F.(Max.) 4 dB

Again, Typical Characteristics curves for the 2N4416 family, are shown for Yfs, rDS(ON), IDSS and ID.

I hope you can find someone with more up-to-date information, especially the lead configuration.

73, Fred, K4DII

1643. Dom Rep & Haiti

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 22:09:02 UTC
From: dick@kanga.demon.co.uk
Message-ID: <761436542snz@kanga.demon.co.uk>
Source record: 270994

HI gang,
I am going the Dom Rep and , hopefully Haiti
for vacation in middle May. Any comments will
be very welcome. Hoping to take rig and operate
a little, (when she lets me HI)

1644. Re: kits

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 22:16:24 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Feb16221624@mipgsun.mipg.upenn.edu>
Source record: 271024

Something that has not been clear to me from the start of this thread is why the people who are smart enough to de-bug assembled kits that are obviously in dire need of it are not smart enough to assemble the things from their own components in the first place. Is it cheaper buying one of these kits than it is buying the individual components?

Scrounging around for all the parts you need to build a project is not all that easy. I know. I am building the swr/power meter present in the ARRL handbook and am having a beast of a time finding the proper ferrite beads. The local vendor does not carry Amidon beads and I can't find out the appropriate values for the Amidon part so I can buy the equivalent. The chips needed required shopping with several vendors before I got everything I needed.

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

1645. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 22:20:09 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-160294172009@k4dii.ksc.nasa.gov>
Source record: 270995

In article <CLAz5v.Iss@news.direct.net>, kg7bk@indirect.com (Cecil Moore) wrote:
> John Ramsey and I have never met in person. We have exchanged letters and
> e-mail and I perceive him to be a friendly, helpful, and assertive
> businessman who is trying to make a living at his hobby.

Cecil-

Over the years, I have seen John at his booth at several hamfests. He may even be at the Orlando Hamfest this coming weekend, if you happen to be in the Central Florida area.

My impression is as yours, that he is a reputable person. While his products are not in the Kenwood or Icom category, neither are his prices. I have a nice solid-state, dual trace, 20 MHz oscilloscope, purchased from him several years ago. Except for the nameplate, it is identical to one sold by several other companies. However, the other companies charged a LOT more for theirs!

I think the kits he sells are aimed towards people like ourselves, who are quite willing to go through the ordeal of de-bugging a kit, for the feeling of accomplishment from getting it to work! Unfortunately, we are like dinosaurs about to become extinct.

The modern ham seems to think a kit is something you merely plug the parts into, like assembling an IBM-clone computer from modules. From that point of view, I'll admit that John's kits are not "modern".

73, Fred, K4DII

1646. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 22:22:05 UTC
From: kg7bk@indirect.com
Message-ID: <CLC8su.DCt@news.direct.net>
Source record: 270996

Dana Myers (myers@sunspot.West.Sun.COM) wrote:
: >But my approach was not, "you idiots don't know your ass from..."

: The implication is that Jeff's approach was this. Do you knoe something we
: don't?

That has been Jeff's approach toward Ramsey for the year that I have been
on Internet.

: In the 20 or so years I've been building kits, especially Heathkits,
: I've had at least 90% of them work from the moment the power was turned on.

Your experience has been different from mine. I had 100 times the trouble
out of Heathkits that I had with Ramsey kits. You probably weren't around
for the '50s when it was a miracle if a Heathkit ever worked.

: Err... settle down Cecil; I think Jeff is mentioning that the assembly
: manual didn't say you needed to stretch the coil.

Ramsey immediately responded with that information and included it in the
next manual printing.

: I will say, flat out, that John Ramsey indeed bad-mouthed Jeff Gold by
: name during a phone call with me despite the fact I asked him not to do so.
: * Dana H. Myers KK6JQ

I agree it was probably not a "politically correct" thing to do. But John
may (or may not) share my attitude that anyone who calls another person
a liar in public is less than human. And John probably doesn't appreciate
his name being a line item on Internet so how about us taking this off
line?

73, Cecil, kg7bk@indirect

1647. QSL info????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 22:24:20 UTC
From: wb9omc@constellation.ecn.purdue.edu
Message-ID: <wb9omc.761437460@constellation.ecn.purdue.edu>
Source record: 270997

I'm wondering if anyone out there has a CURRENT WORKING ADDRESS for

4N7ZZ, Tibi of Yugoslavia

I have no idea if he is dead or alive at this point, alive I certainly HOPE, for his sake.

A long time ago I worked him and tried to send a QSL card, but I suspect that events in the region probably zorched that one. For all I know he might even have a different call by now.....

If anyone has any info, please email to:

wb9omc@harbor.ecn.purdue.edu

posting it here might also be useful on the off chance that anyone else also needs QSL for 4N7ZZ.

Thanks,

Duane

1648. Re: Looking for Sigma Design Associates...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 22:45:54 UTC
From: wws@renaissance.cray.com
Message-ID: <1994Feb16.164554.12683@walter.cray.com>
Source record: 270998

In article <CLBuHt.Mox@on.bell.ca>, ydupont@Qc.Bell.CA (Yvan Dupont) writes:
|>
|> In a past article in the October 92 issue of 73 Magazine there was a
|> reference to a company named "Sigma Design Associates" located at 22150
|> Berkeley Court, Los Altos CA. They had a kit which can be used with
|> software to emulate a TNC at a very low cost.
|>
|> Does anyone have phone or fax number of that company?
|> Or does anyone know if that company still exists or has moved???
|> I tried directory assistance without success...

The address is (was?) the author's house. He must have moved.
(I picked a kit up in person about a year ago.)

Walt

Walt Spector It usually takes more than three weeks
(wws@renaissance.cray.com) to prepare a good impromptu speech.
Sunnyvale, California Mark Twain
_._ _._ _.... _. ._.

1649. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 23:42:58 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-160294163435@waters.corp.mot.com.corp.mot.com>
Source record: 270999

In article <patrick_tatro.27.7C558180@stortek.com>,
patrick_tatro@stortek.com (Patrick Tatro) wrote:

> When practicing for my code test I use the Morse Academy software on my
> computer. I'm finding my keyboard code speed is now 14wpm but my paper code
> speed is still at about 10 to 11wpm.
>
> Would the VEC's kick me out if I brought a laptop to a code test session or
> should I wait until my paper speed catches up to my keyboard speed?
>
> Opinions requested.

I am only one VE, so this is just my opinion here, the actual test conditions are up to the VEs administering the test. Every VE team I know of though tries very hard to make the testing as fair and flow as smoothly as possible.

The general rule is that you must show the VEs that there is nothing in the computer memory which could help you during the test.

The easiest way would be to disable (remove?) the hard drive and run with only the operasting system and typing software. (Obviously *not* a morse reader of any type :-) You have to be able to demonstrate that t he hard drive is empty or disabled though.

Actually copying every word is overkill, since all you need to do is to take notes much as you would in an actual QSO. You can pass the test with *either* the required number of consecutive characters or answering enough questions correctly.

BTW if the VEs will allow it, sit for the next higher speed test as well, after listening to 20wpm for five minutes it is amazing how slow 13 wpm will sound!

If you get enough consectutive characters for the 13 wpm test then you can be given 13 wpm credit - giving you an extra try with no penalty if you don't make it.

73 and GOOD LUCK!

1650. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-16 23:51:01 UTC
From: myers@cypress.West.Sun.COM
Message-ID: <2jubh6INNl25@abyss.West.Sun.COM>
Source record: 271000

In article DCt@news.direct.net, kg7bk@indirect.com (Cecil Moore) writes:
>Dana Myers (myers@sunspot.West.Sun.COM) wrote:
>: >But my approach was not, "you idiots don't know your ass from..."
>
>: The implication is that Jeff's approach was this. Do you knoe something we
>: don't?
>
>That has been Jeff's approach toward Ramsey for the year that I have been
>on Internet.

Keep in mind, Jeff's experience with Ramsey appears to pre-date your arrival
to the Internet.

>: In the 20 or so years I've been building kits, especially Heathkits,
>: I've had at least 90% of them work from the moment the power was turned on.
>
>Your experience has been different from mine. I had 100 times the trouble
>out of Heathkits that I had with Ramsey kits. You probably weren't around
>for the '50s when it was a miracle if a Heathkit ever worked.

Sure. Anyone can find from the callsign database my birthdate of 5/3/63. I
started building kits around the time I was 10.

>: I will say, flat out, that John Ramsey indeed bad-mouthed Jeff Gold by
>: name during a phone call with me despite the fact I asked him not to do so.
>: * Dana H. Myers KK6JQ
>
>I agree it was probably not a "politically correct" thing to do. But John
>may (or may not) share my attitude that anyone who calls another person
>a liar in public is less than human. And John probably doesn't appreciate
>his name being a line item on Internet so how about us taking this off
>line?

Hang on, slamming your customers is not only not politcally correct, it is
bad business. It doesn't matter if they call you a liar. Anyway, why wouldn't
John appreciate his name being a line item on Internet?

---
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1651. Re: callsign server info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 00:15:44 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.761444144@BIX.com>
Source record: 271001

ah301@yfn.ysu.edu (Jerry Sy) writes:

>which port do I telnet to get to callsign server on
>cs.buffalo.edu ?

telnet callsign.cs.buffalo.edu 2000

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715
Hamilton Laboratories, 13 Old Farm Road, Wayland, MA 01778-3117

1652. Article in Popular Electronics

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 00:28:17 UTC
From: drenze@icaen.uiowa.edu
Message-ID: <2judn1$cq2@news.icaen.uiowa.edu>
Source record: 271002

Dunno whether this has been noted yet, but in the latest issue
of Popular Electronics there's an article about Ham Radio in the '50s.
Pretty decent article, actually.

--
__ /| | Doug Renze, N0YVW | Don't believe what your eyes are telling
\'o.O' | +1 319 339 7814 | you! All they show is limitation. Look
=(___)= | drenze@icaen.uiowa.edu | with your understanding, find out what you
U | Douglas-Renze@uiowa.edu | already know, and you'll see the way to fly.

1653. Update for Periodic Reminder of World FTP site

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 00:28:47 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLCEo0.Cpp@netcom.com>
Source record: 271003
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner

This is a periodic reminder that the Boston Amateur Radio Club maintains an
FTP area on World - ftp.std.com (192.74.137.7) in pub/hamradio.

This area is accessible via: anonymous ftp, gopher, and World Wide Web
(and possibly other methods I'm not yet aware of). World is not
fsp-able yet (I asked them).

Via Gopher, the easiest path to the area is by selecting the following
from World's main menu:

18. Membership and Professional Associations

3. Boston Amateur Radio Club

And go from there...

Please feel free to browse through the area.

If anyone has any questions about it, please do not hesitate to e-mail me.

Also, up-to-date copies of the files on the ARRL's information server
(info@arrl.org) are available in the directory pub/hamradio/ARRL/Server-files.

All text files are uncompressed, so they are both retrievable and
viewable via Gopher and World Wide Web. (If you have any troubles with
any text file, please e-mail me).

Source code for programs is always welcome. It can permit people to use
those programs on other computers with other operating systems.

Scott
--
```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
================================================================================
```

1654. Base Station Power Supply

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 00:35:15 UTC
From: rob@vitsemi.com
Message-ID: <1994Feb17.003515.4688@vitsemi.com>
Source record: 271004

One of my current projects is to set up a base station for VHF/UHF using a mobile rig. This means I need a 13.8V power supply that can supply up to 12 Amperes. I know the supply should not have too much ripple, but I do not know how much is acceptable.

Initially, I was planning on building/purchasing a 12V/14A supply. But now I am considering using a deep discharge marine lead-acid battery that is continuously charged for my power supply. Are there any safety issues associated with keeping this type of battery on continuous charge?

Using such a battery has the advantage of being a good emergency backup. The batteries cost much less than power supplies, so if the charger is inexpensive, the cost will be about the same.

The 1993 ARRL Radio Amateurs Handbook has a circuit for a 12V charger. It appears to be suitable for my needs. It appears to be intended to be used as a charging circuit, but not while the battery is in use. Is it suitable for continuous operation? I would expect that the battery would keep ripple quite low.

In addition, I would rather not make my own PC board. The Handbook does not give a source for the PC boards. Does anyone have any PC boards for this available?

Advice and suggestions for this project are welcome.
--

Rob Eccles KD6VYW | Disclaimer: The statements made here
rob@vitsemi.com | do not represent my employer.
"Hope for the best, but prepare for the worst." -unknown

1655. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 01:40:48 UTC
From: wvhorn@magnus.acs.ohio-state.edu
Message-ID: <2juhv0$h56@charm.magnus.acs.ohio-state.edu>
Source record: 271006

In article <CLC4Dw.10E@oakhill.sps.mot.com>,
Ben Thornton <ben@yosemite.sps.mot.com> wrote:

>So, explain to me just how it is that someone is somehow a different person
>simply because they wear no clothing. The difference is only in the eye
>of the beholder...

Hardly. If you're nude, you can't wear one of those nifty baseball caps
with your name and callsign on it. What's the point of being in ham
radio if you don't wear your baseball cap? Sheesh.

---Bill VanHorne

1656. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 01:40:55 UTC
From: "T.J. Alessi WB1L" <p01258@psilink.com>
Message-ID: <2970520692.0.p01258@psilink.com>
Source record: 271007

>DATE: Wed, 16 Feb 1994 17:04:14 GMT
>FROM: Patrick Tatro <patrick_tatro@stortek.com>
>
>When practicing for my code test I use the Morse Academy software on my
>computer. I'm finding my keyboard code speed is now 14wpm but my paper code
>speed is still at about 10 to 11wpm.
>
>Would the VEC's kick me out if I brought a laptop to a code test session or
>should I wait until my paper speed catches up to my keyboard speed?
>
>Opinions requested.
>

Pat,

I run the VE sessions for our local club here in Stamford, CT
and using a laptop is perfectly fine in a word processor or editor mode.
You may just have to show it to them first. If they give you are hard time
just fly out here and we'll let you use one!

- Tom -

==
Thomas J. Alessi - WB1L | INTERNET: TJA@Panix.Com
P.O. Box 16781, Stamford CT. 06905 | AmprNet: 44.88.6.35
203-969-1880(H) 203-977-5200(W) | ax.25: WB1L@KC2FD.#nli.ny.us
==

1657. Re: W6GO QSL MGR LIST-ACCESS?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 02:30:08 UTC
From: k9cw@prairienet.org
Message-ID: <2jukrg$ccl@vixen.cso.uiuc.edu>
Source record: 271008

In a previous article, michaela@freenet2.scri.fsu.edu (Michael Christie) says:

>What access is there for the W6GO QSL manager's list? [Keep
>it simple, please. I am new at this computer stuff.]
>
>Michael Christie, K7RLS
>Crawfordville, Florida
>

The best thing to do is send $25 to W6GO and receive the printed copies
via US mail. Second best thing is $10 to W6GO and access the list on your
local PacketCluster node.

73 de Drew K9CW

--
-----------------------------------------------------------------*
| Andrew B. White K9CW | internet: k9cw@prairienet.org |
| ABW Associates, Ltd. | phone/fax: 217-643-7327 |
-----------------------------------------------------------------*

1658. A QSL Card that will Make a Difference

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 02:35:02 UTC
From: andy@clark.net
Message-ID: <2jul4m$1g@clarknet.clark.net>
Source record: 271009

Last week his 40 meter antenna fell victim to the famous Calvert County (MD) ice storm. The next day he lost power for 6 straight days. Now he's going into the hospital for hip surgery, followed by 6 weeks of recovery with nothing to do but watch ice melt. Not a good month for Ron Nord, N3AKP, who, by the way, is no spring chicken.

I wouldn't post this request if I didn't think it would make a difference. But it would really be great if you could cut loose an extra QSL card and send it along to Ron with perhaps a little "get-well" message. It's the kind of thing that would brighten his spirits and maybe even speed his recovery a bit.

Hey, thanks, guys! Ron's address is: Ron Nord, N3AKP
3621 Halls Creek Lane
Owings, MD 20736

1659. Re: Iambic keyer paddles

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 02:41:02 UTC
From: k9cw@prairienet.org
Message-ID: <2julfu$d8m@vixen.cso.uiuc.edu>
Source record: 271010

In a previous article, yee@mipg.upenn.edu (Conway Yee) says:

>I am told that in general, right handed operators use the right paddle
>for the dash while the left paddle is used for the dit. OK no problem
>so far.
>
>Is there a rationale behind this convention?
>

Do you operate CW? The reason that the thumb on the right hand is the dot lever is probably historical. Old time "bugs" used a weight on a spring loaded lever arm to send dots, and the thumb controlled that lever. On the other hand (so to speak) a good friend of mine sends with his right hand, but he learned to send using a paddle configured for a left handed operator - as a result, his right hand thumb sends space elements. I have another contest operator friend who did, in fact, teach himself to send with his left hand so that he would write with his right in contests. That was years before CT and other computer logging programs made keyer paddles all but obsolete in contests...

73 de Drew K9CW (still uses his right hand to send CW)

--
-----------------------------------------------------------------*
| Andrew B. White K9CW | internet: k9cw@prairienet.org |
| ABW Associates, Ltd. | phone/fax: 217-643-7327 |
-----------------------------------------------------------------*

1660. kits

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 02:43:49 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2jull5$rhc@geraldo.cc.utexas.edu>
Source record: 271011

fred-mckenzie@ksc.nasa.gov (Fred McKenzie) says:

>>I think the kits [Ramsey] sells are aimed towards people like
>>ourselves, who are quite willing to go through the ordeal of
>>de-bugging a kit, for the feeling of accomplishment from getting
>>it to work! Unfortunately, we are like dinosaurs about to become
>>extinct.

>>The modern ham seems to think a kit is something you merely plug the parts
>>into, like assembling an IBM-clone computer from modules. From that point
>>of view, I'll admit that John's kits are not "modern".

Something that has not been clear to me from the start of this thread
is why the people who are smart enough to de-bug assembled kits that are
obviously in dire need of it are not smart enough to assemble the things
from their own components in the first place. Is it cheaper buying one
of these kits than it is buying the individual components?

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

1661. FT-530 Receive Problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 02:58:26 UTC
From: leber@panther.warm.inmet.com
Message-ID: <CLCLLE.26I@inmet.camb.inmet.com>
Source record: 271012

For those of you who have been following my adventures with Yeasu trying to resolve what seems to be internally generated RF noise around 145.14 Mhz, here's the latest:

They have now had the radio (second time back) for about 2.5 weeks. Last Thursday, the phone rep told me that the unit was waiting for a Quality Control check before being shipped (I didn't ask where Quality Control was when they didn't fix the problem the first time around). It's now almost a week later, and still no radio, so I called to find out what was going on.

After being told they would call back in 15-20 minutes, and waiting 45 minutes with no response, I called again, and finally got through to 'Sam' (didn't get the last name), who is the Service Manager. He said he could not find any sign of the interference. No matter what they had tried, nothing other than 'normal FM noise' was audible in the frequency range in question, and no other receivers held near the 530 picked anything up. This conversation went on for about 15 minutes, at which point I was connected with Chip Margelli, the Customer Service Manager who I had talked with several times before.

Chip reiterated Sam's statement that they could find nothing no matter what they tried. He repeatedly attempted to find the noise while we talked, but couldn't do it. Naturally, if they can't reproduce the problem, they can't fix it.

At this point, I just want the thing back, so I said to ship it back, and I would try it out again. If the problem still exists, I'll try to work with them to pin it down. I thought I had pretty much proven it was coming from the 530, but I'll see if there is some undiscovered external force at work here.

I should have the unit by Friday. Maybe the problem has magically disappeared due to the therapeutic effects of UPS shipping. I'll keep you all posted.

Cheers,
Tom

P.S. I still think it's a pretty nice unit despite this annoying problem.

--

Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
"Smother technology and it rebels." - Max Headroom

1662. Guide to the Personal Rad

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 03:15:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <94021703002697@sec21.uucp>
Source record: 271013

Dear Sirs,

Archive-name: radio/ham-radio/archives

I'm interested in the following files listed below:

How can I get them?

antenna_refs - references for articles about antenna designs
arrl_fo_jobs - descriptions of some ARRL Field Organization jobs
carpet.loop.2 - Antenna for apartments and small spaces
comb6.zip - HF Propagation Predication program
dxcc-k2di - ARRL DXCC country list
dx_w2iol.dat - data for all country prefix, position, etc
dx_w2iol.doc - documentation for the above database
florida_antenna - Florida State antenna law info
hams_on_usenet - list of ham operators and e-mail addresses on the ne
hf_rigs - QST reviews of available HF rigs
mail_order - a database of electronic mail order shops
manufacturers - names and addresses of ham gear manufacturers
newcomers - tips and hints for those new to amateur radio
pio_handbook - ARRL Public Information Officer's Handbook
qsl_bureau1 - information about the ARRL QSL bureau
qsl_bureau2 - "what should I do if" list for the QSL bureau
qst_prodrev - index of ARRL product reviews in QST

Thank you for any help!

73, Gerson Rissin - PY1APS & PY7APS

################################ Super Tag ################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

1663. Index to the rec.rad

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 03:16:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <94021703002596@sec21.uucp>
Source record: 271014

Dear Paul,

PWSK-.Archive-name: radio/ham-radio/archives

Thanks for your list. I'm interested in the following files listed
below:

How can I get them?

antenna_refs - references for articles about antenna designs
arrl_fo_jobs - descriptions of some ARRL Field Organization jobs
carpet.loop.2 - Antenna for apartments and small spaces
comb6.zip - HF Propagation Predication program
dxcc-k2di - ARRL DXCC country list
dx_w2iol.dat - data for all country prefix, position, etc
dx_w2iol.doc - documentation for the above database
florida_antenna - Florida State antenna law info
hams_on_usenet - list of ham operators and e-mail addresses on the ne
hf_rigs - QST reviews of available HF rigs
mail_order - a database of electronic mail order shops
manufacturers - names and addresses of ham gear manufacturers
newcomers - tips and hints for those new to amateur radio
pio_handbook - ARRL Public Information Officer's Handbook
qsl_bureau1 - information about the ARRL QSL bureau
qsl_bureau2 - "what should I do if" list for the QSL bureau
qst_prodrev - index of ARRL product reviews in QST

Thank you for any help!

73, Gerson Rissin - PY1APS & PY7APS

################################ Super Tag ################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

1664. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 03:37:02 UTC
From: evidence@netcom.com
Message-ID: <evidenceCLCnDr.7uL@netcom.com>
Source record: 271015
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

I probably missed this, but, what is the address for the FCC database?

Evidence.

1665. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 03:39:58 UTC
From: kg7bk@indirect.com
Message-ID: <CLCnIn.n3D@news.direct.net>
Source record: 271016

Dana Myers (myers@cypress.West.Sun.COM) wrote:

: Keep in mind, Jeff's experience with Ramsey appears to pre-date your arrival
: to the Internet.

Then would you not agree that it's way past time to stop knocking kits that Ramsey stopped shipping two years ago? This whole mess is not about kits... it is about conflicting personalities, something that belongs in another group. I had exactly the same experiences as Jeff. But all the problems have been solved and documented. I have had as much fun with the FX kits as I had with the ICOM-22S and that's a hellava lot.

: Sure. Anyone can find from the callsign database my birthdate of 5/3/63. I
: started building kits around the time I was 10.

You missed a lot of grief and years of poor designs and poor manuals at Heathkit. But they kept at it and improved with the help of their customers. It won't be many years until they achieve Sainthood. Do you think Ramsey Electronics deserves the same chance?

: Hang on, slamming your customers is not only not politcally correct, it is
: bad business. It doesn't matter if they call you a liar. Anyway, why wouldn't
: John appreciate his name being a line item on Internet?
: * Dana H. Myers KK6JQ

Well, Dana, when one particular customer's biggest thrill in life is stabbing the owner in the back, it may be that the customer is not always right. This thing between Jeff and John is obviously personal. As such, it has no place here. Notice how carefully Jeff avoided telling us what product he was talking about. A new reader could infer that he was talking about a presently available product, which he was not. My only purpose here was to point out that he was talking about the FTR-146, not the present FX-146, and since he has not purchased anything from Ramsey in two years, is not a present authority on their products.

There were problems in the original FTR-146 design. I fixed them. There were problems in the original FX-146 design. I fixed a couple and accessed a data base containing fixes for all the rest... speaking of rest, I need some from this thread.

73, Cecil, kg7bk@indirect.com (Objectivist and Libertarian)

1666. Re: GAP DX EAGLE comments?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 03:48:58 UTC
From: kurdzo@gdc.COM
Message-ID: <1994Feb17.034858.15501@gdc.com>
Source record: 271017

Alan P. Biddle (BIDDLEAP@ctrvax.Vanderbilt.Edu) wrote:
: Hi,

: I was wondering if anyone has had any experience with the DX Eagle antenna
: which GAP makes. It is a smaller version which is roughly comparable
: to the R-7. I have a lot of input on the Cushcraft, but not much

After several calls to GAP and LOTS of tweaking, I've managed to get 5
out of the 6 bands working quite well. I've been waiting for the weather
to get a little better before I attempt to improve the SWR on 17m.

In A/B comparisons with my G5RV/Tuner combo, the GAP was consistently
better on DX, while MUCH worse with local contacts (probably due to
polarization differences). Also, the GAP is VERY quiet.

Another advantage of the GAP: Full-band coverage on all but 10m.

All in all, I guess I'm happy with the GAP. I'm not sure I would buy
another, however.

--

Jim Kurdzo AA1GZ
General DataComm
Middlebury, CT 06762-1299
(203) 574-1118 x6443
kurdzo@gdc.com

1667. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 04:02:32 UTC
From: kg7bk@indirect.com
Message-ID: <CLCoK9.o1@news.direct.net>
Source record: 271018

Jeff Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:

: Jeff got his point across - we understood what he said quite
: clearly, and I don't think anyone (except you) cares how he said it:

Seems like a statement of what's wrong with this country... nobody cares,
(except me). I wonder if Elmering will survive?

: Oh, by the way: I am a mathematics lecturer - isn't `lecturer' a thing
: just like `liar'. Jeff NH6IL

Jeff, Sometimes 'lecturers' are like 'liars'. :-) I like teachers better.
If it makes you happy, please edit "thing" into "bad-thing" or "xxx".
How come I can't reply to you? jherman@uhunix3.uhcc.Hawaii.Edu bounced.

73, Cecil, kg7bk@indirect.com

1668. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 04:25:46 UTC
From: myers@cypress.West.Sun.COM
Message-ID: <2jurkaINNli7@abyss.West.Sun.COM>
Source record: 271019

In article n3D@news.direct.net, kg7bk@indirect.com (Cecil Moore) writes:
>Dana Myers (myers@cypress.West.Sun.COM) wrote:
>
>: Keep in mind, Jeff's experience with Ramsey appears to pre-date your arrival
>: to the Internet.
>
>Then would you not agree that it's way past time to stop knocking kits that
>Ramsey stopped shipping two years ago? This whole mess is not about kits...
>it is about conflicting personalities, something that belongs in another
>group. I had exactly the same experiences as Jeff. But all the problems
>have been solved and documented. I have had as much fun with the FX kits
>as I had with the ICOM-22S and that's a hellava lot.

Well, Cecil, I certainly did not knock the FTR-146 in my posting. I simply said "John Ramsey bad-mouthed two individuals by name". Jeff stepped forward and said "Well, here's my side of the story". Yes, Cecil, this is about personalities, not kits. No, Cecil, this is about the personalities of the people at an amateur radio company that does business with amateurs and is at least as reasonable for rec.radio.amateur.misc as anything else. What other newsgroup should we discuss this in?

>: Hang on, slamming your customers is not only not politcally correct, it is
>: bad business. It doesn't matter if they call you a liar. Anyway, why wouldn't
>: John appreciate his name being a line item on Internet?
>: * Dana H. Myers KK6JQ
>
>Well, Dana, when one particular customer's biggest thrill in life is stabbing
>the owner in the back, it may be that the customer is not always right. This
>thing between Jeff and John is obviously personal. As such, it has no
>place here. Notice how carefully Jeff avoided telling us what product
>he was talking about. A new reader could infer that he was talking about
>a presently available product, which he was not. My only purpose here was
>to point out that he was talking about the FTR-146, not the present FX-146,
>and since he has not purchased anything from Ramsey in two years, is not
>a present authority on their products.

Oh, Cecil, please listen carefully: only a few weeks ago did John Ramsey bring up Jeff Gold by name and proceed to criticize him strongly. It doesn't matter which kit is being discussed. Listen carefully, I'll summarize for you: What is being discussed is Ramsey's way of doing business. Is that clear enough? Now, carefully consider the implication of this: it doesn't matter which kit Jeff built, since the issue was the way Ramsey does business. Now, carefully think about this item: a good business does not berate customers in the presence of other customers. Are you suggesting this is not true? Are you suggesting a business should *ever* engage in insults and personal attacks

on other customers?

Look, for the record, I had a relatively pleasant chat with John Ramsey on the telephone. I don't dislike John Ramsey or Ramsey Electronics. I just had an experience which is very important and should not be trivialized; businesses do not get better if they are not constructively criticized. I warned the readers of this group that Ramsey Electronics engaged in a tactic that I (and others) find highly offensive. At the time I asked John *not* to do it, but he insisted. So, I ended up bringing it here, several weeks later, when the same tactic appeared on the Usenet. Take it for what it is worth.

---
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1669. DX: Tune In To Tuva

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 04:37:00 UTC
From: greg.pool@cld9.com
Message-ID: <7.14535.976.0N5B8509@cld9.com>
Source record: 271020

TUNE IN TO TUVA
Greg Pool WH6DT/6

A group of radio amateurs from the Central Coast of California met with hoomeii-master Kongar-ool Ondar and his family last October in an effort to bring Amateur Radio to the land of Tannu-Tuva, near Mongolia in central Asia.

Ondar and his student, Bady-Dorzhu, had been showcasing hoomeii, their unique style of throat-singing, at concerts in New York, San Francisco, and Los Angeles. Their trip included a heartwarming appearance on the former Chevy Chase Show, where nine-year old Bady's performance stole the show.

Ondar's livelihood is the teaching of hoomeii, which dates back thousands of years. The performer accentuates the natural harmonics present in all our voices to sing several different tones all at once. An oddly mesmerizing sound to the listener and equally difficult one for the performer to maintain, it is a national treasure to the Tuvinian people and a heralded craft throughout the world.

Spearheaded by Pat Barthelow AA6EG and Ralph Leighton, of Friends of Tuva (FOT), the group presented radio equipment to Ondar for delivery to the Lyceum of Tuva, a high school located in the capital city of Kyzyl. FOT was founded jointly by Leighton and the late physicist, Nobel Laureate Richard Feynman.

The equipment included a Drake 2-NT transmitter and 2-C receiver, donated by Paul Herrschaft KQ6G, and both the ARRL's Radio Amateur's Handbook and Antenna Book, donated by Jim Maxwell W6CF.

"Tannu-Tuva is an extremely remote republic of about 300,000 people," Pat informs. "The winters are very severe; temperatures can reach -60 deg F. The republic is surrounded by the 10,000-foot high Sayan mountain range to the north and the Tannu-ola mountains to the south.

"Between 1921 and 1944, Tuva was an independent state. They joined the Soviet Union voluntarily in 1944 as an autonomous region, and were consti-tuted as an autonomous republic in October, 1961. Tuva now faces a new future as a member of the Commonwealth of Independent States."

A member of the Naval Postgraduate School ARC in Monterey CA, Pat is working on furnishing enough ham radio equipment to help activate a radio club at the Lyceum.

"The Lyceum amateur radio station," he says, "is likely to become a centerpiece of attention throughout the republic, enabling the school to become connected to the rest of the world, particularly to other schools. They are very interested in communicating with other students."

Although not an amateur himself, Ondar immediately recognized the Morse Code key given to him and gladly agreed to bring back the equipment to the Lyceum in Tuva. Quite a celebrity in his own country, Ondar informed the group through Leighton that he would tell his fellow Tuvinians of his visit with the US amateurs.

Besides FOT, Pat is also working with the Foundation for Amateur Radio International Radio Service (FAIRS) and the Northern California DX Association (NCDXA).

On hand to represent the NCDXA was Jim W6CF, who noted that Tuva (UA0Y..) is on the air but still quite rare. "Tuva is located in Zone 23, which includes Mongolia and Tibet, but is not that active." Jim informed Leighton that the project would be of interest to a great many amateurs, even to the point of DXpeditions into the area.

Pat adds the power grid there is 220 volt and 50 Hz. "HF, VHF, UHF, satellite, and packet is needed. If anyone knows how to obtain ham radio equipment through educational grants, I would love to hear about it."

This first delivery will be a test to see how best to transport radio equipment into Tuva. Hand-carrying anything of significant value through customs in Russia can carry a slight risk. A letter from the President of Tuva in support of the project will accompany all donations.

"Any equipment would go to Tuva under the close accounting and supervision of myself and Ralph Leighton, " assures Pat. Leighton authored Tuva or Bust!, an account of the FOT's formation in 1977 and their ensuing exploits.

You can contact Pat at on internet at 4927 @ msg.com, packet @ K6LY.#NOCAL.CA.USA.NA or mail at 810-B Airport Rd., Monterey CA 93940 USA.

Bylirig! (Tuvinian for 73)

from:
Pool, G., 1994, "Tune In To Tuva," Worldradio, March, p. 16.
see also:
Pool, G., 1993, "Iniki and the Red Cross," Worldradio, June, pp. 1, 18-21.
Pool, G., 1993, "Royal Gardens QRT," Worlradio, April, pp. 1, 13-16.
Pool, G., 1992, "Volcano Voice," Worldradio, August, pp. 11-12.

• OLX 2.1 TD • Aloha+73 de Greg WH6DT greg.pool@nitelog.com
• [R2.00o] • Usenet • Nitelog BBS • Monterey CA • 408-655-1096

1670. SBPMORSE - Morse to Text w/SB(Pro)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 04:46:12 UTC
From: kayd@storm.cs.orst.edu
Message-ID: <2jusqkINNjsh@flop.ENGR.ORST.EDU>
Source record: 271021

I've been working on source code from DSPMORSE/FFTMORSE and the SB Freedom project for a few days and have come up with a better morse-to-text translating program that seems to be more compatible than either of the two previous versions. I have yet to contact Rocco Caputo or the author of FFTMORSE about the release of their source code, but the SBF kit is available via anonymous FTP and the author has allowed me to release my modified portion of that kit.

Basically, SBPMORSE uses high-speed DMA transfers to get digitized sound from the SB(Pro)'s microphone plug. It then runs it through a fast fourier transformation to create a 16 segment spectrum analyzer. The user then slides a window and a mask over the spectrum analyzer to pick the frequencies from which to detect a tone. The tone is then converted to dits & dahs and finally to text.

Modifications I have done are:
---
eliminate need for ct-voice.drv
change switch to lookup table for code translation
reduce DMA overhead
set up auto-morse-speed tracking
added BT & SK prosigns
support for more "Sound Blaster" compatible cards
allow sampling up to 45KHz when using SBPro
reduced screen flicker
set maximum limit for spectrum analyzer levels

...and more I can't think of right now.

In any case, I'm going to upload the executable to:
wuarchive.wustl.edu:/pub/msdos_uploads/ham/sbpmorse.zip

If you have any problems, send E-mail to me and I'll see what I can do.

Darrek Kay
kayd@xanth.cs.orst.edu
(503)737-9410

1671. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 04:57:57 UTC
From: lapin@casbah.acns.nwu.edu
Message-ID: <2jutgl$k1o@news.acns.nwu.edu>
Source record: 271022

>
>73, Cecil, kg7bk@indirect.com
>

Even thought the current Ramsey thread is far more colorful, I'd like to get a few basic questions answered.

I've never built a Ramsey kit and have not seen the manual. I have considerable respect for the integrity and accuracy of the ARRL product reviews.

To those who are Ramsey proponents, DID YOU PUT THE THING ON A SPECTRUM ANALYZER BEFORE PUTTING IT ON THE AIR?

If so, what did you see? If not, what will the FCC see if they happen to look? Does the manual tell you to check the spectral purity before getting on the air?

Tnx,

Greg Lapin KD9AZ

1672. Re: Looking for Sigma Design Associates...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 05:54:19 UTC
From: larson@loren.net.com
Message-ID: <1994Feb17.055419.14319@unet.net.com>
Source record: 271023

In article <CLBuHt.Mox@on.bell.ca> ydupont@Qc.Bell.CA writes:
>
>In a past article in the October 92 issue of 73 Magazine there was a
>reference to a company named "Sigma Design Associates" located at 22150
>Berkeley Court, Los Altos CA. They had a kit which can be used with
>software to emulate a TNC at a very low cost.
>
>Does anyone have phone or fax number of that company?
>Or does anyone know if that company still exists or has moved???
>I tried directory assistance without success...

Sigma Design Associates
P.O. Box 49085
Colorado Springs, Co 80949

(719) 260-5513

I haven't put the kit together yet, but it came fairly quickly.

This is a single speed modem for 1200 baud.

Alan

1673. Help: QSL Printer

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 07:06:03 UTC
From: mcduffie@unlinfo.unl.edu
Message-ID: <2jv50s$80f@crcnis1.unl.edu>
Source record: 271025

This may seem like a strange request, but here goes...

Several years ago, I stumbled onto a specific QSL design that I liked very much. It was a card I received from someone else. The card had no markings from the printer, so I called the sender and asked for the information. Luckily, he still had it. It's now 13 years later, I've reordered from them once, moved once, and yes, lost the address.

I would like to describe the card and see if anyone recognizes the design. It is a thick card stock, flat-not shiney, is yellow at the top, gradually fading/transforming to redish-orange on the bottom. The printer was in PA (I think), and possibly had a name resembling RAU.

If anyone can supply me with the printer's name/address/phone, I would really appreciate it. I'd like to order some new cards from him as soon as possible.

Thank you for any help you might be able to provide.

73, Gary

1674. Daily Summary of Solar Geophysical Activity for 16 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 08:13:38 UTC
From: oler@rho.uleth.ca
Message-ID: <9402170813.AA28659@rho.uleth.ca>
Source record: 271026
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

16 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 047, 02/16/94
10.7 FLUX=104.7 90-AVG=106 SSN=071 BKI=3433 3322 BAI=014
BGND-XRAY=B2.1 FLU1=2.7E+06 FLU10=1.3E+04 PKI=3433 3332 PAI=015
BOU-DEV=030,050,023,034,033,023,017,015 DEV-AVG=028 NT SWF=00:000
XRAY-MAX= B6.2 @ 1113UT XRAY-MIN= B1.8 @ 1815UT XRAY-AVG= B2.4
NEUTN-MAX= +002% @ 2235UT NEUTN-MIN= -003% @ 1620UT NEUTN-AVG= +0.0%
PCA-MAX= +1.2DB @ 1940UT PCA-MIN= -0.3DB @ 0350UT PCA-AVG= +0.0DB
BOUTF-MAX=55356NT @ 0319UT BOUTF-MIN=55310NT @ 1842UT BOUTF-AVG=55336NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+062,+000,+000
GOES6-MAX=P:+125NT@ 1803UT GOES6-MIN=N:-067NT@ 0530UT G6-AVG=+086,+040,-031
FLUXFCST=STD:105,110,110;SESC:105,110,110 BAI/PAI-FCST=015,025,020/015,025,020
KFCST=1112 2111 3333 4121 27DAY-AP=012,007 27DAY-KP=3333 3232 2311 1232
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 15 FEB 94 is not available.
The Full Kp Indices for 15 FEB 94 are: 4- 3- 3o 3o 5- 3o 3o 3+
The 3-Hr Ap Indices for 15 FEB 94 are: 23 14 15 16 36 15 15 20
Greater than 2 MeV Electron Fluence for 16 FEB is: 5.4E+08

SYNOPSIS OF ACT

Solar activity was very low. A new region was assigned:
7672 (N03E28).

Solar activity forecast: solar activity is expected to be
low.

The geomagnetic field has been at mostly unsettled levels
at mid-latitudes while some high latitude stations reported
major storm levels. Energetic electron fluxes continue to be at
elevated levels. It appears as if the long duration geomagnetic

storm is about to end. A-Fredericksburg values for the past eleven days are listed below:

Date: Feb 5 6 7 8 9 10 11 12 13 14 15
A-Fred: 21 39 45 42 32 28 38 27 30 28 26

This represents the longest string of days greater than 20 since 1957.

Geophysical activity forecast: the geomagnetic field is expected to be unsettled to begin the period. Active to minor storm conditions are expected for the end of the period due to a well positioned coronal hole.

Event probabilities 17 feb-19 feb

Class M 10/10/10
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 17 feb-19 feb

A. Middle Latitudes
Active 25/35/35
Minor Storm 25/35/25
Major-Severe Storm 05/05/05

B. High Latitudes
Active 30/35/35
Minor Storm 25/35/30
Major-Severe Storm 05/05/05

HF propagation conditions continued to improve to near-normal values over the low and middle latitudes today. High and polar latitudes also showed improvements, although periods of below-normal conditions persisted primarily along the night-sectors where residual localized substorming is persisting. Conditions should continue at current levels until 18 February when the next disturbance from another well placed (although smaller) coronal hole is due to begin perturbing the high and upper-middle latitude ionosphere.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7668 N08W55 283 0020 BXO 04 005 BET
7669 N08E17 211 0010 BXO 04 002 BET
7670 N10E24 204 0040 CRO 09 008 BET
7671 N10E38 190 0420 CKO 05 004 BET
7672 N03E28 200 0010 AXX 01 002 ALPHA

REGIONS DUE TO RET
NMBR LAT
7661 N08 133
7660 S08 114

LISTING OF SOLAR ENERGETIC EVENTS FOR 16 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1340 1340 1341 150

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 16 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 16/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
62 S19W02 S19W02 N17W26 N22W04 246 ISO NEG 013 10830A
63 S15E63 S27E51 S01E46 S01E46 184 ISO POS 008 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
15 Feb: 0049 0141 0157 B9.0
0345 0351 0402 C1.0 SF 7670 N12E49
0551 0556 0600 C1.1 SF 7670 N10E47
0747 0757 0811 C1.8 SF 7671 N09E63 15 16 24

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Region 7670: 2 0 0 2 0 0 0 0 002 (50.0)
Region 7671: 1 0 0 1 0 0 0 0 001 (25.0)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (25.0)

Total Events: 004 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce

associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1675. Re: Baycom and TFPCX

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 08:22:19 UTC
From: mljteijn@et.tudelft.nl
Message-ID: <1994Feb17.092219.2508@tudedv.et.tudelft.nl>
Source record: 271027

In article <8335@gold.gvg.tek.com>, groverc@gvgadg.gvg.tek.com writes:
>
> I need English documentation for the program TFPCX.

Haven't seen one yet, but I do use TFPCX without any problems, so
if you have any questions, mail them to MLJTeijn@ET.TUDelft.NL

>
> This is a piece of software that lets one use GraphPac
> with a tnc in kiss mode or with a Baycom module.

A tnc in KISS mode requires tfpcR, not tfpcX!

>
> Any help appreciated.
>
> 73
>
> Grover, WT6P

Grtnx Marcel

/--\
| Marcel L.J. Teijn |
| University of Technology (Sorry, no cool signature yet...) |
| Delft, The Netherlands |
| E-mail: MLJTeijn@Et.TUDelft.NL |
\--/

1676. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 08:28:04 UTC
From: k23690@lehtori.cc.tut.fi
Message-ID: <2jv9qk$nvi@cc.tut.fi>
Source record: 270878

Jon Bloom (KE3Z) (jbloom@arrl.org) wrote:

> Of course, to realize the 50-dB SNR from the 8-bit system, the signals
> have to use all of the available signal range. If you use less, the
> SNR is reduced proportionally, as the signal is closer to the noise
> floor. That probably argues for something on the order of a 12-bit
> converter for "overhead." But with good ALC ahead of the A/D, 8 bits
> might be acceptable.

Why not use standard u-law or A-law compression as used in telephone
systems for decades. The input signal is band-limited to 3.4 kHz,
sampled at 8 kHz and converted with a 12 bit linear ADC. The output
from the ADC (an integer) is converted to a floating point format
consisting of 1 bit sign, 4 bit mantissa and 3 bit exponent. This
is then serialized to 64 kbit/s.

If this quality is adequate for normal telephone networks, then
it should be adequate for inter-repeater links.

This has been used for decades and there should be surplus equipment
avilable.

All modern compression systems are much more bit effective than this,
but I don't think that there are surplus equipment available yet.

Paul OH3LWR

1677. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 09:16:27 UTC
From: elendir@enst.fr
Message-ID: <2jvclb$9ap@cismsun.univ-lyon1.fr>
Source record: 270879

Alan Bloom (alanb@sr.hp.com) wrote:
: Andrew B. White (k9cw@prairienet.org) wrote:

: I think what people object to is that F6FNU does not do the QSL'ing
: as a public service, as most QSL managers do, but to make a profit.

Really ? That surprises me. Thought that all QSL management was free of
charge.

Vince (11 weeks, still waiting, future F1...)

--

1678. Sound Blaster ASP morse coder/decoder

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 10:48:07 UTC
From: demetre@phaethon.intranet.gr
Message-ID: <2jvi17$esm@helios.intranet.gr>
Source record: 270880

CQ netters,

Does anyone out there have a program that makes use of the Sound Blaster
ASP card for morse coding/decoding ??

1679. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 11:00:53 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CLD7xI.1Ju@hpqmoea.sqf.hp.com>
Source record: 270881

Jon Bloom (KE3Z) (jbloom@arrl.org) wrote:
: jramsey@delphi.com wrote:

: : . You see, the
: : ARRL couldn't get their kit to work! So we sent them an assembled unit.

: : Yes it did not meet the FCC specs for spurious - missing by about a db or
: : two (I'm at home and don't have notes handy). The ARRL missed the whole
: : point of the kit which was to promote kit building, etc,etc.

Here in Britain, there are no required specs for spurious outputs,
we're held responsible for any problems due to any at any level. I know
that the US FCC has put actual numbers on required performance (sounds
like an improvement on our requirements, to me). So, just from personal
curiosity, what are the consequences to an amateur who puts a radio on
the air that does not meet the FCC specs ?

David GM4ZNX

1680. Re: Whats it got to do with 40 m QRP?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 12:28:00 UTC
From: kt2q@cbnewst.cb.att.com
Message-ID: <CLDByp.Cyq@cbnewst.cb.att.com>
Source record: 270882

Looks to me like this thread should be renamed "Copying whole words on CW" Seems like it has nothing to do with cw QRP.

All you have to do is edit the subject line in your followup....

Rick KT2Q

1681. Help wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 12:32:46 UTC
From: laczik@vax.oxford.ac.uk
Message-ID: <1994Feb17.123246.20415@oxvax>
Source record: 270883

Hi,

I am thinking about getting a Kenwood TS-440S or a Yaesu FT-757GX.
I would be most interested to hear about your experience with either
of them, or even better a comparison between the two.
Also: any alternative suggestions, e.g. how inferior would a TS-140S or
FT-747GX would be?
My main requirement is good RX performance and I also need a computer
interface to store VFO and mode data, and for the remote control
of as many functions as possible.

Many thanks,
John

1682. Attn: Key Collectors

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 13:07:51 UTC
From: turini@gdls.com
Message-ID: <2jvq77$kvd@gdls.com>
Source record: 270884
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Recently I picked up a keyer at a local gun show (shows you can never tell where things will show up). It looks like a standard Vibroplex bug, except that it's marked

Mfg. by
O.M. Thomas Electric Co.
St. Louis, MO

Does anyone have any information on it? Year in production? What it's worth? etc.

Thanks

Bill

1683. Re: Iambic keyer paddles

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 13:16:06 UTC
From: junger@rsg1.er.usgs.gov
Message-ID: <1994Feb17.131606.24289@rsg1.er.usgs.gov>
Source record: 270885

>I am told that in general, right handed operators use the right paddle
>for the dash while the left paddle is used for the dit. OK no problem
>so far.
>
>Is there a rationale behind this convention?
>

I am left-handed and use a single paddle key set up so that my thumb
does dashes. This habit probably originates from my use of right-handed
bugs back in the 50's and 60's. It does allow me to use any right-handed
ham's keyer without any problems, though.

73's -- John W3GOI

1684. ARRL Letter available via FTP

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 13:57:05 UTC
From: marcbg@netcom.com
Message-ID: <marcbgCLDG36.4Mw@netcom.com>
Source record: 270886

As part of an experiment, I am making the ARRL letter, which I have been posting to this and rec.radio.info, available via anonymous FTP. I plan to keep a repository of ARRL letters (we'll see how it goes). Future plans also are for the W5YI letter.

If this proves to work without too much hassle, I'll keep it up.

ftp to: netcom8.netcom.com
/pub/marcbg

Enjoy!
--
==========
Marc B. Grant Voice Mail: 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com
==========

1685. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 14:31:14 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb17.143114.3229@ke4zv.atl.ga.us>
Source record: 270887

In article <fred-mckenzie-160294172009@k4dii.ksc.nasa.gov> fred-mckenzie@ksc.nasa.gov (Fred McKenzie) writes:
>In article <CLAz5v.Iss@news.direct.net>, kg7bk@indirect.com (Cecil Moore)
>wrote:
>> John Ramsey and I have never met in person. We have exchanged letters and
>> e-mail and I perceive him to be a friendly, helpful, and assertive
>> businessman who is trying to make a living at his hobby.
>
>Cecil-
>
>Over the years, I have seen John at his booth at several hamfests. He may
>even be at the Orlando Hamfest this coming weekend, if you happen to be in
>the Central Florida area.
>
>My impression is as yours, that he is a reputable person. While his
>products are not in the Kenwood or Icom category, neither are his prices.
>I have a nice solid-state, dual trace, 20 MHz oscilloscope, purchased from
>him several years ago. Except for the nameplate, it is identical to one
>sold by several other companies. However, the other companies charged a
>LOT more for theirs!

Actually his pricing was about in line with other resellers of Goldstar scopes, and you can get a very much better used Tek 453A for less money. It's not a ripoff, but it's not that much of a bargain either, even though he cut the price and threw in a digital meter when I bought one from him.

>I think the kits he sells are aimed towards people like ourselves, who are
>quite willing to go through the ordeal of de-bugging a kit, for the feeling
>of accomplishment from getting it to work! Unfortunately, we are like
>dinosaurs about to become extinct.
>
>The modern ham seems to think a kit is something you merely plug the parts
>into, like assembling an IBM-clone computer from modules. From that point
>of view, I'll admit that John's kits are not "modern".

Well I wouldn't object if the kits were marketed as random collections of out of spec parts for a poor design that, if you follow the assembly instructions exactly, won't meet FCC spectral purity requirements, or Ramsey advertised sensitivity, selectivity, and power output specs.

Sure you can replace parts, extensively modify the design, and alter tuneup procedures so that the end product is usable and legal, but only if you have a spectrum analyzer and a bench full of other equipment, as well as a good deal of RF experience. Or if you don't care that you're

spraying RF over half the band and keying half a dozen repeaters at once.

If the kit were advertised as a *starting point* for an experienced builder to develop his own transceiver design, I don't think there'd be much complaint. But as it stands, it's cheaper, and better, to start with a piece of surplus gear that at least met FCC specs at one time, and modify *that* to the amateur band. At least you know up front what you're getting into.

Perhaps hams have been spoiled by the good repeatable designs of other kit suppliers such as the defunct Heathkit, or the current kits available from Down East Microwave and some others, where, if you follow instructions, you'll get a finished product that, if not exactly high performance, at least meets published specs and FCC requirements without need of sophisticated test equipment and extensive experience. There's really no excuse for a design that allows transmission with an unlocked synthesizer. Nor is there an excuse for a PA design that emits a spectrum that looks like a comb except at one razor sharp tuning point. Proper unconditionally stable amplifiers with fixed component filtering are too easy to design to tolerate the Ramsey approach of critically tweaked circuits any longer.

Note that I had fun discovering what was wrong with the design and engineering fixes for it once I realized that there were serious problems. But I don't think most builders would test their transceiver with a lab grade spectrum analyzer and realize it had serious problems that needed fixing. For the ham whose bench only contains a soldering iron, DVM, and maybe a commercial transceiver, noticing that the Ramsey kit was grossly out of compliance with FCC requirements wouldn't be obvious. They'd likely go ahead and use it until a determined band of T-hunters found them and pinned their coax.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1686. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 14:40:29 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb17.144029.3459@ke4zv.atl.ga.us>
Source record: 270888

In article <2970520692.0.p01258@psilink.com> TJA@Panix.Com writes:
>>
>>Would the VEC's kick me out if I brought a laptop to a code test session or
>>should I wait until my paper speed catches up to my keyboard speed?
>
> I run the VE sessions for our local club here in Stamford, CT
>and using a laptop is perfectly fine in a word processor or editor mode.
>You may just have to show it to them first. If they give you are hard time
>just fly out here and we'll let you use one!

Or bring in your Royal or Smith Corona portable typewriter. Even the FCC
allowed you to copy by mill back in the 1960s.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1687. HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 14:50:52 UTC
From: jangus@skyld.grendel.com
Message-ID: <761496652snx@skyld.grendel.com>
Source record: 270889

In article <CLC6Dp.Hz6@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:

[snips out a bunch of point-counter point hamblaster stuff]

> You know, this IS starting to sound like an ad. The above exchange
> could have been conducted via email; it sounds a bit contrived,
> doesn't it?
>
> Jeff NH6IL

Oh God, what next? I hope they don't start advertising frequencies on 6 MHz.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

1688. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 14:50:55 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb17.145055.3550@ke4zv.atl.ga.us>
Source record: 270890

In article <CLC4Dw.10E@oakhill.sps.mot.com> ben@yosemite.sps.mot.com (Ben Thornton) writes:
>In article <2jt93e$ds9@charm.magnus.acs.ohio-state.edu>,
>>
>>Even the *thought* of receiving a QSL card with a nude picture of the average
>>ham on it is enough to offend me. I mean, seriously, folks. Leaf through
>>any QST of recent (or even ancient) vintage, look at the pictures of the
>>hams and imagine seeing them nude.
>
>So, explain to me just how it is that someone is somehow a different person
>simply because they wear no clothing. The difference is only in the eye
>of the beholder...

Of course, all esthetics are in the eye of the beholder. Aside from it's utilitarian aspect, decorative clothing is designed to mask the ugly, not hide the beautiful. And according to the prevailing esthetic, most hams *need* that decorative covering to avoid offending the eye of the beholder. A prime rule of society is that one shouldn't do something in public that frightens the horses.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1689. Re: Daily Summary of Solar Geophysical Activity for 14 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 15:05:04 UTC
From: jmvasnie@cen.ex.ac.uk
Message-ID: <CLDJ8H.7n5@cen.ex.ac.uk>
Source record: 270891
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave

oler@rho.uleth.ca writes:
> /\
>
> DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT
>
> 14 FEBRUARY, 1994
>
> /\
>
> (Based In-Part On SESC Observational Data)
>
>
> SOLAR AND GEOPHYSICAL ACT
> --
>
> NOTE: Intense stratospheric warming and a strong anticyclone exists over
> the North Atlantic and Europe. Warm air is spreading east.
>
> Please also note the inclusion of greater than 2 MeV electron fluence
> values (useful for monitoring satellite charging activity).
>
> !!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 045, 02/14/94
> 10.7 FLUX=101 90-AVG=106 SSN=059 BKI=4433 3534 BAI=023
> BGND-XRAY=B2.3 FLU1=6.2E+06 FLU10=1.7E+04 PKI=4443 3544 PAI=028
> BOU-DEV=056,052,037,028,022,073,035,044 DEV-AVG=043 NT SWF=00:000
> XRAY-MAX= B7.9 @ 0032UT XRAY-MIN= B2.0 @ 1749UT XRAY-AVG= B2.8
> NEUTN-MAX= +003% @ 0945UT NEUTN-MIN= -001% @ 2105UT NEUTN-AVG= +0.6%
> PCA-MAX= +0.1DB @ 1845UT PCA-MIN= -0.4DB @ 0440UT PCA-AVG= -0.0DB
> BOUTF-MAX=55359NT @ 0416UT BOUTF-MIN=55304NT @ 1608UT BOUTF-AVG=55336NT
> GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+065,+000,+000
> GOES6-MAX=P:+131NT@ 1727UT GOES6-MIN=N:-084NT@ 0648UT G6-AVG=+088,+040,-034
> FLUXFCST=STD:100,105,105;SESC:100,105,105 BAI/PAI-FCST=020,010,015/020,012,018
> KFCST=0115 5010 0005 5010 27DAY-AP=022,022 27DAY-KP=3333 5533 3553 4233
> WARNINGS=*AURMIDWCH
> ALERTS=
> !!END-DATA!!
>
> NOTE: The Effective Sunspot Number for 13 FEB 94 was 39.6.
> The Full Kp Indices for 13 FEB 94 are: 4+ 3+ 3o 5- 4- 5- 5- 4-
> The 3-Hr Ap Indices for 13 FEB 94 are: 33 19 15 41 21 37 42 24
> Greater than 2 MeV Electron Fluence for 14 FEB is: 3.6E+08
>
>

> SYNOPSIS OF ACT
> --------------------
>
> Solar activity was very low. Region 7671 (N10E65)
> features a large, dark, spot extending over three degrees.
>
> Solar activity forecast: solar activity is expected to be
> very low.
>
> STD: Region 7671 is associated with extremely intense Ca XV
> emissions. The National Solar Observatory reported extremely
> intense emissions as this region rotated around the east limb
> on 12 February. Bad weather has prevented attempts to observe
> emissions since then. C-class flares are possible from this
> region. The threat for possible satellite anomalies may
> continue for the next 2 or 3 days before electrons at greater
> than 2 MeV fall back toward background levels.
>
> The geomagnetic field has been at unsettled to minor storm
> levels at mid-latitudes and major storm levels at high
> latitudes. The storm which began 05 February continues at high
> latitudes, but appears to have receded at mid-latitudes. The
> energetic electron flux is elevated for the seventh day
> in a row.
>
> Geophysical activity forecast: the geomagnetic field is
> expected to range from unsettled to minor storm for day one.
> The field is expected to relax to mostly unsettled levels
> for day two. A new coronal hole may disturb the magnetic field
> on day three.
>
> Event probabilities 15 feb-17 feb
>
> Class M 05/05/05
> Class X 01/01/01
> Proton 01/01/01
> PCAF Green
>
> Geomagnetic activity probabilities 15 feb-17 feb
>
> A. Middle Latitudes
> Active 35/25/30
> Minor Storm 20/15/20
> Major-Severe Storm 05/05/05
>
> B. High Latitudes
> Active 35/25/30
> Minor Storm 25/15/20
> Major-Severe Storm 05/05/05
>

> HF propagation conditions continue to very slowly improve,
> but are still well below normal, particularly on higher
> latitude paths. Conditions are expected to remain below-normal
> for at least the next 3 to 4 days. Another smaller coronal
> hole related disturbance is expected to rejuvenate activity on
> about 17 February, although it should primarily affect the
> higher latitudes.
>
>
> COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
> ==
>
> REGIONS WIT
> --
> NMBR LOCATION LO AREA Z LL NN MAG TYPE
> 7668 N09W29 283 0050 CSO 09 011 BET
> 7669 N05E32 222 0000 AXX 00 001 ALPHA
> 7670 N08E48 206 0010 BXO 05 004 BET
> 7671 N10E65 189 0450 CHO 06 003 BET
> 7667 S07W80 334 PLAGE
> REGIONS DUE TO RET
> NMBR LAT
> 7659 S13 150
>
>
> LISTING OF SOLAR ENERGETIC EVENTS FOR 14 FEBRUARY, 1994
> --
> A. ENERGETIC EVENTS:
> BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
> NONE
>
>
> POSSIBLE CORONAL MASS EJECTION EVENTS FOR 14 FEBRUARY, 1994
> --
> BEGIN MAX END LOCATION TYPE SIZE DUR II IV
> NO EVENTS OBSERVED
>
>
> INFERRED CORONAL HOLES. LOCATIONS VALID AT 14/2400Z
> --
> ISOLATED HOLES AND POLAR EXT
> EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
> NO DAT
>
>
> SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY
> ---
>
> Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
> ------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------

> 13 Feb: 0051 0244 0429 C1.3
>
>
> REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY
> --
>
> C M X S 1 2 3 4 Total (%)
> -- -- -- -- -- -- -- -- --- ------
> Uncorrellated: 1 0 0 0 0 0 0 0 001 (100.0)
>
> Total Events: 001 optical and x-ray.
>
>
> EVENTS WIT
> --
>
> Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
> ------ ---- ---- ---- ---- -- ------ ------ ---------------------------
> 13 Feb: 0051 0244 0429 C1.3 IV
>
> NOTES:
> All times are in Universal Time (UT). Characters preceding begin, max,
> and end times are defined as: B = Before, U = Uncertain, A = After.
> All times associated with x-ray flares (ex. flares which produce
> associated x-ray bursts) refer to the begin, max, and end times of the
> x-rays. Flares which are not associated with x-ray signatures use the
> optical observations to determine the begin, max, and end times.
>
> Acronyms used to identify sweeps and optical phenomena include:
>
> II = Type II Sweep Frequency Event
> III = Type III Sweep
> IV = Type IV Sweep
> V = Type V Sweep
> Continuum = Continuum Radio Event
> Loop = Loop Prominence System,
> Spray = Limb Spray,
> Surge = Bright Limb Surge,
> EPL = Eruptive Prominence on the Limb.
>
>
> ** End of Daily Report **

1690. Re: MAJOR NEW HF RADIO PROPAGATION SOFTWARE ANNOUNCEMENT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 15:05:55 UTC
From: jmvasnie@cen.ex.ac.uk
Message-ID: <CLDJ9v.7p5@cen.ex.ac.uk>
Source record: 270892
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave

oler@rho.uleth.ca writes:
> bid: $STBL4045A
> NEW HF PROPAGATION SOFTWARE
> PACKET RADIO REPORT
> SOLAR TERRESTRIAL DISPATCH
> (PACKET: VE6MGS@VE6MC.#EDM.AB.CAN.NOAM)
> (INTERNET: COLER@SOLAR.STANFORD.EDU)
>
> The Solar Terrestrial Dispatch
> Ionospheric Support Branch
>
> Proudly Releases
>
>
> S K Y C O M V e r s i o n 1 . 0
>
> High Frequency Ionospheric Signal Analyst
>
>
> A New Standard in
> Radio Communications Software
>
>
> This significant software package is designed for high frequency (HF)
> and very high frequency (VHF) radio communicators and/or listeners. This is
> the ONLY major ionospheric software package we are aware of for personal
> computers to thoroughly examine (in accurate detail) practically every
> ionospheric parameter relavent to radio communications. It is a "MUST-HAVE"
> for anyone involved in HF or refractive-VHF radio communications and will
> almost certainly improve the productivity of all broadcasters.
>
> Essentially, this software can be used as an ionospheric laboratory for
> determining the effects of radio signals under a wide variety of solar and
> geophysical conditions. It is very useful as a teaching tool, as well as an
> analytical and predictive tool.
>
> A complex dynamic model of the ionosphere is used to generate
> exceptionally useful and accurate information regarding global ionospheric
> conditions. Based on a corrected version of the most recent International
> Reference Ionosphere (IRI) model - which produces realistic ionospheric
> electron density profiles, SKYCOM dynamically alters the ionospheric profile
> characteristics to more closely resemble profiles observed under actual

> conditions.
>
> This software has been a long time coming. We're pleased to announce a
> few of the more significant features below:
>
> * RAY TRACE SIGNALS THROUGH THE IONOSPHERE BET
> ON THE EARTH.
> * Learn the behavior of radio signals and see where and how signals are
> refracted in the ionosphere.
> * Visually study the effects of sporadic-E on radio signals. Observe
> how signals are refracted by sporadic-E.
> * Simultaneously observe changes in the electron density as the signals
> are traced and refracted from one point to another.
> * Examine the effects of signal convergence and divergence caused by
> ionospheric refraction.
> * Study the behavior of signals as they penetrate into the various
> ionospheric layers (D, E, sporadic-E, F1, and F2 layers are all
> supported as well as TOP-SIDE ionospheric profiles up to 1000 km).
> * Estimate effects of solar flares (minor or major) on the ionosphere
> and signals traversing the daylit sides of the ionosphere.
> * Estimate the quality of any signal transmitted between any two points,
> under almost any set of circumstances. Quality figures are derived
> through the use of models that estimate the effects of: Geomagnetic
> Activity, SWFs, Sporadic-E, the Equatorial Anomaly, Regular
> Non-Deviative Absorption, the Winter Anomaly, Polar Cap Absorption,
> Deviative Auroral Absorption, etc.
> * Determine circumstances which may result in very good, good, fair,
> poor, very poor, or even radio blackout conditions for any given
> path and for any given geophysical event.
> * Determine accurate, rigorously ray-traced Maximum Usable Frequencies
> for practically any path.
> * PRODUCE EXCEPTIONALLY DET
> Determine exactly where your transmissions can be received on the
> Earth and the relative strength or quality of the received signals.
> * PRODUCE IN-DEPTH COMPLEX GLOBAL MAPS OF IONOSPHERIC CHARACTERISTICS
> These maps are similar to weather maps used by meteorologists and
> provide a wealth of information regarding the state of the
> ionosphere at any given date or time.
> * Compute global maps of maximum usable frequencies for any time of day.
> * Display global maps of ionospheric M-factors for 3000 km distances.
> * Generate global maps of critical E or F2 layer frequencies.
> * Display maps of solar zenith angles (elevation of the Sun).
> * Generate global maps showing the maximum height of the F2 layer
> electron density.
> * Produce unique transverse CROSS-SECTIONS of the ionosphere for any
> given path.
> * Generate maps showing the geomagnetic DIP or inclination angles
> throughout the world.
> * Display maps of the Total Field Intensity of the geomagnetic field.
> * Also produce maps of Magnetic Latitude or Modified DIP angles.

> * MIX AND MAT
>
> SYSTEM REQUIREMENTS:
>
> - IBM or compatible computer system (386 or better recommended).
> - Math Coprocessor recommended, although not required.
> - MSDOS 3.3 or higher.
> - VGA graphics capabilities required. All graphics are VGA quality.
> - 512 to 640 K of free memory.
>
>
> FOR PRICING INFORMATION, CALL THE RECORDED MESSAGE (APPROXIMATELY 2 MINUTES)
> BY DIALING: 403 756-2386. A SPECIAL LIMITED TIME INT
> AVAILABLE *ONLY* THROUGH 31 MARCH 1994.
>
>
> ** END OF PACKET BULLETIN **

1691. Re: Noise Problem

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 15:07:42 UTC
From: jmvasnie@cen.ex.ac.uk
Message-ID: <CLDJCx.7qM@cen.ex.ac.uk>
Source record: 270893

William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM writes:
>
> [dab@kaiwan.com] Doug Brandon [NF6H] writes:
>
> For the past year or so, I've had a very bad noise problem while
> operating
> on the HF bands. Since I've been a lot more active the past few
> months,
> this is really starting to frustrate me. The noise is not a real
> choppy
> sounding noise, but sounds more like VERY strong band noise. However
> when I have this very loud noise, other stations within a few miles
> have no noise. Neither of the two noise blankers turned up full blast
> on my TS-930S do much good. I'm using a vertical antenna, so I can't
> turn it to see which direction it's coming from. The noise is very
> apparent on all HF bands from 1.8-28 MHz, 144mhz, as well as sparkles
> on my cable TV. The noise doesnt seem to make it up to 450mhz though,
> nice and quiet up there.
>
> I have power lines directly in back of my house, but I don't think
> they are the problem. I've had Southern California Edison come out a
> few times over the past couple of years and they reported no problems.
> The noise is not always there and varries in strength each time it
> comes on. I think the noise is coming from some sort of appliance or
> machinery from one of the neighbors' houses, but I have no idea how to
> find it. It is a little baffling though, sometimes I won't hear the
> noise for weeks, but is has been present this entire weekend 24 hours
> a day.
>
> Has anybody had experience tracking down and solving this type of
> noise problem?
>
> This sounds like a problem that drove me nuts for quite some time. Look for
> a gas dryer or heater with an auto-igniter (as opposed to a pilot light). I
> found my dryer will on occasion get stuck in a partially on condition at
> the end of a cycle, causing the igniter to spark, but leaving the gas off,
> the result is broad band noise and no TV (I'm too cheap for cable). :-)
>
> I hope this helps. (By the way, since you are just up the road, I'm on the
> Autonetics repeater during commute time, 145.915 (-) pl 136.5.)
>
> 73
>
> ---

> Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
> Rockwell International Ham: KD6MCI
> (714) 762-2872
> Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com
> ---
> Who are you? * I am number 2. * Who is number 1? * You are number 6.
> ---
>
>
>

1692. Re: Foot race across desert?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 15:23:37 UTC
From: nsmca@aurora.alaska.edu
Message-ID: <1994Feb17.062337.1@aurora.alaska.edu>
Source record: 270894
Cross-posted to: misc.emerg-services,rec.radio.amateur.misc

In article <2johsr$r45@garuda.csulb.edu>, byon@beach.csulb.edu (Byon Garrabrant) writes:
> In article <jfhCL86vF.tv@netcom.com>, Jack Hamilton <jfh@netcom.com> wrote:
>>I remember hearing about a foot race somewhere across the desert in
>>Southern California and maybe Nevada. It's run by a police agency as
>>a fundraiser for some charity, I think. They have solicited amateur radio
>>volunteers in the past, but I heard about it only after the event (and I
>>don't remember where).
>>
>>Does anyone have more information about this event?
>>
>
>
> It is called the Challange Cup Relay Race - also know as the Baker to Vegas
> race. It's a 120 mile relay race in 20 legs from Baker, in California,
> through Pahrumph (sp) and on into Vegas. This year it will be held
> on April 8-9. We (Orange County RACES) set up a communications system
> for the use of a few county teams. It is an international event, run
> by police officers. This is all off the top of my head, so I may be off
> a bit, but I gan get you as much info as you would like.
>
> --
> Byon Garrabrant KD6BCH byon@csulb.edu
>

There is one in Alaska or was one, between I believe Fairbanks and Anchorage or
was it Fairbanks and Valdez. It used to be run, but not sure if its doen any
more.. It was run by mostly State Troopers, APD (Anchorage PD), and other
Alaskan Police/Law Officers..

Anyone have any info?

===
Ghost Wheel - nsmca@acad3.alaska.edu
also 1@9714 WWIVnet..

1693. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 15:27:28 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb17.152728.3713@ke4zv.atl.ga.us>
Source record: 270895

In article <1994Feb16.173115.8288@arrl.org> jbloom@arrl.org (Jon Bloom (KE3Z)) writes:
>
>To talk about a "power dB" as separate from a "voltage dB" is
>meaningless, *unless* the two voltages you are comparing occur across
>different impedances, which is not the case here. Your statement makes
>no sense.

Yep. I can only plead brain fade on that one. You're exactly correct.
20log(voltage ratio) is exactly the same thing as 10log(power ratio).
It's the power ratio we hear, but it's the voltage ratio we're
looking at in the A/D-D/A conversions. (Actual devices are current
driven, but it amounts to the same thing.)

>So, what's enough SNR, 50 dB or 100 dB? I suggest it's 50 dB. A
>compact disk gives you about 90 dB, and I'd hate to think we need
>better than CD quality on our voice links!

I agree. We strive to achieve CD quality in our broadcast transmission
systems, but we rarely achieve it. We count on the 62 db spl of a quiet
room to mask the defects in transmission on the lower end. Since 110 db
spl is threshold of pain, we only *have* to deliver about 48 db SNR to
satisfy the listener. People using good tight sealing headphones can
hear the noise, but otherwise it's lost in the ambient room noise.

Note that for amateur use, our source is a live mike in an often less
than quiet room. So there's no reason to have greater than 48 db SNR
in our transmission system since the source SNR will be no better than
that.

>Of course, to realize the 50-dB SNR from the 8-bit system, the signals
>have to use all of the available signal range. If you use less, the
>SNR is reduced proportionally, as the signal is closer to the noise
>floor. That probably argues for something on the order of a 12-bit
>converter for "overhead." But with good ALC ahead of the A/D, 8 bits
>might be acceptable.

ALC often makes the problems worse if implemented improperly. What
we want is enough gain to put the source noise at the floor of the
converter, and a gain *reduction* circuit to ride peaks so that we
stay in the converter's range. That'll minimize our system noise.
If the source has a SNR greater than 50 db, 8 bits will compress
it down to 50 db. If the source SNR is worse than 50 db, we can't
make it better by scaling gain in front of the A/D.

Gary
--

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1694. Frequency doubler design, help, VFO.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 15:43:13 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Feb17.234313.1@ntuvax.ntu.ac.sg>
Source record: 270896
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,

I need a simple design for a 20m VFO that drops into the place of a X-tal. My exact transmitting circuit is the 6-watter from the 1986 ARRL Handbook.

I have also built a 40 meter VFO from the QRP tranceiver designs in the 1994 ARRL Handbook and they work. But when I use the VFO with the freq. doubler circuit from the September 1993 issue of CQ, I found the output to be too weak and fundamental frequency rejection is insufficient.

The doubler was originally intended for doubling 3.5 MHz to 7 MHz but I am using it to double 7 MHz to 14 MHz. Is there a problem doing this and/or is there a more suitable means of deriving 20 m from a 40 m VFO?

The VFO works fine right now. I just can't get a strong and clean doubled frequency. Can anyone help me, especially if you have access to the documents I cited, could you take a look at the circuits and advise me. Tks.

73 de 9V Daniel

1695. Re: kits

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 15:59:09 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb17.155909.4034@ke4zv.atl.ga.us>
Source record: 270897

In article <2jull5$rhc@geraldo.cc.utexas.edu> oo7@astro.as.utexas.edu (Derek Wills) writes:
>
> Something that has not been clear to me from the start of this thread
> is why the people who are smart enough to de-bug assembled kits that are
> obviously in dire need of it are not smart enough to assemble the things
> from their own components in the first place. Is it cheaper buying one
> of these kits than it is buying the individual components?

It can be, but mostly it's *easier* to buy from one source instead of chasing down components from a bunch of different vendors, all of whom seem to have minimum orders well above the price of the components you need from them. I hate having to deal with vendors who are geared to PO numbers and 1000 unit pricing for my little onesy twosy purchases. I can easily run up a *phone* bill as high as the kit cost just tracking down vendors who will sell me the parts.

So I'm willing to pay a premium to the kitmaker because he provides a real service by acting as my purchasing agent for project components. Where some of them fall down is in the *design* of their projects. Their services are rather useless if they supply you with the wrong parts for the wrong circuitry to do the job properly. I think the kit designer has a responsibility to produce a kit that can meet it's claimed specifications when assembled by someone competent to follow instructions. If a lab full of test equipment and ad hoc circuit changes are required for the project to successfully meet FCC specs, that should be stated up front in the advertising.

My main gripe with the Ransey transceiver kit is that the builder is led to believe that he can successfully complete the project with only a frequency counter, power meter, and DVM. That's not true. If you follow the instructions to the letter, you'll have a radio that won't meet advertised specs, and will have an output spectrum that looks like a comb on the spectrum analyzer. You *cannot* just peak that PA for maximum output and have a clean spectrum.

Note: Ramsey isn't the only offender here. Hamtronics kits are at least as bad. In fact, just getting a clean oscillator that will start reliably in their 70cm converter is just short of impossible with the circuitry they provide. You can either get an easy starting comb generator, or you can get a clean spectrum on an oscillator that won't start. Sheesh! A simple design change fixes the problem, but you shouldn't be expected to have to do that.

Gary
--

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1696. QSL info for Cuba

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 15:59:42 UTC
From: sjhawk2@srv.PacBell.COM
Message-ID: <1994Feb17.155942.8507@PacBell.COM>
Source record: 270898

Hello,
I would like to know what the best way to QSL to CUBA is?
If anyone has the lastest info please Email me.
Thanks Steve WV6U

1697. Re: FCC Database Online For Calif.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 16:07:01 UTC
From: bfoust@nic.cerf.net
Message-ID: <2k04n5$ml4@news.cerf.net>
Source record: 270899
Cross-posted to: rec.radio.scanner,alt.radio.scanner,ba.broadcast,rec.radio.amateur.misc

> I probably missed this, but, what is the address for the FCC database?

telnet tcomeng.com login: fcc no password

--
Serving the God of Creation
-Brent Foust

1698. Re: ICOM IC-28 series mods needed

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 16:07:18 UTC
From: wilpwr@rsvl.unisys.com
Message-ID: <wilpwr.5.00AB3ADE@rsvl.unisys.com>
Source record: 270900

In article <BAzKNJu.lmarrin@delphi.com> lmarrin@delphi.com writes:
>From: lmarrin@delphi.com
>Subject: Re: ICOM IC-28 series mods needed
>Date: 12 Feb 94 03:26:30 GMT

>Gary following is a transmit mod for the Icom 28. A friend tried it
>and it works.
>
>By the way, the Icom 28 is very popular among the small fishing fleets
>in California, as the transmit mod is very easy. Commerical fisherman
>sometimes do a lot of bootlegging, in the hope that competing fleets
>won't be listening in.
>
>73 from Leigh/KM6JE in Santa Barbara.
>_________________
>==== BOYAN Log to Disk, 08/03/93 at 03:08 ====
>From : GI4NDX @ GI4NDX
>To : ICOM @ ALLUS
>Date : 910908/1749
>Msgid : BF 125@GI4NDX, 1055@K6TZ $125_GI4NDX
>Subject : IC28 MOD
>Path :
>K6IYK!KB6JES!KB6RAA!KA0WIN!N4UTO!WN4IIV!W1FJI!W1EOH!WB4RHO!K4RY!W4AP!W
>
>D4AGG!WD4PPF!N4WZL!K4BFT!WB4TTZ!GI4NDX
>
>
>ICOM IC-28A AND IC-28H
>
>To make the IC-28 transmit 138-174 MHz, cut D21 (no retuning
>required). D21 is a tiny glass diode standing on-end near the center
>of the upper circuit board, accessible by removing the top cover. The
>IC-28 is the only convertible ham rig I know that covers the 170-MHz
>federal government (including national park) frequencies.
>
>[source: W9MKV]
>
>
>
>
>
> END <<< MSG #1055 >>> on
>K6TZ BBS.
>(Original MSG #125 from GI4NDX @ GI4NDX. filed on 910908/1749)

>
FWIW, when I modified my IC-28 for MARS use, instead of just cutting the diode, I ran it through a switch and a subminiature LED so that I could avoid accidentally transmitting where I shouldn't. The LED lights whenever the rig is set to transmit outside 14x MHz.

73, Bill.

Bill Powers WY0Q <wilpwr@rsvl.unisys.com>
<powe0040@gold.tc.umn.edu>
UNISYS Corp.
MS 4033 Phone: [612] 635-5267
P.O. Box 64942 FAX: [612] 635-7523
St. Paul, MN 55164-0942

1699. Re: FT-530 Firmware Problems (epilogue)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 16:52:39 UTC
From: sadams@eis.calstate.edu
Message-ID: <2k07cn$ii8@eis.calstate.edu>
Source record: 270901

RGS@gfimda.UUCP (Robert G. Schaffrath) writes:
> This is a post of an item I deposited on Compu$erve's HAMNET forum:
>
> Well I just received my re-repaired FT-530 back today. As I had promised
> earlier, here is the finally summary of what was done and the cost if it
> is out of warranty. Please note that my radio is Lot #16. All FT-530's
> that I have played with suffer from the DTMF code squelch problem:
More questions:
I got my 530 around 5 or 6 months ago. How long is the warranty good
for? I have never tried using the DTMF code squelch. Is this something
I should send my radio back for even though I have never tried it out??
If I have performed the jumper 13 removal, will that invalidate the
warranty??

Steve Adams
sadams@ctp.org

1700. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 16:54:53 UTC
From: jimc@megatek.com
Message-ID: <1994Feb17.165453.392@megatek.com>
Source record: 270902

In article <2juhv0$h56@charm.magnus.acs.ohio-state.edu> wvhorn@magnus.acs.ohio-state.edu (William VanHorne) writes:
>In article <CLC4Dw.10E@oakhill.sps.mot.com>,
>Ben Thornton <ben@yosemite.sps.mot.com> wrote:
>
>>So, explain to me just how it is that someone is somehow a different person
>>simply because they wear no clothing. The difference is only in the eye
>>of the beholder...
>
>Hardly. If you're nude, you can't wear one of those nifty baseball caps
>with your name and callsign on it. What's the point of being in ham
>radio if you don't wear your baseball cap? Sheesh.
>
>---Bill VanHorne
>

The first time I met Ben was at a nudist resort called Glen Eden near
Lake Elsinore, Ca. It turns out he was wearing shoes & socks, and a baseball
cap with his callsign on it. (it might have had his name on it too, but my
memory is such that I can only remember callsigns).
It was debated for many moons, but finally decided that it was
politically correct to call yourself "nude" while wearing shoes, socks and
possibly a baseball cap, in any order you want (or anywhere you want :^).

73,
-jim

--
Jim Campbell "The Tye-Dye Guy" | "Remember to tweet!"
jimc@megatek.com | When in doubt, you're probably
WB6ZPB NSS ASA TNS | unsure about something

1701. This Week on Spectrum 02/19/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 16:56:44 UTC
From: spectrum@starcomm.overleaf.com
Message-ID: <2k07kc$jnc@starcomm.overleaf.com>
Source record: 270903
Cross-posted to:
rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.scanner,rec.video.satellite,rec.radio.cb,alt.radio.scanner,alt.radio.pirate

This week on Spectrum we are going to visit the world of utility listening with Larry Van Horn. Larry is the ute editor for Monitoring Times. We haven't looked at ute since mid summer and lots of interesting things have happened. Almost 90% of the frequency space from 3 to 30 MHz is dedicated to non-broadcast transmissions and there are lots of fun things to explore.

--
Spectrum airs live Sunday at 0300 UTC (2200 EST Saturday) on:

WWCR, 5810 KHz, Nashville, TN (World Wide)
WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Omega Radio Network, Galaxy III, X17, 5.8 MHz WIDE audio. (Satellite)

Spectrum is rebroadcast:

Sunday at 1500 EST, on WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Monday at 0400 UTC (2300 EST Sunday),
on WWCR, 7435 KHz, Nashville, TN (World Wide)

--
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+1 800-787-SPECTRUM, +1 908-671-4209

1702. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 17:03:09 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb17.170309.4396@ke4zv.atl.ga.us>
Source record: 270904

In article <1994Feb15.060544.8419@vigard.mef.org> mdf@vigard.mef.org (Matthew Francey) writes:
>gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>So an 8 bit system would have a SNR of 10*log(2^9)=27 db.
>
>heywaitaminute. isnt the SNR a power ratio? you've
>done a voltage ratio here ...

Heh, no, I did a power ratio when I was dealing with voltage ratios.
As Jon noted, I should have used 20*log(2^9)=54.18 db.

>>per second. That requires a very good brickwall filter, however,
>>so sampling is usually done at a somewhat higher rate, say 3X
>>or 4X the highest audio frequency. Lets pick 3X. So our required
>>bit rate is 16*15,000=240 kb/s.
>
>but after your oversampling and filtering, you don't bother with
>the "in-between" samples anymore ... you still end up transmitting
>10kbps (in your example).

No. The best we can do is cut the number of samples down to the
Nyquist limit of 2xFcutoff by decimation and multiply by the
number of bits per sample. So we're down to 10 kilosamples/sec
times 8 bits per sample or a 80 kb/s digital bit stream. (But
I think you meant that.)

>tho i would say that 8kilosamples/second @ 8bits is quite accepatable.
>64kbps. using an ADPCM encoder you can chop this in half.

Yes, data compression can reduce the required transmission bit rate.
I've been dealing with only the raw sample data so far.

>if you have a soundblaster, you can experiment with both sample rate
>and resolution ... 4k samples/sec is too low, 6k is passable. fewer
>than about 5 bits would probably make things very irritating.

Yeah. If you further reduce Fcutoff, you can lower the sample rate,
and if you reduce the SNR, you can use fewer bits per sample. But
we were trying for "broadcast grade" transmission here. And we didn't
even make that because we restricted Fcutoff to 5 kHz. If we'd insisted
on a 15 kHz Fcutoff, the required bit rate would be 3x more, or 240 kb/s.
Applying the *correct* formula, 5 bit samples would give a SNR of
20log(2^6)=36 db. That actually looks fairly acceptable for ham grade
channels. But there's another effect we haven't discussed. That's
intermodulation distortion. With a 5 bit sample, we have products
at 5 times the sample rate mulitiplied by each frequency in the sampled

waveform. If our D/A isn't linear out to a fairly high frequency, we can get mixing products, or beats, between the various sample products that can wind up down in the audio passband. That'll give us harsh buzzing artifacts in our audio that simple filtering can't remove. The higher the sample rate, the less these step products become noticable. They tend to converge to an infrasonic frequency that's easily filtered.

>>Or we can abandon voice grade radios for the links and use purpose
>>built digital radios with higher baud rates. If we take a 56 kb
>>WA4DSY RF modem (GRAPES), and couple that with an on the fly
>
>or you could just get a pair of gunplexers. pricey, but you also
>get the beginnings of a *very* high speed (>1Mbps) data link. voice/packet/
>whatever.
>
>price/performance/future: how much are gunplexers, how much are
>the WA4DSY modem/radios and compare what both are eventually capable of.

Well the WA4DSY modem is $250, and then you need a transverter. That can run from $150 to over $300, and you need the digital driver to generate and control the bits to the modem. Say the total is $500-$600 per end for the package. That means a link is going to cost $1000-$1200 plus feedline and antennas. Paths of 30-40 miles are fairly routine, barring major terrain blockage, and good high sites can do much better than that.

M/Acom 10mw gunnplexer transceivers are available for on the order of $350 from SI, or raw gunnplexers can be found for $30-$70 on the surplus market. But you have to design an AFC system, and the high speed digital modulator/demodulators for them. Find dishes for them, and find line of sight paths for the links. Costs could be similar, around $1000 per link, but site selection would be much more restricted, and likely range as well (only a couple of miles for reasonable sized dishes and average terrain). Ten watts and 4 foot dishes can give 50+ mile paths at video bandwidths under good conditions, but that's serious money. It could be worth it for the higher throughput in some cases.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1703. Re: kits

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 17:25:36 UTC
From: jimc@megatek.com
Message-ID: <1994Feb17.172536.559@megatek.com>
Source record: 270905

In article <2jull5$rhc@geraldo.cc.utexas.edu> oo7@astro.as.utexas.edu (Derek Wills) writes:
>fred-mckenzie@ksc.nasa.gov (Fred McKenzie) says:
>
>>>I think the kits [Ramsey] sells are aimed towards people like
>>>ourselves, who are quite willing to go through the ordeal of
>>>de-bugging a kit, for the feeling of accomplishment from getting
>>>it to work! Unfortunately, we are like dinosaurs about to become
>>>extinct.
>
>>>The modern ham seems to think a kit is something you merely plug the parts
>>>into, like assembling an IBM-clone computer from modules. From that point
>>>of view, I'll admit that John's kits are not "modern".
>
> Something that has not been clear to me from the start of this thread
> is why the people who are smart enough to de-bug assembled kits that are
> obviously in dire need of it are not smart enough to assemble the things
> from their own components in the first place. Is it cheaper buying one
> of these kits than it is buying the individual components?
>
Depends on where you live. The answer is often "yes".

-jim

>
>Derek Wills (AA5BT, G3NMX)
>Department of Astronomy, University of Texas,
>Austin TX 78712. (512-471-1392)
>oo7@astro.as.utexas.edu

--
Jim Campbell "The Tye-Dye Guy" | "Remember to tweet!"
jimc@megatek.com | When in doubt, you're probably
WB6ZPB NSS ASA TNS | unsure about something

1704. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 19:01:44 UTC
From: mcduffie@unlinfo.unl.edu
Message-ID: <2k0eup$k3o@crcnis1.unl.edu>
Source record: 270906

rcrw90@email.mot.com (Mike Waters) writes:

>The easiest way would be to disable (remove?) the hard drive and run with
>only the operasting system and typing software. (Obviously *not* a morse
>reader of any type :-) You have to be able to demonstrate that t he hard
>drive is empty or disabled though.

Okay, what am I missing? What has the hard drive got to do with it?
Why would you care about a hard drive? Does Seagate put out HDs that
can copy code now? And as for a "morse reader", how would it be able
to copy in a testing environment? This guy is sweating a test. He
doesn't have time to load some program to help him cheat, if there was
such a program. Just watch him like you would all the other testees,
maybe a little closer, if you like. I think you will find that you ae
being paranoid for no reason.

>BTW if the VEs will allow it, sit for the next higher speed test as well,
>after listening to 20wpm for five minutes it is amazing how slow 13 wpm
>will sound!

Absolutely!

My 2 cents...

Gary

1705. Where is ktwin400.zip

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 19:15:32 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLDutw.FJF@netcom.com>
Source record: 270907

The ham radio archives on World had a program called ktwin400.zip.

I have since lost track of who offered it, but when I recently tried to unzip it, zip claimed the files was corrupted. I DID transfer it in binary mode from World directly to the PC.

I tried both DOS's pkunzip v.2.04g, along with UNIX's unzip, but no luck.

If anyone can point me to another location which has this file, I'd be very appreciative. I already checked the hamradio section on Oakland, but no luck.

Thanks much in advance!

P.S. Please note the new FTP address for World in my .signature

Scott

--
```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
================================================================================
```

1706. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 19:52:01 UTC
From: jcw@kd4dts.dixie.com
Message-ID: <1994Feb17.195201.22281@kd4dts.dixie.com>
Source record: 270908

I built the 2m kit, and was I mad when I was done. I could never get the radio to produce 5 watts, and I had access to a Motorola spectrum analyzer. I talked to a Ramsey 'droid at the hamfest, and said "Oh yea, a tune up is about $10." I said, "Cool, I'll send it off." I talked to the service department who said "Oh, it's $50 to align a radio." I told them that was ridiculous, here's what the other guy told me. They said "Oh, well, if we don't have to fix it, there's no charge, except shipping." I told them "Fine, you won't have to fix anything, the radios not broke". I later find out that I have to pay $50 to get my radio out of hock with these BOZO's. I say "Well?" They say "Well, adjusting the coil on the final (which isn't in the manual) was a repair". I tell them "F**K you, here's $50 give me my damn radio back, I'm never buying another frickin' Ramsey product. Your sales people are liars, your technicians are liars, and you have my radio that I have to pay 50 bucks for, or I'll never see it again." I got it back, and it produces about 4 watts, still under spec. I'll never buy any Ramsey crap again.

- John, KD4DTS
--

John C. Wren (kd4dts) | "The UNIX operating system has a command, NICE,
jcw@kd4dts.atl.ga.us | which allows a user to voluntarily reduce the
..!emory!wa4mei!kd4dts!jcw | priority of his process, in order to be nice to

1707. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 20:23:13 UTC
From: glenne@sad.hp.com
Message-ID: <CLDxyq.K47@srgenprp.sr.hp.com>
Source record: 270909

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: M/Acom 10mw gunnplexer transceivers are available for on the order of
: $350 from SI, or raw gunnplexers can be found for $30-$70 on the surplus
: market. But you have to design an AFC system, and the high speed digital
: modulator/demodulators for them. Find dishes for them, and find line of
: sight paths for the links. Costs could be similar, around $1000 per
: link, but site selection would be much more restricted, and likely
: range as well (only a couple of miles for reasonable sized dishes
: and average terrain). Ten watts and 4 foot dishes can give 50+ mile
: paths at video bandwidths under good conditions, but that's serious money.
: It could be worth it for the higher throughput in some cases.

The 2 Mbps link I built and showed in HR Magazine and which is now in
the ARRL Handbook had at least 10 dB of excess signal(for BER small
compared to 1 error per 1500 byte packet) across 13 miles with 10 milliwatt
sources and 2' dishes. The hardware (excluding a digital controller to
handle the bit stream) cost little more than $100 per end.

Ten watts and a 4' dish can do a *lot* more than 50 miles under good
conditions, if by good you mean line-of-sight. In fact you wouldn't likely
be able to use that much C/N on a terrestrial link.

A 4' antenna with typical feed efficiency is about 40 dBi at 10,250
MHz. Ten watts is +40 dBm; the combination gives +80 dBm ERP. If you
consider a video system with 6 MHz of bandwidth and that 45 dB of C/N
ratio gives "good quality" video, with a 3 dB sytem noise figure the
noise floor is about -103 dBm and you therefore want -58 dBm at the
receiver. The receive antenna gives another 40 dBi and you only need
-98 dBm (into an isotropic antenna) at the receiving site. So, you are
allowed +80-(-98)=178 dB of path loss. At 10.25 GHz this is over 1000
miles; a longer line-of-sight path than you'd be able to actually find
anywhere on the surface of the earth.

In fact, with 4' antennas instead of 2' ones (+12 dB system improvement)
and a "real" receiver instead of a 15 dB NF diode mixer (another +12 dB), the
10 milliwatt sources should be capable of 35 miles with the above video
system requirements.
While it's true that you would need line-of-sight, I think most
practical installations of a lower frequency system also incur
15-40 dB incremental path loss once they leave LOS conditions and
for higher information rate transmission effectively need LOS in order
to stay economic.

If you don't believe this, carefully measure signal strength change on
440 MHz or 1290 MHz when the two ends of a link go from full visual (no

trees etc) line-of-sight to "almost LOS, suburban trees, clutter etc.
I'm not talking about a "still sounds full quieting on the HT here, OM"
measurement where there is 60 dB of excess signal in a nbfm bandwidth
and you can't tell the difference in going to only 30 dB excess, but a
real measurement of signal or C/N. I've done this and most situations
show at least 20 dB of degradation above 400 MHz.
Although 10 watts may be much cheaper at 440 MHz than it is at 10 GHz,
The 2*incremental_antenna_gain = 2*20log(10.25/.44)=55 dB of the
microwave solution far more than compensates for the 30 dB (10 watts to
10 milliwatts) transmit power differential.

Also, at high information rates, the additional multipath and path
variability problems incurred by going to a non-LOS path make the UHF
solution even less attractive since error correction, channel equalization
and additional system margin may be required to guarantee data flow.

Glenn Elmore n6gn

ax.25 n6gn@wx3k.#nocal.ca.usa.na
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

1708. Re: Hamblaster update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 20:46:36 UTC
From: jfh@netcom.com
Message-ID: <jfhCLDz1o.27E@netcom.com>
Source record: 270910

dtiller@cscsun.rmc.edu (Dave Tiller) wrote:

>Is it just me, or is anyone else wondering why we're being continually
>bombarded with a blatantly commercial posting? I'm glad they've taken
>the initiative to make a new piece of hardware for hams, but I don't think
>this is the proper forum for their continous ads disguised as status
>reports.

It's hard to think of them as ads when the product doesn't even exist yet.
In any case, there's no blanket prohibition against advertising on the net.

I don't plan to buy a Hamblaster (I already have a SoundBlaster 16 ASP),,
but I think the progress reports are mildly interesting.

--

Jack Hamilton USMail: POB 281107 SF CA 94128 USA
jfh@netcom.com Packet: kd6ttl@w6pw.#nocal.ca.us.na

1709. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 21:05:34 UTC
From: kg7bk@indirect.com
Message-ID: <CLDzxC.JBr@news.direct.net>
Source record: 270911

Dana Myers (myers@cypress.West.Sun.COM) wrote:
: What other newsgroup should we discuss this in?

How about

alt.revenge.vendetta.character.assassination.hurt.Ramsey's.business?

: a good business does not berate customers in the presence of other
: customers. Are you suggesting this is not true? * Dana H. Myers KK6JQ

Dana, I will give you the benefit of the doubt and for the sake of this discussion, accept what you have said as true... that John Ramsey berated Jeff Gold in a private telephone conversation with you. Now who is the worst offender of common decency and professional ethics... one who berates an individual in a private telephone conversation or one who berates an individual in public on Internet? Seeking professional revenge for a personal insult seems like extreme overkill to me.

I didn't understand until you told me just now that Jeff was complaining about a personal problem rather than a transceiver. In my opinion, the only objective question to be answered here is, does Ramsey make a resonable transceiver for the money? The votes are obviously split and the free market will decide the answer.

73, Cecil, kg7bk@indirect.com

1710. pc.usl.edu more up-to-date than cs.buffalo.edu

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 21:05:40 UTC
From: ken@boxhill.com
Message-ID: <2k0m74$cio@boxhill.com>
Source record: 270912

For what it's worth, the callsign server at
telnet pc.usl.edu. 2000
appears to be more up-to-date than the one at
telnet cs.buffalo.edu. 2000

(the former has my new mailing address, the latter does not!)

Does anyone know if the two servers are related?
They appear to use the same callsign server software...

73

Ken (ken@boxhill.com)

1711. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 21:06:52 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-170294155638@136.141.220.39>
Source record: 270913

In article <2jtorv$6fv@cville-srv.wam.umd.edu>, ham@wam.umd.edu (Scott
Richard Rosenfeld) wrote:

> Patrick Tatro <patrick_tatro@stortek.com> wrote:
> >
> >Would the VEC's kick me out if I brought a laptop to a code test session or
> >should I wait until my paper speed catches up to my keyboard speed?
>
> While I wouldn't kick you out, I don't know how others would feel. In my
> opinion, how you transcribe your code is your business, not anyone else's.
> If you have to have a laptop there to copy, so be it. But you'd better be
> able to show me the difference between an AR, SK, BT, and DN prosign.
> Obviously, BT would be like "--" and DN would be "/". But how about SK
> and AR?

Not sure whether my previous reply on this subject made it into the system,
but as another VE, I wouldn't kick you out either. Our VE team wants to
know whether you can copy Morse (yourself), and _how_ you do it is pretty
much up to you. We don't have a computer at the exam session, so anybody
wanting to use one would have to bring their own...if you wanna engrave it
on stone, bring your own rock.

We're accommodating for handicaps and for personal preferences in taking
the test, but we do expect you to copy it; that's one of the reasons we use
the fill-in-the-blanks code test rather than the "multiple guess" version.

Actually, in most cases an examinee can pass the exam without having to
distinguish among AR, SK, BT and DN, both on the written test and for the
one-minute solid copy. And I'd accept a typed "AR" or "SK" (that's what I
write when I'm copying code myself).

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1712. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 21:13:58 UTC
From: kg7bk@indirect.com
Message-ID: <CLE0BB.JIA@news.direct.net>
Source record: 270914

Gregory Lapin (lapin@casbah.acns.nwu.edu) wrote:

: To those who are Ramsey proponents, DID YOU PUT THE THING ON A SPECTRUM
: ANALYZER BEFORE PUTTING IT ON THE AIR?

Sure did.

: If so, what did you see? Greg Lapin KD9AZ

It met FCC specs, if that is what you mean. I made a couple of minor improvements while I was building it so I don't know what it looked like before the improvements. A friend of mine built one that didn't work. Most of the component leads were about 1/2 inches long. Told him to go lick his calf over again.

73, Cecil, kg7bk@indirect.com

1713. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 21:15:47 UTC
From: ben@yosemite.sps.mot.com
Message-ID: <CLE0EC.HEp@oakhill.sps.mot.com>
Source record: 270915

In article <2juhv0$h56@charm.magnus.acs.ohio-state.edu>,
William VanHorne <wvhorn@magnus.acs.ohio-state.edu> wrote:
>In article <CLC4Dw.10E@oakhill.sps.mot.com>,
>Ben Thornton <ben@yosemite.sps.mot.com> wrote:
>
>>So, explain to me just how it is that someone is somehow a different person
>>simply because they wear no clothing. The difference is only in the eye
>>of the beholder...
>
>Hardly. If you're nude, you can't wear one of those nifty baseball caps
>with your name and callsign on it. What's the point of being in ham
>radio if you don't wear your baseball cap? Sheesh.

Ok, ok, so I wasn't *completely* nude last time I worked the Nude Recreation
Week special events station... I wore my Kenwood baseball cap...:)

--ben

--
Ben Thornton Amateur call: WD5HLS
Internet: ben@yosemite.sps.mot.com Motorola Inc., Austin, TX
Caution: Wearing clothes has been shown to cause permanent psychological
dependence on textiles. WEAR THEM AT YOUR OWN RISK.

1714. Data connection by radio?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 21:34:48 UTC
From: gsa@iia.org
Message-ID: <2k0nto$hr3@mary.iia.org>
Source record: 270916

I would like to know if anyone has tried establishing a data link by ham radio... I am not a ham now, but would be interested in haveing a system by which I could keep in contact with the net in my car with a laptop. If I could do this, I assume I could just as easily also have a mobile telephone. (Yes, i'm too cheap for a cell phone :)

Thanks for the advice -
--
W. Robert Nelson (gsa@iia.org)

1715. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 21:36:13 UTC
From: ben@yosemite.sps.mot.com
Message-ID: <CLE1CE.HMr@oakhill.sps.mot.com>
Source record: 270917

>In article <CLC4Dw.10E@oakhill.sps.mot.com> I write:
>>
>>So, explain to me just how it is that someone is somehow a different person
>>simply because they wear no clothing. The difference is only in the eye
>>of the beholder...

In article <1994Feb17.145055.3550@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> responded:
>
>Of course, all esthetics are in the eye of the beholder. Aside from it's
>utilitarian aspect, decorative clothing is designed to mask the ugly,
>not hide the beautiful. And according to the prevailing esthetic, most
>hams *need* that decorative covering to avoid offending the eye of the
>beholder. A prime rule of society is that one shouldn't do something in
>public that frightens the horses.

I'll let that argument die of it's own accord, but will make one comment:

Yes, clothing has it's purposes but there are many situations in which the
wearing of clothing serves no real purpose other than reinforce a false
sense of modesty such as when swimming, sunbathing, kicking back to enjoy
a beer, etc. Everyone has seen a nude body at least once before, and
many people have discovered that "the prevailing esthetic" has no real
benefit to society other than to to protect the overly-squeamish.

--ben
--
Ben Thornton Amateur call: WD5HLS
Internet: ben@yosemite.sps.mot.com Motorola Inc., Austin, TX
Caution: Wearing clothes has been shown to cause permanent psychological
dependence on textiles. WEAR THEM AT YOUR OWN RISK.

1716. Re: Help me find quartz for TV station in Novosibirsk

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 21:48:55 UTC
From: jimc@megatek.com
Message-ID: <1994Feb17.214855.302@megatek.com>
Source record: 270918
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <AAOIYOjmC5@msib.nsk.su> main@msib.nsk.su writes:
>
>Hi, world!
>
> Anybody know where can I find a few quartz resonators for
>governmental TV station in Novosibirsk, becouse component plants in
>Russia are stay or closed and component distributors demand minimal order
>in $1000.
>
>Please, help me find quartz
>
>Freq Q-ty
>98,217 MHz 1
>48,972 ... 1
>49,986 1
>50,388 1
>50,791 1
>52,000 1
>52,201 1
>52,590 1
>53,368 1
>44,333333 1
> 5,13550 8 <-- urgent & urgent
> 5,040 2 <--
>
>98,217 KHz 2
>
>Please, answer me directly by e-mail, because I don't follow
>this newsgroups.
>
>Thanks,
>
>----
>Alexandr N.MAINICHEV /Telex: (64)412062 OCTET SU,
> / BOX 50516
> Dipl.Physic. / POST BOX 82, / main@msib.nsk.su
> Director of / NOVOSIBIRSK-90, / Fax:(383 2) 35 68 11
> "Agency MicroSib" / 630090, RUSSIA / Ph :(383 2) 35 44 28
>
>
>
>
>

>

Most of you probably already know this, but the commas in this posted
request serve the same funtion as our decimal points. So they are *not* looking
for XTALs in the GHZ range...

--
Jim Campbell "The Tye-Dye Guy" | "Remember to tweet!"
jimc@megatek.com | When in doubt, you're probably
WB6ZPB NSS ASA TNS | unsure about something

1717. Hawaiian 2m repeaters?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 22:09:44 UTC
From: jjhanso1@students.wisc.edu
Message-ID: <jjhanso1.219.2D63EB23@students.wisc.edu>
Source record: 270919

I'll be in Hawaii (on Maui and in Honolulu) from March 25-April 6 and was wondering if anyone could provide some advice as to good 2m repeaters...

Yes, I have a rptr directory, but I was hoping for more specific advice.

Thanks!

Jason Hanson + 1510 Tripp Cir. #VI309 + (608)264-1079
U. of Wisconsin + Madison, WI 53706-1294 + Ham Radio:N9LEA (Extra)
jjhanso1@students.wisc.edu jhanson@macc.wisc.edu undergrad-Political Sci.

1718. DJ-580 UHF receive ragne

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-17 23:23:33 UTC
From: ruentien@maverick.Corp.Sun.COM
Message-ID: <2k0u9l$bj9@jethro.Corp.Sun.COM>
Source record: 270920
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

hi, guys:

I recently purchase a ALINCO DJ-580, it is a great radio. The quality of audio is great. I have no complaint about this rig.
I got one question here, the menu stated the receive range for UHF is from 430 to 470 Mhz, but what I found is that I can make it from 400 to 520 Mhz. I didn't make any modification on this rig, I don't know this is misinformed on menu? or .....
Any answer will be appreciated!!

PS. I don't have call-sign yet, just pass the test last week.

1719. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 00:11:19 UTC
From: georgen@stortek.com
Message-ID: <CLE8Ix.18x@stortek.com>
Source record: 270921

Jim Hollenback (jholly@cup.hp.com) wrote:
:
: No, I don't think your out of place. Would one send a nude QSL to a foreign
: country? I certainly hope not. In some counties they would be banned and
: could get the recieving ham in trouble. Besides, what sort of image are
: you presenting for the U.S.? If you would not send one to a foriegn country,
:
: Jim, WA6SDM
: jholly@cup.hp.com

:
Although correct that some countries would ban nude QSL cards, you will find
that countries banning the card are relatively few. Not all countries
are as "Prudish" as this country about nudity.

Nude cards do exist, I've gotten some from Japan. QSLs of this sort
usually get answered more quickly........

Signed: "Dirty Old Man Amateur"

George, W1XE/0
email georgen@redwood.stortek.com

1720. ARRL DX Bulletin #10 - February 17, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 00:23:03 UTC
From: Jim Reisert AD1C <reisert@wrksys.enet.dec.com>
Message-ID: <$arld.010@ampr.org>
Source record: 270922
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

ZCZC AE08
QST de W1AW
DX Bulletin 10 ARLD010
>From ARRL Headquarters
Newington CT February 17, 1994
To all radio amateurs

SB DX ARL ARLD010
ARLD010 DX news

The items in this week's bulletin are courtesy of Chod, VP2ML; Bruce, WA1G; WD4IEH; Dick, K3DI; and the Ohio/Penn and Yankee Clipper Contest Club DX PacketCluster networks. Thanks.

GUINEA BISSAU. Erik, SM0AGD, will be in J5-land during late February, and hopes to be able to do some operating. Erik last operated J5 in 1980. QSL via SM0AGD, Vestag 27, 19556 Marsta, Sweden.

SOUTHERN COOK ISLANDS. Seven Glen Canyon Wireless Association members will be on from Rarotonga between March 4 and 10. They plan to be active in the ARRL SSB DX Contest as ZK1AVY.

WALVIS BAY. Ian, ZS9A, is on 160 meters just before his sunrise. Check 1815 kHz around 0400z.

CAMBODIA. Sanyi, XU7VK, has been heard on 3522 kHz at 1524z, 7009 kHz at 1700z and on 14083 kHz RTT
through the end of February.

DESECHEO ISLAND. According to Ray, AB4JI, the upcoming DXpedition for the SSB weekend of the ARRL International DX Contest has been cancelled. The U.S. Fish and Wildlife Service has denied landing permission because a group of Haitian squatters are on the island. The Coast Guard was unsuccessful in removing them, and reports are that the U.S. Navy may be called to remove the group. Until this situation is resolved, no landing permission can be given. AB4JI and crew hope to make last minute arrangements to operate from another island.

BELIZE. WB5B and WA5TKC will be signing V31BW and V31PP respectively, from February 19 to March 12. V31BW will operate primarily CW on 160 through 10 meters from South Water Caye, NA-080. V31PP will be located in the rain forest area near Blue Creek, and will operate 80 through 10 meters with SSB and RTT
active in both ARRL DX Contests and the CQ WW 160 Meter Contest.

QSL via their home calls.

ZAMBIA. DL7VTM, DG9WYL and DL7VLA will sign 9I2Z, 9I2M and 9I2A respectively, during their planned three week operation. They expect to be on the air around March 14. Listen for them on all bands and possibly for some satellite activity. It is believed that this may be the first satellite operation from Zambia. QSL via DL7VRO.

CQ ZONE 2. VE1CBK, of CY0SAB fame, and VE3YYR will be active from February 22 to 28. Listen for them in the CQ WW 160 Meter Contest the weekend of February 26 and 27. Before the contest they will be working all bands, mainly with RTT
RS-12. QSL via VE3YYR.

BAHAMAS. Dick, K3DI, will be signing C6AHL from Treasure Cay, Great Abaco, during the ARRL International DX Contest. This will be an all band, single op effort. He may even operate some QRP, conditions permitting. QSL via K3DI.

THIS WEEKEND ON THE RADIO. The CW weekend of the annual ARRL International DX Contest is a 48 hour event starting at 0000z February 19. W/VE stations work amateurs in as many DXCC countries as possible. DX stations work W/VE stations. W/VE stations send signal report and state/province. DX stations sent signal report and three digit number indicating transmitter output power. For full information and contest rules, check page 125 of December QST

Some island invasions planned for the contest include PS0F by W9VA, VP2E/WJ2O; VP5B by K9IMM, GD0SLY by WA3CGE; V31TP by WC0W; and V31WW by a team.
NNNN

--
James J. Reisert Internet: reisert@wrksys.enet.dec.com
Digital Equipment Corp. UUCP: ...decwrl!wrksys.enet.dec.com!reisert
146 Main Street - MLO3-6/C9 Voice: 508-493-5747
Maynard, MA 01754 FAX: 508-493-0395

1721. Coax minimum-loss impeance

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 00:29:26 UTC
From: tomb@lsid.hp.com
Message-ID: <CLE9D2.9Jo@hpcvsnz.cv.hp.com>
Source record: 270923

Over on sci.electronics, someone was asking about how we
came to 50 ohms as common for coax impedance. I posted
the appended followup after some interesting calcs that
I had not seen previously: I'd seen the "77 ohms for
min loss" thing, but not the effects of dielectric noted
here, and I thought folk here might be interested:

==========

Subject: Re: History of 50 ohms standard?
Newsgroups: sci.electronics

Richard Karlquist (rkarlqu@scd.hp.com) wrote:
: In article <CLBvpK.7q4@odin.corp.sgi.com>,
: Dave Chengson <chengson@chengson.mti.sgi.com> wrote:
: >Does anyone know the background/history of where 50 ohms came from?
: >Its been suggested that it came from WWII from the antenna folks
: >and it is rumored it was a relatively arbitrary impedance value.

: I believe this is discussed in the MIT Rad Lab books.
: With air dielectric, 74 ohms gives the minimum loss for a given
: outer diameter. 35 ohms give the highest power handling capability
: assuming air breakdown is the limiting factor. 50 ohms is a compromise
: about half way in between.

I remembered it as 77 ohms for the minimum loss, and just went thru
the calcs to figure it out. Turned out to be 76.708 ohms ;-)
Now this is interesting, because it turned out to depend only on
the ratio of inner to outer diameter, and expressed that way, was
independent of dielectric, under the assumption that dielectric
losses are negligible, which should be the case for practical
coax cables at HF frequencies. I might add that this also assumes
perfect surface conditions on the round (not stranded) conductors.

OK, carrying this one step further, the outer-diameter/inner-diameter
ratio for min loss under these conditions is 3.59112:1. With air
dielectric, this is the 77 ohm cable. But if the dielectric is
polyethelene, commonly used in WWII vintage cables, the impedance
is ... 51.02 ohms! By the way, doing the same thing for solid
Teflon gives 52.9 ohms, still really close to 50.

For those interested in the calcs:
Zo=60*ln(D/d) / (e^.5)

where
Zo is characteristic impedance of coaxial line
D is inner diameter of outer conductor

d is outer diameter of inner conductor
e is dielectric constant of insulation

A100 = 4.34 * Rt / Zo + 2.78*f*Fp*(e^.5)

where
A100 is dB attenuation for 100 feet of line
Rt is total effective resistance at operating freq
f is operating frequency
Fp is power factor of dielectric at frequency f
(and the second term is generally negligible at HF,
leaving 4.34*Rt/Zo, for practical insulations.
Dissipation in the insulation favors lower impedance
since the loss goes down with voltage)

Rt = .1 * f^.5 * (1/d + 1/D)

You can reduce this: let D/d = x, then

A100*D/(7.233E-3*(e*f)^.5) = (x + 1) / ln(x)

For a constant D, e and f, you want to minimize the right side for
minimum attenuation. That leads to the D/d mentioned above.
Substitute e=1 into the Zo formula for air; e=2.26 for polyethelene,
and e=2.10 for teflon.

73, K7ITM

1722. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 00:29:39 UTC
From: dts@world.std.com
Message-ID: <CLE9DH.K8@world.std.com>
Source record: 270924

In article <CLDzxC.JBr@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>Dana Myers (myers@cypress.West.Sun.COM) wrote:
>: What other newsgroup should we discuss this in?
>
>How about
>
>alt.revenge.vendetta.character.assassination.hurt.Ramsey's.business?
>
>: a good business does not berate customers in the presence of other
>: customers. Are you suggesting this is not true? * Dana H. Myers KK6JQ
>
>Dana, I will give you the benefit of the doubt and for the sake of this
>discussion, accept what you have said as true... that John Ramsey berated
>Jeff Gold in a private telephone conversation with you. Now who is the
>worst offender of common decency and professional ethics... one who
>berates an individual in a private telephone conversation or one who
>berates an individual in public on Internet? Seeking professional revenge
>for a personal insult seems like extreme overkill to me.
>
>I didn't understand until you told me just now that Jeff was
>complaining about a personal problem rather than a transceiver. In my
>opinion, the only objective question to be answered here is, does Ramsey
>make a resonable transceiver for the money? The votes are obviously split
>and the free market will decide the answer.
>
>73, Cecil, kg7bk@indirect.com
>

The problem is, I think I'd be concerned with buying any more products from
Ramsey. After all, if I had any problems, he might bad-mouth me all over the
place too. It is bad business and really just plain unneccesary. Jeff appears
to be a very nice guy for not filing a slander suit, especially given the
ample evidence.

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

1723. MINIMUF on HP42S calculators

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 00:35:00 UTC
From: haymoree@newt.ee.byu.edu
Message-ID: <q+&@byu.edu>
Source record: 270925

Some time ago I ported MINIMUF (a BASIC program for predicting
MUF's) to my HP42S calculator. If anyone's interested in it, email me
and I'll send you a copy. (It's free.)

--
Ed Haymore | AA6EJ
ed@byu.edu | Live long and prosper.

1724. ham-univ mailing list

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 00:40:16 UTC
From: david@stat.com
Message-ID: <TP4wHc1w165w@stat.com>
Source record: 270926

I need the address of the ham-univ mailing list. Can someone mail it asap to me, I have a problem I need the expertise of the group.

david dodell, wb7tpy

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

1725. Re: Hawaiian 2m repeaters?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 01:50:26 UTC
From: zardoz@ornews.intel.com
Message-ID: <2k16tj$4lh@ornews.intel.com>
Source record: 270927

In article <jjhanso1.219.2D63EB23@students.wisc.edu> jjhanso1@students.wisc.edu (Jason J. Hanson) writes:
>I'll be in Hawaii (on Maui and in Honolulu) from March 25-April 6 and was
>wondering if anyone could provide some advice as to good 2m repeaters...

When I was over there in Sept. about 2 years ago, I didn't hear much
repeater activity on 2 meters at all. I visited Big Island and Oahu.
I did find some highly unusual activity on 2 meter simplex in Honolulu.
Be sure to scan the whole band for this stuff.

--
zardoz@ornews.intel.com WA7LDV

1726. FCC Digest

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 02:29:58 UTC
From: k1zat@bah.COM
Message-ID: <Pine.3.05.9402172158.A15123-a100000@booz.bah.com>
Source record: 270828

>Steve Allen (steve.allen@brent.uucp) wrote:
>: Bruce: besides being 99.9% irrelevant to amateur radio, this is an
>: incredible waste of bandwidth. If you feel a need to post this
>: stuff, form your own newsgroup.
>: -Steve N2WSA

Talk about an incredible waste of bandwidth, this "friendly note"
is a PRIME EXAMPLE.

>There are a number of informational posts that
>are not of interest to all the amateurs in this newsgroup but that
>doesn't mean they should be run off.
>Please keep posting the FCC digests.

>Dan

Second that motion, keep them coming.....

1727. Re: QSL Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 02:31:52 UTC
From: alanb@sr.hp.com
Message-ID: <CLEF14.8oD@srgenprp.sr.hp.com>
Source record: 270829

Elendir (elendir@enst.fr) wrote:
: Alan Bloom (alanb@sr.hp.com) wrote:

: : I think what people object to is that F6FNU does not do the QSL'ing
: : as a public service, as most QSL managers do, but to make a profit.

: Really ? That surprises me. Thought that all QSL management was free of
: charge.

Most QSL managers do it for the love of the hobby. You really have to hand it to them -- it's an awful lot of time and effort that could be spent working your own DX.

F6FNU charges $2 per card which is twice the normal one "green stamp" contribution. If you send $1 he replies via the bureau, which is essentially free. Apparently he makes around $1 per QSL.

AL N1AL

1728. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 02:43:44 UTC
From: alanb@sr.hp.com
Message-ID: <CLEFKx.91K@srgenprp.sr.hp.com>
Source record: 270830

David Stockton (dstock@hpqmoca.sqf.hp.com) wrote:
: : jramsey@delphi.com wrote:

: : : Yes it did not meet the FCC specs for spurious - missing by about a db or
: : : two (I'm at home and don't have notes handy). The ARRL missed the whole
: : : point of the kit which was to promote kit building, etc,etc.

: Here in Britain, there are no required specs for spurious outputs,
: we're held responsible for any problems due to any at any level. I know
: that the US FCC has put actual numbers on required performance (sounds
: like an improvement on our requirements, to me). So, just from personal
: curiosity, what are the consequences to an amateur who puts a radio on
: the air that does not meet the FCC specs ?

As a practical matter, the FCC would likely never find out unless you
had an interference complaint, and probably not even then. In the
unlikely event that FCC came to your shack with a power attenuator
and spectrum analyzer and found your rig out of spec, you would
receive a notice of violation with the requirement to correct
the illegal condition and respond in writing within XX days.

In the case of interference, you would probably also be ordered
off the air until the problem was fixed.

AL N1AL

1729. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 03:00:01 UTC
From: trier@odin.ins.cwru.edu
Message-ID: <2k1avh$86i@usenet.INS.CWRU.Edu>
Source record: 270831

In article <CLEFKx.91K@srgenprp.sr.hp.com>, Alan Bloom <alanb@sr.hp.com> wrote:
>As a practical matter, the FCC would likely never find out unless you
>had an interference complaint, and probably not even then.

On the other hand, there was recently a gentleman with a 1.25m repeater
who was fined lots of money for having a spur on a distress frequency.

I'd say it's just a matter of being a good citizen to care about spurious
emissions.

Stephen

--
Stephen Trier KB8PWA "What's the human race going to do next?
Other: trier@ins.cwru.edu Grind up clarinets and smoke them?"
Home: sct@po.cwru.edu - narcotics agent Greg Elam,
quoted on Clarinet

1730. Re: Coax minimum-loss impeance

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 03:04:59 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2k1b8r$9l2@hpscit.sc.hp.com>
Source record: 270832

In article <CLE9D2.9Jo@hpcvsnz.cv.hp.com>, Tom Bruhns <tomb@lsid.hp.com> wrote:
>
>OK, carrying this one step further, the outer-diameter/inner-diameter
>ratio for min loss under these conditions is 3.59112:1. With air
>dielectric, this is the 77 ohm cable. But if the dielectric is
>polyethelene, commonly used in WWII vintage cables, the impedance
>is ... 51.02 ohms! By the way, doing the same thing for solid
>Teflon gives 52.9 ohms, still really close to 50.

I stand corrected (77 vs. 74 ohms).

This is correct, technically, but my recollection of the MIT Rad
Labs book discussion was that 50 ohms was historically chosen in
relation to air coax, and the fact that it happened to be
minimum loss with polyethylene was a lucky accident. But my
memory or the Rad Lab books may be wrong on historical details.

Now for a follow up question: where did the idea for 92 ohm coax
come from?

Rick N6RK
rkarlqu@scd.hp.com

1731. Re: Data connection by radio?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 03:09:55 UTC
From: trier@odin.ins.cwru.edu
Message-ID: <2k1bi3$8s7@usenet.INS.CWRU.Edu>
Source record: 270833

In article <2k0nto$hr3@mary.iia.org>, W. Robert Nelson <gsa@iia.org> wrote:
>I am not a ham now, but would be interested in haveing a
>system by which I could keep in contact with the net in my car with a
>laptop.

It's possible, but restrictions on the type of traffic that can be
carried over ham radio make this less useful than one might think.
Prohibitions that affect this include no business traffic and no
obscene or indecent language. Since there's no telling what will
come in over the net, it's not a good idea to do this unless you have
someone else providing tight control over what is forwarded through.

A cellphone doesn't have these restrictions.

Stephen

--
Stephen Trier KB8PWA "What's the human race going to do next?
Other: trier@ins.cwru.edu Grind up clarinets and smoke them?"
Home: sct@po.cwru.edu - narcotics agent Greg Elam,
quoted on Clarinet

1732. Re: Iambic keyer paddles

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 03:15:39 UTC
From: alanb@sr.hp.com
Message-ID: <CLEH24.A20@srgenprp.sr.hp.com>
Source record: 270834

Conway Yee (yee@mipg.upenn.edu) wrote:
: ... It seems to me that it would be much more convenient to send
: code with the left hand so that the right hand is kept free to copy
: incoming code. This is the same logic that is used with baseball
: mitts. Is it that strictly right handed people can not do this?

I learned on a left-handed bug (semi-automatic mechanical keyer) years ago, even though I am right-handed. To this day I can send with either a bug or keyer with either hand. But not with a straight key -- I can only do that right handed.

ARRL General Manager Dave Sumner K1ZZ is an avid left-handed contester who can send with either hand. I have seen him sending right-handed while simultaneously logging left-handed. And his writing was neater than mine is normally!

AL N1AL

1733. Re: Frequency doubler design, help, VFO.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 03:22:26 UTC
From: alanb@sr.hp.com
Message-ID: <CLEHDE.A93@srgenprp.sr.hp.com>
Source record: 270835
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

asirene@ntuvax.ntu.ac.sg (asirene@ntuvax.ntu.ac.sg) wrote:

: ... I have also built a 40 meter VFO from the QRP tranceiver designs in
: the 1994 ARRL Handbook and they work. But when I use the VFO with the freq.
: doubler circuit from the September 1993 issue of CQ, I found the output to
: be too weak and fundamental frequency rejection is insufficient.

I'm not familiar with either the VFO or doubler design, but how about this idea: Build another VFO, but with all the frequency-determining coils and capacitors 1/2 the value. You would end up with a VFO that tunes 14-14.6, assuming the 40 meter version tunes 7-7.3. You could reduce the tuning capacitor size even further (i.e. make it about 1/4 the size instead of 1/2) to reduce the tuning range.

AL N1AL

1734. Re: Moving to Texas

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 03:48:52 UTC
From: dcgreen@pro-harold.cts.COM
Message-ID: <bh71393@pro-harold.cts.com>
Source record: 270836

```
------ Forwarded Message ------
From pro-sat!wen Wed Feb 16 18:37:31 1994
Received: by pro-harold.cts.com (sendmail 2.3 24mar92)
id <bg67002@pro-harold.cts.com>; Wed, 16 Feb 94 18:37 PST
Received: by pro-sat.cts.com (sendmail 2.3 24mar92)
id <bg70451@pro-sat.cts.com>; Wed, 16 Feb 94 19:34 PDT
Message-Id: <bg70451@pro-sat.cts.com>
Date: Wed, 16 Feb 94 19:31:14 PDT
Ppath: pro-harold!root
From: wen@pro-sat.cts.com (Wendell Wyly)
X-Mailer: Mail (1.7 20feb92)
To: root@pro-amber root@pro-harold root@pro-sol bblue@crash mikey@slic
Subject: Moving to Texas

I am packing to move to Texas. Please discontinue all feed to pro-sat and
delete my map from the network. I will reconnect feeds after I get settled
in Texas. I will probably go through crash as bill blue has the only 9600
HST modems that mine works with. It has been fun and look forward to
getting connected back on the network soon.

Again thanks for all the help and assistance in the past 10 years that
pro-sat, pro-mercury and T-Net La Mesa has operated from this phone number.
Thanks for all the wonderful pro-line software support and bill and
morgans tireless assistance.

See you soon........Wendell

---- End Forwarded Message ----

_____________________________________________
David Green ... dcgreen@pro-harold.cts.com
SysOp of Pro-Harold BBS .. San Diego, CA
```

1735. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 04:07:04 UTC
From: n1ist@netcom.com
Message-ID: <n1istCLEJFt.E7C@netcom.com>
Source record: 270837

In article <2jqu8k$96m@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:
-In article <x8yqthx.jramsey@delphi.com>, <jramsey@delphi.com> wrote:
->ARRL couldn't get their kit to work! So we sent them an assembled unit.
-I do not know how you read this, but to me it looks like bad news for
-buildability of Ramsey Kits. And now imagine an average John Q. Ham
-with a 200 watt soldering gun and acid core solder. :)

Apparantly, Ramsey will be losing the 2 meter kit business very soon. Ten Tec
has a 2M kit for $195 (available in May) that not only includes a 5 watt 2M
radio, expandable to 35W on the board and the case, but a *complete*
micro-driven front panel with frequency readout, memories, and a tuning knob in
5kc clicks. No more diodes, and only $20 more than Ramsey ($150 for the radio
and $25 for the 'optional' case.

Why do I feel that Ten Tec is more likely to make kits that will work, meet
FCC spec, and not thump when the squelch closes?

/mike
--
\|/ Michael L. Ardai N1IST Teradyne ATG Boston
--- --
/|\ ardai@maven.dnet.teradyne.com n1ist@netcom.com

1736. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 04:24:37 UTC
From: n1ist@netcom.com
Message-ID: <n1istCLEK91.FHx@netcom.com>
Source record: 270838

In article <CLAFwp.J8C@cup.hp.com> jholly@cup.hp.com (Jim Hollenback) writes:
-No, I don't think your out of place. Would one send a nude QSL to a foreign
-country? I certainly hope not. What sort of image are you presenting for the
-U.S.?

First of all, the discussion concerns QSL cards for special event stations commemorating National Nude Week. Having a naturist scene on the card - note, not pornography - doesn't sound too unusual. As for the image, remember that most of the world does not have the hangups about nudity that seems to be common here in the US.

As far as the envelope issue goes, I prefer to get QSLs in envelopes, since they are less likely to get trashed (or stamped/printed on) by the Post Office.

When I work the special event station, I will send a SASE to help with the cost of the envelope and postage.

73,
/mike

--
\|/ Michael L. Ardai N1IST Teradyne ATG Boston
--- ---
/|\ ardai@maven.dnet.teradyne.com n1ist@netcom.com

1737. San Diego Ham

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 04:50:16 UTC
From: novotny@nosc.mil
Message-ID: <1994Feb18.045016.10165@nosc.mil>
Source record: 270839

Since there was a lot of interest in this a few months back, I thought I'd post this for the rest of the net. This was the lead article in Tom Blair's column in the February 17, 1994 edition of the San Diego Union-Tribune.

"In a new bit of tension between the Board of Supervisors and Sheriff Jim Roache, the board refused Tuesday to accept a gift to the Sheriff's Dept. and told the sheriff to return it. the gift: a portable ham radio used last August by a back-country bicyclist, Chris Boyer, to summon help for a seriously injured friend. After sheriff's deputies responded to the emergency call, they told Boyer he had violated FCC rules by using restricted emergency frequencies and ordered him to surrender the improperly altered radio to them and the FCC. To avoid further hassle, Boyer signed the radio over to the department as a gift. But the supervisors, who honored Boyer in December as a good Samaritan, said no thanks this week. They urged the sheriff to return the radio to Boyer."

John WA6ORO

1738. Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 05:27:56 UTC
From: Bob.Albert@f943.n102.z1.fidonet.org
Message-ID: <761584352.AA05328@mcws.fidonet.org>
Source record: 270840

I have been a ham for a long time, and have gone to nudist beaches, colonies, and resorts on occasion. My experience indicates that hams are no uglier than those who take it all off at these places. As a matter of what I have observed, the attendees at "naturist" places are less attractive than the general population (myself excepted of course).

Going to a ham club meeting alone is more pleasant than going to a nudist resort alone; single people are looked at with some suspicion.

73 DE K6DDX

1739. PSE HELP regarding my CBA '94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 09:06:06 UTC
From: planke@hekla.Systemtechnik.TU-Ilmenau.DE
Message-ID: <2k20du$qgn@prakinf2.PrakInf.TU-Ilmenau.DE>
Source record: 270841

After the change of callsigns in (East) Germany I don't know
whether my callsign is noticed with the correct address or not
in the international part of the CallBook
and whether my old callsign Y32JK is still included.

If you have a new 1994 CallBook - please be so kind and
tell me the address for my calls DL5ATP and Y32JK.

Thank you in advance.
DL5ATP
--
Thomas Planke Planke@Systemtechnik.TU-Ilmenau.DE
Technical University of Ilmenau Phone: +49 3677/69-1465

1740. Re: Frequency doubler design, help, VFO.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 10:24:21 UTC
From: elendir@enst.fr
Message-ID: <2k250l$amn@cismsun.univ-lyon1.fr>
Source record: 270842
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Alan Bloom (alanb@sr.hp.com) wrote:
: asirene@ntuvax.ntu.ac.sg (asirene@ntuvax.ntu.ac.sg) wrote:

: I'm not familiar with either the VFO or doubler design, but how about
: this idea: Build another VFO, but with all the frequency-determining
: coils and capacitors 1/2 the value. You would end up with a VFO that
: tunes 14-14.6, assuming the 40 meter version tunes 7-7.3. You could
: reduce the tuning capacitor size even further (i.e. make it about 1/4
: the size instead of 1/2) to reduce the tuning range.

That is a solution, but does not take into account how the transistor acts
versus the frequency.
The idea behind a frequency multiplier is the same as a class C amplifier.
I mean, you take the output from the VCO, and feed it into a small-signal
class C (typically a transistor with emm. grounded, or better a FET, because
FET are known to show only quadratic behaviour), whose output is connected to
a parallel LC network (or ceramic filter, or whatever) tuned at the second
harmonic. That should give you a neat output.

73 from France,
Vince (11.5 weeks and waiting)

1741. Daily Summary of Solar Geophysical Activity for 17 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 10:32:58 UTC
From: oler@rho.uleth.ca
Message-ID: <9402181033.AA03571@rho.uleth.ca>
Source record: 270843
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

17 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 048, 02/17/94
10.7 FLUX=106.4 90-AVG=106 SSN=067 BKI=2233 2310 BAI=008
BGND-XRAY=B2.2 FLU1=1.8E+06 FLU10=1.2E+04 PKI=2233 2222 PAI=008
BOU-DEV=011,015,035,024,019,027,008,003 DEV-AVG=017 NT SWF=00:000
XRAY-MAX= C1.7 @ 1109UT XRAY-MIN= B2.0 @ 0535UT XRAY-AVG= B3.1
NEUTN-MAX= +002% @ 2330UT NEUTN-MIN= -001% @ 2145UT NEUTN-AVG= +0.2%
PCA-MAX= +0.1DB @ 0135UT PCA-MIN= -0.2DB @ 1125UT PCA-AVG= -0.0DB
BOUTF-MAX=55344NT @ 0241UT BOUTF-MIN=55321NT @ 2025UT BOUTF-AVG=55335NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+071,+000,+000
GOES6-MAX=P:+127NT@ 1526UT GOES6-MIN=N:-063NT@ 0730UT G6-AVG=+094,+037,-026
FLUXFCST=STD:110,110,110;SESC:110,110,110 BAI/PAI-FCST=018,015,010/018,018,012
KFCST=3332 2111 0005 5010 27DAY-AP=007,007 27DAY-KP=2311 1232 3212 2122
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 16 FEB 94 was 42.0.
The Full Kp Indices for 16 FEB 94 are: 3+ 4o 3- 3- 3+ 3o 3- 2+
The 3-Hr Ap Indices for 16 FEB 94 are: 20 29 13 12 20 15 12 9
Greater than 2 MeV Electron Fluence for 17 FEB is: 4.1E+08

SYNOPSIS OF ACT

Solar activity was low. A C1 x-ray event occurred at
17/1111Z which was optically uncorrelated. A new region was
assigned today as Region 7673 (N06W48).

Solar activity forecast: solar activity is expected to be
low.

The geomagnetic field has been at quiet to unsettled
levels for the past 24 hours at mid-latitudes. Some active
conditions were experienced at high-latitudes during the

period.

Geophysical activity forecast: the geomagnetic field is
expected to be active the first day of the forecast. This is
due to the passage of a coronal hole. The second day of the
forecast should be unsettled to active with unsettled conditions
at the end of the period.

Event probabilities 18 feb-20 feb

Class M 10/10/10
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 18 feb-20 feb

A. Middle Latitudes
Active 30/25/20
Minor Storm 25/15/10
Major-Severe Storm 05/05/01

B. High Latitudes
Active 30/25/25
Minor Storm 30/15/15
Major-Severe Storm 05/05/05

HF propagation conditions were near-normal for low and
middle latitude paths. High and polar latitude paths also
showed near-normal propagation except during the local night
sectors where residual degradation continues to sporadically
linger. Conditions may become slightly more unstable on 18 or
19 February due to effects from the above-noted coronal hole.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7668 N06W66 281 0010 AXX 02 003 ALPHA
7669 N10E03 212 0010 AXX 00 001 ALPHA
7670 N12E12 203 0020 BXO 07 005 BET
7671 N13E26 189 0420 CHO 08 005 BET
7673 N07W49 264 0030 BXO 03 003 BET
7672 N03E15 200 PLAGE
REGIONS DUE TO RET
NMBR LAT
7663 N13 89

LISTING OF SOLAR ENERGETIC EVENTS FOR 17 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP

NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 17 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 17/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
16 Feb: 0054 0059 0104 B3.6
1106 1112 1125 B6.2
1502 1509 1514 B5.6 SF 7670 N07E25
1911 1912 1915 SF 7668 N10W51

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Region 7668: 0 0 0 1 0 0 0 0 001 (25.0)
Region 7670: 0 0 0 1 0 0 0 0 001 (25.0)
Uncorrellated: 0 0 0 0 0 0 0 0 002 (50.0)

Total Events: 004 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep

V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1742. HF FAX list for 2/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 11:38:46 UTC
From: moisan@bronze.lcs.mit.edu
Message-ID: <2k29c6$58k@bronze.lcs.mit.edu>
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HF-FAX LIST

by Marius Rensen

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Last Revised Feb. 1994

(Times in UTC)

This listing contains all Fax stations worldwide, transmitting on
different frequencies (LF-MF-HF) weather-charts, Satellite-
pictures and Press-text/pictures.

Corrections and additions to this listing would be welcome.

Many thanks to all, who send me corrections for the list.

Marius

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Note: Weather faxes are sent most with an (I)ndex (O)f (C)orrelation
(IOC) of 576, and with (L)ines (P)er (M)inute (LPM) of 120.(the most
CIS stations use also 60 and 90 LPM).
Press faxes are most send with a IOC of 352 and a LPM of 60 (negat.!)

Technical specifications for F3C (example 120/576 on HF):

Class of emission: F3C
Bandwith (f0=1900 Hz): White +400 Hz (f0+400 Hz = 2300 Hz)
Black -400 Hz (f0-400 Hz = 1500 Hz)
(Low freq. (30-300 kHz f0+-150 Hz)
Index of correlation: 576
Drum speed (LPM): 120
Scanning Line Density: 3.8 lines/mm
Scanning frequency: 120 lines/minute
Start signals: Carrier modulated by 300 Hz for 5 seconds
Phasing signal: BLACK signal interrupted by 1 WHITE phasing pulse
per revolution of the facsimile drum, transmitted
for at least 30 seconds prior to the transmission
of the chart.
Stop signals: Carrier modulated by 450 Hz for 5 seconds followed
by 10 seconds of BLACK signal.

The list shows the carrier frequencies, use for USB -1.9 kHz
use for LSB +1.9 kHZ

Here are a few stations send also text and pictures:

CALL NAME FREQUENCIES
=====================================
LRO 26 AP Buenos Aires 05777.5/11480.0
3MA xx CNA Tai-Pei 09430.0/13766.0/14685.0/15878.0/19680.0/22850.0
LRO xx DyN Buenos Aires 08167.5/09242.0/11451.0
KCNA Pyongyang 11475.7/13580.0
UJQ Kiyev Radio 12828.0/19745.0
9VF KYODO Singapore 16270.0/23765.0 Re-transmit from Tokyo R.
BDF Shanghai Meteo 11420.0/18940.0
JJC Tokyo Radio 04316.0/08467.5/12745.5/16971.0/17069.5/22542.0
UKA Vladivostok R. 12813.0/17000.0
XINHUA Beijing 07636.0

Radio amateurs 120/288 and 120/264, HamColor 360/204 and SSTV:
+/- 3605/3730/7040/14105/14232(USA)/21150/28200/28300(USA)/28685(Japan).
IARU Region 1 -> 3730-3740/7035-7045/14225-14235/21335-21345/28675-28685

Chart (UNID) indentification:

1- Find out the technical parameters (LPM/IOC), only stations working
with Russian equipment using LPM 90, that are normally CIS stations
or Ankara Meteo.

2- If the station transmitting in LSB/288/352 (negativ) and LPM 60 it is
normally a Press photo station ie 60/352 or 60/288

3- Look in the corner of the chart for a indentification (4) number.
The first two numbers is the orginating center indicator (distributed
the chart).

01-09 WMCs: 01-03 Melbourne; 04-06 Moscow; 07-09 Washington.

10-25 AFRICA: 10+11 Cairo; 12+13 Dakar; 14+15 Nairobi; 16+17
Antanarivo 18+19 Tunis; 20 LasPalmas; 21 El Djazair;
22+23 Lagos

26-40 ASIA: 26+27 Khabarovsk; 28+29 Delhi; 30+31 Novosibirsk; 32+33
Tashkent; 34+35 Tokyo; 36 Bangkok; 37 Ulan Bator; 38+39
Beijing.

41-50 S.AMERICA: 41+42 Buenos Aires; 43+44 Brasilia; 45 Santiago.

51-63 N+C AMERICA: 51+52 Miami; 53+54 Montreal; 55 San Francisco; 56
Washington.

64-73 PACIFIC: 64 Honolulu; 65+66 Darwin; 67+68 Melbourne; 69+70
Wellington.

74-98 EUROPE: 74+75 Bracknell; 76+77 Moscow; 78+79 Offenbach;
80+81 Rome; 82+83 Norrkoeping; 84+85 Paris; 86 Helsinki;
87 Belgrade; 88 Oslo; 89 Prague; 90 Episkopi; 91 Ankara;
92 Frankfurt; 93 London; 94 Copenhagen; 95 Rota;
96 Athens

The last two numbers is the serial chart number by that center.

Example: 9220 92= WAFC Frankfurt (EDZW) serial number 20
6411 64= RAFC Honolulu serial number 11

Note: some stations using 5 numbers, than take the last four numbers.

4- Look for a four letter location indicator.

ADDN Darwin; AMMC Melbourne; BABJ Beijing; DEMS Delhi; EDZW Offenbach;
EGRR Bracknell; EKMI Danish Met; FAPR Pretoria; FMEE Saint Denis;
GOOY Dakar; HECA Cairo; HKNC Nairobi; KWBC Washington;KGWC Offut (USAF);
LEMM Madrid; LERT Rota; LFPW Toulouse; LIIB Roma; LTAA; Ankara; OKPR
Praque; RJTD Tokyo; RKSL Seoul; RUHB Khabarovsk; RUMS Moscow; RUNW Novo-
sibirsk; RUTK Tashkent; SABM Buenos Aires; UKBB Kiyev; VTBB Bangkok.

========== HF FAX LIST ==========

Marked (*) frequencies are changed or new in the list.

USN Catania, and USN Thurso deleted !

FREQ CALL NAME ITU LPM/IOC REMARKS MODE
==========
05325.0 RCW 75 Alma Ata Meteo KAZ 60/576 0145/1650/1920/2230/2330
07910.0 RCW 79 Alma Ata Meteo KAZ 60/576 see 05325.0
10570.0 RWH 79 Alma Ata Meteo KAZ 90/576 see 05325.0
09927.5 RXA 76 Alma Ata Meteo KAZ 90/576

03377.4 YMA 20 Ankara Meteo TUR 90/576
06790.0 YMA 20 Ankara Meteo TUR 90/576

05777.5 LRO 26 AP Buenos Aires ARG 60/352 nx/px 2300-0100 LSB
11480.0 AZG 641 AP Buenos Aires ARG 60/352 nx/px 2100-2300 LSB

03657.0 RVZ 73 Arkhangelsk Meteo RUS 60/576
07762.0 RGH 77 Arkhangelsk Meteo RUS 60/576
05347.0 RSW 71 Arkhangeslk Meteo RUS 60/576

08530.0 SVA 4 Athens Radio GRC 120/576 0845-0945 (6 Charts)

05806.6 ZKLF Auckland Meteo NZL 120/576
09458.6 ZKLF Auckland Meteo NZL 120/576
13550.1 ZKLF Auckland Meteo NZL 120/576
16340.1 ZKLF Auckland Meteo NZL 120/576
2045/2120 0445+1645 schedule

07395.0 HSW 64 Bangkok Meteo THA 120/576 0050-0215+0300-0615+0700-
17520.0 HSW 61 Bangkok Meteo THA 120/576 0830+1000-1040+1300+1700+
2300

05527.0 BAF 6 Beijing Meteo CHN 120/576
08122.0 BAF 36 Beijing Meteo CHN 120/576
10117.0 BAF 4 Beijing Meteo CHN 120/576
14367.0 BAF 8 Beijing Meteo CHN 120/576
16025.0 BAF 9 Beijing Meteo CHN 120/576

18237.0 BAF 33 Beijing Meteo CHN 120/576

02618.5 GFE 25 Bracknell Meteo G 120/576 120/288 1800-0600
04610.0 GFA 22 Bracknell Meteo G 120/576 120/288 continuous
08040.0 GFA 23 Bracknell Meteo G 120/576 120/288 continuous
14436.0 GFE 23 Bracknell Meteo G 120/576 120/288 continuous
18261.0 GFE 24 Bracknell Meteo G 120/576 120/288 0600-1800
1400 radio frequency check

05185.0 LRO 69 Buenos Aires Meteo ARG 120/576 0100-0200+2000-2300
10720.0 LRB 72 Buenos Aires Meteo ARG 120/576 0100-0200+2000-2300
18621.5 LRO 84 Buenos Aires Meteo ARG 120/576 0100-0200+2000-2300
1430 schedule

04528.2 SUU 36 Cairo Meteo EGY 120/576 LSB
10122.2 SUU 2 Cairo Meteo EGY 120/576 LSB

07470.0 VLM Casey Meteo ATA 120/576
11455.0 VLM Casey Meteo ATA 120/576

03253.0 VFF CCG Iqaluit CAN 120/576 0100+0952+1006+2100+2155+
07710.0 VFF CCG Iqaluit CAN 120/576 2209+2335
Seasonal transmissions (Summer)

03253.0 VFR CCG Resolute CAN 120/576 1035+1049+1400+1416+1430+
07710.0 VFR CCG Resolute CAN 120/576 2232+2246+2335
Seasonal transmissions (Summer)

00122.5 CFH CF Halifax CAN 120/576 0000-2400
04271.0 CFH CF Halifax CAN 120/576 2200-1000
06496.4 CFH CF Halifax CAN 120/576 0000-2400
10536.0 CFH CF Halifax CAN 120/576 0000-2400
13510.0 CFH CF Halifax CAN 120/576 1000-2200
1001 schedule (Mon/Thur/Sat)

02754.0 CKN CF Vancouver CAN 120/576
04268.0 CKN CF Vancouver CAN 120/576
06456.0 CKN CF Vancouver CAN 120/576
12753.0 CKN CF Vancouver CAN 120/576
TX times:0245-0330+1025-1120
+1230-1255+1515-1540+2115-2250
0245 schedule

09430.0 3MA 34 CNA Tai-pei TAI 120/576 60/288 nx/txt LSB
13766.0 3MA 26 CNA Tai-pei TAI 120/576 60/288 nx/txt LSB
14685.0 3MA 25 CNA Tai-pei TAI 120/576 60/288 nx/wx LSB
15878.0 3MA 24 CNA Tai-pei TAI 120/576 60/288 nx/wx LSB
19680.0 3MA 23 CNA Tai-pei TAI 120/576 60/288 nx/wx LSB
22850.0 3MA 36 CNA Tai-pei TAI 120/576 60/288 nx/txt LSB
0200+1500 (1500 time/freq sked)

05850.0 OXT Copenhagen Meteo DNK 120/576
09360.0 OXT Copenhagen Meteo DNK 120/576

13855.0 OXT Copenhagen Meteo DNK 120/576
17510.0 OXT Copenhagen Meteo DNK 120/576

04790.5 6VU 23 Dakar Meteo SEN 120/576 60/576
13666.5* 6VU 73 Dakar Meteo SEN 120/576 60/576 LSB
19750.0 6VU 79 Dakar Meteo SEN 120/576 60/576

05755.0 AXI 32 Darwin Meteo AUS 120/576 0800-2100
07535.0 AXI 33 Darwin Meteo AUS 120/576 0800-2100
10555.0 AXI 34 Darwin Meteo AUS 120/576 continuous
15615.0 AXI 35 Darwin Meteo AUS 120/576 2100-0800
18060.0 AXI 36 Darwin Meteo AUS 120/576 2100-0800
0030 schedule

18225.0 ATU 38 Dehli Meteo IND 120/576 0230-1430
04993.5 ATA 55 Delhi Meteo IND 120/576 1430-2030
07403.0 ATP 57 Delhi Meteo IND 120/576 Continuous B9W
14840.0 ATV 65 Delhi Meteo IND 120/576 Continuous B9W

08167.5 LQB 9 DyN Buenos Aires ARG 60/352 nx/px 2100-2400 LSB
09242.5 LRO 64 DyN Buenos Aires* ARG 60/352 nx/px 2300-0100 LSB
11451.0 LRO DyN Buenos Aires ARG 60/352 nx/px 2100-2400 LSB
* //5777.5 (AP Buenos Aires)
02342.5 DHJ 51 Grengel Meteo D 120/576
03302.0 DHJ 51 Grengel Meteo D 120/576
04570.5 DHJ 51 Grengel Meteo D 120/576

03855.0 DDH 3 Hamburg Meteo D 120/576 120/288
07880.0 DDK 3 Hamburg Meteo D 120/576 120/288
13882.5 DDK 6 Hamburg Meteo D 120/576 120/288
Mo 1050 schedule

09982.5 KVM 70 Honolulu Meteo HWA 120/576
11090.0 KVM 70 Honolulu Meteo HWA 120/576
16135.0 KVM 70 Honolulu Meteo HWA 120/576
23331.5 KVM 70 Honolulu Meteo HWA 120/576

05280.0 RKR 76 Irkutsk Meteo RUS 90/576 60/576

11475.7 HMF 52 KCNA Pyongyang KRE 60/352 nx/px 2330-0000+0030-0100
13580.0 HMY 33 KCNA Pyongyang KRE 60/352 nx/px 2330-0000+0030-0100

04516.7 RXB 72 Khabarovsk Meteo RUS 120/576 60/90/288/576
07475.0 RXB 75 Khabarovsk Meteo RUS 120/576 60/90/288/576
09230.0 RXO 70 Khabarovsk Meteo RUS 120/576 60/90/288/576
10220.0 Khabarovsk Meteo RUS 120/576 60/90/288/576
14610.0 RCR 79 Khabarovsk Meteo RUS 120/576 60/90/288/576
14737.0 RXO 72 Khabarovsk Meteo RUS 120/576 60/90/288/576
19275.0 RXO 74 Khabarovsk Meteo RUS 120/576 60/90/288/576

03360.0 RPN 71 Kiyev Meteo UKR 90/576 60/576
04525.0 RPN 75 Kiyev Meteo UKR 90/576 60/576
06950.0 RJK 78 Kiyev Meteo UKR 90/576 60/576

05285.0 Kiyev Meteo UKR 90/576 60/676

12828.9 UJQ Kiyev Radio UKR 60/576 nx/txt 1000
19745.0 UJQ Kiyev Radio UKR 60/576 nx/txt 1000

16270.0 9VF 207 KYODO Singapore SNG 60/576 nx/wx/txt 0700-1000+1400-1820
23865.0 9VF 235 KYODO Singapore SNG 60/576 nx/wx/txt 0700-1000+1400-1820
>Scrambled from may 1994<

06918.5 ECA 7 Madrid Meteo E 120/576
10250.0 Madrid Meteo E 120/576

02628.0 AXM 31 Melbourne Meteo AUS 120/576 *
05100.0 AXM 32 Melbourne Meteo AUS 120/576
11030.0 AXM 34 Melbourne Meteo AUS 120/576
13920.0 AXM 35 Melbourne Meteo AUS 120/576
20469.0 AXM 37 Melbourne Meteo AUS 120/576 **
* May-Jul 1100-2100/ Aug-Oct 1700-2000
** During summer suspended
0115 schedule

03810.0 RST 75 Mensk Meteo BLR 90/576 1950-0555
07575.0 RSR 79 Mensk Meteo BLR 90/576 1950-0555
07640.0 RST 76 Mensk Meteo BLR 90/576 1950-0555

02572.0 WLO Mobile Radio USA 120/576 Day
06852.0 WLO Mobile Radio USA 120/576 Day/Night
09157.5 WLO Mobile Radio USA 120/576 Day 1500 schedule
0230/0735/0920/1100/1145/1430/
1500/1910/2020/2100/2300/2345

15830.0 RUZU Molodezhnaya ATA 90/576 60/576

00053.6 RTO Moscow Meteo 1 RUS 120/576 90/576
00144.5 RCG Moscow Meteo 3 RUS 120/576 90/288/576
02815.0 RVO 76 Moscow Meteo 2 RUS 120/576 60/90/288/576
03875.0 RCI 72 Moscow Meteo 2 RUS 120/576 60/90/288/576
04550.0 RWW 79 Moscow Meteo RUS 120/576 90/576
04560.0 Moscow Meteo RUS 120/567 60/90/567 Yekaterinburg ?
05150.0 RVO 73 Moscow Meteo 1 RUS 120/576 90/576
05355.0 RND 77 Moscow Meteo 2 RUS 120/576 60/90/288/576
06880.0 RAN 77 Moscow Meteo 1 RUS 120/576 90/576
07670.0 RCC 76 Moscow Meteo 1 RUS 120/576 90/576
07750.0 RAW 78 Moscow Meteo 2 RUS 120/576 60/90/288/576
10230.0 RKA 78 Moscow Meteo 1 RUS 120/576 90/576
10980.0 RDD 79 Moscow Meteo 2 RUS 120/576 90/60/288/576
11525.0 RWZ 77 Moscow Meteo 1 RUS 120/576 90/576
12165.0 RKB 78 Moscow Meteo 3 RUS 120/576 90/576
13470.0 RKU 71 Moscow Meteo 1 RUS 120/576 90/576
15950.0 RBI 77 Moscow Meteo 2 RUS 120/576 90/60/288/576

07906.4 Murmansk Meteo RUS 120/576 90/576
10130.0 RBW 48 Murmansk Meteo RUS 120/576 90/576

09045.0 5YE Nairobi Meteo KEN 120/576
16187.0 5YE Nairobi Meteo KEN 120/576
17445.5 5YE Nairobi Meteo KEN 120/576

00069.1 RCK Novosibirsk Meteo RUS 120/576 90/576
05210.0 ROF 75 Novosibirsk Meteo RUS 120/576 90/576
05295.0 RCK Novosibirsk Meteo RUS 120/576 90/576
05335.0* ROF 76 Novosibirsk Meteo RUS 120/576 90/576
05765.0 RYO 79 Novosibirsk Meteo RUS 120/576 90/576
09220.0 RTB 26 Novosibirsk Meteo RUS 120/576 90/576
12320.0 RYO 76 Novosibirsk Meteo RUS 120/576 90/576

00117.4 DCF 37 Offenbach Meteo D 120/576
00134.2 DCF 54 Offenbach Meteo D 120/576 120/288
METEOSAT -> 0103+0320+0811+1245+
1301+2022

00111.8 OLT 21 Praque Meteo CZR 120/576

07508.0 ZRO 2 Pretoria Meteo AFS 120/576 0405-1000+1455+2200
18238.0 ZRO 4 Pretoria Meteo AFS 120/576 0405-1000+1455+2200

02374.0 GYA RN London G 120/576
03652.0 GYA RN London G 120/576
04307.0 GYA RN London G 120/576
06446.0 GYA RN London G 120/576
08331.5 GYA RN London G 120/576
12844.5 GYA RN London G 120/576
16912.0 GYA RN London G 120/576
0300+1640 schedule

02195.5 WLC Rogers City Radio USA 120/576
05898.6 WLC Rogers City Radio USA 120/576
Winter -> October 0630+0930+1530+1830+2030+0230
Summer -> April 0530+0830+1430+1730+1930+0130

04777.5 IMB 51 Rome Meteo I 120/576
08146.6 IMB 55 Rome Meteo I 120/576
13597.4 IMB 56 Rome Meteo I 120/576

03610.0 ROO 70 Rostov na Donu RUS 90/576 60/576
06720.0 Rostov na Donu RUS 90/576 60/576
07630.0 RNR 78 Rostov na Donu RUS 90/576 60/576
07968.0 RFU 7 Rostov na Donu RUS 90/576 60/576
09100.0 ROO 72 Rostov na Donu RUS 90/576 60/576 (RFU 9 ?)

08176.0 FZR 81 Saint Denis Meteo REU 120/576 0740-0815+1100-1135
16335.0 FZS 63 Saint Denis Meteo REU 120/576 0740-0815+1100-1135

02720.0 RDE 73 Samara Meteo RUS 60/576 0140/2000
03710.0 RGJ 61 Samara Meteo RUS 60/576 0045/0125/1945/2155/2245
04530.0 RGJ 62 Samara Meteo RUS 60/576 0140/2000
04575.0 Samara Meteo RUS 60/576 0140/2000

07420.0 BDF Shanghai Meteo CHN 120/576 2230-0950
11420.0 BDF Shanghai Meteo CHN 120/576 2230-0950
18940.0 BDF Shanghai Meteo CHN 120/576 2230-0950

05857.7 HLL 8 Soul Meteo KOR 120/576 0000-2100
07433.5* HLL 5 Soul Meteo KOR 120/576 0000-2100

04616.0* BMB Tai-pei Meteo TAI 120/576/288 2100 txt 2230 chart
05250.0* BMB Tai-pei Meteo TAI 120/576/288 2100 txt 2230 chart
08140.0 BMB Tai-pei Meteo TAI 120/576/288 2100 txt 2230 chart

03280.0 RBX 70 Tashkent Meteo 1 UZB 90/576 60/576
03690.0 Tashkent Meteo 1 UZB 90/576
04365.0 RPJ 78 Tashkent Meteo 2 UZB 90/576 60/576 120/288
05890.0 RBV 78 Tashkent Meteo 2 UZB 90/576 60/576 120/288
07570.0 RBX 72 Tashkent Meteo 2 UZB 90/576 60/576 120/288
08083.0 RIJ 75 Tashkent Meteo 1 UZB 90/576 60/576
09150.0 RCH 73 Tashkent Meteo 1 UZB 90/576 60/576
09340.0 RCH 72 Tashkent Meteo 1 UZB 90/576 60/576 120/288
13947.0 ROM 5 Tashkent Meteo 1 UZB 90/576 60/576
14982.5 RBV 76 Tashkent Meteo 2 UZB 90/576 60/576 120/288

03745.0 RIS 70 Tbilisi Meteo GEO 90/576 60/288/576
07495.0 RDK 23 Tbilisi Meteo GEO 90/576 60/288/576
14990.0* Tbilisi Meteo GEO 90/576 60/288/576

03622.5 JMH Tokyo Meteo 2 J 120/576
03365.0 JMJ Tokyo Meteo 1 J 120/576
05405.0 JMJ 2 Tokyo Meteo 1 J 120/576
07305.0 JMH 2 Tokyo Meteo 2 J 120/576
09438.0 JMJ 3 Tokyo Meteo 1 J 120/576
09970.0 JMH 3 Tokyo Meteo 2 J 120/576
13597.0 JMH 4 Tokyo Meteo 2 J 120/576
14692.5 JMJ 4 Tokyo Meteo 1 J 120/576
18220.0 JMH 5 Tokyo Meteo 2 J 120/576
18441.2 JMJ 5 Tokyo Meteo 1 J 120/576
23522.9 JMH 6 Tokyo Meteo 2 J 120/576

04316.0 JJC Tokyo Radio J 120/576 60/288/576nx/wx 24h
12745.0 JJC Tokyo Radio* J 120/576 60/288/576 nx/wx 24h
16971.0 JJC Tokyo Radio J 120/576 60/288/576 nx/wx 24h
17069.5 JJC Tokyo Radio J 120/576 60/288/576 nx/wx 24h
22542.0 JJC Tokyo Radio J 120/576 60/288/576 nx/wx 24h
>Scrambled from may 1994<
* 1010 scrambled-testchart
09102.0 AJO USAF Adana TUR 120/576 (Incirlik)

13380.0 AIE USAF AWS GUM 120/576 1300-2300
17528.3 AIE USAF AWS GUM 120/576 2300-1300
20380.0 AIE USAF AWS GUM 120/576 2300-1300

04757.0 AJE USAF AWS Croughton G 120/576/288
05236.9 AJE USAF AWS Croughton G 120/576/288
07598.4 AJE USAF AWS Croughton G 120/576/288

07625.0 AJE USAF AWS Croughton G 120/576/288
09102.3 AJE USAF AWS Croughton G 120/576/288
10875.0 AJE USAF AWS Croughton G 120/576/288
14399.0 AJE USAF AWS Croughton G 120/576/288

06821.0 AJK USAF AWS Ramstein D 120/576 120/288

03232.0 USAF AWS Elk Horn USA 120/576
04858.0 USAF AWS Elk Horn USA 120/576
05709.0 USAF AWS Elk Horn USA 120/576
06905.0 USAF AWS Elk Horn USA 120/576
11121.0 USAF AWS Elk Horn USA 120/576
19327.0 USAF AWS Elk Horn USA 120/576

03398.0* USAF AWS Homestead USA 120/576
04855.0* USAF AWS Homestead USA 120/576
07398.0* USAF AWS Homestead USA 120/576
07870.0* USAF AWS Homestead USA 120/576
10997.0* USAF AWS Homestead USA 120/576
11622.0* USAF AWS Homestead USA 120/576
15781.0* USAF AWS Homestead USA 120/576
19363.0* USAF AWS Homestead USA 120/576

03242.0 NMF USCG Boston USA 120/576 0530-0600 1730-1800
07530.0 NMF USCG Boston USA 120/576 0530-0600 1730-1800
08502.0 NIK USCG Boston USA 120/576 1600 Ice chart
12750.0 NIK USCG Boston USA 120/576 1600 Ice chart

04298.0 NOJ USCG Kodiak ALS 120/576 0400/1000/1800/2200
08459.0 NOJ USCG Kodiak ALS 120/576 0400/1000/1800/2200

04346.0 NMC USCG San Francisco USA 120/576 0145-0526 1500-2345
08682.0 NMC USCG San Francisco USA 120/576 0145-0526 1500-2345
12730.0 NMC USCG San Francisco USA 120/576 0145-0526 1500-2345
17151.2 NMC USCG San Francisco USA 120/576 0145-0526 1500-2345
22527.0 NMC USCG San Francisco USA 120/576 0145-0526 1500-2345

08494.0 NUD USN Adak ALS 120/576 Continuous//(8492.5)

05262.0 NPN USN Apra Harbour 2 GUM 120/576 Indian Ocean schedule
10253.0 NPN USN Apra Harbour 1 GUM 120/576 Pacific schedule
10257.0 NPN USN Apra Harbour 2 GUM 120/576 Indian Ocean schedule
19858.0 NPN USN Apra Harbour 1 GUM 120/576 Pacific schedule
16027.6 NPN USN Apra Harbour 1 GUM 120/576 Pacific schedule
19862.0 NPN USN Apra Harbour 2 GUM 120/576 Indian Ocean schedule
23008.0 NPN USN Apra Harbour 1 GUM 120/576 Pacific schedule
1315+1330 schedule

07582.0 NKW USN Diego Garcia DGA 120/576 1400-0200
12806.0 NKW USN Diego Garcia DGA 120/576 continuous
20302.0 NKW USN Diego Garcia DGA 120/576 0200-1400

08614.0 NWC USN Exmouth AUS 120/576 1000-2200 ISB
12727.5 NWC USN Exmouth AUS 120/576 continuous
16914.5 NWC USN Exmouth AUS 120/576 2200-1000

03820.5* NRK USN Keflavik ISL 120/576 Standby on call
09318.5 NRK USN Keflavik ISL 120/576 Continuous
18486.0* NRK USN Keflavik ISL 120/576 Standby on call

03357.0 NAM USN Norfolk USA 120/576 0000-1200
08080.0 NAM USN Norfolk USA 120/576 Standby on call
10865.0 NAM USN Norfolk USA 120/576 1200-0000
15959.0 NAM USN Norfolk USA 120/576 Standby on call
20015.0 NAM USN Norfolk USA 120/576 Standby on call
0000 schedule

04855.0 NPM USN Pearl Harbour HWA 120/576 0600-1600 LSB/ISB
21735.0 NPM USN Pearl Harbour HWA 120/576 1600-0600 LSB/ISB

04623.0 AOK USN Rota Sigonella E 120/576 1800-0600
05864.5 AOK USN Rota Sigonella E 120/576 Continuous
09373.0 AOK USN Rota Sigonella E 120/576 Continuous
11485.0 AOK USN Rota Sigonella E 120/576 0600-1800

04704.0 AOK USN Rota Moron E 120/576 1800-0600 on call
05785.0 AOK USN Rota Moron E 120/576 Continuous on call
09382.5 AOK USN Rota Moron E 120/576 Continuous on call
17585.0 AOK USN Rota Moron E 120/576 0600-1800 on call

06453.0 NPG USN San Francisco USA 120/576 Continuous (Stockton CA)
09090.0 NPG USN San Francisco USA 120/576 Continuous (Stockton CA)

04963.0 NDT USN Yokosuka 1 J 120/576
04967.0 NDT USN Yokosuka 2 J 120/576
12777.0 NDT USN Yokosuka 1 J 120/576
22322.5 NDT USN Yokosuka 1 J 120/576
22326.5 NDT USN Yokosuka 2 J 120/576

04228.0 CBV Valparaiso Radio CHL 120/576 1115+1915+1940+2310+2330
08677.2* CBV Valparaiso Radio CHL 120/576 1115+1915+1940+2310+2330
17144.4 CBV Valparaiso Radio CHL 120/576 1115+1915+1940+2310+2330

12813.0 UKA Vladivostok Radio RUS 60/576 nx/txt 0200-0700+2300-0100
17000.0 UKA Vladivostok Radio RUS 60/576 nx/txt 0200-0700+2300-0100

07636.0 XINHUA Beijing CHN 120/576 1416+1826 txt

03255.0 RVT 73 Yekaterinburg UKR

10665.0 RCO 73 Yakutsk Meteo RUS 90/576

Frequencies marked ON CALL can be activated/De-activated by units trough
Comspot request.

AP Associated Press (USA)
CNA Central News Agency (Taiwan)
DyN Diarios y Noticias (Argentina)

KCNA Korean Central News Agency
KYODO Kyodo News Service (Japan)
XNA Xinhua News Agency (China)

-- End of file --

--
| David Moisan, N1KGH /^_/^\ moisan@silver.lcs.mit.edu |
| 86 Essex St. Apt #204 (o ^ o) n1kgh@amsat.org |
| Salem. MA 01970-5225 | | ce393@cleveland.freenet.edu |

1743. Re: DJ-580 UHF receive ragne

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 13:26:54 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1994Feb18.132654.6536@rsg1.er.usgs.gov>
Source record: 270845
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <2k0u9l$bj9@jethro.Corp.Sun.COM>, ruentien@maverick.Corp.Sun.COM (Ruentien Lu) writes:
|> hi, guys:
|>
|> I recently purchase a ALINCO DJ-580, it is a great radio. The quality of audio is great. I have no complaint about this rig.
|> I got one question here, the menu stated the receive range for UHF is from 430 to 470 Mhz, but what I found is that I can make it from 400 to 520 Mhz. I didn't make any modification on this rig, I don't know this is misinformed on menu? or .....
|> Any answer will be appreciated!!
|>
|>
|> PS. I don't have call-sign yet, just pass the test last week.
|>

It will DISPLAY up to 520, but you will note that after about 487 the decimal point disappears, meaning that the PLL will not lock and you will not actually receive anything. It will also display down to 810 but will not lock below about 860. The 487 and 860 numbers depend on the individual radio, but that is what mine does. Bye...

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

1744. ORBS$049.OSCAR.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 13:34:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7428.99.0C38A22E@drig.com>
Source record: 270846

```
SB KEPS @ AMSAT $ORBS-049.O
Orbital Elements 049.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH,TX February 18, 1994
BID: $ORBS-049.O
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94041.03785160
Element set: 261
Inclination: 27.2065 deg
RA of node: 342.3641 deg
Eccentricity: 0.6022608
Arg of perigee: 153.3557 deg
Mean anomaly: 257.8051 deg
Mean motion: 2.05878353 rev/day
Decay rate: -1.38e-06 rev/day^2
Epoch rev: 8016
Checksum: 280

Satellite: UO-11
Catalog number: 14781
Epoch time: 94044.54889300
Element set: 664
Inclination: 97.7907 deg
RA of node: 65.0254 deg
Eccentricity: 0.0011279
Arg of perigee: 310.7761 deg
Mean anomaly: 49.2455 deg
Mean motion: 14.69144313 rev/day
Decay rate: 3.63e-06 rev/day^2
Epoch rev: 53215
Checksum: 306

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94047.04020088
Element set: 863
Inclination: 082.9204 deg
RA of node: 058.3872 deg
Eccentricity: 0.0011757
Arg of perigee: 005.5029 deg
Mean anomaly: 354.6799 deg
```

Mean motion: 13.72331248 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 33329
Checksum: 301

Satellite: AO-13
Catalog number: 19216
Epoch time: 94046.66135778
Element set: 879
Inclination: 057.8129 deg
RA of node: 267.9831 deg
Eccentricity: 0.7205073
Arg of perigee: 334.9717 deg
Mean anomaly: 002.9154 deg
Mean motion: 02.09729204 rev/day
Decay rate: 2.242e-05 rev/day^2
Epoch rev: 4346
Checksum: 331

Satellite: FO-20
Catalog number: 20480
Epoch time: 94046.42832899
Element set: 659
Inclination: 99.0216 deg
RA of node: 221.3367 deg
Eccentricity: 0.0539917
Arg of perigee: 255.4010 deg
Mean anomaly: 98.6634 deg
Mean motion: 12.83223845 rev/day
Decay rate: -1.4e-07 rev/day^2
Epoch rev: 18851
Checksum: 320

Satellite: AO-21
Catalog number: 21087
Epoch time: 94044.50409244
Element set: 424
Inclination: 82.9374 deg
RA of node: 234.2226 deg
Eccentricity: 0.0036823
Arg of perigee: 68.1133 deg
Mean anomaly: 292.3931 deg
Mean motion: 13.74534088 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 15259
Checksum: 296

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94044.66379265
Element set: 662

Inclination: 82.9220 deg
RA of node: 103.0678 deg
Eccentricity: 0.0030946
Arg of perigee: 91.8517 deg
Mean anomaly: 268.6203 deg
Mean motion: 13.74034946 rev/day
Decay rate: 4.3e-07 rev/day^2
Epoch rev: 15168
Checksum: 314

Satellite: ARSENE
Catalog number: 22654
Epoch time: 93338.80803910
Element set: 243
Inclination: 1.4104 deg
RA of node: 113.5274 deg
Eccentricity: 0.2936576
Arg of perigee: 161.9838 deg
Mean anomaly: 210.8642 deg
Mean motion: 1.42202044 rev/day
Decay rate: -8.7e-07 rev/day^2
Epoch rev: 299
Checksum: 278

/EX

1745. ORBS$049.MICRO.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 13:37:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7429.99.0C38A22F@drig.com>
Source record: 270847

```
SB KEPS @ AMSAT $ORBS-049.D
Orbital Elements 049.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH,TX February 18, 1994
BID: $ORBS-049.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94046.18347456
Element set: 964
Inclination: 98.5953 deg
RA of node: 132.5942 deg
Eccentricity: 0.0010599
Arg of perigee: 186.2827 deg
Mean anomaly: 173.8225 deg
Mean motion: 14.29823413 rev/day
Decay rate: 6.0e-07 rev/day^2
Epoch rev: 21215
Checksum: 317

Satellite: AO-16
Catalog number: 20439
Epoch time: 94045.75388848
Element set: 764
Inclination: 98.6038 deg
RA of node: 133.2765 deg
Eccentricity: 0.0010934
Arg of perigee: 188.0238 deg
Mean anomaly: 172.0765 deg
Mean motion: 14.29879034 rev/day
Decay rate: 7.6e-07 rev/day^2
Epoch rev: 21210
Checksum: 328

Satellite: DO-17
Catalog number: 20440
Epoch time: 94045.23034447
Element set: 763
Inclination: 98.6058 deg
RA of node: 133.0443 deg
Eccentricity: 0.0010965
Arg of perigee: 189.4352 deg
Mean anomaly: 170.6623 deg
```

Mean motion: 14.30017107 rev/day
Decay rate: 7.0e-07 rev/day^2
Epoch rev: 21204
Checksum: 266

Satellite: WO-18
Catalog number: 20441
Epoch time: 94045.76328214
Element set: 765
Inclination: 98.6054 deg
RA of node: 133.5798 deg
Eccentricity: 0.0011505
Arg of perigee: 188.3662 deg
Mean anomaly: 171.7330 deg
Mean motion: 14.29993172 rev/day
Decay rate: 5.9e-07 rev/day^2
Epoch rev: 21212
Checksum: 309

Satellite: LO-19
Catalog number: 20442
Epoch time: 94045.74960276
Element set: 763
Inclination: 98.6048 deg
RA of node: 133.7927 deg
Eccentricity: 0.0011921
Arg of perigee: 187.6862 deg
Mean anomaly: 172.4137 deg
Mean motion: 14.30087334 rev/day
Decay rate: 6.4e-07 rev/day^2
Epoch rev: 21213
Checksum: 308

Satellite: UO-22
Catalog number: 21575
Epoch time: 94046.13690949
Element set: 465
Inclination: 98.4466 deg
RA of node: 123.0432 deg
Eccentricity: 0.0007219
Arg of perigee: 301.1937 deg
Mean anomaly: 58.8542 deg
Mean motion: 14.36890610 rev/day
Decay rate: 1.13e-06 rev/day^2
Epoch rev: 13555
Checksum: 302

Satellite: KO-23
Catalog number: 22077
Epoch time: 94046.40390865
Element set: 360

Inclination: 66.0810 deg
RA of node: 174.9628 deg
Eccentricity: 0.0009874
Arg of perigee: 317.5713 deg
Mean anomaly: 42.4539 deg
Mean motion: 12.86284764 rev/day
Decay rate: -3.7e-07 rev/day^2
Epoch rev: 7112
Checksum: 311

Satellite: AO-27
Catalog number: 22825
Epoch time: 94046.21545311
Element set: 261
Inclination: 98.6626 deg
RA of node: 123.1936 deg
Eccentricity: 0.0008062
Arg of perigee: 202.2052 deg
Mean anomaly: 157.8775 deg
Mean motion: 14.27607193 rev/day
Decay rate: 5.8e-07 rev/day^2
Epoch rev: 2028
Checksum: 289

Satellite: IO-26
Catalog number: 22826
Epoch time: 94042.21058899
Element set: 261
Inclination: 98.6649 deg
RA of node: 119.2441 deg
Eccentricity: 0.0008529
Arg of perigee: 216.1988 deg
Mean anomaly: 143.8612 deg
Mean motion: 14.27708814 rev/day
Decay rate: 5.3e-07 rev/day^2
Epoch rev: 1971
Checksum: 325

Satellite: KO-25
Catalog number: 22830
Epoch time: 94045.75293537
Element set: 264
Inclination: 98.5674 deg
RA of node: 121.3071 deg
Eccentricity: 0.0011406
Arg of perigee: 172.0390 deg
Mean anomaly: 188.0975 deg
Mean motion: 14.28033386 rev/day
Decay rate: 5.3e-07 rev/day^2
Epoch rev: 2022
Checksum: 286

/EX

1746. ORBS$049.WEATH.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 13:39:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7430.99.0C38A230@drig.com>
Source record: 270848

```
SB KEPS @ AMSAT $ORBS-049.W
Orbital Elements 049.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX February 18, 1994
BID: $ORBS-049.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94048.05740928
Element set: 717
Inclination: 099.0629 deg
RA of node: 097.0472 deg
Eccentricity: 0.0014834
Arg of perigee: 198.2531 deg
Mean anomaly: 161.8614 deg
Mean motion: 14.13588676 rev/day
Decay rate: 1.08e-06 rev/day^2
Epoch rev: 47337
Checksum: 335

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94048.07887430
Element set: 615
Inclination: 098.5086 deg
RA of node: 060.7353 deg
Eccentricity: 0.0013148
Arg of perigee: 322.0632 deg
Mean anomaly: 038.0209 deg
Mean motion: 14.24865197 rev/day
Decay rate: 1.92e-06 rev/day^2
Epoch rev: 38550
Checksum: 313

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94046.33979358
Element set: 262
Inclination: 82.5401 deg
RA of node: 5.5070 deg
Eccentricity: 0.0016642
Arg of perigee: 157.5160 deg
Mean anomaly: 202.6730 deg
```

Mean motion: 13.84706663 rev/day
Decay rate: 3.0e-07 rev/day^2
Epoch rev: 30549
Checksum: 289

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94039.99790931
Element set: 262
Inclination: 82.5380 deg
RA of node: 54.3969 deg
Eccentricity: 0.0015730
Arg of perigee: 222.0779 deg
Mean anomaly: 137.9138 deg
Mean motion: 13.16964807 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 26638
Checksum: 335

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94046.98300494
Element set: 521
Inclination: 099.1592 deg
RA of node: 032.9867 deg
Eccentricity: 0.0011924
Arg of perigee: 112.3219 deg
Mean anomaly: 247.9779 deg
Mean motion: 14.12958217 rev/day
Decay rate: -9.6e-07 rev/day^2
Epoch rev: 27810
Checksum: 325

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94044.55769401
Element set: 262
Inclination: 82.5198 deg
RA of node: 242.4732 deg
Eccentricity: 0.0011047
Arg of perigee: 225.2162 deg
Mean anomaly: 134.8075 deg
Mean motion: 13.84359023 rev/day
Decay rate: 1.07e-06 rev/day^2
Epoch rev: 25058
Checksum: 297

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94046.12070456
Element set: 987

Inclination: 82.5552 deg
RA of node: 354.3730 deg
Eccentricity: 0.0006056
Arg of perigee: 241.9787 deg
Mean anomaly: 118.0703 deg
Mean motion: 13.04413574 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 20698
Checksum: 291

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94040.79306496
Element set: 762
Inclination: 82.5504 deg
RA of node: 309.6649 deg
Eccentricity: 0.0016176
Arg of perigee: 139.0978 deg
Mean anomaly: 221.1403 deg
Mean motion: 13.84188455 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 18299
Checksum: 328

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94046.23594868
Element set: 892
Inclination: 98.8422 deg
RA of node: 70.2522 deg
Eccentricity: 0.0014658
Arg of perigee: 354.4648 deg
Mean anomaly: 5.6337 deg
Mean motion: 14.01322369 rev/day
Decay rate: -2.54e-06 rev/day^2
Epoch rev: 17662
Checksum: 323

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94045.22593445
Element set: 762
Inclination: 82.5209 deg
RA of node: 243.8029 deg
Eccentricity: 0.0014675
Arg of perigee: 36.2160 deg
Mean anomaly: 323.9979 deg
Mean motion: 13.83572388 rev/day
Decay rate: 1.7e-07 rev/day^2
Epoch rev: 17075
Checksum: 317

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94044.59202931
Element set: 670
Inclination: 82.5391 deg
RA of node: 256.9674 deg
Eccentricity: 0.0013673
Arg of perigee: 130.9218 deg
Mean anomaly: 229.3059 deg
Mean motion: 13.16460015 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 13509
Checksum: 285

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94039.95700562
Element set: 919
Inclination: 98.6320 deg
RA of node: 70.4809 deg
Eccentricity: 0.0012014
Arg of perigee: 247.6730 deg
Mean anomaly: 112.3172 deg
Mean motion: 14.22366100 rev/day
Decay rate: 1.36e-06 rev/day^2
Epoch rev: 14230
Checksum: 260

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94046.41312719
Element set: 667
Inclination: 82.5533 deg
RA of node: 202.7275 deg
Eccentricity: 0.0013636
Arg of perigee: 137.2394 deg
Mean anomaly: 222.9769 deg
Mean motion: 13.16827457 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 12043
Checksum: 304

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94047.11395079
Element set: 263
Inclination: 082.5509 deg
RA of node: 302.3850 deg
Eccentricity: 0.0021878
Arg of perigee: 203.9744 deg
Mean anomaly: 156.0899 deg
Mean motion: 13.83000458 rev/day

```
Decay rate: 6.9e-07 rev/day^2
Epoch rev: 02335
Checksum: 310

/EX
```

1747. ORBS$049.MISC.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 13:41:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7431.99.0C38A231@drig.com>
Source record: 270849

```
SB KEPS @ AMSAT $ORBS-049.M
Orbital Elements 049.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX February 18, 1994
BID: $ORBS-049.M
TO ALL RADIO AMATEURS BT

Satellite: POSAT
Catalog number: 22829
Epoch time: 94045.75585944
Element set: 254
Inclination: 98.6608 deg
RA of node: 122.7699 deg
Eccentricity: 0.0009759
Arg of perigee: 191.0097 deg
Mean anomaly: 169.0872 deg
Mean motion: 14.28003980 rev/day
Decay rate: 7.2e-07 rev/day^2
Epoch rev: 2022
Checksum: 326

Satellite: MIR
Catalog number: 16609
Epoch time: 94048.08346927
Element set: 140
Inclination: 051.6194 deg
RA of node: 068.8223 deg
Eccentricity: 0.0005218
Arg of perigee: 334.0639 deg
Mean anomaly: 026.0757 deg
Mean motion: 15.60261716 rev/day
Decay rate: 1.0503e-04 rev/day^2
Epoch rev: 45731
Checksum: 288

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94045.21686181
Element set: 437
Inclination: 28.4690 deg
RA of node: 305.8162 deg
Eccentricity: 0.0006080
Arg of perigee: 238.3563 deg
Mean anomaly: 121.6440 deg
```

Mean motion: 14.90475490 rev/day
Decay rate: 1.057e-05 rev/day^2
Epoch rev: 1102
Checksum: 268

Satellite: GRO
Catalog number: 21225
Epoch time: 94045.19676059
Element set: 66
Inclination: 28.4619 deg
RA of node: 5.5021 deg
Eccentricity: 0.0003857
Arg of perigee: 262.4247 deg
Mean anomaly: 97.5914 deg
Mean motion: 15.40075712 rev/day
Decay rate: 4.645e-05 rev/day^2
Epoch rev: 3795
Checksum: 300

Satellite: UARS
Catalog number: 21701
Epoch time: 94043.59286458
Element set: 478
Inclination: 56.9850 deg
RA of node: 298.3343 deg
Eccentricity: 0.0004571
Arg of perigee: 105.6879 deg
Mean anomaly: 254.4667 deg
Mean motion: 14.96334686 rev/day
Decay rate: 4.144e-05 rev/day^2
Epoch rev: 13228
Checksum: 336

/EX

1748. ORBS$049.2L.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 13:43:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7432.99.0C38A232@drig.com>
Source record: 270850

```
SB KEPS @ AMSAT $ORBS-049.N
2Line Orbital Elements 049.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX February 18, 1994
BID: $ORBS-049.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10
1 14129U 83058B 94041.03785160 -.00000138 00000-0 10000-3 0 2618
2 14129 27.2065 342.3641 6022608 153.3557 257.8051 2.05878353 80161
UO-11
1 14781U 84021B 94044.54889300 .00000363 00000-0 69607-4 0 6647
2 14781 97.7907 65.0254 0011279 310.7761 49.2455 14.69144313532150
RS-10/11
1 18129U 87054 A 94047.04020088 .00000024 00000-0 26346-4 0 8632
2 18129 082.9204 058.3872 0011757 005.5029 354.6799 13.72331248333290
AO-13
1 19216U 88051 B 94046.66135778 .00002242 00000-0 12555 0 0 8791
2 19216 057.8129 267.9831 7205073 334.9717 002.9154 02.09729204 43460
FO-20
1 20480U 90013C 94046.42832899 -.00000014 00000-0 49346-4 0 6594
2 20480 99.0216 221.3367 0539917 255.4010 98.6634 12.83223845188515
AO-21
1 21087U 91006A 94044.50409244 .00000094 00000-0 82657-4 0 4241
2 21087 82.9374 234.2226 0036823 68.1133 292.3931 13.74534088152592
RS-12/13
1 21089U 91007A 94044.66379265 .00000043 00000-0 29527-4 0 6625
2 21089 82.9220 103.0678 0030946 91.8517 268.6203 13.74034946151682
ARSENE
1 22654U 93031B 93338.80803910 -.00000087 00000-0 00000 0 0 2437
2 22654 1.4104 113.5274 2936576 161.9838 210.8642 1.42202044 2990
UO-14
1 20437U 90005B 94046.18347456 .00000060 00000-0 40471-4 0 9649
2 20437 98.5953 132.5942 0010599 186.2827 173.8225 14.29823413212157
AO-16
1 20439U 90005D 94045.75388848 .00000076 00000-0 46533-4 0 7643
2 20439 98.6038 133.2765 0010934 188.0238 172.0765 14.29879034212109
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DO-17
1 20440U 90005E 94045.23034447 .00000070 00000-0 44132-4 0 7637
2 20440 98.6058 133.0443 0010965 189.4352 170.6623 14.30017107212047
WO-18
1 20441U 90005F 94045.76328214 .00000059 00000-0 39826-4 0 7657
2 20441 98.6054 133.5798 0011505 188.3662 171.7330 14.29993172212124
LO-19
1 20442U 90005G 94045.74960276 .00000064 00000-0 41740-4 0 7638
2 20442 98.6048 133.7927 0011921 187.6862 172.4137 14.30087334212130
UO-22
1 21575U 91050B 94046.13690949 .00000113 00000-0 52716-4 0 4657
2 21575 98.4466 123.0432 0007219 301.1937 58.8542 14.36890610135556
KO-23
1 22077U 92052B 94046.40390865 -.00000037 00000-0 10000-3 0 3601
2 22077 66.0810 174.9628 0009874 317.5713 42.4539 12.86284764 71129
AO-27
1 22825U 93061C 94046.21545311 .00000058 00000-0 41460-4 0 2617
2 22825 98.6626 123.1936 0008062 202.2052 157.8775 14.27607193 20284
IO-26
1 22826U 93061D 94042.21058899 .00000053 00000-0 39268-4 0 2612
2 22826 98.6649 119.2441 0008529 216.1988 143.8612 14.27708814 19710
KO-25
1 22830U 93061H 94045.75293537 .00000053 00000-0 38624-4 0 2647
2 22830 98.5674 121.3071 0011406 172.0390 188.0975 14.28033386 20227
NOAA-9
1 15427U 84123 A 94048.05740928 .00000108 00000-0 57386-4 0 7177
2 15427 099.0629 097.0472 0014834 198.2531 161.8614 14.13588676473374
NOAA-10
1 16969U 86073 A 94048.07887430 .00000192 00000-0 82625-4 0 6151
2 16969 098.5086 060.7353 0013148 322.0632 038.0209 14.24865197385508
MET-2/17
1 18820U 88005A 94046.33979358 .00000030 00000-0 12997-4 0 2628
2 18820 82.5401 5.5070 0016642 157.5160 202.6730 13.84706663305497
MET-3/2
1 19336U 88064A 94039.99790931 .00000051 00000-0 10000-3 0 2623
2 19336 82.5380 54.3969 0015730 222.0779 137.9138 13.16964807266383
NOAA-11
1 19531U 88089 A 94046.98300494 -.00000096 00000-0 00000 0 0 5218
2 19531 099.1592 032.9867 0011924 112.3219 247.9779 14.12958217278100
MET-2/18
1 19851U 89018A 94044.55769401 .00000107 00000-0 82803-4 0 2624
2 19851 82.5198 242.4732 0011047 225.2162 134.8075 13.84359023250582
MET-3/3
1 20305U 89086A 94046.12070456 .00000044 00000-0 10000-3 0 9878
2 20305 82.5552 354.3730 0006056 241.9787 118.0703 13.04413574206986
MET-2/19
1 20670U 90057A 94040.79306496 .00000024 00000-0 79036-5 0 7621
2 20670 82.5504 309.6649 0016176 139.0978 221.1403 13.84188455182995
FY-1/2
1 20788U 90081A 94046.23594868 -.00000254 00000-0 -14043-3 0 8921
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2 20788 98.8422 70.2522 0014658 354.4648 5.6337 14.01322369176623
MET-2/20
1 20826U 90086A 94045.22593445 .00000017 00000-0 15837-5 0 7622
2 20826 82.5209 243.8029 0014675 36.2160 323.9979 13.83572388170755
MET-3/4
1 21232U 91030A 94044.59202931 .00000051 00000-0 10000-3 0 6701
2 21232 82.5391 256.9674 0013673 130.9218 229.3059 13.16460015135098
NOAA-12
1 21263U 91032A 94039.95700562 .00000136 00000-0 80464-4 0 9196
2 21263 98.6320 70.4809 0012014 247.6730 112.3172 14.22366100142301
MET-3/5
1 21655U 91056A 94046.41312719 .00000051 00000-0 10000-3 0 6673
2 21655 82.5533 202.7275 0013636 137.2394 222.9769 13.16827457120431
MET-2/21
1 22782U 93055 A 94047.11395079 .00000069 00000-0 63374-4 0 2638
2 22782 082.5509 302.3850 0021878 203.9744 156.0899 13.83000458023351
POSAT
1 22829U 93061G 94045.75585944 .00000072 00000-0 46760-4 0 2541
2 22829 98.6608 122.7699 0009759 191.0097 169.0872 14.28003980 20229
MIR
1 16609U 86017 A 94048.08346927 .00010503 00000-0 12582-3 0 1406
2 16609 051.6194 068.8223 0005218 334.0639 026.0757 15.60261716457315
HUBBLE
1 20580U 90037B 94045.21686181 .00001057 00000-0 90647-4 0 4379
2 20580 28.4690 305.8162 0006080 238.3563 121.6440 14.90475490 11020
GRO
1 21225U 91027B 94045.19676059 .00004645 00000-0 10629-3 0 661
2 21225 28.4619 5.5021 0003857 262.4247 97.5914 15.40075712 37958
UARS
1 21701U 91063B 94043.59286458 .00004144 00000-0 38419-3 0 4780
2 21701 56.9850 298.3343 0004571 105.6879 254.4667 14.96334686132281
/EX
```

1749. Re: Looking for Sigma Design Associates...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 14:33:05 UTC
From: rogerm@hpscit.sc.hp.com
Message-ID: <50030047@hpscit.sc.hp.com>
Source record: 270851

There is a Sigma Design Comapny in Fremont, California. Don't know if this
is the same one you are looking for. Try directory assistance for Fremont, CA.
I believe the area code is (510).

1750. Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 14:59:22 UTC
From: kg7bk@indirect.com
Message-ID: <CLFDMz.ICJ@news.direct.net>
Source record: 270852

"Well I will say it flat out:" Jeff Gold "is a liar. I caught him at it first hand and won't" read any more of his magazine articles. Everything in quotes is from Jeff's posting to the subject of John Ramsey.

In the first paragraph of his recent magazine article he tells us that there is something "magical" about ham radio. That's a lie, Jeff. It is all simple physics.

He also says that every one of the radios he built has given him pleasure. Then in his Internet posting he talks about getting mad, experiencing difficulties, and problems with the FTR-146. One of those statements is a lie.

Don't anybody bother responding to this ridiculous posting... just wanted Jeff to see what it's like to be treated the way he treats others.

The Magical Devil made me do it. Cecil, kg7bk@indirect.com

1751. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 15:08:27 UTC
From: gdavis@griffin.uvm.edu
Message-ID: <gdavis.761584107@griffin>
Source record: 270853

Well, after all is said and done... I still think Americans place too much emphasis on visuals. Too bad all of us can't have that perfect BOD for you guys and gals to lust after.

I recall, in the seventies, there was a psychology professor ... I think at Berekley , who insisted his classes meet in the nude. It had something to do with what he called "total honesty". (snicker)

However.. I really don't think the public should equate bare loins with sex. I know that nudity is much better accepted in more mature cultures. Especially, in Europe. But, then again many Amazon people don't see the need for clothes either from a practical or social point of reference.

By the way there was a student at Berekley who insisted on going to class nude. I understand he was not stopped until a female feminist group claimed sexual harrassment.
I also heard the biggest objection to "the nude guy" was people didn't want to sit in a chair after he got up. (perhaps this was a good idea)
It was Not a good enough reason to throw the "lad" in jail.
I think he was trying to prove a social point: American's are very nervous and inhibited about theirs and other peoples nude bodies.

As far as nude QSLs ... I got the one from Japan a couple of years ago. It was quite a conversation piece. Others wanted to work him so perhaps the QSL may have generated a pile-up. (sniker)

Well, folks get to know your body better.. even those parts called privates. Ain't nothin dirty about em... the good lord gave em to you to treat with respect, not distain.

A would-be bufferew-
WQ1F

" What did you do for fun last summer?"

--
******** Gary E. Davis***** WQ1F *****
The most common of all follies is to believe passionately in the palpably not true. It is the chief occupation of mankind.-H.L.Mencken

1752. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 15:22:22 UTC
From: kg7bk@indirect.com
Message-ID: <CLFEpB.Iqy@news.direct.net>
Source record: 270854

Alan Bloom (alanb@sr.hp.com) wrote:

: As a practical matter, the FCC would likely never find out unless you
: had an interference complaint, and probably not even then. AL N1AL

When I was in college, I had a Heathkit am/cw transmitter and vfo that was all mode... AM and FM at the same time. I used it for years and the only complaints I got was from fellow hams. Found out later that it was illegal.

I doubt that the difference between spurious emissions of -50db and -48db can even be detected by monitoring the radiated signal. If my math is right, for a 5 watt fundamental signal from the FX-146, that -50db to -48db difference is 0.00003 watt. It's not in the same league as a kw on 11m. It's more like driving 57 mph.

73, Cecil, kg7bk@indirect.com

1753. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 15:50:20 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-180294104722@136.141.220.39>
Source record: 270855

In article <CLC8su.DCt@news.direct.net>, kg7bk@indirect.com (Cecil Moore) wrote:

>
> Your experience has been different from mine. I had 100 times the trouble
> out of Heathkits that I had with Ramsey kits. You probably weren't around
> for the '50s when it was a miracle if a Heathkit ever worked.
>

Really?! I've built Heathkits from the original oscilloscope and AT-1 transmitter right up through their kit 2-m HT, and had _very_ few problems that weren't my own stupidity (back in the '50's I was known to make a cold solder joint occasionally). Think I had one bad relay in my HW-100 that they promptly replaced, can't recall any other problems in well over twenty kits.

Only built one Ramsey kit, their 40-m qrp transmitter. Very simple circuit, but it doesn't work. (Oscillator stage is okay, but the final doesn't amplify.) Haven't had a chance to troubleshoot it yet, so can't rule out my own stupidity, but Ramsey doesn't have a good track record with me.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1754. Ramsey mod list? (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 16:06:44 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2k2p2kINNmbh@abyss.West.Sun.COM>
Source record: 270856

In article <n1istCLEJFt.E7C@netcom.com> n1ist@netcom.com (Michael L. Ardai) writes:
>In article <2jqu8k$96m@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan)
writes:
>-In article <x8yqthx.jramsey@delphi.com>, <jramsey@delphi.com> wrote:
>->ARRL couldn't get their kit to work! So we sent them an assembled unit.
>-I do not know how you read this, but to me it looks like bad news for
>-buildability of Ramsey Kits. And now imagine an average John Q. Ham
>-with a 200 watt soldering gun and acid core solder. :)
>
>Apparantly, Ramsey will be losing the 2 meter kit business very soon. Ten Tec
>has a 2M kit for $195 (available in May) that not only includes a 5 watt 2M
>radio, expandable to 35W on the board and the case, but a *complete*
>micro-driven front panel with frequency readout, memories, and a tuning knob in
>5kc clicks. No more diodes, and only $20 more than Ramsey ($150 for the radio
>and $25 for the 'optional' case.
>
>Why do I feel that Ten Tec is more likely to make kits that will work, meet
>FCC spec, and not thump when the squelch closes?
^^

It is actually more like a sharp click; even with the volume turned
down it is quite loud. I've heard a rumor that Ramsey has a fix for
this; possibly Ramsey would like to post a list of mods and fixes
to rec.radio.amateur.homebrew, or put the list (and the actual
mod files?) on an ftp server somewhere. This would save the
Internet folks the cost of a phone call to New York...

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1755. Re: DJ-580 UHF receive ragne

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 16:25:49 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2k2q6d$e2v@bigfoot.wustl.edu>
Source record: 270857

Ruentien Lu (ruentien@maverick.Corp.Sun.COM) wrote:
: hi, guys:

: I recently purchase a ALINCO DJ-580, it is a great radio. The quality of audio is great. I have no complaint about this rig.
: I got one question here, the menu stated the receive range for UHF is from 430 to 470 Mhz, but what I found is that I can make it from 400 to 520 Mhz. I didn't make any modification on this rig, I don't know this is misinformed on menu? or .....
: Any answer will be appreciated!!

: PS. I don't have call-sign yet, just pass the test last week.
^^^^^^^^^^^^^^^^^^^^^^^^^^

you know, I don't think I'd be able to put up with not being able to TX
for two months after getting the radio. you must have some self-discipline!
more than I have at least. Just hope that warrantee doesn't expire too
soon. . . (Note: I'm not implying that there is anything with this radio)

If only the FCC would hurry up!!!

--jesse (57 days and counting--so I guess that's over 8 weeks)

1756. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 16:39:44 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-180294093408@waters.corp.mot.com.corp.mot.com>
Source record: 270858

In article <2k0eup$k3o@crcnis1.unl.edu>, mcduffie@unlinfo.unl.edu (Gary McDuffie Sr) wrote:

> rcrw90@email.mot.com (Mike Waters) writes:
>
> >The easiest way would be to disable (remove?) the hard drive and run with
> >only the operasting system and typing software. (Obviously *not* a morse
> >reader of any type :-) You have to be able to demonstrate that t he hard
> >drive is empty or disabled though.
>
> Okay, what am I missing? What has the hard drive got to do with it?
> Why would you care about a hard drive? Does Seagate put out HDs that
> can copy code now? And as for a "morse reader", how would it be able
> to copy in a testing environment? This guy is sweating a test. He
> doesn't have time to load some program to help him cheat, if there was
> such a program. Just watch him like you would all the other testees,
> maybe a little closer, if you like. I think you will find that you ae
> being paranoid for no reason.

I have no idea what help someone could get from a program, that is not the point.

My problem is that this is somewhat like the reasoning that led up to the Challenger disaster.

The need is not to show that someone *is* or *could* cheat, but for them to prove that they *could not* cheat.. If you want to use some piece of equipment in a testing session *you* must show that (a) you are not using it to cheat and (b) it won't disturb the other test takers.

Showing an empty hard drive or none at all is one very easy way to do this. Certainly there are other waysto do this. Remember the onus in not on the VEs to try to anticipate every possible way for someone to cheat, but to ensure fair tests

1757. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 16:44:32 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2k2r9g$e2v@bigfoot.wustl.edu>
Source record: 270859

Cecil Moore (kg7bk@indirect.com) wrote:
: "Well I will say it flat out:" Jeff Gold "is a liar. I caught him at it
: first hand and won't" read any more of his magazine articles. Everything
: in quotes is from Jeff's posting to the subject of John Ramsey.

what exactly is that "Jeff Gold" in there for?

: In the first paragraph of his recent magazine article he tells us that
: there is something "magical" about ham radio. That's a lie, Jeff. It is
: all simple physics.

The physics of ham radio are purely physics. But how about the allure and
people's sustained interest? Seems pretty magical to me.

: He also says that every one of the radios he built has given him pleasure.
: Then in his Internet posting he talks about getting mad, experiencing
: difficulties, and problems with the FTR-146. One of those statements is a
: lie.

Help me out here. what's wrong with this? Everybody eventually feels
pleasure if he/she can eventually get a project to work. Now this is the
key. If I bought a (older) Ramsey kit--I'd probably be frustrated as
hell not being to assemble it. I'm a natural science (note not
engineering) major and probably wouldn't have a clue how to get things
to work if they weren't spelled out. I'd probably call to complain--and
I don't want to know how that'd turn out. (OK so I lied here--I'm taking
electric/electronic network courses here [partially for this interest]
and MIGHT be able to get a professor to help out--or maybe a fellow ham
here) But buy something given a certain set of expectations (said or
implied by the seller), you will get mad, frustrated, and experience
difficulties and problems if the expectations aren't met.

: Don't anybody bother responding to this ridiculous posting... just wanted
: Jeff to see what it's like to be treated the way he treats others.

Well, at least you didn't use the anon server.

: The Magical Devil made me do it. Cecil, kg7bk@indirect.com

At the moment, I wouldn't buy any of Ramsey's kits--I do believe that
half of business is selling yourself. And from what I've seen posted
on this group, he doesn't sell himself very well. Until netwisdom
speaks better of Ramsey, I'll be wary.

just imvho. . .and my choice

-jesse

<no flame intended, but a flare of irritation with the post>

1758. Policy and Procedure in Bahama Islands ..

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 16:46:32 UTC
From: sonny@ufnet.ufl.edu
Message-ID: <2k2rd8$iuq@cutter.clas.ufl.edu>
Source record: 270860
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.packet

Dear Newsgroup,

I am a scientist at the University of Florida and also a ham operator.
I anticipate being in the Bahama Islands (Eleuthra) for several months
this summer on a research sabbatical.

I would really appreciate direct communication with another amateur
in the Bahamas, or any information on the policy, practice, and procedure
of taking and operating my radio equipment in this country.

Any info on packet any freq in the area would be doubly appreciated ..

Thanks in advance .. Sonny .. sonny@ufnet.ufl.edu

1759. Chinese Amateurs Sent to Labor Camps ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 17:03:34 UTC
From: mikewood@rock.concert.net
Message-ID: <2k2sd6$mb9@inxs.concert.net>
Source record: 270861
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave

Information was posted on the Southeastern U.S.A. DX Packet
Cluster system last nite that if true is a most disturbing
occurrence.

The posting stated that the Voice of America had reported
that ** all ** radio amateurs in the The Peoples Republic
of China (Radio Prefix BY) had been placed in labor camps.

Does anyone have verification and/or further details of
this situation?

Does the VOA post any news scripts to any Internet locations?

Some amateurs noted that there had been a recent lack of
activity from PRC amateurs but had attributed this to
poor propagation.

If the information proves to be true, I urge you to protest
this action by calls or letters to the PRC Embassy in
your country.

The reported reason fr the action by the way was that all
PRC amateurs "had been monitoring unauthorized frequencies".

Mike Wood Internet: mikewood@rock.concert.net
The Signal Group
P.O. Box 1979 ***Avoid company disclaimers by owning the company ***
Wake Forest, NC 27588

Phone: 919-556-8477 Fax: 919-556-0115

1760. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 17:20:05 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb18.172005.8942@ke4zv.atl.ga.us>
Source record: 270862

In article <CLDxyq.K47@srgenprp.sr.hp.com> glenne@sad.hp.com (Glenn Elmore) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>
>: M/Acom 10mw gunnplexer transceivers are available for on the order of
>: $350 from SI, or raw gunnplexers can be found for $30-$70 on the surplus
>: market. But you have to design an AFC system, and the high speed digital
>: modulator/demodulators for them. Find dishes for them, and find line of
>: sight paths for the links. Costs could be similar, around $1000 per
>: link, but site selection would be much more restricted, and likely
>: range as well (only a couple of miles for reasonable sized dishes
>: and average terrain). Ten watts and 4 foot dishes can give 50+ mile
>: paths at video bandwidths under good conditions, but that's serious money.
>: It could be worth it for the higher throughput in some cases.
>
>The 2 Mbps link I built and showed in HR Magazine and which is now in
>the ARRL Handbook had at least 10 dB of excess signal(for BER small
>compared to 1 error per 1500 byte packet) across 13 miles with 10 milliwatt
>sources and 2' dishes. The hardware (excluding a digital controller to
>handle the bit stream) cost little more than $100 per end.

I've looked at your design. It's certainly simple for the performance
it promises, but I doubt you could sell it for under $100 per end with
ham market size volumes. The DSY modem kit is not very different in
complexity, yet GRAPES can't sell it that cheap. I believe you probably
mean that a good scrounger could gather the parts that cheap. If you
can offer a kit for $100 per end, I'll take two right away. I have a
one mile through-the-trees link I need to make right now. A pair of
Wavelan cards feeding Down East loop yagis won't make it, but 100 mw
HTs at 70 cm make it fine, as can a pair of GRAPES 56kb modens feeding
70 cm transverters (but I can't do that because I need them for another
link). BTW, a BER better than 1 in 10^6 is no problem with the DSY design
with 1.0 microvolt of signal into the modem.

>Ten watts and a 4' dish can do a *lot* more than 50 miles under good
>conditions, if by good you mean line-of-sight. In fact you wouldn't likely
>be able to use that much C/N on a terrestrial link.
>
>A 4' antenna with typical feed efficiency is about 40 dBi at 10,250
>MHz. Ten watts is +40 dBm; the combination gives +80 dBm ERP. If you
>consider a video system with 6 MHz of bandwidth and that 45 dB of C/N
>ratio gives "good quality" video, with a 3 dB sytem noise figure the
>noise floor is about -103 dBm and you therefore want -58 dBm at the
>receiver. The receive antenna gives another 40 dBi and you only need
>-98 dBm (into an isotropic antenna) at the receiving site. So, you are
>allowed +80-(-98)=178 dB of path loss. At 10.25 GHz this is over 1000

>miles; a longer line-of-sight path than you'd be able to actually find
>anywhere on the surface of the earth.
>
>In fact, with 4' antennas instead of 2' ones (+12 dB system improvement)
>and a "real" receiver instead of a 15 dB NF diode mixer (another +12 dB), the
>10 milliwatt sources should be capable of 35 miles with the above video
>system requirements.

Well sure, pure line of sight definitely makes things better, witness
TVRO systems that make 22,500 miles on 50 watts or less. However, we
don't get that kind of performance out of our terrestrial TV links.
First of all, the bandwidth required for our TV links isn't 6 MHz,
it's 30 MHz, because we use FM video. Of course the FM enhancement
effect mitigates that somewhat. And second, we rarely have pure line
of sight. Finally, the bulk of the path loss occurs in the first
mile, 119.27 db at 13 GHz. After that the incremental losses are
rather small, another 3 db for every doubling of distance.

Our experience with setting up ad hoc terrestrial links with our news
vans is that the portables with 100 mw and 2 foot dishes shouldn't be
counted on beyond 2 miles. A carefully engineered LOS path between two
high sites does better, of course. We have one full time path at 24 GHz
that is 7 miles. It was solid with 2 foot dishes except when it was raining
hard, with 8 foot dishes it's solid even in the heaviest cloudbursts.
Our longest engineered path is 50 miles, using a 6 foot dish at one
end, and an 8 footer at the other, running 10 watts at 7 GHz, from a
1,000 foot tower to a 2370 foot mountain. Even that path fades in
heavy rain.

Note that over a perfectly smooth Earth, LOS is only 38.72 miles
for a dish 1,000 feet HAAT. For the typical van mast, or ham tower,
of 40 feet, LOS is only 7.745 miles. (Double those numbers for a
grazing path to another site of the same HAAT.) When we add in real
obstacles like 40-1000 foot buildings, 100 foot trees, etc, it gets much
worse. And to avoid the first Fresnel zone, we need to clear an obstacle
at the mid-point of the path by 30.96 feet. That's not going to happen
even over smooth Earth at a distance greater than 3.87 miles with
a 40 foot mast. So pure LOS is pretty much a mountaintop to mountaintop
affair for longer distances.

> While it's true that you would need line-of-sight, I think most
>practical installations of a lower frequency system also incur
>15-40 dB incremental path loss once they leave LOS conditions and
>for higher information rate transmission effectively need LOS in order
>to stay economic.

Well lets look at a 219 MHz system with a 11 db antenna at 40 feet
shooting to another system also with a HAAT of 40 feet and a 11 db
antenna. System power is 7 watts. That's 38.45 dbm plus 22 db of
antenna gain for a total link ERP of 60.45 dbm. We need 1 uV
across 50 ohms for a 1 in 10^6 BER at the receiver. That's 2*10^-14
watts, or -137 dbm. So we have a budget of 60.45-(-137)=197.45 db.

Assuming we want to stay out of first Fresnel, we have a total path length of 7.74 miles which has a free space path loss of 101.58 db. That gives us a margin of 95.87 db. Looks like we can easily tolerate 15-40 db of foliage and building loss in the path. For the same path, it looks like foliage losses at 10 GHz are about 30 db more, for a total of about 198 db at 10 GHz, or about 20 db below your system's noise floor worst case.

>Also, at high information rates, the additional multipath and path
>variability problems incurred by going to a non-LOS path make the UHF
>solution even less attractive since error correction, channel equalization
>and additional system margin may be required to guarantee data flow.

Ok. Lets take a look at beyond horizon signals. If we assume forward scatter for beyond horizon signals, and a 90 mile path, then we're looking at 194.89 db path loss at 219 MHz. At 10 GHz our path loss is now 296.51 db. (It's really silly to be quoting two decimal place precision here, the loss figures are only accurate to about +/- 10%) Anyway, it looks like a modest antenna improvement over the base 11 db shown in earlier figures will give us 1e-6 BER for a DSY modem over this path, but you'd need about 120 db more margin to make it. (Troposcatter loss figures interpolated from the 50% reliability line of fig 35, Chapter 24, _Reference Data for Radio Engineers_ 4th edition, free space path loss from my spreadsheet.)

Now back to the real world. We have a 90 mile 70 cm path between Sweat Mtn and Scaly Mtn that is not line of sight. It works with very few retries. We're using 19 db antennas on each end, and our mean HAAT is about 1300 feet, but with mountains taller than that in between. I won't claim that's typical. We've got another link that's only 21 miles, and line of sight, that doesn't work well. But one end is nestled in downtown buildings and suffers severe multipath (and desense from commercial equipment too). The tighter beamwidth of your system would probably be a win here.

To summarize, if we could depend on having LOS paths, a 10 GHz system would be ideal, but in the real world we probably can't afford the number of hops that would require (except in special terrain cases like the California coast with it's mountains overlooking the population areas), and 219 MHz calculations seem to show it will suffice using troposcatter over the much longer paths we are likely to need in our rolling terrain.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1761. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 17:37:37 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb18.173737.9050@ke4zv.atl.ga.us>
Source record: 270863

In article <n1istCLEJFt.E7C@netcom.com> n1ist@netcom.com (Michael L. Ardai) writes:
>
>Apparantly, Ramsey will be losing the 2 meter kit business very soon. Ten Tec
>has a 2M kit for $195 (available in May) that not only includes a 5 watt 2M
>radio, expandable to 35W on the board and the case, but a *complete*
>micro-driven front panel with frequency readout, memories, and a tuning knob in
>5kc clicks. No more diodes, and only $20 more than Ramsey ($150 for the radio
>and $25 for the 'optional' case.
>
>Why do I feel that Ten Tec is more likely to make kits that will work, meet
>FCC spec, and not thump when the squelch closes?

Yaaaay Ten-Tec. I hope they have some at Dayton. I'll give this one a
try and see how it compares to the Ramsey. Frankly I hope they *don't*
drive Ramsey out of the business. I hope they drive Ramsey to improve
the quality of their product. We can't have too many good kits out there.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1762. Re: Coax minimum-loss impeance

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 17:50:44 UTC
From: garyf@wang.com
Message-ID: <CLFLKn.5J8@wang.com>
Source record: 270864

rkarlqu@scd.hp.com (Richard Karlquist) writes:

>I stand corrected (77 vs. 74 ohms).

>This is correct, technically, but my recollection of the MIT Rad
>Labs book discussion was that 50 ohms was historically chosen in
>relation to air coax, and the fact that it happened to be
>minimum loss with polyethylene was a lucky accident. But my
>memory or the Rad Lab books may be wrong on historical details.

>Now for a follow up question: where did the idea for 92 ohm coax
>come from?

>Rick N6RK
>rkarlqu@scd.hp.com

Well this isn't too theoretical an answer, but I suspect that it was developed
as a very low capacitance cable for use in connecting AM car radio antennas.
Since these use whips that a MUCH shorter than 1/4 wave they have very high
impedance and consequently connecting them to a feedline with lots of
capacitance loses lots of signal.
Gary
--
--/* Gary A. Field - WA1GRC, Wang Labs M/S 019-72B, 1 Industrial Ave
Lowell, MA 01851-5161, (508) 967-2514, email: garyf@wiis.wang.com, EST5EDT
A waist is a terrible thing to mind! */

1763. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 18:01:34 UTC
From: k9jma@cbnewsc.cb.att.com
Message-ID: <CLFM2x.41G@cbnewsc.cb.att.com>
Source record: 270865

In article <CLEFKx.91K@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>David Stockton (dstock@hpqmoca.sqf.hp.com) wrote:
>: Here in Britain, there are no required specs for spurious outputs,
>: we're held responsible for any problems due to any at any level. I know
>: that the US FCC has put actual numbers on required performance (sounds
>: like an improvement on our requirements, to me). So, just from personal
>: curiosity, what are the consequences to an amateur who puts a radio on
>: the air that does not meet the FCC specs ?
>
>As a practical matter, the FCC would likely never find out unless you
>had an interference complaint, and probably not even then. In the
>unlikely event that FCC came to your shack with a power attenuator
>and spectrum analyzer and found your rig out of spec, you would
>receive a notice of violation with the requirement to correct
>the illegal condition and respond in writing within XX days.
>
>In the case of interference, you would probably also be ordered
>off the air until the problem was fixed.
>
>AL N1AL

I think the important lesson to be learned from recent enforcement actions is that this model doesn't apply any more. This is an accurate statement of previous policy and practice, but not of the current practice. There will, in general, be no warning or prior notice, as mentioned here, to secure compliance. The first communication from the FCC will probably be the notice of apparent liability for monetary forfeiture (~$2K to ~$8K).

It seems fairly clear from the packet radio message content case and this recent case of the spur from the repeater that the emphasis has shifted away from securing compliance through education and guidance. The new emphasis is on enforcement through punishment and collection of fines^H^H^H^Hmonetary forfeitures.

The equipment owner and/or operator cannot rely on the certification of the manufacturer that the equipment would meet any requirement when operating properly to protect against being found liable for monetary forfeiture in the event of malfunction. The practical course is to undertake frequent, if not continuous, monitoring with the best spectrum analysis equipment available to see that all emissions actually are below current requirements. This is operationally the same requirement mentioned in the post from the UK - that there be no spurious emissions in operation.

The manufacturers' certification is _also_ necessary, and it is a separate violation for it to be lacking.

--
Ed Schaefer K9JMA ham radio N97178 aviation

1764. Re: Noise Problem (and other noise sources)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 19:07:12 UTC
From: jdc@cci.com
Message-ID: <CLFp41.Ez4@sunsrvr6.cci.com>
Source record: 270866

In article <2jqq6i$glg@vixen.cso.uiuc.edu>,
Ignacy Misztal <ignacy@ux2.cso.uiuc.edu> wrote:
>Sources of broadband noise in my house:
>1. Light dimmers,
>2. TV set,
>3. Fluorescent lights.
>
>Ignacy Misztal, NO9E, SP8FWB
>ignacy@uiuc.edu

I had a MOV (Metal Oxide Varistor) in a "surge supressor" go bad. They
to into a partially-conducting mode, sorta like a SCR dimmer switch.

And some electronic ballast flourescent lights are really bad. We have
some Lights of America flourescent lights with FCC Part-15 tags.

73...Jim
N2VNO

1765. * SpaceNews 21-Feb-94 *

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 19:18:05 UTC
From: kd2bd@ka2qhd.DE.COM
Message-ID: <9402181918.AA22036@ka2qhd.de.com>
Source record: 270867

SB NEWS @ AMSAT $SPC0221
* SpaceNews 21-Feb-94 *

BID: $SPC0221

=========
SpaceNews
=========

MONDAY FEBRUARY 21, 1994

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited distribution.

* OSCAR SKN BEST FISTS *
========================
Many thanks to all who participated in our 22nd Annual Straight Key Night on OSCAR, 1 January 1994. The following "Best Fist" nominations have been received: W1NU, WQ3Y and W6HDO. Although we didn't ask that logs be submitted, several participants also reported working AMSAT-NA's esteemed president, W3XO/5, in one of Bill's rare appearances on CW (PVRC members especially will appreciate the significance of this occasion). An "honorary" Best Fist nomination goes to you, Bill; let's hope that more SSB ops will follow your fine example, dust off their old pump handles, and enjoy the fun.

See you all next year!

[Info via Ray, W2RS]

* STS-62 PRE-LAUNCH ORBITAL DATA *
==================================
STS-62
1 00062U 94062.63664409 .00073440 00000-0 22129-3 0 29
2 00062 39.0115 247.8629 0006644 298.2691 61.7477 15.90695888 27

Satellite: STS-62
Catalog number: 00062
Epoch time: 94062.63664409 = (03 MAR 94 15:16:46.05 UTC)
Element set: 002
Inclination: 39.0115 deg
RA of node: 247.8629 deg Space Shuttle Flight STS-62
Eccentricity: .0006644 Prelaunch Element set JSC-002
Arg of perigee: 298.2691 deg Launch: 03 MAR 94 13:54 UTC
Mean anomaly: 61.7477 deg
Mean motion: 15.90695888 rev/day G. L. Carman
Decay rate: 7.3440e-04 rev/day^2 NASA Johnson Space Center

Epoch rev: 2
Checksum: 310

[Info via Gil Carman]

* OSCAR-13 ZRO TEST SKED *
==========
The ZRO Memorial Technical Achievement Award Program, or just "ZRO Test" has a new schedule for February and March, 1994, via AMSAT-OSCAR-13. This activity is a test of operating skill and equipment performance.

During a typical ZRO run, a control station will send numeric code groups using CW at 10 words-per-minute. At the beginning of the run, uplink power from the control station is set to match the general beacon downlink strength. This is level "zero". The control operator will send and repeat a random five-digit number, then lower his uplink power by 3 dB (half power) and repeat the procedure with a new random number (level "1"). This will continue to a level 30 dB below the beacon (level "A").

A participating listener monitors the downlink signals till he can no longer copy the numbers. Those who can hear the beacon will qualify for the basic award by copying the code group heard at level "zero". The challenge is to improve home-station performance to a point where the lower-level downlink signals can be copied (levels 6 through A). To date, only one station (Darrel Emerson, AA7FV) has successfully copied level "A".

The following schedule of Mode "B" tests were chosen for convenient operating times and favorable squint angles. The tests can be heard on 145.840 MHz. Andy WA5ZIB will conduct all the tests. Mode "JL" tests will no longer occur due to the failure of AO-13's 70-cm transmitter.

Day Date (UTC) Time Areas covered

Sunday Feb. 20, 1994 0330 UTC NA, NW SA, Japan, Pacific
Saturday Feb. 26, 1994 1930 UTC NA, SA, Europe, Africa, ME
Saturday Mar. 19, 1994 1930 UTC NA, SA, Europe, Africa
Saturday Mar. 26, 1994 2315 UTC NA, SA

Note that the dates and days are shown in "UTC", thus the first test listed occurs at 9:30 PM CST Saturday night (the 19th). Any changes will be announced as soon as possible via the AMSAT HF and AO-13 Operations Nets.

All listener reports with date of test and numbers copied should be sent to Andy MacAllister WA5ZIB, AMSAT V.P. User Operations, 14714 Knights Way Drive, Houston, TX 77083-5640. A report will be returned verifying the level of accurate reception. An S.A.S.E. is appreciated but not required.

Information about the AMSAT Awards Program can be found on page 197 of the "Proceedings of the AMSAT-NA Tenth Space Symposium" (1992). This paper, covering all the AMSAT-NA awards including specifics on the ZRO Test, was reprinted on page 10 in the March/April 1993 issue of "The AMSAT Journal". The ZRO Test information provided in the article covers test procedures, means for obtaining certificates and gives some historical background

about the program. Reprints of the article can be obtained for an S.A.S.E. to WA5ZIB at the address above.

[Info via WA5ZIB]

* DISCOVERY-MIR RADIO LINK *
==========

The Space Shuttle Discovery's crew and the MIR Russian space station made an Amateur Radio contact on 08-Feb-94 during a period of time when Discovery was over the south Pacific and MIR was over the Caribbean.

"We fly during a lot of time with Sergej and I wish a good work with his North American collegues, and a not problems return to the Earth", said Valery Polyakov one of the MIR cosmonauts. "Thanks, I heard you perfect", replied Krikalev in Russian.

[Info via Gustavo, LW2DTZ of AMSAT-LU]

* AMSAT HF PBBS *
==========

WT0N-3 in St. Paul, MN, USA will be on 10.127 LSB (30 meters) Monday through Saturday from 1600 UTC until 23OO UTC. This station will carry all AMSAT bulletins and Keps. It will also carry other satellite related items such as "SpaceNews". This PBBS will be set up on 300 baud HF packet, but will also be available for AMTOR or PACTOR operations if there is a need to do so. At this time, the PBBS will be set up as an experiment and any comments and suggestions should be directed to the sysop, BJ Arts, WT0N, at any one of the following addresses:

PACKET: WT0N@WB0GDB.#STP.MN.USA.NOAM
INTERNET: BJARTS@STTHOMAS.EDU

[Info via WT0N]

* FO-20 SCHEDULE *
==========

The FO-20 command station announced that a slight malfunction in the onboard command system had been detected. As a result, analog mode operation arranged from 09-Feb-94 will be performed on schedule, but there is a possibility of interruption due to satellite ground station control.

The present schedule is as announced before:

Analog mode:
09-Feb-94 07:15 -to- 16-Feb-94 07:40 UTC
23-Feb-94 08:05 -to- 02-Mar-94 06:40 UTC
09-Mar-94 07:05 -to- 16-Mar-94 07:30 UTC
23-Mar-94 07:52 -to- 30-Mar-94 08:15 UTC

Digital mode: Unless otherwise noted above.

[Info via Kazu Sakamoto, JJ1WTK]

* THANKS! *
==========
Thanks to all those who sent QSL cards, letters, and messages of
appreciation regarding SpaceNews, especially:

N2WPW EA4RCT VK4STS G7MJL XX9AS KY0R

* FEEDBACK/INPUT WELCOMED *
==========
Mail to SpaceNews should be directed to the editor (John, KD2BD) via any
of the following paths:

FAX : 1-908-747-7107
PACKET : KD2BD @ N2KZH.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College
Lincroft, New Jersey 07738
U.S.A.

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
John A. Magliacane, KD2BD * /\/\ * Voice : 1-908-224-2948
Advanced Technology Center |/\/\/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
Brookdale Community College |\/\/\/| Internet: kd2bd@ka2qhd.ocpt.ccur.com
Lincroft, NJ 07738 * \/\/ * Morse : -.- -.. ..--- -... -..

1766. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 19:22:18 UTC
From: gaulandm@tekig7.PEN.TEK.COM
Message-ID: <13795@tekig7.PEN.TEK.COM>
Source record: 270868

In article <1994Feb18.123827.1@apollo.robins.af.mil> woodj@apollo.robins.af.mil writes:
>Don't forget about the name tags. I reckon it would be a real boon for
>the double-sided tape manufacturers.
>
> Jim Wood

Name tags? I thought Real Hams had their calls tattooed on?

--
Michael A. Gauland gaulandm@tekig7.PEN.TEK.COM
AA7JF (503) 627-5067

1767. JOHN RAMSEY

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 19:23:06 UTC
From: steven.rosenberg@support.com
Message-ID: <9402181123.A8768wk@support.com>
Source record: 270869

JMG@tntech.edu (JEFF M. GOLD) writes:

>Anyway, Ten Tec is suppose to come out with a nice 2 meter fm
>transceiver kit in the near future.

When??? This could be GREAT.

1768. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 19:35:07 UTC
From: dave@llondel.demon.co.uk
Message-ID: <761625307snx@llondel.demon.co.uk>
Source record: 270870

The subject brings a whole new dimension to the phrase 'Have you got all my details' as heard in contests :-)

I bet the cards aren't as bad as some of the SSTV pictures often emanating from Italy.....

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

1769. Re: Iambic keyer paddles

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 19:38:55 UTC
From: dave@llondel.demon.co.uk
Message-ID: <761625535snx@llondel.demon.co.uk>
Source record: 270871

I am left handed but I normally send with my right hand, regardless of whether I am using a straight key or an iambic keyer. I can switch to my left hand if I want without having to rewire the keyer.

Having said that, on the rare occasion I get to use CW now, I tend to loaf along at <20wpm - perhaps at higher speed the left hand would go wrong.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

1770. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 20:33:35 UTC
From: glenne@sad.hp.com
Message-ID: <CLFt40.Cq0@srgenprp.sr.hp.com>
Source record: 270872

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: I've looked at your design. It's certainly simple for the performance
: it promises, but I doubt you could sell it for under $100 per end with
: ham market size volumes. The DSY modem kit is not very different in
: complexity, yet GRAPES can't sell it that cheap. I believe you probably
: mean that a good scrounger could gather the parts that cheap. If you
: can offer a kit for $100 per end, I'll take two right away. I have a

I'm definitely not an amateur manufacturing type but I greatly
appreciate the difficulty of producing (kitting is probably even worse)
almost anything of this type for sale. Process and production issues
are often a bigger task/cost than the original design itself. However,
from a complexity and parts count point of view, if one compares to
existing high volume hardware (we may already be out of the camp of
amateur radio) I think that lowcost microwave transceivers could be
built. As I've previously mentioned, another 10-20 dB of system
performance over the 10 GHz stuff at about the same cost/complexity I
showed is readily available should someone choose to go after it.

As I've also repeatedly said, the 10 GHz link was a "teaser" and never
even intended to be used for more than a demonstration. The fact that
people have built and used them is incidental. That design is certainly
not one I would choose to manufacture if I did choose to get into the
business.
I do believe that $100 h/w is a possibility given volume production
though. Existing automotive radar detectors are similar in complexity.
In fact some of them are probably considerably more complex.

: one mile through-the-trees link I need to make right now. A pair of
: Wavelan cards feeding Down East loop yagis won't make it, but 100 mw
: HTs at 70 cm make it fine, as can a pair of GRAPES 56kb modens feeding
: 70 cm transverters (but I can't do that because I need them for another
: link). BTW, a BER better than 1 in 10^6 is no problem with the DSY design
: with 1.0 microvolt of signal into the modem.

I think you really need to be careful to compare apples and apples. 100
mw HTs aren't anything close to the video bandwidths which I was
discussing. Also, with the narrower bandwidth and low data rate,
multipath distortion and the resulting intersymbol interference (or
phase distortion as it is sometimes called) isn't nearly so significant.
I think that a BER of better than 1e-6 may be difficult in many or most
non-LOS situations without error correction and/or channel equalization
(whether through brute force means or with spread spectrum). Even at
only GRAPES speeds this is an issue. I would point to the Ottowa
group's experiences and VE3JF's CNC article as a reference.

While the excess path loss degrades more slowly at lower frequencies
than at microwave I maintain that as soon as one gets into high
information transfer situations that multipath and path variation
cause similar difficulties and make indirect paths uneconomical or
impossible. When you have lots of margin to throw away (low data rates)
it does indeed appear that low frequencies win. When you start pushing
performance and high information transfer (lots of users over a wide
area) they fail badly, even before the consideration of sufficient
available spectrum is applied. I believe that this is the fundamental
reason that terrestrial radio links have all been at microwave. It
makes economic sense.

: Well sure, pure line of sight definitely makes things better, witness
: TVRO systems that make 22,500 miles on 50 watts or less. However, we
: don't get that kind of performance out of our terrestrial TV links.
: First of all, the bandwidth required for our TV links isn't 6 MHz,
: it's 30 MHz, because we use FM video. Of course the FM enhancement
: effect mitigates that somewhat. And second, we rarely have pure line

I used traditional TV bandwidths in my example because they were more
conservative/demanding. In using 6 MHz and 45 dB C/N instead of 35 MHz
and 13 dB C/N (or your favorite number near that for a TVRO system) I
was requiring about 25 dB *more* signal than a TVRO style system. If
you allow the TVRO system you can increase the previous estimated
distances by a factor of 16 or so.

: of sight. Finally, the bulk of the path loss occurs in the first
: mile, 119.27 db at 13 GHz. After that the incremental losses are
: rather small, another 3 db for every doubling of distance.

Wow! I stand corrected. Things must work differently where you are.
The darn signals drop 6 dB when you double the distance out here in
California. This happens every time you double it, the second mile or
the second hundred (or pretty close to it up through 10 GHz) as long as
you're LOS.

: a 40 foot mast. So pure LOS is pretty much a mountaintop to mountaintop
: affair for longer distances.

Yes it is unless a lot more path engineering is done than amateurs are
used to doing. However, if we are ever to get high information rate
systems we are going to *have* to pay attention to details. Once we do
this, those details will be made more economic as we use
microwave/millimeter (if all of amateur radio hasn't been scooped by
fiber by then) wavelengths.

: > While it's true that you would need line-of-sight, I think most
: >practical installations of a lower frequency system also incur
: >15-40 dB incremental path loss once they leave LOS conditions and
: >for higher information rate transmission effectively need LOS in order
: >to stay economic.

: Well lets look at a 219 MHz system with a 11 db antenna at 40 feet

I'm discussing higher speed systems. Links of the type required to
trunk a significant number of users with moderate to high bandwidth
applications across the US. 1 MHz at 219 is not going to be
able to support such without a tremendous amount of spacial reuse
which probably means antennas so large as to be impractical.

: That gives us a margin of 95.87 db. Looks like we can easily tolerate
: 15-40 db of foliage and building loss in the path. For the same path,
: it looks like foliage losses at 10 GHz are about 30 db more, for a
: total of about 198 db at 10 GHz, or about 20 db below your system's
: noise floor worst case.

Yes, if you don't need much performance you can use lower frequencies,
you can lose a lot of the *potential* performance and still function.
For that matter you can run 60 wpm rtty on HF across great distances if
that's your goal.

My point is that once you try to get economical performance at high
information rates you can't afford to throw away power into poorly
engineered paths and that the economics greatly favor microwave over vhf
for wireless systems.

: >Also, at high information rates, the additional multipath and path :
: >variability problems incurred by going to a non-LOS path make the UHF :
: >solution even less attractive since error correction, channel equalization
: >and additional system margin may be required to guarantee data flow.

: Ok. Lets take a look at beyond horizon signals. If we assume forward

Let's not. Once you've done that you have thrown away so much system
capability that it is beyond amateur resources. I don't think
most of us are ready to install multi-killiwatt troposcatter systems
of the kind the military used at low vhf to island hop in the Pacific.
And that's about what it takes if you are talking about medium speed
information (though I suspect the military stuff was more or less audio
bandwidths).

If you did consider long haul, I suspect that microwave might do
better than many expect. During the 10GHz over-land DX record tests we
did a few years ago, both the strongest and the most reliable signals
heard across the 415 mile path were at 10 GHz. They were the strongest
when the ducting occurred and they were the most reliable in that the 1
watt into a *30 inch* diameter antenna was always copiable via
troposcatter. This was true even though we had liaison on 40M SSB, 144
MHz (1/4 KW and long yagis each end) and 432 MHz. However,neither of those
propagation mechanisms is one I would want to consider for high rate
information transfer.

: Now back to the real world. We have a 90 mile 70 cm path between Sweat
: Mtn and Scaly Mtn that is not line of sight. It works with very few
: retries. We're using 19 db antennas on each end, and our mean HAAT is
: about 1300 feet, but with mountains taller than that in between. I won't
: claim that's typical. We've got another link that's only 21 miles,
: and line of sight, that doesn't work well. But one end is nestled

: in downtown buildings and suffers severe multipath (and desense from
: commercial equipment too). The tighter beamwidth of your system would
: probably be a win here.

Your second 21 mile link obviously *isn't* LOS!
Local clutter is probably degrading things severely.
Antennas help a lot (2 dB of system improvement per dB of antenna gain)
but a poor path degrades things much faster than antennas can fix it.
That "nestled end" that you call line-of-sight is clearly far from it.
See my comment above about most practical links losing 15-40 dB as
soon as they leave LOS. Your link is probably an example of this.

: To summarize, if we could depend on having LOS paths, a 10 GHz system
: would be ideal, but in the real world we probably can't afford the
: number of hops that would require (except in special terrain cases
: like the California coast with it's mountains overlooking the population
: areas), and 219 MHz calculations seem to show it will suffice using
: troposcatter over the much longer paths we are likely to need in our
: rolling terrain.

If we are willing to settle for low information rate to each user I
agree. However, if we are considering medium speed or greater, as
defined by the industry, culture and available systems, and if we are
considering more than a single or a few users, 219 MHz capacity isn't
going to come close to being enough to interest hams and potential
hams in "investing". Even now it is difficult to convince people
that ham radio is neat for information age services when a 14.4 kbps
or 28.8 kbps modem is so cheap and provides so much performance
to the user compared to anything AR has to offer.

Glenn Elmore n6gn

1771. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 20:38:27 UTC
From: woodj@apollo.robins.af.mil
Message-ID: <1994Feb18.123827.1@apollo.robins.af.mil>
Source record: 270873

In article <2juhv0$h56@charm.magnus.acs.ohio-state.edu>,
wvhorn@magnus.acs.ohio-state.edu (William VanHorne) writes:
> In article <CLC4Dw.10E@oakhill.sps.mot.com>,
> Ben Thornton <ben@yosemite.sps.mot.com> wrote:
>
>>So, explain to me just how it is that someone is somehow a different person
>>simply because they wear no clothing. The difference is only in the eye
>>of the beholder...
>
> Hardly. If you're nude, you can't wear one of those nifty baseball caps
> with your name and callsign on it. What's the point of being in ham
> radio if you don't wear your baseball cap? Sheesh.
>
> ---Bill VanHorne
>
Don't forget about the name tags. I reckon it would be a real boon for
the double-sided tape manufacturers.

Jim Wood

1772. rsgb gb2rs news 20th feb

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 20:44:00 UTC
From: ted@tedb.demon.co.uk
Message-ID: <761604240snz@tedb.demon.co.uk>
Source record: 270874
Cross-posted to: rec.radio.amateur.misc,uk.radio.amateur

Good morning. It's Sunday the 20th of February and here is the GB2RS news broadcast, prepared by the Radio Society of Great Britain.

First the headlines:- Today's RSGB VHF Convention; The Trafford Rally; The VHF Round Table; Arfon Repeater Update; Closedown of Repeater GB3NA; New RLOs for the Isle of Man and Lothian areas; Dates for next year's rallies and events required urgently; Morecambe Bay amateur wins Silver Trophy.

Today sees the premier event in the VHF Calendar, the RSGB VHF Convention, held at Sandown Race Course, Esher, Surrey. Doors open at 10.30am and the convention features a trade exhibition and a lecture programme featuring VHF, UHF and Microwaves, starting at 2.15pm. The February edition of RadCom carries full details of the event including a list of lectures. Refreshments will be available from 11am and talk-in is on channels S22 and SU22 by GB2VHF.

Also today, the Trafford rally takes place at Manchester. More details of this later in our bulletin.

A VHF 'Round Table' meeting is scheduled for Sunday the 10th of April at the British Telecom Laboratories, Martlesham Heath, Ipswich. Comprehensive measuring and test equipment will be available and there will be the usual technical workshops and talks. Entrance to the meeting will be strictly by ticket only, but these are free and are available from Darren Hatcher, G7BKO, BT Computer Centre, Bibb Way, Ipswich, Suffolk. Please remember to enclose a Stamped Addressed Envelope and a list of names of all those in your party. Refreshments and free car parking are available. For further details contact Darren on 0473 227332 during office hours only.

The Arfon Repeater Group 70cm Repeater GB3AN has now been operational from its new site on the north east coast of Anglesey for three months. The received reports to date, show good results of the predicted coverage area, but during the past few weeks a problem arose which made access to the repeater difficult. The cause was traced to the 1750 Hz tone detect circuit which has now been rectified. The Group apologies for any inconvenience this caused. The linking experiment between GB3AN on 70 centimetres and GB3AR on 2 metres is also receiving favourable comments, and giving extended coverage to both repeaters.

The repeaters can be link from either GB3AR or GB3AN and once the confirmation "K" is received, then normal QSO's can be carried out over the two repeaters which has a four minute time-out. Both send a total of four pips, it is good practice to wait for two pips before transmitting, this gives a chance for a station to break-in. For further details about the group or for a copy of the operating procedures for linking, contact the Arfon Repeater Group Secretary, John, GW0AQR, enclosing a Self Addressed Stamped Envelope. John's address is

correct in the RSGB Call Book.

The Repeater GB3NA has been closed down by the RIS from the 9th of February 1994 as no NOV was in force. The issue of the NOV has been deferred by the RSGB in consultation with the Radiocommunications Agency pending an investigation by G4AFJ, Chairman of the Repeater Management Group, of allegations that individuals concerned in the management of the repeater are responsible for abuse and until RSGB(RMG) are satisfied that there are adequate arrangements in place to reduce abuse. Anyone who wishes to give information on this matter is advised to write to G4AFJ, 31 Newbold Road, Kirkby Mallory, Leicestershire, LE9 7OG.

{Newsreaders: This item can be deleted if your broadcast does not cover the County of Lothian or Isle of Man areas}

Attention RSGB members in the County of Lothian and the Isle of Man areas. Two new RSGB Liaison Officers (RLO) have been appointed, one for each area. The RLO for the Lothian is Mr TWG Menzies, GM1GEQ. His address is 31 Pentland Terrace, Edinburgh, EH10 6HD. For the Isle of Man, the RLO is Mr C G Baillie-Searle, GD4EIP. His address is 2 Marguerite Place, Foxdale, Isle of Man, IM4 3HE. RLOs hold a wide range of information and they are available to help any RSGB member seeking advice.

Next, attention all Club and Rally Secretaries. The Society intends to update all the society records of all Club Rallies and Events for 1995. For this to be achieved, can all club secretaries involved send the date of their event for 1995 immediately to RSGB Headquarters so that it can be included in the list. Information should be marked for the attention of Justine Hodges, Marketing Coordinator, and must be received at Headquarters by Friday the 4th of March.

Congratulations to Len Williams, G4UUX, the winner of the Morecambe Bay Amateur Radio Society Construction Competition which took place last January. Len was presented with a silver Cup by Ian, G4VAP who started the competition some years ago in order to encourage more home construction.

Now some items of HF DX news from the weekly RSGB DX News Sheet which is edited by Brendan McCartney, G4DYO. From Aruba, VE3MR will sign P40MR from tomorrow, Monday the 21st until Saturday the 12th of March. Activity will be on 12 and 17 metres, SSB only. From Canada, G3RBP will be active as VA3YJ/8 from Yellowknife, North West Territories (VE8), for one or two days, during the next three weeks. Activity will be on 160, 80 and 40 metres, CW only. Check these frequencies 1.827, 3.505 and 7.005MHz, QSX up. From Africa, ZS6EZ will activate the callsign ZS9Z from Walvis Bay, starting, all being well, late on Thursday the 24th of February. On Monday the 28th at 2200 UTC, midnight local time, the area becomes part of Namibia and he will use the callsign V51Z, until after dawn on Wednesday the 2nd of March. Particular attention will be paid to the WARC and LF bands. And from Reunion Island, G0IXC will sign FR/G0IXC from Friday the 25th of February for three weeks. Activity will be SSB only, 10 - 40 metres but mainly 15m.

{Newsreaders: This event can be deleted if your broadcast does not cover the local area}

Rally news now and we know of the following event for today, Sunday the 20th of February:

The Trafford Rally is being held at the G-MEX Centre, Manchester. Doors open at 10.30am for all, but there is a disabled persons priority queue. This event features all the usual trade stands and many other attractions, including an RSGB book and information stand. Refreshments are available and talk-in is on channel S22 via GB1GMX.

There are three events that we know for next weekend:

On Saturday the 26th the Rainham Radio Rally will be held at the Rainham School for Girls, Derwent Way, Rainham, Kent. A new venue for this event. Leave the M2 Motorway at junction 4 and follow the Rainham Radio Rally arrows. Doors open at 10am. The venue has more space and ample off road parking. There will be trade stands, a bring and buy stall and club stands featuring, Packet, Television, KRG, Raynet etc. Refreshments will be available and talk-in will be on channel S22 via GB4RRR. Further details can be obtained from Martin, G7JBO on 0634 365980. Also on Saturday the 26th, the Tyneside Amateur Radio Society Annual Rally will be held at the Temple Park Centre, John Reid Road, South Shields. Accessable from the A1 and A19 from both the north and south and the A69 from the West. Doors open at 11am, 10.30 for disabled visitors. The event features all the usual trade stands and a bring and buy stall. Refreshments will be available and talk-in will be on channel S22. Further details can be obtained from Jack, G0DZG on 091 265 1718.

And on Sunday the 27th of February, the Taw and Torridge Rally will be held at the Bideford Halls on the Quay, Bideford, North Devon. Doors open at 10.30am. The event features trade exhibitors and a bring and buy stall. Refreshments will be available all day. Further details can be obtained from Mike, G3PGA,who is QTHR.1IJK on 061 748 9804.

Next a date for your diary:

The 1994 RSGB London Amateur Radio and Computer Show is to be held during Saturday the 12th and Sunday the 13th of March, at the Lee Valley Leisure Centre, Picketts Lock Lane, Edmonton, North London. February's RadCom contains details of the Show which is being run by RadioSport Ltd, in conjunction with the RSGB and the Southgate Amateur Radio Club. A Show Guide is being published as a supplement to the March edition of RadCom. There will be no RSGB National Convention this year so the Society will put on a larger stand at the London Show. For further information call 0923 893929. If anyone would like to take advantage of the special arrangements made for hotel accommodation during this event, then please get in touch with Bernard Godfrey, G4AOG, telephone 0923 678770.

HF contest news now:

The ARRL International CW DX Contest takes place this weekend, from 0000UTC on Saturday the 19th, to 2400UTC on Sunday the 20th of February. Contestants may use all bands from 1.8MHz to 28MHz, but excluding the WARC bands. See February

RadCom page 19 for rules and entry details but please disregard the dates which are incorrect. To recap, the correct dates are the 19th and 20th of February. The RSGB 7MHz DX Contest takes place next weekend, from 1500 UTC on Saturday the 26th, to 0900 UTC on Sunday the 27th. See September RadCom page 81 for full details.

Next the results of the 1993 2nd 1.3/2.3GHz Fixed Contest were as follows: In the 1.3GHz Single Operator Section G3MEH came first with 251 points and GD4GNH was second with 113 points. For the 1.3GHz Multi Operator Section the winner was G8OHM with 149 points. The winner of the 2.3GHz Single Operator Section was G8ZQB with 32 points.

Now some VHF contest news:

The penultimate sessions of the RSGB 70MHz Cumulative Contest takes place next Sunday the 27th of February, from 1000 to 1200 UTC. There are three sections:- Fixed station single operator, Open and Listeners. See December's RadCom page 83 for details. The RSGB 144/432MHz Contest will take place from 1400 UTC on Saturday the 5th, to 1400 UTC on Sunday the 6th of March. See January and February RadCom's pages 83 for details of the different sections.

GX3CHM/P will aired from East Pennard, Somerset, during today Sunday the 20th. It will be operated by members of the Yeovil Amateur Radio Club who will be commemorating the 40th anniversary of first sky-wave contact using a transistor transmitter. GX3CMH/P will operate on 3.560MHz CW using an equivalent QRPP transmitter to that used in the first tests. For further details contact G4JBL on 0258 473845. RSGB members may like to note that a feature on this historic event appeared in the February RadCom.

And now the solar factual data:

The period 7th to 13th February must hold a record of some sort, the geomagnetic field has been at storm or severe storm levels all the period, with sever storm at high latitudes every day. It is the most disturbed period since March 1989. Needless to say, the HF bands have been severly affected, auroras and noise storms were reported particularly from northern stations. The cause of the storms was an elongated coronal hole which has taken some 10 days to pass by, and as this bulletin was being prepared on the 14th we had not seen the end of it. No flares have been reported. Sun spot indices didnot change much day to day and meaned at 53. Solar flux levels have declined slightly and averaged 96 units. The 90 day mean was 106 units on the 8th. The geomagnetic Ap indices ranged from full storm levels of 62 units on the 7th and 8th only dropping to sub storm levels of 45 units by the 13th, with the period averaging at an Ap of 48 units. The state has been magstorms in progress all the period. The aa indices for the 1st to 7th February as supplied by the British Geological Survey gave daily averages of 43.7 nanoTeslas about K4, with the 1st being very quiet down to only 11.6 nanoTeslas, rising to sub storm levels of 85 nanoTeslas by the 6th and 7th, with the auroral periods being up to 136 nanoTeslas about K6. The X-Ray flux increased over the period and averaged B1.9 units, though the 12th was up to B2.9 units. Bartells rotation 2192 starts on the 26th February. A major Stratospheric Warming was reported on the 13th covering the North Atlantic,

Europe and was spreading East, the temperature rise was 30 degrees C at 10 Hecta Pascals level about 35 kilometres high.

Now the ionospheric data for Central France:

The F2 daytime critical frequencies at Poitiers as reported by Meudon, were very severly affected by the storms and only averaged 6.8MHz, with the 8th 9th and 10th being down to only just over 5MHz. The darkness hour lows averaged only 1.8 MHz with little variation day to day. These are the lowest levels recorded since this data was first given in October 1992. The darkness hours also recorded a lot of spread F and other phenomena at times making readings impossible.

Now the ionospheric data for the north:

The F2 daytime critical frequencies at Ekaterinberg only averaged 5.4MHz and the darkness hour lows 2.2MHz. Another suprise from solar cycle 22. About this time in solar cycles coronal holes are very prevalent, but most are either isolated patches or are tongues reaching up or down from the suns polar regions, which pass in two or three days, in the passed 17 years since I have been doing the GB2RS news, I cannot remember a coronal hole elongated along the sun's equator of the shape and size that has occurred at this time.

And lastly the solar forecast:

This week, the active side of the sun will be rotating away, solar flux levels are expected to be about the 110s, and the X-Ray flux is expected to be high about B3.0. Geomagnetic activity will depend on the progress of the coronal holes but is expected to decline to more normal levels. Ionospheric MUFs in the south are expected to be about 24MHz during daylight and 10MHz during the darkness hours. East/west paths may be slightly lower than this. Northern station levels will be lower.

And that's the end of the solar information.

Finally in the main news, SSL has informed the Society that as of last Wednesday morning, the latest callsigns issued were in the G0 U L and G7 R T series, and Novice calls in the 2 0 A H and 2 1 C R series. .

You're listening to GB2RS, the news broadcasting service of the Radio Society of Great Britain, transmitting in the 80, 40, 6 and 2 metre bands.

Next, the local news.

NEWS FOR THE SOUTH EAST

Meetings for Tuesday the 22nd of February:

Dorking and District Radio Society has a talk entitled 'Doughnuts in Radio' by Pat, G8HMG. Members and visitors welcome. For further details tel: 0306 631236.

Stevenage and District Amateur Radio Society has a talk on 'The 1993 Coast to Coast walk' by Ralph, G7HFD. Details from Neil, tel: 0438 350882.

Waterside Amateur Radio Society has a talk by David Wright on 'Radio Astronomy'. Details from George, G0IDN on 0703 843491.

Meetings for Wednesday the 23rd of February:

Chesham and District Amateur Radio Society has a talk 'The RSGB - speaker to be advised'. Details from Ian, G0RTF on 0494 676391.

Cheshunt and District Amateur Radio Club has a talk 'The LONNY Wormhole' by Julian, G4NQO. Details from Roger, G4OAA on 0992 464795.

Darenth Valley Radio Society has a visit by Fred Stewart, RSGB RLO for Kent. More details from Len, G0HRD, tel: 0474 703322.

Dover Radio Club has a talk on 'The history of the Duke of York School' by Mike Carson. For further details contact Mick, G7NOR on 0304 825030.

Farnborough and District Radio Society has a talk entitled 'Introduction to Contesting' by G3HEJ. For more information telephone 0252 715765.

Grafton Radio Society has a talk 'Understanding Ferrite transformers in HF Power Amplifiers' by Stein Torp, LA7MI. Further details from Rod, G0JUZ 081 368 8154.

Newbury & District Amateur Radio Society has a Junk Sale. Further details from Norman, G0HFU tel: 0635 863310.

Worthing and District Amateur Radio Club has a Discussion evening. For further details contact G4GPX on 0903 753893.

Meetings for Thursday the 24th of February:

Colchester Radio Amateurs has a talk called 'Rallies and Practical Wireless' by Rob Mannion, G3XFD. Further details from Mike, G4YJN on 0206 738189.

Crowborough & District Amateur Radio Society has an E.G.M. followed by the talk 'Antenna design in miniature' by Eric, G3TXZ. For details contact Mick, G6UUO on 0892 661807.

Shefford and District Amateur Radio Society meets for its Annual General Meeting. Contact Paul, G1GSN on 0462 700618 for further details.

Southgate Amateur Radio Club has an Activity Night. Further information from Brian, G0MEE on 081 360 2453.

Vange Amateur Radio Society meets for its Annual General Meeting. Contact Doris on 0268 552606 for further information.

Meetings for Friday the 25th of February:

Clifton Amateur Radio Society has a Film Evening. Further details from Keith, G4TJE on 081 859 7630.

Hilderstone Amateur Radio Society has a demonstration 'First Aid & Resuscitation' by Ken Bailey, St Johns Ambulance Brigade. For further details, telephone 0843 869812.

Itchen Valley Amateur Radio Club has a visit from Rob Mannion, G3XFD. Contact Les, G3ABA on 0703 732997 for details.

Medway Amateur Receiving & Transmitting Society has its Annual General Meeting. Further details from Gloria, G7OVI on 0634 710023.

Wimbledon and District Amateur Radio Society has a talk on 'Desert Island Radio'. Information from Chris, G0KEB, tel: 081 397 0427.

NEWS FOR SOUTH WEST

Exeter Amateur Radio Society Club has a new venue and now meets in The Moose International Centre, Blackboy Road, Exeter. For details contact Ray, G3YBK 0392 78710.

Meetings for Monday the 21st of February:

Appledore and District Amateur Radio Club has a talk on 'Satellite Communications' by Dennis, G0FCL. Details from G4ETJ, tel: 0237 477301.

Wincanton Amateur Radio Club has an Open Evening. Further details from Dave, G3ZXX on 0963 34360 or Andy, G1FPW on 0747 51381.

Meeting for Wednesday the 23rd of February:

South Bristol Amateur Radio Club has a Talk/demo entitled 'Soldering Techniques and their use' by Ken, G0TDS. For more information tel: 0275 834282.

Meeting for Thursday the 24th of February:

Yeovil Amateur Radio Club has a Station-on-Air evening. Contact Cedric, G4JBL on 0258 473845 for further information.

Meeting for Friday the 25th of February:

North Bristol Amateur Club has a Table Sale. More details from Tony, G4ROX tel: 0272 513573.

NEWS FOR EAST ANGLIA

Meeting for Monday the 21st of February:

Felixstowe and District Amateur Radio Society has a Computing Workshop, led by Paul, G4YQC. For further details contact Paul, G4YQC on 0394 273507 any evening.

Meetings for Wednesday the 23rd of February:

Ipswich Radio Club has a CW evening. For further details contact Sheila, G8HYE on 0473 742072.

Norfolk Amateur Radio Club has a Construction and QRP evening. For further details contact Sheila, G0KWP on 0603 618810.

Meetings for Thursday the 24th of February:

Kings Lynn Amateur Radio Club has a lecture on 'Amateur TV on the cheap' by Ian, G1NOO. Visitors welcome. Details from Ian, G0BMS on 0553 765614.

Yarmouth Radio Club has a talk 'Tapes for the Blind' by G0FIY. Contact Tony, G3NHU, on 0493 721173 for further details.

NEWS FOR THE MIDLANDS

Meeting for Monday the 21st of February:

Aldridge and Barr Beacon Amateur Radio Club now meets at its new venue: The Aldridge Central Community Association Hall, Middlemore Lane, Aldridge, Walsall, WS9 8AN. Details from Charles, G0NOL 0922 36162.

Dudley Amateur Radio Club has a Resume of current VHF practices and thoughts for the future by Peter Burden, G3UBX. More information from Drew, G7DMO on 0533 755310 during office only.

Stourbridge and District Amateur Radio Society has its Annual Construction Competition. Contact James, G7HEZ on 0384 374354 for more details.

Meetings for Tuesday the 22nd of February:

Bromsgrove Amateur Radio Society has a Visit by Dave Gourley, Zonal Council Member and John Marks, local RSGB Liaison Officer. After a short talk, there will be a Question and Answers session. Details from Barry, G0TPG on 0527 542266.

Buxton Radio Amateurs has a QSL Card night. Details from Derek, G4IHO, tel: 0298 25506.

Loughborough and District Amateur Radio Club has a talk on 'Video Editing' by Derrick, G7OXA. For further details contact G8SNF, tel: 0509 218259.

Meetings for Wednesday 23rd of February:

Derby and District Amateur Radio Society has a talk by Ken Griffin called 'Another side of G4HDP'. Details from Hayley, G7PXA on 0773 856904.

Lincoln Short Wave Club has a talk 'Amateur Satellites' by Dave, G4CUO and Ted, G6HMS. For more details contact Nigel, G7KIE on 0522 703778.

Telford and District Amateur Radio Society has its 'Under a Fiver' Competition. For further details contact Dave, G4EIX, on 0952 588878.

Meetings for Thursday the 24th of February:

Amateur Radio Club of Nottingham has a Construction night. Further details from Simon, G0IEG on 0602 501733.

Salop Amateur Radio Society has a demonstration of 'FAX and SSTV, both software and dedicated machines' by Clem, G0ALV. Details from Sheila, G0SST 0743 361935.

Meetings for Friday the 25th of February:

Coventry Amateur Radio Society has a Quiz Night. Further details from David, G1ORG, tel: 0203 311468.

South Notts Amateur Radio Club has a visit from Nunsfield House Amateur Radio Club at Fairham College. Contact Julie, G0SOU on 0602 216342 for details.

NEWS FOR THE NORTH OF ENGLAND

Meetings for Monday the 21st of February:

Rochdale and District Amateur Radio Society has a Talk by Rev George Dobbs, G3RJV. For more information contact Brian, G0GNR on 061 653 8316.

Sheffield Amateur Radio Club has a Construction night. Further details from David, G0JJR Tel: 0742 446282.

Thornton Cleveleys Amateur Radio Society is discussing its 'Stand Plan for the Norbreck Rally'. Further details from G4BFH who is QTHR.

Woodford (RATEC) has a talk 'HMS Bronington, G0TON' by Peter, G3XGE. Visitors welcome to attend. For further details contact Don, G4SFU on 061 485 3912.

Meetings for Tuesday the 22nd of February:

Bury Radio Society has a showing of RSGB videos. For further details contact Mike, G4GSY on 061 761 5083.

Chester and District Amateur Radio Society has a Surplus Equipment Sale by G3EWZ. Further details are available from G0OXA, tel: 051 608 3229.

Liverpool and District Amateur Radio Society has a Surplus Sale. Further details from Ian, G4WWX QTHR.

Wakefield and District Radio Society meets for a Night on the Air. Further details from Roy G0TBY 0924 893321.

Meetings for Wednesday the 23rd of February:

Hornsea Amateur Radio Club has a talk 'PAL Colour TV' by G8EQZ. For further details contact G4UOZ on 0964 534283.

Mid-Cheshire Amateur Radio Society has a Video night. Contact Mike, G7LQD on 0606 331210 for details.

North Wakefield Radio Club has a visit to the West Yorkshire Police Control at 7pm. Details from John, G4RCG on 0924 362144.

Stockport Radio Society has a Quiz night - Committee v Members. For further details telephone 061 439 4952.

Meetings for Thursday the 24th of February:

Hambleton Amateur Radio Society has a Practical night. For further details contact Nigel, G0NHM, 0609 776608.

Keighley Amateur Radio Society has a 'Practical Fractals - a hands on electromnic experience' by Lance Kean. Further details from Kathy, G0RLO on

0274 496222.

North Wakefield Radio Club has a talk entitled 'A guide to short Term Forecasting' by Charlie Newton, G2FKZ. Details from John, G4RCG on 0924 362144.

Meetings for Friday the 25th of February:

East Cleveland Amateur Radio Club has a talk on Mountain Safety by Jim Butcher. Details from Alistair, G4OLK on 0642 475671.

North Ferriby United Amateur Radio Society meets for its Annual General Meeting. Further details from Frank, G3YCC, tel: 0482 650410.

South Manchester Radio Club has a talk 'Desk Top Publishing' by G0OQS. For further details contact Edward, G7FQY, tel: 061 969 1964.

Stockport Radio Society Computer Group has a talk 'Computer hardware/software' by a member of the Firstec Company. For further details telephone 061 439 4952.

NEWS FOR SCOTLAND

Meeting for Tuesday the 22nd of February:

Dundee Amateur Radio Club has a Construction Night. Details from GM4FSB who is QTHR.

Meeting for Thursday the 24th of February:

Dunfermline Radio Society has a Construction evening - Top Band DF equipment. Further details from Wallace, GM0GNT who is QTHR.

Meetings for Friday the 25th of February:

Aberdeen Amateur Radio Society has a talk 'A junk sale Frequency Meter'. Details from Gordon, GM7PXW, tel 0224 780591.

Ayr Amateur Radio Group has a 'Home Constructors' evening. Details from Ian, GM43VMG on 0292 260870.

West of Scotland Amateur Radio Society has a Construction Competition. For details contact Jack, GM4COX on 0698 350926.

NEWS FOR WALES

Meeting for Monday the 21st of February:

Dragon Amateur Radio Club has a Talk by Bob, GW3CGN. Further details from Tony, GW0FMQ, tel: 0248 600963.

NEWS FOR NORTHERN IRELAND

Meeting for Friday the 25th of February:

Ballymena Amateur Radio Club has its Winter Bring & Buy Sale. The RAIBC will be present and there will be an RSGB Bookstall. Refreshment will be available.

Details from Jeff, Gi4HCN, tel: 0266 659769.

And that's the end of this week's GB2RS news broadcast, which was prepared by the Radio Society of Great Britain.

1773. Re: CELLULAR SURVEILLANCE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 20:56:18 UTC
From: bmiller@landesk.intel.com
Message-ID: <2k3a1i$b3q@ornews.intel.com>
Source record: 270875

In article <2jr0tmree1@rosebud.ncd.com> phil@hansen.ncd.com (Phil Graham) writes:
>
>So what does it do?
>
>In article <9402141902.A9592wk@t8000.cuc.ab.ca>, bill.FIscher@t8000.cuc.ab.CA writes:
>|>
>|> 94-02-14
>|>
>|> Finally, as the result of the efforts of a number of Internet gurus,
>|> we're able to tell you how to download a demo copy of the software
>|> that controls our Cellular Surveillance Interface, via e-mail. The
>|> program is entitled CELLDEMO.ZIP

It is a demo of how their "black-box" decoder allows several different types of 800MHz radios to track the movement of cellular phone calls from cell to cell. The demo program is just a simulation of how the control data is decoded. This can be used to control your radio's frequency (in the real version of the program). Nifty demo if you like that kind of stuff, but the product sells for around $400 (+ or - $100) - not for the average joe.

--
Brett Miller N7OLQ E-mail: brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

1774. Spectral purity of 2m tx (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 21:08:58 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2k3apaINNmjf@abyss.West.Sun.COM>
Source record: 270876

In article <CLFEpB.Iqy@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>Alan Bloom (alanb@sr.hp.com) wrote:
>
>: As a practical matter, the FCC would likely never find out unless you
>: had an interference complaint, and probably not even then. AL N1AL
>
>When I was in college, I had a Heathkit am/cw transmitter and vfo that
>was all mode... AM and FM at the same time. I used it for years and the
>only complaints I got was from fellow hams. Found out later that it was
>illegal.

Good amateur practice would suggest that you take those complaints
seriously and figured out why you had a notable chirp. I wouldn't
brag too much about running a sub-standard station for years and
cheerfully ignoring the complaints :-) <- This is a smiley.

>I doubt that the difference between spurious emissions of -50db and
>-48db can even be detected by monitoring the radiated signal. If my
>math is right, for a 5 watt fundamental signal from the FX-146, that
>-50db to -48db difference is 0.00003 watt. It's not in the same league
>as a kw on 11m. It's more like driving 57 mph.

Keep in mind the second harmonic falls into a fairly sensitive
piece of spectrum, the military aviation band. Anyway, the spec
for amateur transmitters operating between 30-225Mhz is -60dBc,
no greater than 25uW in any case. I'm not sure where you got the
-48dB and -50dB numbers from. -48dB versus -60dB is 12dB over
the limit, which is 5dB more than the absolute maximum permitted
level for a 5W transmitter. We've never been told how far off spec
the FX-146 was; Ramsey claims 2dB, but Bloom stated it was considerably more.

Anyway, comparing 1kW on 11m to the amateur rules is pointless.
Amateurs have historically been very proud of a strict compliance
to the rules, and frequently ridicule 11m folks for not complying
with the appropriate rules. I should hope you aren't condoning the
operation of radios with illegal harmonic outputs on sensitive aero bands.
If we can ignore the rules if we don't break them much, then why not look
the other way when General class operators get 1 or 2 kHz into the Advanced
band segments?

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1775. Help - Need ARES Packet Software.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 21:30:00 UTC
From: Gregm@raynet.demon.co.uk
Message-ID: <761607000snz@raynet.demon.co.uk>
Source record: 270877

Hi,
I believe that ARES has a program for packet radio which allows the tracking
of Competitors on a fun run/walk etc. Could anyone help out with a filename
& FTP site where this program is stored ?
My RAYNET group has a forthcoming 'attraction' in '95 of 300 people taking
part in a 50 mile cross country walk & this program sounds ideal for cutting
down on our paperwork load during the event.

Thanks,

+-------------------------------------+--+
| Greg Mossop G0DUB | 'Even logic must give way to physics' |
| Internet: Gregm@raynet.demon.co.uk | - Spock - Star Trek VI |
+--------------------PGP 2.3a key available at key servers--------------------+

1776. Ham software for Mac

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 21:49:28 UTC
From: geraldg@oakhill.sps.mot.com
Message-ID: <CLFwMG.Auu@oakhill.sps.mot.com>
Source record: 270928

I'm looking for satellite tracking, DX database, packet and other radio related software recommendations for my Mac. Please respond via email.

Thanks,
Gerald

Gerald W. Garcia, P.E. N5UMB Motorola Inc., MD: TX30/OE37
Senior Design Engineer 6501 Wm. Cannon Dr. West
geraldg@spud.sps.mot.com Austin, TX 78735-8598
(512) 891-2806 (voice) (512) 891-8315 (fax)

1777. Good car choice for mobile (Honda Accord??)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 22:33:28 UTC
From: markeh@netcom.com
Message-ID: <markehCLFyo1.EtI@netcom.com>
Source record: 270929

Appreciate any help::

I am looking for a new car. My first choice was a Honda Accord. When the dealer called the factory rep to ask about mobile radio installations, the reply was: "We don't know anything about that. We have guidlines for installing equipment we sell (ie: stereos) only. If you install any other equipment (ham equip) you are on your own. Any damage you do is your responsility". (not a direct quote - just my interpretation of what I heard)

SO.... I still need a car, and would appreciate any help from people who have been down this path

-- Have you installed a mobile rig in a recent (93, or 94) Honda, and what was your experience.

-- Can you reccomend another car (similar size/price/quality), recent/new model, where you have had success with an install, and didn't fry the ignition computer, etc...

Thanks for your help

Mark

KM6FM

1778. EOSS Balloon Flight In Denver

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 22:37:50 UTC
From: rickvg@cscns.com
Message-ID: <-CKPjSEHGkfN057yn@cscns.com>
Source record: 270930
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.digital.misc,rec.radio.shortwave

For Followups to this post check the newsgroup rec.radio.amateur.space

Edge of Space Sciences, Inc. (EOSS) is a non-profit organization comprised of individuals interested in the use of high altitude balloon flights to offer an experimental platform for students and other experimenters. The group has a very high level of participation by amateur radio operators, however, this is NOT a requirement for membership and participation.

EOSS has flown 14 successful flights over the past few years. We regularly fly amateur television, and a suite of atmospheric sensors.

Other experimental payloads have included, GPS and LORAN-C for a comparison of their accuracy. Homebrew differential GPS on the same flight. Students of Coloraro University at Boulder (CU) created their own differential system using a gps receiver at a KNOWN location, and calculated the offsets themselves, allowing the GPS vs. LORAN-C comparison greater accuracy.

EOSS hosted last year's "National Balloon Symposium" in Denver Colorado. People from more than 10 states, and Canada were in attendance as well as some of the commercial providers of equipment used in our "hobby".

We plan to fly EOSS-15 soon and here is our general information release about this flight. If you have any questions about the flight or EOSS please use email to my address (sig file at bottom).

EOSS-15 FLIGHT PROFILE

LAUNCH SITE:
Thunder Ridge Middle School
Picadilly and Smokey Hill Rd.
Aurora, Colorado, USA

latitude 39.61195 deg North
longitude 104.75050 deg West

(The lat/lon is actually for a location within 1 mile of launch point. I haven't been to the launch site to take an accruate fix yet.)

LAUNCH DATE: February 26,1994

LAUNCH TIME: 1600 UTC (Set up 1400 UTC) Launch time subject to FAA approval

ON-BOARD EXPERIMENT: Conducted by Cherry Creek High School.

PURPOSE: To measure the various levels of alpha, beta, and gamma radiation at various altitudes.

SHUTTLE FREQUENCIES:
Packet: 144.340
ATV: 426.250
CW Beacon: 147.555
Carries the call of WB4ETT

There will be a HF net run by Sparky\ KA0DPC on 7.232 MHz (phone). And the FOXHUNTER'S will coordinate on the Colorado Repeater Association's repeater 147.225 MHz (+600kHz). This will also be used for some local information during the flight. Thanks in advance to the Colorado Repeater Association for the use of their repeater.

REMARKS: Edge of Space Sciences will provide the platform for Cherry Creek High School and Thunder Ridge Middle School to study the lower atmosphere. Cherry Creek H.S. students have modified a geiger counter to meet the EOSS interface specifications which will measure the alpha, beta, and gamma levels of radiation vs. altitude. The experiment will gather data that should interest local NASA and NOAA officials.

Thunder Ridge M.S. students will make graphs that will help them understand the temperature vs. altitude and balloon dynamics by graphing the ascent and descent rate of the balloon.

The project will be presented at this years Denver, News 4 Education Exposition at the Colorado Convention Center on March 11,12,13 1994. More information about the EXPO can be obtained from EOSS.

Sponsorship for this flight and Education Exposition have been provided by:

Olde Antenna Lab
Dave Clingerman (W6OAL)
4725 W. Quincy
Num 1014
Denver, CO 80236
303-798-5926
303-498-3820

for his:
70 cm ATV Candelabra Antenna
GPS Wheel Antenna
Financial support in Sponsoring EOSS at the KCNC Expo

AT&T
for their:
Financial support in Sponsoring EOSS at the KCNC Expo

SUBMITTED on packet BY: Brian Thomas\N0VSA ground station co-lead
N0VSA@W0GVT.#NECO.CO.USA.NOAM

relayed to internet by:

Rick von Glahn
rickvg@cscns.com -- Internet (preferred)
74620,637 -- Compuserve
N0KKZ@W0GVT.#NECO.CO.USA -- packet radio

1779. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 22:45:17 UTC
From: greg@netcom.com
Message-ID: <gregCLFz7H.3uo@netcom.com>
Source record: 270931

In article <n1istCLEJFt.E7C@netcom.com> n1ist@netcom.com (Michael L. Ardai) writes:
>
>Why do I feel that Ten Tec is more likely to make kits that will work, meet
>FCC spec, and not thump when the squelch closes?
>
This is sort of interesting from a number of perspectives:

First, Ten-Tec got its start making kits, some QRP transceivers which
were, by some accounts, pretty horrendous as to performance and spectral
purity. You could buy anything from boards up to the complete transceiver.
The latter was pretty rinky, and sort of ignored the idea of 'shielding.'

Then came the Argonaut 505. A lot less rinky-tink but still not the
pinacle of sophisticated engineering. The 509 was better, and so on...

What's the difference between Ten Tec and Ramsey, that will probably
mean that one will still be around after twenty more years?

Well, Ten Tec is LEGENDARY for treating their customers like gold.
In fact, they do so well at this that they seem to be making a go of
it without the dealer network who, by all accounts, pushed the higher
margin competition and whose attitudes and approaches was inferior to
Ten Tec's own.

From the looks of things, Ramsey may have a bit to learn in that department.

It's too bad, but we often find that the kind of independent spirit
and just plain cussed stubborness that leads a guy to go out on his
own and start a neat new business, also seems to result in a brusque
and bluff attitude towards the clientele. Somehow, Ten Tec seems to
have separated the cussed stubborn guys who can make a venture in
a niche market work, against all odds, from the kind of flexible and
accomodating folks who keep the customers happy.

Apparently, Ramsey hasn't.

Two companies. Similar beginnings. I'm afraid one is going down a very
different road than the one paved by the other.

Greg

1780. Re: CELLULAR SURVEILLANCE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-18 23:24:11 UTC
From: kenw@col.hp.com
Message-ID: <2k3imr$84f@hp-col.col.hp.com>
Source record: 270932

What scanner users -really- need is a control circuit for various TRUNKING systems! How about developing a low-cost (<$100) circuit to do that? You listening CSI?

1781. A transmission line loss question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 00:44:17 UTC
From: tomb@lsid.hp.com
Message-ID: <CLG4pu.5vw@hpcvsnz.cv.hp.com>
Source record: 270933

I have a perverse question about feeding an antenna with a coaxial transmission line. This is intended as food for thought. (You've been warned ;-)

Assume you have a 50 ohm antenna you want to use on a single frequency in the two meter band. You will be feeding it with about 100 feet of coax, which will be cut to an exact integer multiple number of half-wavelengths on the operating frequency. Which of the following two transmission lines will you choose to give lower loss?

A. 50 ohm air-insulated copper line with 1" OD

B. 75 ohm air-insulated copper line with 1" OD -- in other words, same line as in (A), but a smaller center conductor.

73, K7ITM

1782. Re: Good car choice for mobile (Honda Accord??)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 01:15:34 UTC
From: dts@world.std.com
Message-ID: <CLG65z.10B@world.std.com>
Source record: 270934

In article <markehCLFyo1.EtI@netcom.com> markeh@netcom.com (Mark Helfen) writes:
>Appreciate any help::
>
>I am looking for a new car. My first choice was a Honda Accord. When the
>dealer called the factory rep to ask about mobile radio installations, the
>reply was: "We don't know anything about that. We have guidlines for
>installing equipment we sell (ie: stereos) only. If you install any other
>equipment (ham equip) you are on your own. Any damage you do is your
>responsility". (not a direct quote - just my interpretation of what I
>heard)
>
>SO.... I still need a car, and would appreciate any help from people who
>have been down this path
>
>-- Have you installed a mobile rig in a recent (93, or 94) Honda, and what
>was your experience.
>
>-- Can you reccomend another car (similar size/price/quality), recent/new
>model, where you have had success with an install, and didn't fry the
>ignition computer, etc...
>
>
>Thanks for your help
>
>Mark
>
>KM6FM
>
>
>

Some Hondas are rolling wide-band RF noise sources. This is certainly
true of N1JIT's car. Honda's people at their US headquarters were rather
hostile on the telephone when I asked about the issue. With customer
service like that, I'll buy an american car next time, and the japanese
economy can continue to plummet...

I should note that Nissan of America sent a pretty good set of sheets to
me in which they indicated maximum power levels at different frequencies
that they recommend. It was generally pretty positive.

Ed Hare at the ARRL sent letters to the various auto manufacturers asking
about radio installation. The responses varied. I have a copy of the
letter from Chrysler, in which they indicate which extra ordering code
to use when ordering a new car to be built. This code will ensure the

installation of electronics modules which are specially shielded. Chrysler has been doing a lot of work to ensure their cars do not have these problems, too.

GM has a booklet out on the subject. I was very impressed to see a GM booth at Dayton last year. The folks in the booth were GM hams, who were handing out info on proper installation of radio gear.

Based on positive info from the US companies, and mixed to negative from Honda, I'll probably buy american next time.

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

1783. FT-530 Firware Problems (epilogue)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 03:15:37 UTC
From: RGS@gfimda.UUCP
Message-ID: <940218221537.3136@gms.mh.wp.kgf.com>
Source record: 270935

>I got my 530 around 5 or 6 months ago. How long is the warranty good
>for? I have never tried using the DTMF code squelch. Is this something
>I should send my radio back for even though I have never tried it out??
>If I have performed the jumper 13 removal, will that invalidate the
>warranty??
>
>Steve Adams
>sadams@ctp.org

The warranty on the FT-530 is 1 year. Whether you return the radio because
of the DTMF squelch would really depend on whether or not you; a) want a radio
that functions according to it's specification and/or b) might want to use
the feature at some future date. I have never really used DTMF squelch but
it bothered me that the radio was "defective". Since it was under warranty,
the total cost to fix it now was the cost of shipping. If I waited a year,
the price would rise to at least $156! If I discover any other problems,
I will certainly return it again if the warranty is still in effect. It
might also give me a better resale price since I can point out that the
radio has had all factory improvements performed. As for jumper 13, I had
removed it but was told by Yaesu that this was an authorized modification.
Yaesu does publish this modification and I believe a copy is available
for the asking.

Hope this answers your questions...

Robert N2JTX
rgs%wpmax2%gfimda@uunet.uu.net

1784. Re: A transmission line loss question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 03:21:52 UTC
From: alanb@sr.hp.com
Message-ID: <CLGC0G.282@srgenprp.sr.hp.com>
Source record: 270936

Tom Bruhns (tomb@lsid.hp.com) wrote:

: Assume you have a 50 ohm antenna you want to use on a single
: frequency in the two meter band. You will be feeding it with
: about 100 feet of coax, which will be cut to an exact integer
: multiple number of half-wavelengths on the operating frequency.
: Which of the following two transmission lines will you choose
: to give lower loss?

: A. 50 ohm air-insulated copper line with 1" OD

: B. 75 ohm air-insulated copper line with 1" OD -- in other
: words, same line as in (A), but a smaller center conductor.

Great quiz question. The answer is that the 75 ohm line with the
1.5:1 SWR will have higher loss than the 50 ohm line with 1:1 SWR.

It's true that the 75 ohm line has lower loss WHEN TERMINATED WITH 75
OHMS. To see why, realize that nearly all the loss in an air-dielectric
line is due to the current flowing in the conductors (I^2*R loss).
For a given shield size, a 75-ohm line's center conductor has 1.36 times
the resistance per unit length of a 50-ohm line.

Derivation of above: For an air-dielectric coaxial line,
Zo = 138 log (D/d) where Zo = line characteristic impedance,
D = ID of shield and d = OD of center conductor. So:
D/d = 10^(Zo/138) which is 2.3 for 50-ohm and 3.50 for 75-ohm line.
Because of skin effect, the resistance per unit length is inversely
proportional to the circumference (and thus diameter). This means
that for a given shield diameter, the total resistance of both
conductors is proportional to (1/D + 1/d) = (1/D) * (1 + D/d).
So, for a given shield size (set D=1), the 75-ohm line has
(1+3.5)/(1+2.3) = 1.36 times higher resistance than 50-ohm line.

For a given power level, the current in the 75-ohm line is SQRT(50/75)
= .816 times that in a 50-ohm line. So I^2*R = .816^2*1.36 = .907
times the loss in a 50-ohm line.

But getting back to the quiz question:

Since the line is a multiple of 1/2 wavelength, the feedpoint impedance
will be 50 ohms, even with the 75 ohm line.

The current varies sinusoidally along the 75-ohm line (the standing wave),
being maximum at 50-ohm points (integer multiple of 1/2 wave from the
end) and minimum in between, where the impedance is 75^2/50 = 112.5 ohms.
If the current is 1A at the 50-ohm points, then it is SQRT(50/112.5) =

2/3 A at the 112.5 ohm points. So the standing wave of current can be represented by

I = 1A * [5/6 + (1/6) * cos(2*PI*s/L)]

where s = distance along line and L = wave length.

The rms current, averaged over the entire line, is then

5/6 + .707/6 = .951A

So the question is: does .951A flowing in a 75-ohm line's center conductor cause more loss than 1A flowing in a 50-ohm line's center conductor? We already know the 75-ohm line has 1.36 times the loss resistance, so with .951 times the current the loss is:

I^2 * R = .951^2 * 1.36 = 1.23 times the loss in a 50-ohm line

If you have 1 dB of loss in the 50-ohm line, the 75-ohm line will have 1.23 dB loss when feeding a 50-ohm load.

As a practical matter, however, low-loss 75-ohm coax can often be obtained free as scrap "ends" from your local cable TV company. Even when feeding a 50-ohm load, it will generally have lower loss than standard RG-8 type or (gasp!) RG-58 cable. The only hard part is figuring out how to make inexpensive connectors for it.

AL N1AL

1785. Re: Ramsey mod list? (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 04:12:57 UTC
From: kg7bk@indirect.com
Message-ID: <CLGEDL.DIx@news.direct.net>
Source record: 270937

Dana Myers (myers@pongo.West.Sun.COM) wrote:
: I've heard a rumor that Ramsey has a fix for
: this; possibly Ramsey would like to post a list of mods and fixes
: * Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *

Hi Dana, I've posted that fix a couple of times and it is available on
a server. Unfortunately, I'm at home and that info file is at the office.

Remove R24 and solder the base of R24 into the hole that was previously
occupied by the upper lead of R24. Solder the cathode of a 1N34A into the
hole previously occupied by the base of R24. Solder the top of R24 and the
top (anode) of the 1N34A together. Solder a 10k ohm resistor to that same
junction and solder the other end to the top of R11 which is +5v. This
mod doubles the hysteresis in the COR circuit and reduces the thump.

Someone has set up a library of mods including those for the FXs and I just
can't remember where it is but it was no more than a couple of weeks ago.

73, Cecil, kg7bk@indirect.com

1786. Re: Ramsey slams ARRL (was Re: RAMSEY FX TRANSCEIVER)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 04:30:23 UTC
From: kg7bk@indirect.com
Message-ID: <CLGF6o.E18@news.direct.net>
Source record: 270938

Dana Myers (myers@pongo.West.Sun.COM) wrote:
: If you have any kind of trouble with Ramsey kits, you run the risk of
: being slandered. * Dana H. Myers KK6JQ

Slander has a legal definition. It is next to impossible to slander someone during a private telephone conversation. It is very easy to commit slander on Internet. Statements that can't be proven resulting in monitary loss is all one needs to prove slander. Who did you say got slandered?

73, Cecil, kg7bk@indirect.com

1787. Repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 04:31:04 UTC
From: gsa@iia.org
Message-ID: <2k44m8$sag@mary.iia.org>
Source record: 270939

Would someone please give me some general information about mobile ham radio, and repeaters, or point me to an FAQ. Specificly, I would like to know...

- Can mobile amateur radio stations operate in full duplex?

- Can repeaters in fact be used to place local telephone calls? If so, is there a charge for this service? Is it limited?

- What are the legal restrictions on amateur radio traffic? Are data connections allowed?

- What baud rate could I reliably connect at through a radio link?

Thanks for the help!
--
W. Robert Nelson (gsa@iia.org)

1788. Re: ARRL Letter available via FTP

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 04:33:27 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLGFBr.LM9@netcom.com>
Source record: 270940

In article <marcbgCLDG36.4Mw@netcom.com> marcbg@netcom.com (M Grant) writes:
>As part of an experiment, I am making the ARRL letter, which I have been
>posting to this and rec.radio.info, available via anonymous FTP. I plan
>to keep a repository of ARRL letters (we'll see how it goes). Future
>plans also are for the W5YI letter.
>
>If this proves to work without too much hassle, I'll keep it up.
>
>ftp to: netcom8.netcom.com
> /pub/marcbg
>
>Enjoy!
>--
>==
> Marc B. Grant Voice Mail: 214-246-1150
> marcbg@netcom.com Amateur Radio N5MEI
> marcbg@esy.com
>==

Along with the ARRL Letter, Amateur Radio Newsline and ARRL bulletins are
all redistributed on three different lists maintained by the Boston
Amateur Radio Club.

To subscribe to the ARRL Letter:

send a message to: majordomo@world.std.com
In the body of the message, type: subscribe letter-list

To subscribe to Amateur Radio Newsline:

send a message to: majordomo@world.std.com
In the body of the message, type: subscribe newsline-list
(I grab Newsline off rec.radio.amateur.misc. I'm in the process of
trying to get it sent directly to the list...)

To receive timely League bulletins as e-mail:

send a message to: majordomo@world.std.com
In the body of the message, type: subscribe w1aw-list

Or, to subscribe to all three, just send one message to
majordomo@world.std.com, with three separate lines, each with a subscribe
line.

73,
Scott

```
--
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
================================================================================
```

1789. ARK 20 QRP Xcvr. Recommendations?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 04:34:41 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Feb19.123441.1@ntuvax.ntu.ac.sg>
Source record: 270941
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

Hi,

Can anyone comment on the performance of the ARK 20 QRP transceiver kit as advertised in the CQ magazine. I am thinking of
buying one. Is there a better kit I should be looking at? Tks.

73 de 9V Daniel

1790. RF Power Amp stages, design. Help needed!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 04:37:10 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Feb19.123710.1@ntuvax.ntu.ac.sg>
Source record: 270942

Hi,

I'd like to know what considerations are required to modify an existing HF RF Power stage to a higher power without needing
to actually build a separate HF linear amp. Specifically I'd like to know if it is possible to drop a different transistor into
place and change the current limiting resistor of the final stage, provided the transistor is carefully selected, and get an
increased power output? What about the driver stage? Is the output of the driver stage critical as I see in the catalog, it appears
that some of these transistors come with a specified input power, eg: 0.1 watt in/ 15 watt out/ Ppe 23 dB. What exactly is the Ppe?
Another thing about transistor selection, will a VHF transistor work well in a HF circuit? For example, the specs above are for the
MRF 261 transistor which is actually a VHF transistor, will this work in a HF power stage then? More specifically I am trying to
modify the output of the ARK 20 QRP transceiver from about 3 watts to say 12-20 watts or so. How difficult will the change in
design be? The reason I am thinking of this is that I want to keep the QSK active rather than have a separate QSK TR switch for the
additional linear amp.
Tks for any advice.
73 de 9V Daniel

1791. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 04:50:04 UTC
From: kg7bk@indirect.com
Message-ID: <CLGG3G.EMB@news.direct.net>
Source record: 270943

Jesse L Wei (jlw3@cec3.wustl.edu) wrote:

: Seems pretty magical to me. -jesse

"magic - the pretended art of producing marvelous results by compelling the aid of spirits, or by using the secret forces of nature." OK, Jesse, let's see some of those spirits and/or secret forces of nature.

: <no flame intended, but a flare of irritation with the post>

My point exactly! This is a technical group. Using a person's name as the subject of an article on rec.radio.amateur.misc and slandering that person in the article is immoral, unethical, and unlawful.

73, Cecil, kg7bk@indirect.com

1792. Scandinavian Repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 05:05:19 UTC
From: david@stat.com
Message-ID: <kNaZHc2w165w@stat.com>
Source record: 270944

I will be taking a trip to Scandanavia in the near future ... can anyone fill me in on the VHF/UHF repeater situation?

David wb7tpy

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

1793. Satellite Tracking Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 05:06:29 UTC
From: david@stat.com
Message-ID: <HPaZHc3w165w@stat.com>
Source record: 270945

I am interested in obtaining a good satellite tracking program for tracking some of the amateur birds. Recommendations on shareware / commercial packages would be appreciated.

David wb7tpy

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

1794. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 05:51:46 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2k49diINNmp0@abyss.West.Sun.COM>
Source record: 270946

In article <CLGG3G.EMB@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>Jesse L Wei (jlw3@cec3.wustl.edu) wrote:
>
>: Seems pretty magical to me. -jesse
>
>"magic - the pretended art of producing marvelous results by compelling the
>aid of spirits, or by using the secret forces of nature." OK, Jesse, let's
>see some of those spirits and/or secret forces of nature.

Oh, Cecil, give it a rest. As far as many people are concerned,
radio is a secret force of nature. Anyway, you are trying so hard
to interfere with a perfectly valid amateur radio thread because you
appear to be some fan of Ramsey Electronics. Fine, if you are
fan, fine. But attempting to discredit critics of Ramsey is
pointless and inflamatory. You've worked hard to discredit
my statements, trying one tactic after another. First you
condemn Jeff Gold as "less than a member of the human race". Then
you try "but Jeff had an FTR-146 that is obsolete and therefore
let's drop it". Then you try the very behavior you condemned Jeff
Gold for. Then you outright claim that I'm a liar ("giving you
the benfit of the doubt..."). You can't have it both ways, Cecil.

What you fail to acknowledge is that the public dealings of an
amateur business is a perfectly valid topic for rec.radio.amateur.misc.
Even if you don't agree with the topic, it doesn't invalidate the
topic.

>: <no flame intended, but a flare of irritation with the post>
>
>My point exactly! This is a technical group. Using a person's name as the
>subject of an article on rec.radio.amateur.misc and slandering that person
>in the article is immoral, unethical, and unlawful.

You're missing the point entirely! Either that or you refuse to see it.
The "Jeff Gold" post was intentionally insulting and inflammatory, and
it completely flies in the face of your earlier statement that Jeff
Gold is "less than human". Attacking Jeff Gold because you don't
like his postings *doesn't* belong on rec.radio.amateur.misc, it
would be fine in alt.flame, where it seems many hams won't go have
the flame fests but should.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1795. Re: A QSL Card that will Make a Difference

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 06:20:34 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLGKAB.MzK@news.Hawaii.Edu>
Source record: 270947

In article <2jul4m$1g@clarknet.clark.net> andy@clark.net (Andrew M. Cohn) writes:
>
>Last week his 40 meter antenna fell victim to the famous Calvert County
>(MD) ice storm. The next day he lost power for 6 straight days. Now he's
>going into the hospital for hip surgery, followed by 6 weeks of recovery
>with nothing to do but watch ice melt. Not a good month for Ron Nord,
>N3AKP, who, by the way, is no spring chicken.
>
>I wouldn't post this request if I didn't think it would make a
>difference. But it would really be great if you could cut loose an extra
>QSL card and send it along to Ron with perhaps a little "get-well"
>message. It's the kind of thing that would brighten his spirits and maybe
>even speed his recovery a bit.
>
>Hey, thanks, guys! Ron's address is: Ron Nord, N3AKP
> 3621 Halls Creek Lane
> Owings, MD 20736
>
>

I hope you and some other hams can get his antenna back up, or at least string
up a dipole; that 6 week recovery period will go a lot faster if he can
get back on the air!
I'm sending him a card from Hawaii.

Jeff NH6IL

1796. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 06:29:50 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLGKpq.3q@news.Hawaii.Edu>
Source record: 270948

In article <CLCoK9.o1@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>Jeff Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:
>
>: Jeff got his point across - we understood what he said quite
>: clearly, and I don't think anyone (except you) cares how he said it:
>
>Seems like a statement of what's wrong with this country... nobody cares,
>(except me). I wonder if Elmering will survive?
>
>: Oh, by the way: I am a mathematics lecturer - isn't `lecturer' a thing
>: just like `liar'. Jeff NH6IL
>
>Jeff, Sometimes 'lecturers' are like 'liars'. :-) I like teachers better.
>If it makes you happy, please edit "thing" into "bad-thing" or "xxx".
>How come I can't reply to you? jherman@uhunix3.uhcc.Hawaii.Edu bounced.
>
>73, Cecil, kg7bk@indirect.com
>

Because we had 8 inches of rain in 6 hours - internet became interiorwet!
We have 3 UNIX mainframes here - unix3 doesn't like to let in anything
from the outside - just drop the `3'.

Now, have you, Cecil, or anyone else, built any of Ramsey's HF QRP xmtrs?
For $30 I might get one of those pup's for 20M (but from what I hear
I think a low pass filter might be in order).

73,
Jeff NH6IL

1797. Coax minimum-loss impeance

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 06:30:44 UTC
From: Bob.Albert@f943.n102.z1.fidonet.org
Message-ID: <761692970.AA05360@mcws.fidonet.org>
Source record: 270949

I think the 92 Ohm coax was an attempt to make as high an impedance as reasonable, since most tube circuits work best at higher impedances. Anything much higher was very lossy and fragile and expensive, so they got as close as they could to 100 Ohms. Just a speculation..

73 DE K6DDX

1798. Frequency Exchange

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 07:22:47 UTC
From: jamoran@dtr.stat.com
Message-ID: <o1gZHc2w165w@dtr.stat.com>
Source record: 270950

is ther anyone out there that wants to trade frequency lists. I just
finished work on a database of international broadcasters. i also have a
database of Scanner frequencies (Aviation, Air Traffic Control, Transit
systems, Police, Fire departments, State and Federal Government agencies)
most of my entries are for AZ/CA/NM/UT/CO but I have some from other
areas too.
my snail mail address is p.o. box 25506 tempe az 85285 (USA)
JOHN MORAN

--
jamoran@dtr.stat.com (John moran)
Data Terminal Ready BBS +1 602 993 4753

1799. Re: Ramsey slams ARRL (was Re: RAMSEY FX TRANSCEIVER)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 07:54:04 UTC
From: jlw3@cec2.wustl.edu
Message-ID: <2k4gis$4q2@bigfoot.wustl.edu>
Source record: 270951

Cecil Moore (kg7bk@indirect.com) wrote:
: Dana Myers (myers@pongo.West.Sun.COM) wrote:
: : If you have any kind of trouble with Ramsey kits, you run the risk of
: : being slandered. * Dana H. Myers KK6JQ

: Slander has a legal definition. It is next to impossible to slander someone
: during a private telephone conversation. It is very easy to commit slander
: on Internet. Statements that can't be proven resulting in monitary loss is
: all one needs to prove slander. Who did you say got slandered?

I'm not a legal expert here but, who ever said monitary loss is necessary
for slander to occur? _American Heritage Dictionary_:
slander n. 1. Law. The utterance of defamatory statements injurious
to the reputation or well-being of a person. 2. A malicious statement
or report.

Now again, like guilt, slander is not something that has to be proven to
be existant. Tonya Harding (sorry, I've been following rec.skate) is
frequently said to be "innocent until proven guilty." This doesn't mean
that if she's innocent the court can make her guilty. It can say she's
innocent or guilty but can't change the reality of her actions (or lack
thereof). Slander, likewise, isn't only existant if it is legally proven.
It happens if it happens. Whether somebody can get compensation for being
the victim is another matter altogether.

Now I'd say that (at least from past and recent postings) Ramsey hasn't
exactly lived up to the expectation for his products. Now somebody
saying that he was not happy with somebody else's product is entitled to
that opinion. Whether or not you decide to take this opinion is another
matter altogether. I don't know both sides of the story here, but from
what I've seen, both Jeff and Ramsey have uttered some measure of slander
--however, it seems to me that Ramsey's was unnecessary and done out of
irrationality.

MHO,
jesse

1800. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 08:10:12 UTC
From: jlw3@cec2.wustl.edu
Message-ID: <2k4hh4$4q2@bigfoot.wustl.edu>
Source record: 270952

Cecil Moore (kg7bk@indirect.com) wrote:
: Jesse L Wei (jlw3@cec3.wustl.edu) wrote:

: : Seems pretty magical to me. -jesse

: "magic - the pretended art of producing marvelous results by compelling the
: aid of spirits, or by using the secret forces of nature." OK, Jesse, let's
: see some of those spirits and/or secret forces of nature.

connotation is different than denotation. Common usage is not necessarily
the same as the dictionary definition. By the way, my dictionary also has
"4. a mysterious quality of enchantment: e.g. the magic of the distant past."

I only hope you're arguing (well maybe just contradicting) just for the
sake of doing so. If not, I'd be somewhat doubtful about your eloquence
in public speaking. People, especially writers, tend to use anologies
and a measure of literary freedom to keep reading material from getting
banal.

Oh gosh, look where this thread has lead. A silly argument!

--jesse
(maybe I should resist the temptation to keep defending my ideas and
let the thread die)

OK I concede this thread to you. But just remember that not everybody
has your position on this matter. Especially me. And maybe Gold.

1801. VK2SG RTTY DX Notes, 18 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 08:31:25 UTC
From: bulletin@n8emr.cmhnet.org
Message-ID: <1994Feb19.083125.28399@n8emr.cmhnet.org>
Source record: 270953
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
============================================================
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
============================================================

SB DX @ WW $RTDX0218
VK2SG RTTY DX Notes, 18 February
VK2SG RTTY DX Notes for week ending 18 February 1994 (BID RTDX0218)

Really we must say that 3Y0PI is the DXPEDITION OF THE YEAR '94 and
our congratulations go to the all the crew for having shown to all of
us a real example of wonderful operation under severe conditions. Was
excited, during my qso, to see on the screen Luciano, Luciano,
Luciano, 599 599 from 3Y0PI. Tnx Tony, WA4JQS and Luis, XE1L for the
outstanding effort repairing rtty gear.

Our thanks this week go to ZS5S, W2JGR, WB2CJL, 9X5LJ, I5ICY, I5IGQ
and IK5PWJ Packet Cluster, DJ3IW and the Central Europe DX Cluster
node DB0SPC, the NJ0M node of the Twin Cities.

Bandpass:

Friday 11
0141-14090 V31JU
0644-14087 6W6JX
0649-14085 AH3D QSL JA1HGY see note
0701-14085 UT5RP
1505-14087 RA2FB
1837-21083 ZD7DP
1936-14086 CN8NP
2008-14082 V31JU
2050-14095 C91J
2145-14089 CX3ABE

Saturday 12
0018-14084 VP8WA
0641-14085 AH3D
0702-21070 Z21HS ARQ
0745-14085 SV5BYP
0840-14084 6W6JX
0854-21083 ZD7DP
1007-14084 SU1AH
1019-21070 7Q7LA ARQ
1335-14084 UN7LR
1338-14088 OD5PL
```

1309-14082 ER1PE
1351-14089 J28JJ
1409-14083 S50C
1534-21087 ZS9A
1552-21090 TZ6FIC
1602-21087 FG5FI
1635-21088 HH2PK
1716- 7037 EZ5AA
1746-21083 5R8DG
1843-21085 ZD7SM
2139-21091 AH6JF
2215-14082 3Y8PI QSL KA6V
2234-14083 FY5FJ

Sunday 13
0251- 3577 HH2PK
0516- 7039 HH2PK
0634-14087 EZ5AA
0640-14088 5B4VX
0816-21083 EZ5AA
0948-14084 TA5C
0959-21089 OD5PL
1044-28082 EZ5AA
1144-21085 4X6UO
1325-14087 YL3FW
1327-14083 S51DX
1336-21088 HH2PK
1405-14082 SV9ABG
1429-21086 PJ9JT
1435-21084 HP1AC
1440-14082 KG4CW
1436-21087 YI1AL
1438-21084 CP1FF
1522-21085 ZD7DP
1529-28087 9H1ET
1550-21090 FG5FI
1624-14081 J28JJ
1711-14084 HP1XVI
1919-21087 9J2HN

Monday 14
0243-14082 3Y0PI
2143-14087 FG5GH

Tuesday 15
0624-14085 C91AI
1445-14083 WP4Q

Wednesday 16
0800-14082 EA6NB
1455-21088 CU1AC

1512-14087 UT5DX
1548-14084 3A2LZ
1605-14087 EA8/ON8RI

Thursday 17
0845-14086 OM2GI
0850-14082 YL1ZE
0907-14085 UR0VS
1725-14086 S92ZM

Notes of Interest

ST. PETER & PAUL ZY0. The operators on the Feb. 7th had severe problems with both generators. Fault was located on the kick-off cables which could not be repaired due to lack of suitable tools. They had to run on battery with about 10 watts until Feb. 14.

AH3D/KH0 Activity. Members of the International DX Golf Tournament have been active from 9 to 13 February as AH3D/KH0. While the SSB spot were reporting that call sign on RTTY no mention of /KH0 ??

BELIZE, V3. Large activity is expected from this country. Look for V31PP from 19 Feb to 12 March on all bands SSB and RTTY. Another operation is planned from Sigi, DL7UUO from 20 Feb. to March 3rd using V31UO on SSB, CW, RTTY and PACTOR.

GEORGIA, 4L. Piero, IK2BHX is now in Tiblisi as 4L1HX and will be there for a year. He promised RTTY activity soon. QSL via IK2MRZ.

Send your bandpass and notes for next week to Bob, WB2CJL @ W5KSI.#NOLA.LA.USA.NA or WB2CJL @ ZS5S.ZAF.AF.

GL de (DX2) Luciano, I5FLN @ ZS5S.ZAF.AF
/EX
SP KT7H @ N7DUO.WA.USA.NA

1802. Re: Hawaiian 2m repeaters?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 09:30:08 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLGt28.2tH@news.Hawaii.Edu>
Source record: 270954

In article <2k16tj$4lh@ornews.intel.com> zardoz@ornews.intel.com (Jim Garver) writes:
>In article <jjhanso1.219.2D63EB23@students.wisc.edu> jjhanso1@students.wisc.edu (Jason J. Hanson) writes:
>>I'll be in Hawaii (on Maui and in Honolulu) from March 25-April 6 and was
>>wondering if anyone could provide some advice as to good 2m repeaters...
>
>When I was over there in Sept. about 2 years ago, I didn't hear much
>repeater activity on 2 meters at all. I visited Big Island and Oahu.
>I did find some highly unusual activity on 2 meter simplex in Honolulu.
>Be sure to scan the whole band for this stuff.

I'm only on HF but let me try to give you some frequencies from
memory:
Honolulu City Hall: 146.98 (Oahu County Civil Defense / RACES)
Waianae (West Oahu) 146.84 (ARES)
Diamond Head 147.07 (or 09)
Diamond Head 147.28
plus at least a dozen more but that should get you started. There's
actually a statewide system set up - linked via microwave. The guys
on the above machines will be able to give you more frequencies.

Make sure you bring an umbrella - we've just had a solid week of
tropical thunderstorm activity - 8 inches of rain fell within a
6 hour period and was it ever cold: 78 degrees during the day, and
only 68 at night - brrrrr - had to start using a blanket at night.

73,
Jeff NH6IL

1803. Dana Myers (was: Jeff Gold (was: John Ramsey))

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 09:45:34 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLGtry.32u@news.Hawaii.Edu>
Source record: 270955

In article <2k49diINNmp0@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:
> ....
>You're missing the point entirely! Either that or you refuse to see it.
>The "Jeff Gold" post was intentionally insulting and inflammatory, and
>it completely flies in the face of your earlier statement that Jeff
>Gold is "less than human". Attacking Jeff Gold because you don't
>like his postings *doesn't* belong on rec.radio.amateur.misc, it
>would be fine in alt.flame, where it seems many hams won't go have
>the flame fests but should.

Does anyone else see the irony in this last statement?

``Physician - heal thyself.''

Jeff NH6IL

1804. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 09:57:37 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLGuC1.38v@news.Hawaii.Edu>
Source record: 270956

In article <2k4hh4$4q2@bigfoot.wustl.edu> jlw3@cec2.wustl.edu (Jesse L Wei) writes:
.....
>the same as the dictionary definition. By the way, my dictionary also has
>"4. a mysterious quality of enchantment: e.g. the magic of the distant past."
>
>I only hope you're arguing (well maybe just contradicting) just for the
>sake of doing so. If not, I'd be somewhat doubtful about your eloquence
>in public speaking. People, especially writers, tend to use anologies
^^^^^^^^^

As long as you've got that dictionary open.....

Jeff NH6IL

1805. Re: Good car choice for mobile (Honda Accord??)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 12:55:01 UTC
From: phybs@mizzou1.missouri.edu
Message-ID: <phybs.3.000CEB24@mizzou1.missouri.edu>
Source record: 270965

In article <markehCLFyo1.EtI@netcom.com> markeh@netcom.com (Mark Helfen) writes:
>From: markeh@netcom.com (Mark Helfen)
>Subject: Good car choice for mobile (Honda Accord??)
>Date: Fri, 18 Feb 1994 22:33:28 GMT

>-- Can you reccomend another car (similar size/price/quality), recent/new
>model, where you have had success with an install, and didn't fry the
>ignition computer, etc...

I drive an '87 Jetta that has a handy cave beneath the climate controls and ash tray. I have a scanner, CB and when I get my amateur lic, it has enough room left for a small 2m rig. I have looked at the 94 Jetta's and found that they still have the "cave." Routing power and cables is pretty straightforward and out of site.

1806. Re: Tone Burst Whistle?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 13:08:08 UTC
From: dave@llondel.demon.co.uk
Message-ID: <761688488snx@llondel.demon.co.uk>
Source record: 270957

In article <T95sHc5w165w@stat.com> david@stat.com (David Dodell) writes:
>I have an ICOM 24AT which I would like to use with tone burst. Is there
>a way to do this easily?
>
If all you want is a 1750Hz toneburst then try whistling yourself..... saves having to fiddle with extra buttons and it proves your TX audio works if you bring the repeater up. With practice it is very easy to bring up most UK repeaters with a whistle - or are US ones harder to access (not including trying to whistle DTMF or other wierd tones!)

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

1807. Re: Hamblaster update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 15:38:37 UTC
From: jmorris@spider.co.uk
Message-ID: <1994Feb19.153837.8376@spider.co.uk>
Source record: 270958

In article <CLAC34.Dq@cscsun.rmc.edu> dtiller@cscsun.rmc.edu (Dave Tiller) writes:
>John W. Albert (jwa@tellabs.com) wrote:
>: The Hamblaster Update
>
>: Over the past several months I posted updates about a
>: DSP "The Hamblaster" that Will Torgrim (N9PEA) and myself
>: are developing.
>:
>: Several weeks ago I mentioned that the projected cost for
>: the board would be about $350.00. It was just a
>: "guessestmate". It looks like it will be more in the $275.00
>: range and could be as low as $250.00. This may still sound
>: high compared to the Soundblaster or other sound cards, but
>: you have to remember that it's made exclusivly for Ham Radio
>: and it won't have the volume (sales) of other sound cards.
>
>
>Is it just me, or is anyone else wondering why we're being continually
>bombarded with a blatantly commercial posting? I'm glad they've taken
>the initiative to make a new piece of hardware for hams, but I don't think
>this is the proper forum for their continous ads disguised as status
>reports.

I find some of them interesting, and skip the ones that I don't. It's
often hard to know what is going on in other parts of the world for
such a specialised community as radio amateurs. So I don't object to this
type of posting - at the level I have seen them recently, anyway. However,
I take your point, and wonder if some gentle pointing at rec.radio.amateur.\
equipment might be in order? Or maybe even a new group, such as rec.radio.\
amateur.commercial? Just a thought.

>--
>David Tiller | Network Administrator | Voice: (804) 752-7373 |
>dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
>n2kau@wa4ong.va.usa.na | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
>+++Arch-Conservative+++ | Ashland, Va 23005 | 77d 31' 32.19" W |
^^^
Now the _real_ reason for posting, hi - do you change this if you shift
far enough to make it wrong - say about a foot away? :-)

J.

--
John Morris != Spider Systems jmorris@spider.co.uk GM4ANB@GB7EDN.#77.GBR.EU

1808. AMSAT PBBS UPDATE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 15:46:22 UTC
From: BJARTS@stthomas.EDU
Message-ID: <01H92D48GJF695OCCM@stthomas.edu>
Source record: 270959

```
0 S~& @-#Y1~.&*jJ
> ETransfer aborted by remote R
SB PBBS@AMSAT $ART010
AMSAT PBBS UPDATE

PLEASE READ THE UPDATE MESSAGE. THE FAMSAT PBBS WILL NOW ALSO BE ON PACTOR.
WT0N-3 WILL BE ON 10.127 LBS (30 METERS) MONDAY THROUGH SATURDAY
FROM 1600 UTC UNTIL 23OO UTC . THIS STATION WILL CARRY ALL AMSAT
BULLETINS AND KEPS. IT WILL ALSO CARRY OTHER SATELLITE RELATED
ITEMS SUCH AS "SPACENEWS". THIS PBBS WILL BE SET UP ON 300 BAUD
HF PACKET, BUT IT WILL ALSO BE AVAILABLE FOR AMTOR OR PACTOR
OPERATIONS IF THERE IS A NEED TO DO SO. AT THIS TIME, THE PBBS WILL BE
SET UP AS AN EXPERIMENT AND ANY COMMENTS AND SUGGESTIONS SHOULD
BE SENT TO THE SYSOP, BJ ARTS WT0N, AT ONE OF THE FOLLOWING

PACKET:WT0N@WB0GDB.#STP.MN.USA.NOAM
INTERNET:BJARTS@STTHOMAS.EDU
HF PACKET: WT0N-3 (ON 30 METERS)
HF PACTOR: WT0N

THE STATION IS LOCATED IN ST.PAUL, MN.USA. AGAIN PLEASE FEEL
FREE TO SEND SUGGESTIONS ON HOW TO MAKE THIS PBBS BETTER FOR THE
AMSAT USER.
**** 2/19/94 UPDATE TO AMSAT HF BBS OPERATION ****
FROM 23:30 UTC UNTIL 04:00 UTC WT0N WILL OPERATE HF PACTOR
UNDER THE CALL OF WT0N. THE FREQUENCY WILL REMAIN THE SAME AS THE HF
PACKET OPERATION 10.127 MHz.
SCHEDULE: AS OF 2/19/94
**********************************************************************
FREQUENCY: 10.127 MHz LSB
HF PACKET: 16:00 UTC UNTIL 23:00 UTC MONDAY THRU sATURDAY
VHF PACKET: ALL DAY ON 145.05 MHz IN ST.PAUL,MN.USA
HF PACTOR: 23:30 UNTIL 04:00 OF THE FOLLOWING DAY.

THANKS FOR THE MANY COMMENTS AND SUGGESTIONS FOR THE HF PBBS.
73 AND THANKS FOR YOUR TIME de BJ WT0N

/EX
```

1809. 20m QRP Xcvr kits. Recommendations?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 17:32:24 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Feb20.013224.1@ntuvax.ntu.ac.sg>
Source record: 270960
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,

I am looking to buy a 20 meter QRP kit. Can anyone recommend any good tranceiver kits? Does the kit have VXO? VFO? synthesized etc etc. Cost.

Tks.

73 de 9V Daniel

1810. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 17:33:16 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2k5igs$f1s@bigfoot.wustl.edu>
Source record: 270961

Jeff Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:
: In article <2k4hh4$4q2@bigfoot.wustl.edu> jlw3@cec2.wustl.edu (Jesse L Wei) writes:
.....
: >the same as the dictionary definition. By the way, my dictionary also has
: >"4. a mysterious quality of enchantment: e.g. the magic of the distant past."
: >
: >I only hope you're arguing (well maybe just contradicting) just for the
: >sake of doing so. If not, I'd be somewhat doubtful about your eloquence
: >in public speaking. People, especially writers, tend to use anologies
: ^^^^^^^^^

: As long as you've got that dictionary open.....

: Jeff NH6IL

ha ha. The dictionary was open to m, not a. I don't have a spell
checker on my account, and don't generally bother to proof.

1811. Re: Nude QSL cards

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 19:19:32 UTC
From: kchen@apple.com
Message-ID: <2k5oo4$2rc@apple.com>
Source record: 270962

dave@llondel.demon.co.uk (David Hough) writes:

>The subject brings a whole new dimension to the phrase 'Have you got all my
>details' as heard in contests :-)

>I bet the cards aren't as bad as some of the SSTV pictures often emanating
>from Italy.......

SSTV? It happens even on RTTY. Just this morning, I tuned across
a W-land RTTY station on 14 MHz sending an "ASCII picture" of some
digitized Playboy fold-out. At least the person was smart enough
to use 75 baud instead of the standard 45 baud :-) :-).

Actually, I should have used 8-) instead of :-) .... ..

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

1812. Re: FT530 dtmf decoding

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 19:35:50 UTC
From: willmore@iastate.edu
Message-ID: <willmore.761686550@metropolis.gis.iastate.edu>
Source record: 270963

mladair@mtu.edu (Matthew "Phantom" Adair) writes:
>Found this on the net quite a while back and havn't seen it
>since, so I thought people might be interested.

>Don't blame me if it doesn't work. I don't even own a 530.
>(Wich I did tho!)

>DTMF Decoding

>A nifty little "feature" that isn't mentioned in the manual.
>Steps to follow:
>1) tune to the freq you want to monitor and turn on the code squelch
>2) press Function-Page(Code) to select a code memory
>3) dial up to memory #7
>4) watch the dtmf's scroll by as they are heard by the radio!

Sorry, but it's in the manual. :) IMHO, the manual is very poor, but,
from the Icom manuals I have seen, well above par for the course.

Cheers,
David
--
----
willmore@iastate.edu | "Death before dishonor" | "Better dead than greek" |
David Willmore | "Ever noticed how much they look like orchids? Lovely!" |

1813. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 19:43:07 UTC
From: clifto@indep1.chi.il.us
Message-ID: <2733@indep1.chi.il.us>
Source record: 270964

In article <YEE.94Feb18143836@mipgsun.mipg.upenn.edu> yee@mipg.upenn.edu (Conway Yee) writes:
>Recently, I recieved a polite letter from the ARRL lawyers threatening
>legal action if I continue on this project. Specifically, they state
>that the ARRL owns the FACTS present in the repeater directory and
>that the format of the database infringes upon the ARRL copyright.

So, even though they know better (or should), they seem to be making a thinly-veiled threat of intensive litigation apparently designed to bankrupt you into compliance.
Yet another reason I vote with my dollars; I have never been, and will never be, an ARRL member.
How about publishing the letter on the net? I, for one, would like to ask the FCC about private and restricted-use ownership of its de-facto database of officially coordinated repeaters.

Maybe I'm being too harsh. After all, ARRL stands to lose a great deal if someone comes up with an alternative to their repeater directory; it's intuitively obvious to the most casual observer that every ham will save the few bucks and replace the copies they keep in their backpacks and glove compartments with laptop computers and very long fiber optic cables connected to their Internet providers. This would financially sap the organization and leave them unable to protect their publishing income.
I know personally I'd run right out and spend $15,000 on a laptop and miles of fiber to do THAT.

--
+---+
| Cliff Sharp | |
| WA9PDM | |
+---+

1814. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 21:53:07 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <761943418.F00008@ocitor.fidonet>
Source record: 270778

```
The following files were processed Saturday 2-19-94:

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
ARLB018.ZIP ( 1078 bytes) 02/15/94 Study eyes 2300 Mh
ARLB019.ZIP ( 959 bytes) 02/15/94 Instant license propose
ARLD010.ZIP ( 1910 bytes) ARRL DX Bulletin 02/17/9
ARLP007.ZIP ( 1030 bytes) ARRL Propagation Bulletin 02/18/9
BANDPLAN.ZIP ( 3685 bytes) ARRL suggested amateur radio
frequency band pla
RTDX0218.ZIP ( 1927 bytes) RTTY DX Bulletin 02/18/9

---------------------------------------------------------------------
10589 bytes in 6 file(s)

HAMPACK [ HAM: Packet Communications programs ]
---------------------------------------------------------------------
DSP100.ZIP ( 31096 bytes) HF digital modem, use with
PAC016.ZIP and TOR302C.ZIP, by KC7W
PAC016.ZIP ( 46642 bytes) TNC for PacTOR, use with DSP100.ZIP
and TOR302C.ZIP, byKC7W
SA200.ZIP ( 14785 bytes) Allow 10 users to access Sam
callsign database via G8BPQ node
switch, by N1KB
TOR302C.ZIP ( 185135 bytes) Amtor (SITOR), RTTY, use with
DSP100.ZIP and PAC016.ZIPfor
PacTOR, HF packet and HF DSP
support, by KC7W

---------------------------------------------------------------------
277658 bytes in 4 file(s)

Total of 288247 bytes in 10 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
```

/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

1815. ARnet - Ham Radio Network

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 22:24:00 UTC
From: john.woodstock@woodybbs.com
Message-ID: <93.202.4524.0NFB24A8@woodybbs.com>
Source record: 270966


```
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```


Amateur Radio Net

Amateur Radio Net is a net dedicated to Amateur Radio enthusiasts. If
you are an Amateur Radio enthusiast, or any of your callers are, this is
an echomail network for you. ARnet is replacing an older ham radio
network that recently folded - RF-Net(tm).

If you would like to get more information about this net, please look
for the information packet ARNET024.ZIP on the following BBS's:

Channel1
SaltAir
Mustang HQ BBS
Execnet
Intelec
Sound Of Music
and the Network Host BBS - The Silicon Garden.
It can be FREQ'd from 1:2619/211 using a magic name of ARNET

ARnet is available via QWK & FIDO. As this is the initial announcement
of the net many HUB positions are still open.

If you have any questions, please contact me.

John Woodstock, N2HAA
P.O. Box 436
Coram, NY 11784
BBS: 516-736-6662
FIDO: 1:2619/211
Internet: SysOp@woodybbs.com

 TXTBCST 1.3b: ARnet - Ham Radio Info Source

1816. International callsigns and prefixes

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 22:41:28 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.761697688@BIX.com>
Source record: 270967

If you'd like to look up a US ham's callsign to get his name and address, etc., that's easy: either telnet to callsign.cs.buffalo.edu or (much better!) go buy a copy of the Walnut Creek QRZ! CD-ROM for $30.

But what can you do to lookup an international callsign? I'm not aware if there's even an ascii text file out there someplace that would allow me to do even the simplest lookup of the prefix to determine what country it's from. (This month's CQ contains such a list, but you can bet I'm not ready to key it in myself. :-)

What machine-readable resources are available for looking up international calls?

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715
Hamilton Laboratories, 13 Old Farm Road, Wayland, MA 01778-3117

1817. Callsign allocations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-19 23:20:29 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2k66rt$f69@geraldo.cc.utexas.edu>
Source record: 270968

hamilton@BIX.com (hamilton on BIX) asks:

>>But what can you do to lookup an international callsign? I'm not
>>aware if there's even an ascii text file out there someplace that would
>>allow me to do even the simplest lookup of the prefix to determine
>>what country it's from. (This month's CQ contains such a list, but
>>you can bet I'm not ready to key it in myself. :-)

>>What machine-readable resources are available for looking up international
>>calls?

Don't people read words and books by eye any more? The ARRL log
books and many other sources have all this information listed on
a couple of pages - you know, printing on paper. When you hear
an unfamiliar callsign, you look at the piece of paper. It's
much like looking in a dictionary - a real book, that is, not an
"on-line word source".

Can you tell that I was born before computers became popular?

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

1818. Re: Policy and Procedure in Bahama Islands ..

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 00:37:37 UTC
From: root@jackatak.raider.net
Message-ID: <eXs1Hc4w165w@jackatak.raider.net>
Source record: 270969
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.packet

sonny@ufnet.ufl.edu (Sonny Johnson - KF4VB) writes:

> I am a scientist at the University of Florida and also a ham operator.
> I anticipate being in the Bahama Islands (Eleuthra) for several months
> this summer on a research sabbatical.
Nice island...not sure how it has managed through the recent
Hurricanes, but several years ago we used to go to Governor's Harbor
and operate during the CQWW...nothing serious, just four guys, a light
aircraft, a ton of beer and some radios...

drop a line to lhurder@arrl.org and ask him to send you a reciprocal
operating packet for the Bahamas. I am not sure what the fee is these
days, but it used to be $6.00US/year...renewable.

Part of the reason I am foggy on this is we found a loophole to crawl
through and have a Bahamian callsign now... we keep it current and
whoever is there uses it.

Hope this helps...
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

1819. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 01:16:06 UTC
From: rwb@cs.cmu.edu
Message-ID: <rwb-190294201607@128.2.208.83>
Source record: 270970

> Why not use standard u-law or A-law compression as used in telephone
> systems for decades. The input signal is band-limited to 3.4 kHz,
> sampled at 8 kHz and converted with a 12 bit linear ADC. The output
> from the ADC (an integer) is converted to a floating point format
> consisting of 1 bit sign, 4 bit mantissa and 3 bit exponent. This
> is then serialized to 64 kbit/s.

I agree. The telephone people put a lot of work into this, why not use
their results.
>
>
> This has been used for decades and there should be surplus equipment
> avilable.

It's not the surplus equipment that's important, but the availability of
inexpensive CODEC chips that do the entire encoding/decoding job. Many
computer sound I/O ports use these chips.

There are newer standards that do DPCM compression to get the data rate
from 64K down to 16K; these would be worth a look as well.

1820. Re: Callsign allocations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 01:21:45 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2k6dv9$pgl@bigfoot.wustl.edu>
Source record: 270971

Derek Wills (oo7@astro.as.utexas.edu) wrote:
: hamilton@BIX.com (hamilton on BIX) asks:

: >>But what can you do to lookup an international callsign? I'm not
: >>aware if there's even an ascii text file out there someplace that would
: >>allow me to do even the simplest lookup of the prefix to determine
: >>what country it's from. (This month's CQ contains such a list, but
: >>you can bet I'm not ready to key it in myself. :-)

: >>What machine-readable resources are available for looking up international
: >>calls?

: Don't people read words and books by eye any more? The ARRL log
: books and many other sources have all this information listed on
: a couple of pages - you know, printing on paper. When you hear
: an unfamiliar callsign, you look at the piece of paper. It's
: much like looking in a dictionary - a real book, that is, not an
: "on-line word source".

: Can you tell that I was born before computers became popular?

Well, books are wonderful for general reading--like novels, technical
information--but I find online information much more handy when it's
tabular data you're looking up. Granted, it's in order, but lugging
a callbook (uh oh, are you just talking about the prefixes? if you
are then putting it online seems a little silly since you can just tape
it up near the rig--or the computer) and letting your fingers do the
walking seems a bit less appealing than just typing in the call and
getting all the information!!!

1821. Re: 20m QRP Xcvr kits. Recommendations?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 01:25:55 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLI1B7.G5t@news.Hawaii.Edu>
Source record: 270972
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <1994Feb20.013224.1@ntuvax.ntu.ac.sg> asirene@ntuvax.ntu.ac.sg writes:
>Hi,
>
> I am looking to buy a 20 meter QRP kit. Can anyone recommend any good
>tranceiver kits? Does the kit have VXO? VFO? synthesized etc etc. Cost.
>
> Tks.
>
>73 de 9V Daniel

Daniel: here's a reprint of the second project I posted on .homebrew.

Jeff NH6IL

****
Subject: Project 2 - 20 meter QRP CW xmtr

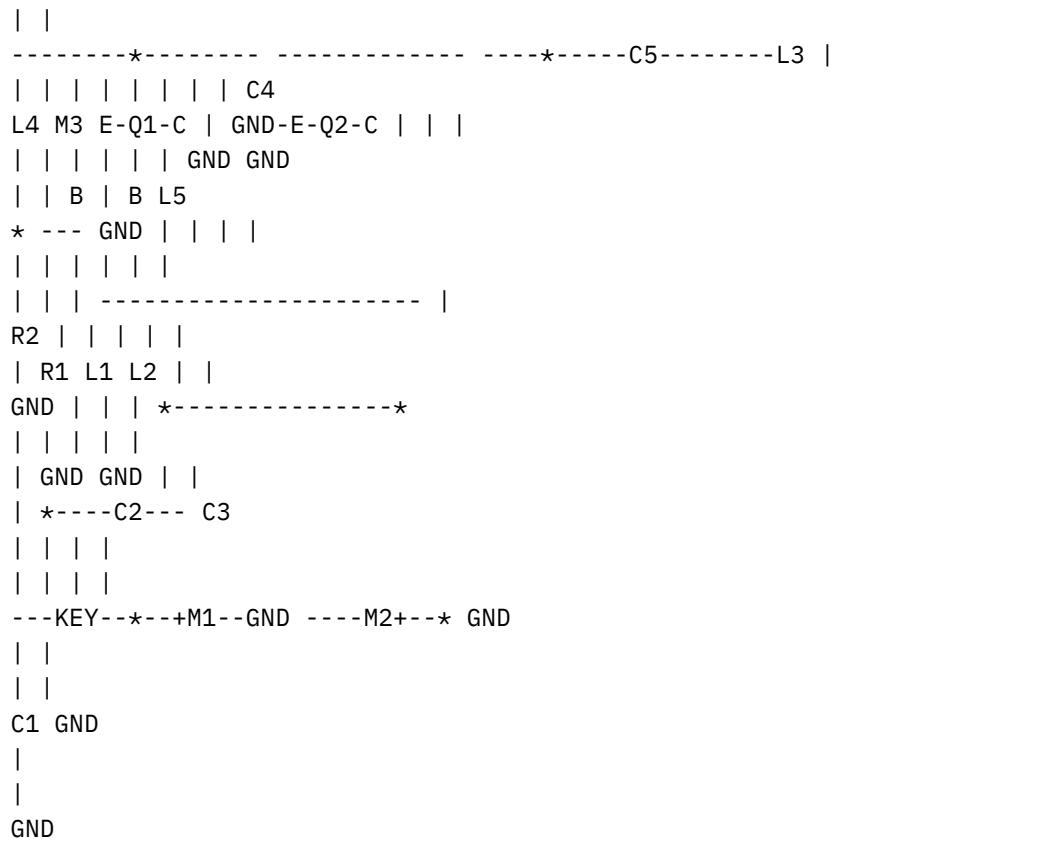
Here's the second QRP project taken from 101 EASY HAM RADIO PROJECTS,
by Robert Brown and Tom Kneitel; again, since the book is out of print,
I assume there will be no copyright problems...
This project is a simple 20 meter CW xmtr with output about 100 mw (?).
Here are the authors' comments:
"If you have always wanted to try low-power on 20 meters, here is an
excellent method for joining the growing ranks of flea-power addicts -
and doing it inexpensively. This circuit is capable of world-wide QSO's,
given the right conditions and assuming QRM is not present.
"The transmitter uses a pair of GE-1 universal replacement transistors
in a unique circuit configuration a great more sophisticated than you
would normally expect for an under-one-watt rig. Crystal can be a
fundamental 14-mHz type.
"L1 should be adjusted for sure-fire oscillation every time the
key is depressed. C4 is simply adjusted for maximum output on the FSM."

PARTS LIST:

C1, C2 .02 uF capacitors
C3, C5 .002 uF capacitors
C4 51 pF variable capacitor
L1 38 turns of No. 22 enameled wire on a 1/2 in. diameter
slug-tuned form
L2 8 turns of No. 22 enameled wire wound over cold end of L1
L3 Coil, 17 turns of Air Dux 616T (or equiv.) tapped 5 1/2
turns from cold end
L4, L5 2.5 mH rf choke (National R-100 or equiv.)
M1 1.5 volt dry cell

M2 6 volt battery
M3 14 mHz crystal
Q1, Q2 GE-1 transistors
R1 180 ohm resistor
R2 1.1 megohm resistor

As before, rather than trying to `draw' the symbol for each component, I've just inserted the part number. Oh, note the polarities of the batteries M1 and M2. GND = ground, ANT = antenna, E = emittor, ANT C = collector, B = base, KEY = well, this is a CW rig.... |



Note that the collector of Q1 `jumps' over the hot end of L2; this is the only jump. * = a junction of 3 or more leads.

.... .- ...- . ..-. ..- -. !

Jeff, NH6IL

Jeffrey Herman, University of Hawaii Mathematics, jherman@Hawaii.Edu

1822. Info sought on N1RAN

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 01:37:02 UTC
From: jason@yar.cs.wisc.edu
Message-ID: <2k6eru$qap@spool.cs.wisc.edu>
Source record: 270973

Can anyone provide me with callbook info for N1RAN in New Hampshire?

It seems to be too new a call for my book or the servers...
--
Jason J. Hanson | 1510 Tripp Circle #VI309 | (608) 264-1079
Univ. of Wisconsin | Madison, WI 53706-1294 | Ham: N9LEA (Extra)
-- jason@yar.cs.wisc.edu =*+++*= n9lea@n0ary.#nocal.ca.usa.na --

1823. Re: Callsign allocations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 01:43:06 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLI23v.GGM@news.Hawaii.Edu>
Source record: 270974

hamilton@BIX.com (hamilton on BIX) asks:
>
> I'm not even
>aware if there's even an ascii text file out there someplace that would
>allow me to do even the simplest lookup of the prefix to determine
>what country it's from. (This month's CQ contains such a list, but
>you can bet I'm not ready to key it in myself. :-)

Now your are: send an email to info@arrl.org and in the text only write
HELP
INDEX
and what you'll get back is a huge, informative index jam-packed with
so many names of files that you'll scream for joy. Look for the file
titled DXCC and send away for it - it'll give you
-prefix
-country name
-continent
-ITU zone
-time zone
-latitutude and longitude

73,
Jeff NH6IL

1824. Re: Chinese Amateurs Sent to Labor Camps ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 02:41:35 UTC
From: jodi731@utxsvs.cc.utexas.edu
Message-ID: <jodi731-190294204136@slip-2-44.ots.utexas.edu>
Source record: 270975

In article <2k2sd6$mb9@inxs.concert.net>, mikewood@rock.concert.net (W. M
Wood -- The Signal Group) wrote:

> Information was posted on the Southeastern U.S.A. DX Packet
> Cluster system last nite that if true is a most disturbing
> occurrence.
>
> The posting stated that the Voice of America had reported
> that ** all ** radio amateurs in the The Peoples Republic
> of China (Radio Prefix BY) had been placed in labor camps.
>
> Does anyone have verification and/or further details of
> this situation?
>
> Does the VOA post any news scripts to any Internet locations?
>
> Some amateurs noted that there had been a recent lack of
> activity from PRC amateurs but had attributed this to
> poor propagation.
>
> If the information proves to be true, I urge you to protest
> this action by calls or letters to the PRC Embassy in
> your country.
>
> The reported reason fr the action by the way was that all
> PRC amateurs "had been monitoring unauthorized frequencies".
>
>
> Mike Wood Internet: mikewood@rock.concert.net
> The Signal Group
> P.O. Box 1979 ***Avoid company disclaimers by owning the company ***
> Wake Forest, NC 27588
>
> Phone: 919-556-8477 Fax: 919-556-0115

The excerpts below may cast some light on the above post.

United Press International 1993
November 6, 1993, Saturday, BC cycle

DATELINE: BEIJING
BODY: China's highest leaders have issued new regulations restricting
access to radio frequencies in the latest of a series of moves to assert
control over media, a state-run newspaper reported Saturday.

The order, approved by President Jiang Zemin and Premier Li Peng, was designed to end ''disorder in the management of radio communications, the use of frequencies and establishment of radio stations,'' the official China Daily said.

''Those found operating radio stations and using radio frequencies without official approval will be subject to inspection and punishment,'' Wu Jichuan, minister of posts and telecommunications, told the newspaper.
The regulations legalize the state's monopoly over radio communications, including mobile telephones, pagers, telecommunications, and radio and television stations.
The article did not specify when the regulations would become effective.
''All radio stations, whether run by individuals or units, must obtain approval from radio management committees and observe the new 10- part regulations,'' the article said.

The regulations were the latest in a recent spate of edicts aimed at controlling both broadcast and print media.

1825. repeater viability during Northridge quake

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 03:55:30 UTC
From: rob@xyzoom.info.com
Message-ID: <1994Feb20.035530.29010@xyzoom.info.com>
Source record: 270976

I would like to know how the repeaters around Los Angeles held up immediately after the recent Northridge earthquake. So many machines are listed as having emergency power in the repeater handbook, yet I don't know if these repeaters will switch over to backup power automatically....

Does anyone have information on this? thanks.

--
rob@xyzoom.info.com "I care not much for a man's religion whose dog or cat
robl@netcom.com are not the better for it" --Abraham Lincoln

1826. Hamvention Parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 04:50:25 UTC
From: dsharp@netcom.com
Message-ID: <dsharpCLIAs1.HIq@netcom.com>
Source record: 270977

After reading the previous threads of gloom and doom about Hamvention parking and lack of bus service, I received the annual flyer in the mail today advertising the Hamvention. According to this flyer the situation shouldn't be near as bad as some ppl have predicted. The paragraphs I've reproduced below should be of interest to some:

Parking...
There are approximately 8000 privately owned pay-to-park parking spaces near Hara Arena. We have again arranged for free parking at Forest Park, Salem Mall, Dayton Mall, Mendelson Electronics, the Meijer store at Route 48 and I-70, and at the Air Force Museum.
Campers, trailers (self-contained vehicles) or vehicles that require more than one space will _not_ be permitted to park in the Flea Market or at the Salem or Dayton Mall. Campers and trailers may park at Tall Timbers KOA or at the Miami Valley Technology Center (formerly Montgomery County Joint Vocational School-JVS), after 3:30 P.M. on Friday and all day Saturday and Sunday.

Free Bus Service...
There will be Free Bus Service provided between Hamvention and our satellite parking areas which include Salem Mall, Forest Park Plaza, Mendelsons, Meijer (Route 48 and I-70), Air Force Museum, Dayton Mall, KOA campground and the Miami Valley Technology Center (formerly Montgomery County Joint Vocational School-JVS). In addition, some motels may offer transportation to Hamvention.

I'm not affiliated with DARA or the Hamvention in any way... I'm just passing on the information I recieved in the mail today. All flames will be directed to /dev/null.

k

--
Dave Sharp - NU8H Dayton, Ohio dsharp@netcom.com

Made from only the freshest electrons and 100% pure ASCII to insure that you have the best possible newsreading experience.

1827. Re: So what happened to the Kenwood TR-751 & TR-851 ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 07:19:07 UTC
From: wroth@netcom.com
Message-ID: <wrothCLIHnv.6su@netcom.com>
Source record: 270779

Brian Cuthie (brian@umbc.edu) wrote:
: Upon trying to buy a Kenwood TR-851A, I was told that it was
: "quietly discontinued" by Kenwood. Does anyone have any idea why?

I think the TR-851A only operated between 430 and 440 MHz, and probably
didn't sell very well.

Wayne Roth
WA2n

1828. Re: Hamvention Parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 07:27:45 UTC
From: sww@csuohio.edu
Message-ID: <1994Feb20.072745.16974@news.csuohio.edu>
Source record: 270780

Let's see ...
They spent $90k last year and the busses were crowded.
They are spending about half of that this year.
Or ..
I can park in the mud and walk in the street.

Hmmmmm.

73,
Steve, NO8M

(Still hearing about KP4s, HCs, and other DX friends not coming
due to this, too.)

1829. Re: Spectral purity of 2m tx (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 07:45:50 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLIIwE.Luv@news.Hawaii.Edu>
Source record: 270781

In article <2k3apaINNmjf@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:
>
>Anyway, comparing 1kW on 11m to the amateur rules is pointless.
>Amateurs have historically been very proud of a strict compliance
>to the rules, and frequently ridicule 11m folks for not complying
>with the appropriate rules. I should hope you aren't condoning the
>operation of radios with illegal harmonic outputs on sensitive aero bands.

Why not? You'll defend a pirate who posts 6MHz air-to-ground frequencies on rec.radio.cb in answer to a query posted by an other pirate as to what frequencies other illegals were using outside of 11M. Don't sound so high and mighty on here Dana while at the same time defend illegals posting (inviting?) pirate operation on air-to-ground channels.

Oh, and let's not forget your coming to Shoup's defense (December) after I chastised him for stating he was going to put a 5kw xmtr on the ham bands.

Make up your mind as to which side of the law you stand on.

Jeff NH6IL

1830. HAM WANNABE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 08:07:27 UTC
From: copie@crl.com
Message-ID: <2k75nv$l8o@crl2.crl.com>
Source record: 270782

I've always wanted to get into HAM radio. How do I start? What do I need to do?

1831. Mobile Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 11:10:03 UTC
From: jestevez@pro-janin.cts.com
Message-ID: <CLIvF7.3DC@hatch.socal.com>
Source record: 270783

```
Remote Server Commands
======================

Server commands are specified in the Subject line of regular mail messages
addressed to server@pro-janin.cts.com (where amateur mobile operators request
information). The request commands are:

HELP Send server help file
INDEX [dir] Send server index for the given [dir] hierarchy
SEND [dir/]file Send file (or one in the named subdirectory)
DIR [dir] Send server directory for the given [dir] hierarchy

(Items in [brackets] are optional; do not enter the brackets).

Examples:

Subject: help [ Sends the help file]
Subject: index [ Sends the server's index(es) ]
Subject: dir amateur manual [ Sends directory listings ]
Subject: send chart [ Sends a file ]
```

1832. Isla de Omotepe, Nicaragua, DXpedition 25-27 Feb

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 12:51:46 UTC
From: awoodhull@hamp.hampshire.edu
Message-ID: <2k8peb$74a@nic.umass.edu>
Source record: 270784

OMETEPE (NICARAGUA) 94 DX EXPEDITION
February 25,26,27, 1994

The island of Ometepe is located in Lake Nicaragua, the third largest lake in Latin America. It is said to be the largest island in the world within a lake. The island is dominated by two volcanos, 1610 meter Concepcion, and 1394 meter Madera, and has a population of 35,000 people living within its 266 square km. area.

The following is excerpted and translated from a message from YN1TV to N1AW (YN1ASW):

On the island of Ometepe there are no radio amateurs, which is a big problem for those OMs who want a QSO with all the islands of the world. This is the reason we are going to invade Ometepe and attempt to put it on the air on HF using packet, RTTY, CW, and SSB. The expedition will camp at the place known as San Marcos, 8 km from Moyogalpa, on the shore of the Great Lake of Nicaragua. It is an ideal location for experiments with antennas.

The expedition will be on the air from 0000 UTC Friday February 25, 1994 until 1100 UTC Sunday February 27.

The call for this DXpedition will be H70O Hotel Seven Zero Oscar, which has been officially solicited for the Club de Radio Experimentadores de Nicaragua (CREN).

QSL INFORMATION: H70O
Postbox 4636
Managua, Nicaragua
2 Greenstamps for QSL
4 Greenstamps for Diploma

Organizadores del evento DX Expedition Ometepe 94:

Humberto Diaz S. YN7DS
Reneiro Montiel Jr. YN1RS
Manuel Navarro YN1ABL
Juan de la Cruz Rodriguez YN1JRP
Jose Antonio Roman YN5JAR
Theo Vlaar YN1TV
Inge Vlaar XYL YN1TV
Douglas Arias Conzales YN5ZDC

Para mas informacion:
CREN, Postbox 925, Managua, Nicaragua
Tel: 505-2-71274/74937

Humberto Diaz S. YN1DS
Postbox 159, Masaya, Nicaragua
Tel. : 505-52-4861
FAX. : 505-52-3826

Theo Vlaar YN1TV
Villa Fontana Norte #67, Managua, Nicaragua
Tel: 505-2-73512
E-Mail: theo@nicarao.apc.org
theo@theo.radio.ni

1833. Re: HAM WANNABE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 14:01:55 UTC
From: John Kent <jokent@delphi.com>
Message-ID: <pq7JGiz.jokent@delphi.com>
Source record: 270785

Brian Copeland <copie@crl.com> writes:

>I've always wanted to get into HAM radio. How do I start? What do I need
>to do?

Call the American Radio Relay League at 203-666-1541 and ask for a
"prospective ham package", and/or buy the book "Now You're Talking",
published by the ARRL, either through them or at Radio Shack.
Address of ARRL: 225 Main St, Newington, CT 06111

John Kent/AA2DY
jokent@delphi.com

1834. Re: FCC Digest

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 14:47:37 UTC
From: arog@BIX.com
Message-ID: <arog.761755657@BIX.com>
Source record: 270786

I'll 'third' it.

I much appreciate the posting of info on the Commission's actions to the net. I'll grant that some of it is not ham.radio specific, but the overview is much needed by folks here.

1835. Re: HAM WANNABE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 14:50:55 UTC
From: arog@BIX.com
Message-ID: <arog.761755855@BIX.com>
Source record: 270787

copie@crl.com (Brian Copeland) writes:

>I've always wanted to get into HAM radio. How do I start? What do I need
>to do?

In addition to the phone call, Luck Herder hangs out a number
of places... including BIX. If you send him e-mail as

arrl@BIX.com

asking for info on ham radio classes and examins in your
area, I'm sure that he'll send it out snail.mail.

You'll need to give him, in that note, your postal address
and the zip-code for the area that you want the info for...
if its different from the one that you get you us.mail in.
(like, you if you want someplace that is close to work so
that you can head for a class after work... before trying
to get home.)

.....
Alan Ogden W6SPK
Moderator of ham.radio at BIX
arog@BIX.com

1836. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 14:56:23 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb20.145623.16512@ke4zv.atl.ga.us>
Source record: 270788

In article <CLFt40.Cq0@srgenprp.sr.hp.com> glenne@sad.hp.com (Glenn Elmore) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: of sight. Finally, the bulk of the path loss occurs in the first
>: mile, 119.27 db at 13 GHz. After that the incremental losses are
>: rather small, another 3 db for every doubling of distance.
>
>Wow! I stand corrected. Things must work differently where you are.
>The darn signals drop 6 dB when you double the distance out here in
>California. This happens every time you double it, the second mile or
>the second hundred (or pretty close to it up through 10 GHz) as long as
>you're LOS.

Arrgh, I knew that. Signal drops with the *square* of distance, so it's
6 db per doubling. The 119 db figure is correct though. The biggest loss
happens in that first mile.

>: a 40 foot mast. So pure LOS is pretty much a mountaintop to mountaintop
>: affair for longer distances.
>
>Yes it is unless a lot more path engineering is done than amateurs are
>used to doing. However, if we are ever to get high information rate
>systems we are going to *have* to pay attention to details. Once we do
>this, those details will be made more economic as we use
>microwave/millimeter (if all of amateur radio hasn't been scooped by
>fiber by then) wavelengths.

I think that my point here is that LOS paths aren't practical for most
amateur data links. The ability to get LOS paths is very terrain specific,
and very $$$ specific. They either require fortuitous high sites, or
very expensive microwave towers.

>: > While it's true that you would need line-of-sight, I think most
>: >practical installations of a lower frequency system also incur
>: >15-40 dB incremental path loss once they leave LOS conditions and
>: >for higher information rate transmission effectively need LOS in order
>: >to stay economic.
>
>: Well lets look at a 219 MHz system with a 11 db antenna at 40 feet
>
>I'm discussing higher speed systems. Links of the type required to
>trunk a significant number of users with moderate to high bandwidth
>applications across the US. 1 MHz at 219 is not going to be
>able to support such without a tremendous amount of spacial reuse
>which probably means antennas so large as to be impractical.

I agree it isn't practical to get multi-megabit systems below the microwave frequencies. What I think you're overlooking is the physical and financial impossibility of building the number of short hops that LOS requires in most of the country in order to do the higher rate channels. Amateurs can't do like the phone company and put up million dollar relay sites every 15-30 miles. The expense isn't in the equipment, it's in the *sites*. Amateurs don't have eminent domain, or the financial resources of a major public utility. Amateurs are going to have to accept lower data rates in order to stretch out the distance between available sites enough to make the system practical.

>: That gives us a margin of 95.87 db. Looks like we can easily tolerate
>: 15-40 db of foliage and building loss in the path. For the same path,
>: it looks like foliage losses at 10 GHz are about 30 db more, for a
>: total of about 198 db at 10 GHz, or about 20 db below your system's
>: noise floor worst case.
>
>Yes, if you don't need much performance you can use lower frequencies,
>you can lose a lot of the *potential* performance and still function.
>For that matter you can run 60 wpm rtty on HF across great distances if
>that's your goal.

Yes, 60 WPM RTTY has been within *individual* amateur reach for a long time. But we can do better. With a *lot* of cooperation and group effort, we should be able to do a 56 kb national network of 300-500 sites. We can't possibly do the 3000-5000 sites needed for national microwave linking. (The California coast, and a few other fortunate areas with access to strategically located mountains overlooking high amateur population density areas, may be able to do that, but not the rest of the country.)

> My point is that once you try to get economical performance at high
>information rates you can't afford to throw away power into poorly
>engineered paths and that the economics greatly favor microwave over vhf
>for wireless systems.

Power is cheap. Sites are few and expensive. We have to be able to use the sites *we can get* to build the network. Unlike a public utility, we can't just go out and condemn ideal sites where we need them for our microwave links. All of our path engineering has to revolve around what we can do with the sites we can get.

>: >Also, at high information rates, the additional multipath and path :
>: >variability problems incurred by going to a non-LOS path make the UHF :
>: >solution even less attractive since error correction, channel equalization
>: >and additional system margin may be required to guarantee data flow.
>
>: Ok. Lets take a look at beyond horizon signals. If we assume forward
>
>Let's not. Once you've done that you have thrown away so much system
>capability that it is beyond amateur resources. I don't think
>most of us are ready to install multi-killiwatt troposcatter systems
>of the kind the military used at low vhf to island hop in the Pacific.
>And that's about what it takes if you are talking about medium speed

>information (though I suspect the military stuff was more or less audio
>bandwidths).

The link budget calc I did showed that a 90 mile forward scatter path
has a path loss of 198 db at 219 MHz for a 56 kb bandwidth. That's doable
with ordinary amateur beams and brick amplifiers, given the sensitivity
of existing RF modems.

>: Now back to the real world. We have a 90 mile 70 cm path between Sweat
>: Mtn and Scaly Mtn that is not line of sight. It works with very few
>: retries. We're using 19 db antennas on each end, and our mean HAAT is
>: about 1300 feet, but with mountains taller than that in between. I won't
>: claim that's typical. We've got another link that's only 21 miles,
>: and line of sight, that doesn't work well. But one end is nestled
>: in downtown buildings and suffers severe multipath (and desense from
>: commercial equipment too). The tighter beamwidth of your system would
>: probably be a win here.
>
> Your second 21 mile link obviously *isn't* LOS!

Yes it is. We can *see* the antennas at each end.

>Local clutter is probably degrading things severely.
>Antennas help a lot (2 dB of system improvement per dB of antenna gain)
>but a poor path degrades things much faster than antennas can fix it.
> That "nestled end" that you call line-of-sight is clearly far from it.
>See my comment above about most practical links losing 15-40 dB as
>soon as they leave LOS. Your link is probably an example of this.

The problem we have is severe multipath because the beamwidth of our
antennas illuminates buildings on either side of the path. That same
path *does* work at 7 GHz because we have a commercial link there using
6 foot dishes at each end that does not suffer multipath. The narrower
beam doesn't illuminate the multipath generating reflectors.

>: To summarize, if we could depend on having LOS paths, a 10 GHz system
>: would be ideal, but in the real world we probably can't afford the
>: number of hops that would require (except in special terrain cases
>: like the California coast with it's mountains overlooking the population
>: areas), and 219 MHz calculations seem to show it will suffice using
>: troposcatter over the much longer paths we are likely to need in our
>: rolling terrain.
>
>If we are willing to settle for low information rate to each user I
>agree. However, if we are considering medium speed or greater, as
>defined by the industry, culture and available systems, and if we are
>considering more than a single or a few users, 219 MHz capacity isn't
>going to come close to being enough to interest hams and potential
>hams in "investing". Even now it is difficult to convince people
>that ham radio is neat for information age services when a 14.4 kbps
>or 28.8 kbps modem is so cheap and provides so much performance
>*to the user* compared to anything AR has to offer.

Well I agree we can't compete with the phone company. Their resources
are vastly greater than anything we could muster. But we can do a *lot*
better than 1200 baud for our users. And *that* horribly slow speed has
been enough to interest 20% of our ham population sufficiently to make
packet their primary operating mode, and has been enough to get hundreds
of high site nodes and digis installed around the country. With those sites
in hand, we can do a pretty good job of upgrading the network to 56 kb.
That's a 47 times improvement over what we've got. We can do that for
about $8 each per year from active packeteers, and a lot of volunteer
labor.

The highest traffic flows are on the user MANs. In some cases where
local topographic conditions permit, those MANs could be shifted to
higher speed. But for the intercity trunks, I don't think we can do
megabit microwave trunks nationwide. There are just too many miles
where there are no hams, and no suitable sites for the asking. Current
inter-MAN traffic demand doesn't justify it even if we could do it,
but I suspect that "build it and they will come" would be in effect
if we could possibly do it. I just don't see any way we could get
the sites. Even if the telcos *gave* us their old microwave sites,
I don't think we could find the manpower to maintain them.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1837. Re: Repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 15:17:34 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb20.151734.16644@ke4zv.atl.ga.us>
Source record: 270789

In article <2k44m8$sag@mary.iia.org> gsa@iia.org (W. Robert Nelson) writes:
>Would someone please give me some general information about mobile ham
>radio, and repeaters, or point me to an FAQ. Specificly, I would like
>to know...
>
>- Can mobile amateur radio stations operate in full duplex?

Yes. It requires an in-car duplexer to do it in the same band, but
crossband is easy.

>- Can repeaters in fact be used to place local telephone calls? If so,
> is there a charge for this service? Is it limited?

Yes. Phone patches are a regular part of many repeater systems, not full
duplex however. The clubs that support these repeaters generally want you
to join if you make regular use of their machine. Dues costs per year run
$20 and up for typical clubs. There are limits placed on phone patches
by the third party and non-commercial rules of amateur radio.

>- What are the legal restrictions on amateur radio traffic? Are data
> connections allowed?

Amateur radio can't be used for your regular business communications.
There are language content restrictions. And third party rules apply.
The latter basically eliminate "reverse autopatch" where incoming
phone calls control the repeater transmitter. That's because there's
usually no way to assure that the incoming call is under the control
of a licensed amateur. Basically, autopatch usage should be considered
"out dial" only. Amateur data transmissions are allowed, though that's
generally not done through phone patch links. That's for a couple of
reasons. First the phone patches were put up for voice use by their
owners, so that's what they want them used for, and second because the
patches are generally half duplex, so normal telco modems don't work.
Generally, amateur data transmission is done on a separate network of
nodes via packet transmission. The same content and third party
restrictions apply to packet as to phone patches.

>- What baud rate could I reliably connect at through a radio link?

The majority of the existing packet network is at 1200 baud, with some
nodes operating at 2400 or 9600 baud, and even a few at 19.2 kb. There
are faster systems, but they aren't yet in widespread use. There are
some networks running at 56 kb, and there are experimental systems at
megabaud+. There's also a long haul HF network operating at 300 baud.
Since packet is store and forward at the packet level, and since there
are many "bbs" systems on the network that can do store and forward on

the message level, You can send Email over national and international distances, but applications requiring high real time throughput are limited to the local area for the most part because of the low throughput of multihop packet transmissions over the existing node network.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1838. Re: Scandinavian Repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 15:27:03 UTC
From: k23690@lehtori.cc.tut.fi
Message-ID: <2k7vg7$n2m@cc.tut.fi>
Source record: 270790

David Dodell (david@stat.com) wrote:

> I will be taking a trip to Scandanavia in the near future ... can anyone
> fill me in on the VHF/UHF repeater situation?

Here is the band plan for Finland and as far as I know this should apply
to other Scandinavian countries too.

145.200 - 145.575 FM-simplex, 145.500 is the calling frequency
145.600 - 145.775 Repeater outputs, inputs at -600 kHz.

433.400 - 433.575 FM-simplex, 433.500 is the calling frequency
434.600 - 434.975 Repeater outputs at -1.6 MHz

1297.000 - 1297.475 Repeater outputs, inputs at -6 MHz
1297.500 - 1298.000 FM-simplex, 1297.500 is the calling frequency

All channels are at 25 kHz steps.
A 1750 Hz tone is required to initially open the repeater.

Paul OH3LWR

Phone : +358-31-213 3657
X.400 : G=Paul S=Keinanen O=Kotiposti A=ELISA C=FI
Internet: Paul.Keinanen@Telebox.tele.fi
Telex : 58-100 1825 (ATTN: Keinanen Paul)
Mail : Hameenpuisto 42 A 26
FIN-33200 TAMPERE
FINLAND

1839. Re: RF Power Amp stages, design. Help needed!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 15:33:45 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb20.153345.16752@ke4zv.atl.ga.us>
Source record: 270791

In article <1994Feb19.123710.1@ntuvax.ntu.ac.sg> asirene@ntuvax.ntu.ac.sg writes:
>Hi,
>
> I'd like to know what considerations are required to modify an existing HF RF Power stage to a higher power without needing
>to actually build a separate HF linear amp. Specifically I'd like to know if it is possible to drop a different transistor into
>place and change the current limiting resistor of the final stage, provided the transistor is carefully selected, and get an
>increased power output?

Well it's usually not quite that simple. Sure it's possible to modify an existing PA to output more power. But the key things are impedance matching and drive levels when changing out the PA transistor for a higher power one. The output impedance of a power transistor is a function of the circuit load line. That in turn is a function of stage voltage, usually fixed at 13.8 volts for typical mobile equipment, and stage output current, a function of drive and transistor beta. So, with the voltage fixed, you have to generate more output current to make more power. R=E/I so more current means a lower output impedance. That in turn means modifications to the output matching network to translate that impedance to 50 ohms.

In fixed equipment, it's often possible to go to a higher supply voltage, say double that of the original stage, and if the transistor beta and drive level are sufficient to also double current output, then your load impedance can remain the same, and the output matching network doesn't have to be modified while your power has increased fourfold. Note however, that input impedance to the active device will also often be different after you change devices, and that has to be matched as well.

>Another thing about transistor selection, will a VHF transistor work well in a HF circuit?

Device gain usually doubles for every octave reduction in operating frequency. VHF transistors can have so much gain at HF that stage stability can be hard to achieve. Other than that, for Class C operation, use of VHF rated transistors in HF circuits is doable. You do have to watch out somewhat more carefully for VHF parasitics. Most VHF transistors are not rated for linear operation, so Class AB1 or B uses may have higher levels of distortion products than a device designed for HF linear service.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1840. Re: CELLULAR SURVEILLANCE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 15:40:04 UTC
From: joe@netcom.com
Message-ID: <joeCLJ4us.7n6@netcom.com>
Source record: 270792

This outfit in Millwaukee has several versions of the monitor - at prices
ranging from $250 to $400 (approx). Mark is a very sharp individual
and keeps his product totally legal. He DOES FILTER the specific unit
addresses (called NAM I believe) and can turn it on in software with
a signed letter from authorities.

--Joe

--

Joseph Jesson joe@netcom.com Day (312) 856-3645 Eve (708) 356-6817
21414 W. Honey Lane, Lake Villa, IL, 60046

1841. repeater viability during Northridge quake

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 15:45:16 UTC
From: jangus@skyld.grendel.com
Message-ID: <761759116snx@skyld.grendel.com>
Source record: 270793

In article <1994Feb20.035530.29010@xyzoom.info.com> rob@xyzoom.info.com writes:

> I would like to know how the repeaters around Los Angeles held up
> immediately after the recent Northridge earthquake. So many machines

The Henry Radio machine was off the air. 146.670 -600 PL 141.3
But, that was just business as usuall with that machine.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

1842. DX: Tuva correction

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 16:12:00 UTC
From: greg.pool@cld9.com
Message-ID: <7.14775.976.0N5BA59A@cld9.com>
Source record: 270794

GP>You can contact Pat at on internet at 4927 # msg.com, packet @
GP>K6LY.#NOCAL.CA.USA.NA or mail at 810-B Airport Rd., Monterey CA 93940 USA.

Make that address 4947 @ mgs.com, says Pat. Sorry!

• OLX 2.1 TD • Aloha+73 de Greg WH6DT greg.pool@nitelog.com
• [R2.00o] • Usenet • Nitelog BBS • Monterey CA • 408-655-1096

1843. HTX-202 or HTX-404

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 17:00:58 UTC
From: "Michael A. Hotz" <mahjmac@delphi.com>
Message-ID: <hUwq2cy.mahjmac@delphi.com>
Source record: 270795

I am a scanner enthusiast, and am now interested in getting into amateur radio since listening to the local "hams" on my scanner. I have a couple quick questions, some of which may even be in a FAQ if it exists, but I'll throw them all out here, since I know you are the people to ask.

1) To get started, I'm considering a portable that I can get quick. I'm considering the RS HTX-202 and HTX404, but I don't know the difference between the two "bands", which is more active, which is better.

2) I often hear about amateur repeaters. I know what a repeater is, and how it works, but is my understanding that there are repeaters installed for use by amateur radio operators correct. Who installed them, who can use them, and what does it cost.

3) Finally, my wife works near Dayton, Ohio during the week, and we live near Toledo. If we both had HT-202 or HT-404 's, could we communicate with each other. Not without repeaters, I'm sure, so I guess this question involves the repeater questions.

Thanks for sharing your knowledge and experience!

MAH

1844. New 2m radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 18:08:06 UTC
From: <>
Message-ID: <dward.761767686@wyvern.wyvern.com>
Source record: 270796

OK. I need some advice. I'm returning to the air after a long absence and would like recommendations on what type of 2m vhf-fm radio to purchase. I desire portability, so that probably means an HT. In addition to brand names, what features should I get -- at a minimum, as well as "nice to have" for future operation. I travel by vehicle around the SE US, so will need to be able to access many different repeaters. So, what do you say?

Dale Ward - N5LNW
--
-=-=-=

1845. Re: Chinese Amateurs Sent to Labor Camps ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 18:21:14 UTC
From: jodi731@utxsvs.cc.utexas.edu
Message-ID: <jodi731-200294122115@slip-2-80.ots.utexas.edu>
Source record: 270797

In article <2k2sd6$mb9@inxs.concert.net>, mikewood@rock.concert.net (W. M Wood -- The Signal Group) wrote:

> Some amateurs noted that there had been a recent lack of
> activity from PRC amateurs but had attributed this to
> poor propagation.

The following excerpts may shed some light on the questions raised--

United Press International 1993
November 6, 1993,

China's highest leaders have issued new regulations restricting access to radio frequencies in the latest of a series of moves to assert control over media, a state-run newspaper reported Saturday.
The order, approved by President Jiang Zemin and Premier Li Peng, was designed to end ''disorder in the management of radio communications, the use of frequencies and establishment of radio stations,'' the official China Daily said.

''Those found operating radio stations and using radio frequencies without official approval will be subject to inspection and punishment,'' Wu Jichuan, minister of posts and telecommunications, told the newspaper.
The regulations legalize the state's monopoly over radio communications, including mobile telephones, pagers, telecommunications, and radio and television stations.
The article did not specify when the regulations would become effective.
''All radio stations, whether run by individuals or units, must obtain approval from radio management committees and observe the new 10- part regulations,'' the article said.

1846. Re: Satellite Tracking Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 19:05:55 UTC
From: steve@NETSYS.COM
Message-ID: <steve.761771155@netsys.com>
Source record: 270798

david@stat.com (David Dodell) writes:

>I am interested in obtaining a good satellite tracking program for
>tracking some of the amateur birds. Recommendations on shareware /
>commercial packages would be appreciated.

>David wb7tpy

>---
>Editor, HICNet Medical Newsletter
>Internet: david@stat.com FAX: +1 (602) 451-1165
>Bitnet : ATW1H@ASUACAD

Try Traksat, ftp to oak.oakland.edu it is in the msdos/satelite directory

Steve K5SE

1847. ANS-050 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 19:06:57 UTC
From: cowdin@pogo.DEn.mmc.COM
Message-ID: <199402201909.LAA21396@AMSAT.Org>
Source record: 270799

SB SAT @ AMSAT $ANS-050.01
NEW HF BBS FOR OSCAR INFO

HR AMSAT NEWS SERVICE BULLETIN 050.01 FROM AMSAT HQ
SILVER SPRING, MD FEBUARY 19, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-050.01

New HF Packet Radio BBS Carrying AMSAT Info

WT0N-3 St. Paul, Minnesota will carry all AMSAT bulletins and Keps as well as other satellite related items such as "SPACENEWS." The station will be on 10.127 LSB (30M) Monday through Saturday from 16:00 UTC until 23:OO UTC Monday through Saturday. The PBBS uses 300 baud HF Packet, but will also be available for AMTOR and/or PACTOR. The PACTOR schedule, as of 2/19/94 is 23:30 to 04:00 UTC. At this time, the PBBS is set up as an experiment and any comments and suggestions should be sent to the SYSOP, B.J. Arts (WT0N), at one of the following:

PACKET:WT0N@WB0GDB.#STP.MN.USA.NOAM
INTERNET:BJARTS@STTHOMAS.EDU

[The AMSAT News Service (ANS) would like to thank B.J. Arts (WT0N) for this information.]

/EX
SB SAT @ AMSAT $ANS-050.02
AO-13 OPERATIONS NET SCHEDS

HR AMSAT NEWS SERVICE BULLETIN 050.01 FROM AMSAT HQ
SILVER SPRING, MD FEBUARY 19, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-050.02

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date UTC Mode Phs NCS Alt NCS

28-Feb-94 0430 B 068 WB6LLO W9ODI

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions

about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. If neither of the Net Control Stations show up, any participant is invited to act as the NCS.

/EX
SB SAT @ AMSAT $ANS-050.03
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 050.03 FROM AMSAT HQ
SILVER SPRING, MD FEBUARY 19, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-050.03

Weekly OSCAR Status Reports: 19-FEB-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Jan 31-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 145 |<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 240/0, Apr 04
[G3RUH/DB2OS/VK5AGR]

FO-20: The FO-20 command station announced that a slight mulfunctioning in the onboard command system had been detected. So, the analog mode operations arranged from 9th of Feb. will be performed on schedule, but there is a possibility of interruption due to commading. The present schedule is as same announced before.
ANALOG MODE:
23-FEB-94 8:05 -TO- 02-MAR-94 6:40 UTC
09-MAR-94 7:05 -TO- 16-MAR-94 7:30 UTC
23-MAR-94 7:52 -TO- 30-MAR-94 8:15 UTC
DIGITAL MODE: Unless otherwise noted above.
[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

AO-16: Operating normally. Experimenter's Day with S-Band transmitter on will be run on 02/23/94 03:45 UTC to 02/24/94 03:15 UTC. Whole Orbit Data (WOD) collections each month by week are: 1) Solar Array Currents, 2) Temperatures 3) Power/Bus Voltages 4) Various telemetry parameters to be determined by the Command Team.
[WH6I & WJ9F]

LO-19: Operating normally. [WH6I]

KO-23: Up and running. [WH6I]

KO-25: BBS up and running. [WH6I]

POSAT: Definitely seems to be turned off on the amateur frequencies.
[WH6I]

IO-26: Is back up and running (1200 baud) and seeing a lot of use. [WH6I]

AO-21: LW2DTZ reports that the RUDAK-II beacon was sending the following information: RUDAK2>BEACON:RUDAK-II Schedule: (down 145.987 MHz, up 435.016) min/10 Beacon Mode
0..4 FM Repeater
5..7 WEFAX Picture
8..9 AFSK TLM

LW2DTZ further notes that AO-21 is very active with hams from south of Brazil using this crossband repeater. [LW2DTZ]

MIR: MIR is working normally in 145.550 MHz. R0MIR and R0MIR-1 Personal Messaging System (PMS) are active on all the orbits. [LW2DTZ]

RS-10: ZS6AOP reports that RS-10 is still operating normally at his QTH. He notes that there are a handful of regular stations keeping the contacts going but recently he has experienced a quiet spell, only hearing himself. ZS6AOP wonders what the preferred mode of operation is over Europe and the USA? Do any stations use CW? The only times has heard CW over Southern Africa is for tuning and spotting one's own signal. [ZS6AOP]

UO-11: ZS6AOP has been monitoring this satellite at regular intervals. It is his observation that the signals are weaker today than before the on-board computer "crash" several months ago. [ZS6AOP]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

1848. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 19:11:06 UTC
From: kg7bk@indirect.com
Message-ID: <CLJEMJ.4Ko@news.direct.net>
Source record: 270800

John E. Taylor III (rohvm1.mah48d@rohmhaas.com) wrote:

: Really?! I've built Heathkits from the original oscilloscope and AT-1
: transmitter right up through their kit 2-m HT, and had _very_ few problems
: 73 de John Taylor W3ZID

My last Heathkit was their small one-transistor 2m linear, can't remember the part number. The collector, base, and emitter were shorted together on the original printed circuit board because the transistor hole was drilled too small. It blew up my Wilson HT.

Any kit company has disgruntled customers. Of the six kits that I bought from Heathkit, only the digital clock worked from the start. My HW101 had something like a cold solder joint or cracked trace that I couldn't find and Heath couldn't find. I sold it for spare parts.

73, Cecil, kg7bk@indirect.com

1849. Help me (was Re: Spectral purity of 2m tx (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 19:43:31 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2k8eh3INNnac@abyss.West.Sun.COM>
Source record: 270801

In article <CLIIwE.Luv@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>In article <2k3apaINNmjf@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:
>>
>>Anyway, comparing 1kW on 11m to the amateur rules is pointless.
>>Amateurs have historically been very proud of a strict compliance
>>to the rules, and frequently ridicule 11m folks for not complying
>>with the appropriate rules. I should hope you aren't condoning the
>>operation of radios with illegal harmonic outputs on sensitive aero bands.
>
>Why not? You'll defend a pirate who posts 6MHz air-to-ground
>frequencies on rec.radio.cb in answer to a query posted by an other
>pirate as to what frequencies other illegals were using outside of
>11M. Don't sound so high and mighty on here Dana while at the same time
>defend illegals posting (inviting?) pirate operation on air-to-ground
>channels.

This really isn't worth a response, much less one to the Usenet, but I'll make one attempt. Jeff Herman has engaged in pattern of attempting inflame newsgroups, by posting such inflammatory notes. This is my only response, since my experience with people exhibiting the conduct I see in Jeff is that they'll go away if you ignore them.

For what it is worth, on rec.radio.cb, I *did* post note suggesting that Jeff's threat to report an SWL to the ITU was frivolous. In fact, I attempted to point out that there was no evidence that this alleged "pirate" Jeff talks about was anything but an SWL.

>Oh, and let's not forget your coming to Shoup's defense (December) after
>I chastised him for stating he was going to put a 5kw xmtr on the ham
>bands.

Mike Shoupe did state he had a couple of 5KW AM transmitters he intended to place on the ham bands, when his license permitted. From the context, it was suggested that Shoupe intends to abide by the regulations of his license class. Next thing we know, Jeff Herman is posting a series of notes condemning Shoupe as an "outlaw" and "scofflaw". It is certainly the case that a high-powered transmitter may be operated at reduced power, often with improved performance. It is also the case that Mr. Shoupe may not yet be aware the AM power limits are less than the oft talked about 1.5KW output limit.

>Make up your mind as to which side of the law you stand on.

I stand on the side of compliance and respect for the rights of individuals. For some reason, Herman feels compelled to carry on a campaign against any Usenet poster who even suggests something that is contrary to law, and Jeff feels compelled to carry on a campaign especially against me, on several occaisions quoting me out of context and making completely false assertions with regards to me.

For the record, I oppose any kind of illegal radio operation.

For the record, I oppose the violation of legal and ethical rights of people.

If Mr. Herman wishes to condemn me for this stance, fine. However, I do not believe this kind of personal vendetta is appropriate for a newsgroup. If you have further questions or comments on the issue, please feel free to write to me at:

Dana.Myers@West.Sun.Com

If you have any questions or comments for Jeff Herman, his e-mail address is:

jherman@Hawaii.Edu

Thank you,
Dana

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1850. code software

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 19:55:12 UTC
From: jsmith@fox.nstn.ns.ca
Message-ID: <jsmith.1.761774103@fox.nstn.ns.ca>
Source record: 270802

Can anyone suggest a site for software for helping with code learning?

Failing that, how about recommending software for this purpose, and where it might be found?

1851. Supermorse 4.06

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 19:57:31 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2k8fbb$jch@bigfoot.wustl.edu>
Source record: 270803

For those of you who practice code with Supermorse--I found SM406 on nic.funet.fi /pub/ham/morse. Sorry if you already have it--but all the ftp sites I had previously seen only has up to sm404. It does have some bug fixes that I noticed--but I won't mention them here.
--jesse

1852. Re: Amelia Earheart was Codeless, unfortunately

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 20:00:29 UTC
From: kchen@apple.com
Message-ID: <2k8fgt$s1u@apple.com>
Source record: 270804

jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:

>In article <2jo50h$9kt@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan)
writes:
>>From: The DX reflector
>>Subject: Amelia Earhart
>>From: ron.chester@lst.spacebbs.com (Ron Chester)
>>Date: Sat, 12 Feb 94 23:30:00 -0800
>>
>>Tonight I saw the last half of a PBS show on Amelia Earhart which I
>>believe most DXers would find interesting. (I missed the beginning, so
>>don't know the name of the program).
>>
>>According to the show, Earhart did not especially like radio
>>communication, and did not get properly trained up on radio navigation.
>>For her final around-the-world flight in 1937, she left her Morse Code key
>>at home, as she had never managed to master the code.
>.........

>I'd state the obvious moral of this story, but we're not on .policy ....
>[See? I'm able to muster a bit of restraint periodically (once a year).]

You mean, Jeff, the moral of the story is to not teleport yourself
back into the 1940s? <haw>

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

1853. Ohio/Penn DX Bulletin #148

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 20:00:46 UTC
From: kb8nw@barf80.nshore.org
Message-ID: <$opdx.148.1994@ampr.org>
Source record: 270805
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ALLBBS $OPDX.148
Ohio/Penn DX Bulletin No. 148

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 148
BID: $OPDX.148
February 21, 1994
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio
Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, ARRL DX Bulletin, DL7VEE & DXNL, DF4RD, ON7GB, VP2ML, NT2X, K4CEF & Southeastern Cluster Group, WA6YOU and AH9B for the following DX information.

3Y0PI, PETER I ISLAND (UPDATE). (ed.- A DXpedition of "EXCELLENCE") Now that the 3Y0PI operation is history, there is only one word to describe this DXpedition, "SUPER". Making 60,000 QSOs, the Peter I DXpedition team (Ralph/K0IR, Tony/WA4JQS, Bob/N4GCK, Bob/KK6EK, Terry/W6MKB, Willy/HB9AHL, Peter/ON6TT and Martin Tosseyn, a Belgian, who is a non-ham, but acted as campsite manager looking after the tents, food and generators.) should be commmended for a well organized operation despite set backs, such as being hit with major snow storms, equipment being damaged during their landing on the island and the storms freezing generators and damaging antennas. But members of the team were technical enough to repair some things so all operations were not lost. The operation has officially gone QRT February 16th, but as this bulletin was being written during the weekend some of the team remains on the island. Extremely bad weather has hampered efforts to get the team off the island. A fax sent to WA4JQS's mother, Ada, from the Russian ship which is picking up the 3Y0PI operators indicated the following: At 2315Z February 18, only two operators (K0IR and HB9AHL) had made it to the ship via only one helicopter run.
1. Very slow evacuation from the island because of bad weather (too much fog). Helicopter flights very risky and difficult.
2. Two operators are already on board the Russian vessel. Only one flight was possible yet.
3. Everybody is OK and waiting for better weather.....
Once the 3Y team is safely aboard the Russian ship, they will be taken to Puntas Arenas, Chile to take flight home, instead of a long sea trip home. (UPDATE February 20th at 0001z: Operators still on the island and they are now in a middle of a tremendous blizzard. Currently, very little equipment has been taken to the Russian ship and all are doing fine. In

case of extreme emergency, they will evacuate the island leaving all equipment behind.) (Another UPDATE just before going to print: A fax sent Sunday morning indicated that 5 of the operators and half of the equipment from the DXpedition are now safely aboard the Russian ship. Tony, WA4JQS, and 3 others operators still remain on the island, but all are expected to be completely off the island by 1700z Sunday.) OH YEA! There is one more group to be commended during the 3Y0PI operation and that would be the amateurs (DXers/Non-Dxers) all over the world. The amateurs of the world were on their best behavior, EVER, during this DXpedition. There were no real major problems of deliberate interference or an overabundance of policemen on patrol (only a couple of minor infractions). This can be attributed to the amount of 3Y0PI stations operating at the same time and the amount of spectrum they used. It is a shame that most DXpeditions are not well thought out (ORGANIZED) and planned like the 3Y0PI.

HS, SAMUI ISLAND - IOTA AS-101 (THAILAND). A group of Thailand amateurs will activate this island sometime in March, no specific dates were mentioned. Samui Island is located in the Malay Peninsula North East group and has not been active for two years. During the operation the operators will pay special attention to the WARC bands. Operators are only allowed to operate on these bands with a special licences and can only obtain these licences for special occasions (such as an IOTA activity).

KH8, AMERICAN SAMOA. Andy, G4ZVJ, will be active from February 16 thru March 16, as AH8F. He will be active mostly on CW, only little SSB and RTTY.

KP5, DESECHEO ISLAND. Bad news! The ARRL DX Buletin and other sources report that the upcoming DXpedition for the SSB weekend of the ARRL International DX Contest has been cancelled. The U.S. Fish and Wildlife Service has denied landing permission because a group of Haitian squatters are on the island. The Coast Guard was unsuccessful in removing them, and reports are that the U.S. Navy may be called to remove the group. Until this situation is resolved, no landing permission can be given. AB4JI and crew hope to make last minute arrangements to operate from another island.

PY, BRAZIL. PY0A and PY0B will be active from Abrolhos Archipeligo (IOTA SA-019) from February 23-28. This island is located in the Bahia State South group and will only count for Brazil. Activity will be CW/SSB on 10-80 meters. QSL to Roberto Stuckert PT1GTI, P.O. Box 09647, 70001-970, Brasilia DF Brasil.

T5, SOMALIA. Ron, WA6YOU, will be active from Mogadishu from February 24th thru March 4th (Information was not clear. It may be March 24th thru April 4th). He will sign T5YOU and will be active on a time available basis from 1800-2000z daily. Due to location constraints, his rig will be an Icom 735 and a dipole antenna. Ron will attempt to operate on the usual DX splits on 15/20 meters SSB only. QSL to WA6YOU direct.

TI9, COCOS ISLAND (UPDATE). Members of OKDXA and the Young Gunners DX Foundation are in the final stages of planning a May 94 DXpedition to Cocos Island. The trip will last for 10 days beginning around the 2nd week of May. Transportation has been obtained, permission to land and operate has also been granted. This will be a full-scale, multi-national effort with about 12 ops. There will be six stations, including one dedicated satellite and another to RTTY. Heavy emphasis will be given to CW and WARC bands. The co-leaders of the team are Javier/AH6MM and Craig/AH9B. Other operators include V73C, AD1S, TI2JJP, XE2CQ, NH6UY, N5MIH and Dr. Pete/N0AFW. QSLs will be handled by OKDXA, Box 88 Wellston, OK 74881.

WORLD NEWS..... A rumor is circulating around 20 meters that Voice of America had a report on the air that all BY hams have been rounded up and sent to labor camps. Apparently, they were charged for "listening to unauthorized frequencies". No more info is available on this one, but there has not been any BY QSN reports on the Ohio/Penn Network since February 1st. Hope it is not true. (This information from KN4QS.).... ..... According to Ed, NT2X, the Reuter news agency had a report on the Spralty Islands (which are contested by several nations). The report states that two of the countries which contest the islands, China (PRC) and Taiwan (ROC), will have a joint scientific expedition that will explore the Spratly Archipelago. A Chinese oceanographic vessel will carry a team of scientists, including 9 ROC citizens. This is a first such joint trip since the end of the Chinese civil war in 1949. There were no details when all this takes place, and obviously, this is not amateur radio related, but perhaps the BV and BY stations may find a way to put a different twist on a Spratly DXpedition in the future.

XF4, REVILLA GIGEDO. Hector, XE1BEF, and others plan to activate XF0C, from February 18 thru March 4. Activity will be all bands 160-6 meters on CW/SSB/RTTY. QSL via XE1BEF.

ZS0, PENGUIN ISLANDS. Just a reminder to begin looking for Baldur, DJ6SI, and others as ZS0X, February 23-28. This will probably be the last ZS0 operation to count for DXCC. Word has it that Baldur and crew will stay after the 28th and use V5 callsigns.

FAX YOUR DX INFORMATION NOW! Faxing is available Monday/Wednesday/Friday from 0430 to 2330z only. The number is 216-237-8208 and the FAX card is sharing the same phone line as BARF-80 BBS using a data/fax/phone switch.

Excerpts and distribution of The OPDX Bulletin are granted as long as OPDX/BARF80 receive credit. To contribute DX info, call BARF-80 BBS online at 216-237-8208 14400/9600/2400/1200/300 and leave a message with the Sysop or send InterNet Mail to: aq474@cleveland.freenet.edu or send BitNet Mail to: aq474%cleveland.freenet@cunyvm or send PRODIGY Mail to: DFJH48A or send a message via packet to KB8NW @ WA8BXN.OH.USA.NA

/EXIT

Tedd Mirgliotta KB8NW

InterNet: kb8nw@barf80.nshore.org
Basic Amateur Radio Frequency BBS (BARF-80) +1 216/237-8208
"Totally devoted to Amateur Radio" - 24 Hrs a day 8/N/1 14.4k-300 baud

1854. Daily Summary of Solar Geophysical Activity for 18 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 21:18:32 UTC
From: oler@rho.uleth.ca
Message-ID: <9402202118.AA12303@rho.uleth.ca>
Source record: 270806
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

18 FEBRUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 049, 02/18/94
10.7 FLUX=106.3 90-AVG=106 SSN=077 BKI=0123 1112 BAI=005
BGND-XRAY=B2.0 FLU1=1.2E+06 FLU10=1.4E+04 PKI=2223 2213 PAI=007
BOU-DEV=004,006,010,024,008,009,006,019 DEV-AVG=010 NT SWF=00:000
XRAY-MAX= C1.1 @ 0543UT XRAY-MIN= B1.8 @ 0327UT XRAY-AVG= B2.7
NEUTN-MAX= +003% @ 2020UT NEUTN-MIN= -001% @ 1525UT NEUTN-AVG= +0.4%
PCA-MAX= +0.1DB @ 2210UT PCA-MIN= -0.3DB @ 0450UT PCA-AVG= -0.0DB
BOUTF-MAX=55345NT @ 2336UT BOUTF-MIN=55328NT @ 1834UT BOUTF-AVG=55337NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+074,+000,+000
GOES6-MAX=P:+129NT@ 1909UT GOES6-MIN=N:-064NT@ 0643UT G6-AVG=+096,+035,-025
FLUXFCST=STD:110,110,110;SESC:110,110,110 BAI/PAI-FCST=015,010,005/015,012,010
KFCST=3334 4333 2224 4221 27DAY-AP=007,005 27DAY-KP=3212 2122 2212 2122
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 17 FEB 94 was 45.0.
The Full Kp Indices for 17 FEB 94 are: 2- 2o 3- 3- 2+ 2+ 2o 2-
The 3-Hr Ap Indices for 17 FEB 94 are: 6 8 14 11 10 9 8 7
Greater than 2 MeV Electron Fluence for 18 FEB is: 4.2E+08

SYNOPSIS OF ACT

Solar activity was low. Region 7671 (N11E15) produced a
C1/0F flare at 18/0542Z. A 5 degree filament near S20E05
disappeared between 17/1857Z and 18/1218Z.

Solar activity forecast: solar activity is expected to be
low through the period.

The geomagnetic field has been at quiet to unsettled
levels for the past 24 hours. High latitudes experienced some
active levels during the period.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled for most of the period due to
coronal hole effects. Quiet to unsettled conditions are
expected by the end of the period.

Event probabilities 19 feb-21 feb

Class M 10/10/10
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 19 feb-21 feb

A. Middle Latitudes
Active 25/25/20
Minor Storm 15/15/10
Major-Severe Storm 05/05/01

B. High Latitudes
Active 25/25/25
Minor Storm 15/15/15
Major-Severe Storm 05/05/05

HF propagation conditions were generally near-normal over
all regions. Conditions should continue near-normal over the
next 72 hours, although high latitudes may see some sporadic
minor signal degradation due to possible effects from a coronal
hole.

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REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7668 N10W82 284 0020 AXX 01 002 ALPHA
7669 N08W08 210 0010 CSO 04 003 BET
7670 N10W00 202 0010 AXX 04 003 ALPHA
7671 N11E14 188 0380 CKO 08 016 BET
7673 N08W65 267 0030 BXO 04 003 BET
7672 N03E02 200 PLAGE
REGIONS DUE TO RET
NMBR LAT
7663 N13 89

LISTING OF SOLAR ENERGETIC EVENTS FOR 18 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0328 0328 0328 320

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 18 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV

NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 18/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
17 Feb: 0300 0300 0303 SF 7670 N11E23
1016 1023 1029 B8.1
1100 1111 1126 C1.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7670: 0 0 0 1 0 0 0 0 001 (33.3)
Uncorrellated: 1 0 0 0 0 0 0 0 002 (66.7)

Total Events: 003 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
17 Feb: 1100 1111 1126 C1.7 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1855. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 21:42:21 UTC
From: kg7bk@indirect.com
Message-ID: <CLJLMM.8zF@news.direct.net>
Source record: 270807

Dana Myers (myers@pongo.West.Sun.COM) wrote:

: Oh, Cecil, give it a rest.

Hi Dana, I appologize to you and anyone else who took this posting seriously. It was pure sarcasm to demonstrate an unethical, uncivilized (less than human) posting. I called it ridiculous in the posting. How many times have I asked you to keep this discussion technical?

: You've worked hard to discredit my statements...

Nope, it wasn't hard.

: Then you try the very behavior you condemned Jeff Gold for.

The behavior was a joke, OK? I asked Jeff if he wanted to see an unethical person and handed him a mirror.

: What you fail to acknowledge is that the public dealings of an
: amateur business is a perfectly valid topic for rec.radio.amateur.misc.

I agree 100%. But public allegations of what was allegedly said in private telephone conversations are not proper topics for this group unless you guys legally taped the conversations. There is no way to prove that you are telling the truth or are out on a personal vendetta for imagined mistreatment. And at this point, unfortunately, it does not matter if you were telling the truth or not. The damage is done either way.

And, by the way, I would never call anyone a liar, except in jest. Civilized people do not call another person a liar. Civilized people give the benefit of the doubt or doubt what one says is true.

: You're missing the point entirely! Either that or you refuse to see it.
: * Dana H. Myers KK6JQ

One more time... this is a technical group. This discussion started when Jeff knocked (for the Nth time) the FTR-146 and objected to the way he was allegedly treated by Ramsey Electronics two years ago. He should have posted it under a Ramsey Electronics heading, identified the product and alleged experience as being two years old. Two years can make a big difference and is a long time to carry a personal grudge. I called Jeff a liar in jest but I would like him and/or you to swear the he/you have never lied... does that mean that you two are liars?

Maybe you should ask Jeff if he would like to see this negative thread about him continue indefinitely. We are wasting a lot of time and energy that could be used helping other hams on Internet.

One more time... The Ramsey FX transceiver problems are all known and there are fixes for every one of them. They exist in a MODS directory on Internet and I will look up the server. I do not know anything about any other Ramsey products.

73, Cecil, kg7bk@indirect.com

1856. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 21:46:29 UTC
From: kg7bk@indirect.com
Message-ID: <CLJLtI.98B@news.direct.net>
Source record: 270808

Jesse L Wei (jlw3@cec2.wustl.edu) wrote:

: connotation is different than denotation. Common usage is not necessarily
: the same as the dictionary definition. By the way, my dictionary also has
: "4. a mysterious quality of enchantment: e.g. the magic of the distant past."
: --jesse

My apologies, Jesse. I did not believe that anyone would take me seriously.
I just wanted to hand Jeff a mirror.

73, Cecil, kg7bk@indirect.com

1857. Re: Ramsey slams ARRL (was Re: RAMSEY FX TRANSCEIVER)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 22:07:28 UTC
From: kg7bk@indirect.com
Message-ID: <CLJMsH.9tu@news.direct.net>
Source record: 270809

Jesse L Wei (jlw3@cec2.wustl.edu) wrote:
: slander n. 1. Law. The utterance of defamatory statements injurious
: to the reputation or well-being of a person. MHO, jesse

Jesse, I'm no legal expert either, but your dictionary agrees with me. John's alleged statements during a private telephone conversation did not injure the reputation or well-being of Jeff. Dana may have injured Jeff's reputation or well-being by revealing the alleged contents of a private telephone conversation. There is no doubt what happened the other direction.

What do you say? How 'bout we both get a technical life.

73, Cecil, kg7bk@indirect.com

1858. Re: A transmission line loss question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 22:12:30 UTC
From: kg7bk@indirect.com
Message-ID: <CLJn0v.9z4@news.direct.net>
Source record: 270810

Tom Bruhns (tomb@lsid.hp.com) wrote:
: I have a perverse question about feeding an antenna with a coaxial
: transmission line. This is intended as food for thought. (You've
: been warned ;-)

: Assume you have a 50 ohm antenna you want to use on a single
: frequency in the two meter band. You will be feeding it with
: about 100 feet of coax, which will be cut to an exact integer
: multiple number of half-wavelengths on the operating frequency.
: Which of the following two transmission lines will you choose
: to give lower loss?

: A. 50 ohm air-insulated copper line with 1" OD

: B. 75 ohm air-insulated copper line with 1" OD -- in other
: words, same line as in (A), but a smaller center conductor.

C. 300 ohm ladder-line... some people will be surprised.

73, Cecil, kg7bk@indirect.com

1859. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 22:33:48 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLJo0C.9t6@news.Hawaii.Edu>
Source record: 270811

In article <2jqtltINNkan@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:
> ....
>By the way, be sure to read alt.radio.pirate; .....

NOW I understand your stance, Dana; now I understand why you continue to come to the defense of suspected illegals.

Hmmm, I wonder if there might be a bit of piracy in your past. That might explain your defending those I chastise for promoting illegal operations. Maybe you're feeling a little guilty?

And don't say ``Get over it Jeff'' because now I will always suspect your past.

Jeff NH6IL

1860. Re: FCC Digest

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 22:36:55 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLJo5K.9vq@news.Hawaii.Edu>
Source record: 270812

In article <arog.761755657@BIX.com> arog@BIX.com (arog on BIX) writes:
>
>I'll 'third' it.
>
>I much appreciate the posting of info on the Commission's
>actions to the net. I'll grant that some of it is not
>ham.radio specific, but the overview is much needed by
>folks here.
>

I have no opinion one way or the other, but maybe to satisfy both parties
it could be posted on just rec.radio.info - that seems like a VERY
appropriate forum.

Jeff NH6IL

1861. Help-Best Antenna Feed Methods

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 23:32:55 UTC
From: John Quist <jquist@delphi.com>
Message-ID: <xI2q2K-.jquist@delphi.com>
Source record: 270813

Please give me some ideas on the best ways to feed antennas through walls, windows without trashing siding, walls etc. Does anyone make an energy efficient
device that you can put in a window that could feed all types of antenna lines. Does anyone have plans for such?
Thank
John Quist
KA2URB

1862. Re: Help me (was Re: Spectral purity of 2m tx (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-20 23:46:57 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLJrE9.B3M@news.Hawaii.Edu>
Source record: 270814

In article <2k8eh3INNnac@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:
>In article <CLIIwE.Luv@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>>In article <2k3apaINNmjf@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:
>>>
>>>Anyway, comparing 1kW on 11m to the amateur rules is pointless.
>>>Amateurs have historically been very proud of a strict compliance
>>>to the rules, and frequently ridicule 11m folks for not complying
>>>with the appropriate rules. I should hope you aren't condoning the
>>>operation of radios with illegal harmonic outputs on sensitive aero bands.
>>
>>Why not? You'll defend a pirate who posts 6MHz air-to-ground
>>frequencies on rec.radio.cb in answer to a query posted by an other
>>pirate as to what frequencies other illegals were using outside of
>>11M. Don't sound so high and mighty on here Dana while at the same time
>>defend illegals posting (inviting?) pirate operation on air-to-ground
>>channels.
>
>This really isn't worth a response, much less one to the Usenet, but
>I'll make one attempt. Jeff Herman has engaged in pattern of attempting
>inflame newsgroups, by posting such inflammatory notes. This is my
>only response, since my experience with people exhibiting the conduct
>I see in Jeff is that they'll go away if you ignore them.

Nice try Dana, but you're the one who seems to follow me from one news-group to another commenting on MY posts. You're the one who wants to play the role of Public Defender. Inflame newsgroups? Nope. But I'm not going to hide my head when I suspect someone has broken the law.

Recall I was a radio officer in the U.S. Coast Guard. I am VERY sensitive when I suspect foul play in the air. For years at Group Monterey Station we had to put up with jamming on 2182 kHz (world-wide MF voice distress frequency) and occasionally even on VHF ch16. I didn't put up with it then and I won't put up with it now, whether it occures on or off the ham bands.

If you see me chastising someone for suspected illegal operation, feel free to hit the `n' key. But If you're going to attack me, expect to receive a few comments yourself.

It seems ``you can dish it out but you can't take it''.

>
>For what it is worth, on rec.radio.cb, I *did* post note suggesting
>that Jeff's threat to report an SWL to the ITU was frivolous. In fact,
>I attempted to point out that there was no evidence that this alleged
>"pirate" Jeff talks about was anything but an SWL.

who was posting the 6MHz air-to-ground frequencies as a
place for pirates to transmit on.

>>Oh, and let's not forget your coming to Shoup's defense (December) after
>>I chastised him for stating he was going to put a 5kw xmtr on the ham
>>bands.
>
>Mike Shoupe did state he had a couple of 5KW AM transmitters he intended
>to place on the ham bands, when his license permitted. From the context,
>it was suggested that Shoupe intends to abide by the regulations of his
>license class. Next thing we know, Jeff Herman is posting a series of

Sorry but ``from the context'' it was never suggested that Shoupe intends
to abide by any regulation. Recall he took delight in bragging about
his illegal past activities.

>notes condemning Shoupe as an "outlaw" and "scofflaw". It is certainly

Yep. He's the one who bragged about his outlaw activites.

>the case that a high-powered transmitter may be operated at reduced power,
>often with improved performance. It is also the case that Mr. Shoupe may
>not yet be aware the AM power limits are less than the oft talked about
>1.5KW output limit.
>
>>Make up your mind as to which side of the law you stand on.
>
>I stand on the side of compliance and respect for the rights of
>individuals. For some reason, Herman feels compelled to carry on
>a campaign against any Usenet poster who even suggests something that
>is contrary to law, and Jeff feels compelled to carry on a campaign
>especially against me, on several occaisions quoting me out of context

No Myers, you're the one with a vendetta. ``Get over it.''

>and making completely false assertions with regards to me.

Not true. ``... completely false assertions...'' is completely false.

>
>For the record, I oppose any kind of illegal radio operation.
>
>For the record, I oppose the violation of legal and ethical rights
>of people.

Good. Then disregard this need you have of coming to the rescue of
those who I suspect and chastise for illegal operations. Let them
defend themselves. Twice on rec.radio.cb you've felt the need
to defend someone (the linear amp thread and the 6MHz air-to-ground

frequencies post) that I took exception to. Leave me alone and
I'll do the same.

>
>If Mr. Herman wishes to condemn me for this stance, fine. However,
>I do not believe this kind of personal vendetta is appropriate for

Hmmm, when I mentioned the personal vendetta you had against me back
in December, you're response was, I believe, `get over it'.
Again, if you want a truce then let the suspected illegals defend
themselves.

>a newsgroup. If you have further questions or comments on the
>issue, please feel free to write to me at:
>
>Dana.Myers@West.Sun.Com
>
>If you have any questions or comments for Jeff Herman, his e-mail
>address is:
>
>jherman@Hawaii.Edu
>
>Thank you,
>Dana

73 Dana,
Jeff NH6IL

1863. Re: New QRZ! Ham Radio Callbook CDROM: $15.95

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 00:07:13 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <CLJsC1.GwM@odin.corp.sgi.com>
Source record: 270815

I got the QRZ CDROM a month ago on the internet "special"
offered by Fred. This was the best use of money for ham
radio for under $20.

This CDROM should give Buckmaster and the others a run for
their money, since they are at the $50 level.

I use the UNIX (tm) version of the callbook. During one
run of 25 calls that I looked up for QSLs to stations worked
during a QRP contest, it took less than 3 seconds on a workstation.
I did this by creating a script with the lines
call k5fjz k5jkb ... (for five calls)
call xxxxxx xxxx xxx

with five calls per line, since the program halts every five for
<cr> as it assumes it's in an interactive mode from a terminal.

I plan on submitting the data base for ALL 180,000+ US cities
and a C program to do great-circle bearing calculations for the
next verions of the QRZ CDROM. The data base alone if more than
5MB!!!

Anyway, my $0.02 worth of publicity. I'm NOT paid for this
endorsement, just another happy satisfied customer.

There are a lot of other programs and data bases on the ROM,
but I haven't had time to play with them yet.

dit dit
--
Chuck Adams K5FO CP-60
adams@sgi.com

1864. Amateur Radio Newsline #862 18 Feb 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 00:29:05 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <H10QjGG8yPtD057yn@dorsai.dorsai.org>
Source record: 270816
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

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Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #112 - POSTED 02/19/94

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Thank You
NEWSLINE

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Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[862]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not for *
* air over amateur radio. Repeat, not for broadcast. This is *
* just a reminder that the address for the Newsline Support *
* Fund is Newsline, in care of Dr. Norm Chalfin, K6PGX, PO Box *
* 463, Pasadena, CA 91102. Again, and as always, we thank *
* you. That ends the closed circuit with Newsline report *
* number 862 for release on Friday, February 18 1994. *
* *
* *

The following is a QST

Another ham-band may wind up in the hands of commercial users and the idea of an instant ham radio license may be quietly fading away.

*****
200 MHz of SPECTRUM TO BE REALLOCATED - HAM RADIO AFFECTED!

Amateur Radio may loose part or all of one super high frequency band in the wake of the release of a Commerce Department report that recommends moving the military and other government agencies off much of the nation's airwaves to make way for new commercial use of the spectrum. The spectrum under fire

is at 2390 to 2400 Mhz and 2402 to 2417 Mhz. If the FCC chooses to reassign it to the commercial sector, its loss will impact on several important ham radio projects including high speed packet radio data relays.
The peril to the band became known on Thursday February 11th. In a preliminary report, the Commerce Department announced that it had targeted 200 MHz of prime VHF and UHF radio spectrum to be reissued immediately with an even bigger block to be made available over the next 15 years. This latter could include the ham radio band that runs from 2300 to 2310 Mhz. A band being looked upon in many crowded urban areas as the logical place to expand repeater and other FM relay operations as well as weak signal work.
This reallocation proposal is part of a major push by congress the Clinton administration and the National Telecommunications and Information Agency. The plan is to reassign valuable government spectrum to the private sector to expand all sorts of communications concepts. It also follows an earlier decision to reallocate another big band of spectrum to the next generation of wireless technology, known as personal communications services.
The Commerce Department report did designate certain specific spectrum to be shared by government and private sector users. It said that moving some government services will be delayed until new equipment can be built. As a result some of the reallocated spectrum will not be made available for several years. The study also concluded that moving some services would be inappropriate. This, because of extensive investments made by the government or the services provided by the current spectrum users. It recommended that certain navigational services, meteorology, astronomy and space communications services should not be moved.
There are two days of sunlight in all of this. First off, the Amateur Satellite band from 2400 to 2402 MHz was not put up on the chopping block. This means that plans for the construction of the new Phase 3D ham satellite can go forward as planned.
Second, and just as important is the fact that this is only an initial report. Kind of a prototype suggestion by the NTIA that is still open to debate. A final report on this proposed spectrum reallocation is scheduled for release after the Federal Communications Commission the and private sectors have a chance to comment on it. Completion of that research and release of the report should come in about twelve months. Meantime, hams involved in the use of spectrum at 2300 MHz and above should get ready for a knock down drag out fight to save that band.

*****
INSTANT LICENSING

The FCC's proposal to bring instant licensing to the amateur radio service appears to be in serious doubt. Comments by the Chief of FCC's Private Radio Bureau seem to leave open the

possibility that the proposal may never see the light of day. Ralph Haller, N4RH, spoke to amateurs at the Tropical Hamboree in Miami on February 5th.
Commission officials say they are surprised at the response to the FCC's proposal to bring instant licensing to ham radio. The idea is to allow people who successfully pass their first license exams to get on the air immediately. That way they would not have to wait to receive a license from the commission. A process that has taken as long as 3 months. The ARRL strongly opposes the FCC's idea. Frank Butler, W4RH directs the leagues Southeastern Division. He says amateurs are solidly against instant licensing.
"What their concern mainly is that people will get, make up a callsign and get on the air without ever really having ever taken a test." Frank Butler, W4RH, Director ARRL Southeastern Division.
Instant licensing the way the FCC proposed may not be necessary. The commission is about to upgrade its nearly 30 year old computer system. Ralph Haller, N4RH, says this promises to be much faster processing of license applications.
"I think the people have some legitimate concerns in instant licensing that we are going to have to look out very closely and combine that with our improved speeds of services I expect with the new computer and weigh wether instant licensing makes sense in the amateur service."
We seem to be leaving the door open for instant licensing the whole controversy could be taken care of with the new computer system.
"I think that's a reasonable possibility. Particularly as we get electronic filing with the VAX. We may well reach the situation individual exam sites would have immediate access to our computers and we might even be able to have a license, I am dreaming a little bit here, that we may well be able to issue, have the VE issue the license right in the exam session." Ralph Haller, N4RH, Chief of the FCC's Private Radio Bureau.
Haller says the commission will look at the responses amateurs submit to the instant licensing proposal. One that so far has little support in the amateur community.

*****
VANITY CALL SIGN UPDATE

Another big announcement from Ralph Haller. Vanity callsigns are just around the corner. Haller believes you'll be able to request a call sign of your choosing by late summer. The program will probably be brought on line in phases, with Extra class hams getting first crack. Club callsigns will also be available.
Start saving your quarters...a vanity call sign will cost $70... that's 7-dollars for each of the 10 years an amateur radio license covers.

*****
COURT ORDERS HAM OFF REPEATER

This just in. An Orange County California Superior Court has issued a three year restraining order against a ham that will keep him from operating on an area repeater. The order was requested in January by an attorney for the Clairmont Amateur Repeater Association and was issued against Tim Seawolf, KJ5KE of Quail Valley. This is a precedent setting case in that the club has used the civil rather than federal court system to ban someone from their repeater that they allege to be an undesirable operator. More details on this story next week.

*****
ARRL BOARD ELECTIONS

The ARRL Board of Directors has affirmed its confidence in the leadership of George S. Wilson, W4OYI by electing him to serve another two years as the organizations president. Wilson, an attorney from Owensboro Kentucky has turned out to be one of the most dynamic leaders in the leagues history. Before his election two years ago, Wilson made a public pledge to do all he could to help clean up the many problems plaguing the ham bands. We carried his words right here on Newsline in 1992. Wilson has since lived up to every word that he said!
Also returning for additional two year terms are first vice president Rod Stafford, KB6ZV, Vice Presidents Jay Holladay, W6EJJ and Tom Frenaye, K1KI. Treasurer Jim Mc Cobb, K1LLU, Executive Vice President Dave Sumner, K1ZZ and Chief Financial Officer Barry Shelly were also re-elected to serve the next two years.
Elected to the Executive Committee are Rocky Mountain division director Marshall Quiat, AG0X, Hudson Division Director Stephen Mendelsohn, WA2DHF, Delta Division Director Joel Harrison, WB5IGF and Great lakes Division Director Al Severson, AB8P.

*****
GEORGIA ANT

A bill introduced in the Georgia Legislature that would eliminate the effect of restrictive property covenants on amateurs is believed to be the first of its type in the nation. This, according to Georgia Section Manager Jim Altman, N4UCK. Altman says that the proposed legislation known as Georgia House Bill 1134, would prevent all new and renewed covenants from regulating, controlling, or restricting antennas owned and operated by licensed amateurs in the state.
Altman says that, in Georgia, all restrictive covenants have a life of 20 years, but can be renewed. In banning new and renewed covenants the proposed new law would leave the existing covenants in place until their natural expiration, and prevent new ones. Then, over the next 20 years, all existing covenants would disappear.

The bill was initially referred to the State Bar committee on real property law, which gave the measure a do pass recommendation. That's a good sign and Amateurs in Georgia are urged to contact their state legislators and urge their support of H.B. 1134. Hams elsewhere will want to watch this one carefully as it could set a national precedent for fighting deed restrictions nationwide.

*****
STONER UPDATE

Speaking about fighting deed restrictions, one ham who has been at the forefront of the battle is Don Stoner, W6TNS. As previously reported, Stoner, who heads up the National Amateur Radio Association has been fighting an antenna battle of his own. In addition to legal action, Don has taken to the political high ground as well. W6TNS is trying to get the Florida State Emergency Preparedness plan changed to include ham radio as an integral aspect and there-by negate anti ham radio deed restrictions in planned communities. We ran into W6TNS at the recent Tropical Hamboree in Miami and got this update.
"The condominium restrictive covenants are applicable all over the country. There are hams all over the country that are precluded from actually getting on the air, at least on HF, because of these restrictive laws. But the support from the local group in the Clearwater area, and really all over the state of Florida, has just been enormous. One of the things I think we can do is marshal that support and organize it into a packet letter writing campaign. I think hams will send packet messages to their legislator far easier than they will write a letter. They love to send messages over ham radio because that is what it is all about." Don Stoner, W6TNS, President of NARA.
Stoner also says that banning the prohibition on ham radio antennas is important to the safety of all of the residents of is regularly hurricane ravaged state.

*****
SEATTLE TROLLEY QRM

Seattle Washington hams are once again suffering from trolley car induced RFI. The story goes back a number of years when Seattle added a number of new electric trolleys to their fleet. According to Clay Freinwald, K7CR of the Western Washington Amateur Relay Association, the presence of these new trolleys was instantly noted as their new electronic control system radiated like an all band transceiver and the overhead cattinary system of power wires became their gigantic antenna.
Marty Hadfield a broadcast engineer at KMT
matter. Operating through the Western Washington Cooperative Interference Committee, Marty was able to get the Metropolitan Transit System to install filters on the vehicles to help

minimize the problem. The filters were not a cure all and you can still hear some of the interference on any AM radio. Recently, the transit authority purchased some dual powered vehicles. They run on diesel engines in outlining areas and then connect to the transit overhead wiring when inside Seattle proper. Marty Hadfield says that these new vehicles are not much different then the old ones. They too radiate like crazy and this time the interference is not limited to the AM broadcast band. He says that almost any radio in the downtown area can hear what sounds like a cats meow on any two way radio including those used by hams. Marty is trying to solve the problem, but it looks as if its going to be an uphill road till all of the meowing is gone from the Seattle radio airwaves.

*****
T9S DX

In DX, the special event station T9S will be active during the month of February to commemorate the 10th anniversary of the Olympic Winter Games of 1984, which was held in Sarajevo. Activity will be on all bands and QSL cards will be handled by DL1QQ, direct or via the bureau.

*****
PERRY TO BE AT DAYTON

Educator Carole Perry, WB2MGP says that she is looking for youngsters skilled in talking before large groups to be a part of her Youth Seminar at the 1994 Dayton Hamvention. The Staten Island New York school teacher will be expanding her youth session and says that more young hams are needed as speakers this year.
"Once again we are looking for youngsters who are articulate and enthusiastic about what they enjoy about amateur radio. I understand I am going to be getting an expanded time slot this year because of the popularity of the program last year. It seems that the session that always follows me, unfortunately always has to deal with us running over a little bit. So this year they have graciously given me a bigger time slot. I am looking for lots and lots of youngsters to be interviewed and have them call me at (718) 983-1416. That's my home number and the machine will pick up if I am not here. Or have them send resumes directly to me, I'm in the callbook. About what it is about ham radio that they have participated in and if they are good and articulate speakers we will certainly consider bring them to Dayton." Carole Perry, WB2MGP.
Again, if you know of an articulate young ham who would like to speak at Carole Perry's Dayton Youth Forum please contact WB2MGP at area code (718) 983-1416. That line is both voice and fax.

*****

That is all from the Amateur Radio Newsline. You can write us
at Newsline, PO Box 463, Pasadena, CA 91102.

* * * Newsline Copyright 1994 all rights are reserved. * * *

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1865. Daily Summary of Solar Geophysical Activity for 19 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 00:37:28 UTC
From: oler@rho.uleth.ca
Message-ID: <9402210037.AA14714@rho.uleth.ca>
Source record: 270817
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

19 FEBRUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 050, 02/19/94
10.7 FLUX=108.0 90-AVG=106 SSN=054 BKI=3343 3333 BAI=016
BGND-XRAY=B2.1 FLU1=4.2E+06 FLU10=1.6E+04 PKI=3344 3343 PAI=017
BOU-DEV=028,021,040,029,023,027,038,021 DEV-AVG=028 NT SWF=00:000
XRAY-MAX= B7.3 @ 0303UT XRAY-MIN= B1.8 @ 1844UT XRAY-AVG= B2.5
NEUTN-MAX= +003% @ 0945UT NEUTN-MIN= -002% @ 2020UT NEUTN-AVG= +0.4%
PCA-MAX= +0.1DB @ 1945UT PCA-MIN= -0.4DB @ 0330UT PCA-AVG= -0.0DB
BOUTF-MAX=55351NT @ 0749UT BOUTF-MIN=55305NT @ 1827UT BOUTF-AVG=55333NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+062,+000,+000
GOES6-MAX=P:+123NT@ 1918UT GOES6-MIN=N:-085NT@ 0722UT G6-AVG=+088,+039,-027
FLUXFCST=STD:110,110,115;SESC:110,110,115 BAI/PAI-FCST=010,010,015/012,010,015
KFCST=2234 4321 1234 5321 27DAY-AP=005,003 27DAY-KP=2212 2122 2112 0111
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 18 FEB 94 was 42.0.
The Full Kp Indices for 18 FEB 94 are: 2- 2o 2- 3- 2- 2o 1+ 3-
The 3-Hr Ap Indices for 18 FEB 94 are: 7 8 7 14 6 8 5 12
Greater than 2 MeV Electron Fluence for 19 FEB is: 1.0E+08

SYNOPSIS OF ACT

Solar activity was very low. Little eruptive activity of
any type occurred. One new Region, 7674 (S14E24) emerged to
join the three other spotted regions visible. Region 7671
(N12W00) remains the dominant spot group.

Solar activity forecast: solar activity is expected to be
low.

The geomagnetic field has been at unsettled to mildly
active levels the past 24 hours.

Geophysical activity forecast: the geomagnetic field is
expected to be mostly unsettled throughout the interval.

Event probabilities 20 feb-22 feb

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 20 feb-22 feb

A. Middle Latitudes
Active 25/25/25
Minor Storm 15/15/15
Major-Severe Storm 05/05/05

B. High Latitudes
Active 25/25/25
Minor Storm 15/15/25
Major-Severe Storm 05/05/05

HF propagation conditions were normal over all regions,
except the auroral latitudes where sporadic fading was observed.
No changes are expected over the next 72 hours.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7670 N09W11 199 0000 AXX 00 001 ALPHA
7671 N11W00 188 0340 CKO 07 010 BET
7673 N08W78 266 0000 AXX 00 001 ALPHA
7674 S14E24 164 0000 BXO 03 002 BET
7669 N08W21 209 PLAGE
7672 N03W11 199 PLAGE
REGIONS DUE TO RET
NMBR LAT
7663 N13 089

LISTING OF SOLAR ENERGETIC EVENTS FOR 19 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 19 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 19/2400Z

ISOLATED HOLES AND POLAR EXT

EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NONE VISIBLE

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
18 Feb: 0538 0542 0546 C1.1 SF 7671 N07E24
0912 0956 1017 C1.1
1314 1319 1322 B5.6 SF 7671 N08E21
2035 2039 2044 B4.3
2148 2152 2154 B4.2

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7671: 1 0 0 2 0 0 0 0 002 (40.0)
Uncorrellated: 1 0 0 0 0 0 0 0 003 (60.0)

Total Events: 005 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1866. Piracy in my past? (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 00:51:23 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2k90ibINNnbv@abyss.West.Sun.COM>
Source record: 270818

In article <CLJo0C.9t6@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>In article <2jqtltINNkan@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:
>> ....
>>By the way, be sure to read alt.radio.pirate; .....
>
>_NOW_ I understand your stance, Dana; now I understand why you continue to
>come to the defense of suspected illegals.
>
>Hmmm, I wonder if there might be a bit of piracy in your past. That might
>explain your defending those I chastise for promoting illegal operations.
>Maybe you're feeling a little guilty?
>
>And don't say ``Get over it Jeff'' because now I will always suspect your
>past.

At no time, ever, I have ever operated an illegal radio station.
Flat out. Full stop. Now, carry on your strange campaign of hatred
in e-mail. If you want to make unfounded accusations, try alt.flame
or something, not rec.radio.amateur.*.

Maybe you could more productively spend your time upgrading to Extra
since you are such a code fanatic :-)

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1867. Yaesu MH-29 LCD Microphone

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 01:16:36 UTC
From: mmjjmm@post.its.mcw.edu
Message-ID: <2k921k$p38@post.its.mcw.edu>
Source record: 270819

I read somewhere that there were undocumented features in the MH-29 LCD microphone. Does anyone on the net have any further information on this subject?

--
Michael J. Malloy
Medical College of Wisconsin Truth is a Virus
mmjjmm@post.its.mcw.edu

1868. Ramsey HF QRP Rigs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 01:53:39 UTC
From: kg7bk@indirect.com
Message-ID: <CLJx9F.2tH@news.direct.net>
Source record: 270820

>Now, have you, Cecil, or anyone else, built any of Ramsey's HF QRP xmtrs?
>For $30 I might get one of those pup's for 20M (but from what I hear I
>think a low pass filter might be in order).
>
>73, Jeff NH6IL

No, Jeff, I haven't built one and don't know anyone who has but, like you,
would be interested in hearing from anyone who has.

73, Cecil, kg7bk@indirect.com

1869. Re: CELLULAR SURVEILLANCE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 02:36:01 UTC
From: pckwong@hkuxb.hku.hk
Message-ID: <CLJz82.AH9@hkuxb.hku.hk>
Source record: 270821

Ken Wyatt (kenw@col.hp.com) wrote:
: What scanner users -really- need is a control circuit for various
: TRUNKING systems! How about developing a low-cost (<$100) circuit
: to do that? You listening CSI?
:
:
They claimed that is a low cost one, at $4XX.

- Philips Wong, VR2XVI

1870. Re: Ramsey slams ARRL (was Re: RAMSEY FX TRANSCEIVER)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 02:57:01 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2k97tt$s9t@bigfoot.wustl.edu>
Source record: 270822

Cecil Moore (kg7bk@indirect.com) wrote:
: Jesse L Wei (jlw3@cec2.wustl.edu) wrote:
: : slander n. 1. Law. The utterance of defamatory statements injurious
: : to the reputation or well-being of a person. MHO, jesse

: Jesse, I'm no legal expert either, but your dictionary agrees with me.
: John's alleged statements during a private telephone conversation did not
: injure the reputation or well-being of Jeff. Dana may have injured
: Jeff's reputation or well-being by revealing the alleged contents of a
: private telephone conversation. There is no doubt what happened the other
: direction.
:
: What do you say? How 'bout we both get a technical life.

:) maybe you, but I'm a natural-science major myself, maybe even
pre-med (yes, an undergrad who hasn't even declared a major!!!)
Maybe _I'm_ arguing for the sake of arguing. Now that's pathetic!!!

: 73, Cecil, kg7bk@indirect.com

--jesse (still waiting)

1871. Re: Help me (was Re: Spectral purity of 2m tx (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 03:06:29 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2k98fl$s9t@bigfoot.wustl.edu>
Source record: 270823

Jeff Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:
: In article <2k8eh3INNnac@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:
: >In article <CLIIwE.Luv@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
: >>In article <2k3apaINNmjf@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:

: Nice try Dana, but you're the one who seems to follow me from one news-
: group to another commenting on MY posts. You're the one who wants to
: play the role of Public Defender. Inflame newsgroups? Nope. But I'm
: not going to hide my head when I suspect someone has broken the law.

: Recall I was a radio officer in the U.S. Coast Guard. I am VERY sensitive
: when I suspect foul play in the air. For years at Group Monterey Station
: we had to put up with jamming on 2182 kHz (world-wide MF voice distress
: frequency) and occasionally even on VHF ch16. I didn't put up with it
: then and I won't put up with it now, whether it occures on or off
: the ham bands.

: If you see me chastising someone for suspected illegal operation, feel
: free to hit the `n' key. But If you're going to attack me, expect to
: receive a few comments yourself.

. . .

: >a newsgroup. If you have further questions or comments on the
: >issue, please feel free to write to me at:
: >
: >Dana.Myers@West.Sun.Com
: >
: >If you have any questions or comments for Jeff Herman, his e-mail
: >address is:
: >
: >jherman@Hawaii.Edu
: >
: >Thank you,
: >Dana

: 73 Dana,
: Jeff NH6IL

OK, I see this as an invitation to keep these. . .um. . .arguments to email. Lets get back to. . .what there usually is without all the bickering--and I'll try to do the same!!!

--jesse

1872. Re: Hamvention Parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 03:15:00 UTC
From: pat.wilson@pplace.com
Message-ID: <5c.13477.23.0N17A6FF@pplace.com>
Source record: 270824

I have heard many, many, many from this area who are not interested if they have to walk everywhere. Seems the buses would make them a small fortune if they were circumspect. Oh well.

N0RDQ

1873. Re: Callsign allocations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 05:20:51 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.761808051@BIX.com>
Source record: 270825

oo7@astro.as.utexas.edu (Derek Wills) writes:

>hamilton@BIX.com (hamilton on BIX) asks:

>>>But what can you do to lookup an international callsign? I'm not
>>>aware if there's even an ascii text file out there someplace that would
>>>allow me to do even the simplest lookup of the prefix to determine
>>>what country it's from. (This month's CQ contains such a list, but
>>>you can bet I'm not ready to key it in myself. :-)

>>>What machine-readable resources are available for looking up international
>>>calls?

> Don't people read words and books by eye any more? The ARRL log
> books and many other sources have all this information listed on
> a couple of pages - you know, printing on paper. When you hear
> an unfamiliar callsign, you look at the piece of paper. It's
> much like looking in a dictionary - a real book, that is, not an
> "on-line word source".

> Can you tell that I was born before computers became popular?

>Derek Wills (AA5BT, G3NMX)
>Department of Astronomy, University of Texas,
>Austin TX 78712. (512-471-1392)
>oo7@astro.as.utexas.edu

Thank you for your helpful, warm remarks.

NOT!!

Look, let's not be a jerk. It should have been clear from my post,
which in its original form mentioned that I had a listing from this
month's CQ but that I really wanted something in electronic form,
that if I wanted something on paper, I already had it. The reason
I like things in computer readable form is because my office is
absolutely overflowing with paper! If I go away for a week, the
amount of new paper that arrives in the mail will more than fill
one of those boxes Hammermill uses for 10 reams of copy paper.
We're talking about a serious problem with too goddam much paper!

Now, your life maybe real simple, just like your view of the world
and maybe for you, a paper listing is adequate. If so, enjoy! No
one's twisting your arm to move into the modern world. For me, an
electronic listing that I can let my machines keep track of for me
would be a real help.

Clear enough?

Yours,
Doug Hamilton hamilton@bix.com Ph 508-358-5715
Hamilton Laboratories, 13 Old Farm Road, Wayland, MA 01778-3117

1874. WARNING: Potential Satellite Anomaly Warning - 21 Feb

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 06:56:44 UTC
From: oler@rho.uleth.ca
Message-ID: <9402210656.AA19946@rho.uleth.ca>
Source record: 270826
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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POT

ISSUED: 06:00 UT, 21 FEBRUARY

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ATTENTION:

Protons at greater than 10 MeV are becoming fairly significantly enhanced at the present time. Flux levels are presently continuing to increase. New maximums are continually being set. Protons at greater than 10 MeV are presently at 570 pfu at 06:05 UTC. Some contamination of the x-ray sensors is presently being observed on-board the GOES-6 and GOES-7 spacecraft. Other anomalies may be also observed during this satellite proton event. This proton event is not particularly hard, spectrally. Most of the particles have energies below 50 MeV.

An interplanetary shock, related to the flare which was responsible for this proton activity, is expected to arrive late in the UTC day of 21 February or (preferably) early in the UTC day of 22 February. There is a fair possibility geosynchronous satellites may observe periods of magnetopause crossings for several hours after the arrival of this shock.

Also by way of update, the high energy electron fluxes (and fluences) at greater than 2 MeV which have been observed over the last two weeks have dropped and are continuing to gradually fall.

** End of Warning **

1875. rec.radio.info not a dumping ground (was Re: FCC Digest)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 06:59:13 UTC
From: pschleck@cwis.unomaha.edu
Message-ID: <pschleck.761813953@cwis>
Source record: 270827

In <CLJo5K.9vq@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:

>In article <arog.761755657@BIX.com> arog@BIX.com (arog on BIX) writes:
>>
>>I'll 'third' it.
>>
>>I much appreciate the posting of info on the Commission's
>>actions to the net. I'll grant that some of it is not
>>ham.radio specific, but the overview is much needed by
>>folks here.
>>

>I have no opinion one way or the other, but maybe to satisfy both parties
>it could be posted on just rec.radio.info - that seems like a VERY
>appropriate forum.

However, rec.radio.info only takes the cream, and not the dregs. Not that the FCC Digests are necessarily dregs, but if rec.radio.info became almost predominantly a target for articles that were kicked off other newsgroups, it would quickly get tuned out as a dumping ground for noise. Arguments about whether or not the articles are appropriate should concern themselves with whether or not they belong on Usenet at all, not if a suitable junkpile can be found for it (a case of "Not in My Back Yard" perhaps?).

Currently, rec.radio.info serves as a concentrator, not a deflector. Any article posted to it is also simultaneously crossposted to another appropriate radio-related discussion newsgroup. The reasons for this are nicely summarized in the following excerpt from the newsgroup's charter postings:

-- Why are messages almost always cross posted to rec.radio.info?

It provides a "tag" for each article to be assembled into a filtered presentation in rec.radio.info (even with cross-posting, only one message, with a unique Message-ID, is propogated across the net). This tag also facilitates a pre-existing method of dropping or cancelling the articles locally within the discussion groups if you don't want to see them. This accommodates individuals who want to separate the bulletins from the discussions, discussions from the bulletins, as well as those who are adamant about not reading another newsgroup and wanted to see everything all in one basket.

With the total size of Usenet (in number of newsgroups and total traffic) doubling every year or so, this is no insignificant contribution to reducing information noise and chaos. Making the discussion groups a catch-all, and making extra newsgroups filters on that catch-all, is also the most realistic

way to implement such a scheme (It's not intuitively obvious what the charter, contents, and general appropriate topics for each and every newsgroup are. Seeing FAQ's and charter/intro postings in the home newsgroup is beneficial for new readers).

By cross-posting one only is adding a few tens of bytes to each bulletin (to specify the extra group on the Newsgroups line), but are adding the capability for very powerful filtering features available on most news servers, listservers and readers. Your local news guru could probably explain these features in more detail.

In short, in order to make everyone happy, rec.radio.info needs to avoid "stealing" any newsgroup's articles, which would implicitly change the contents of newsgroups (especially the non-amateur-radio ones) without their readers' consent. Modern news transport software and news readers makes cross-posting almost indistinguishable from single-newsgroup posting anyway. Making an existing newsgroup "take responsibility" for a given article by serving as a cross-posting target also ensures that rec.radio.info continues as a worthwhile information resource.

If I were to offer an opinion (something that always gets me in trouble :-), I would say that the FCC Digests are a bit too voluminous to continue to post in full. It might be a good idea to make up some sort of pointer posting to them if and when they become available from an FTP or Gopher site, possibly sponsored by fcc.gov.

73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

1876. Daily Summary of Solar Geophysical Activity for 20 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 07:16:31 UTC
From: oler@rho.uleth.ca
Message-ID: <9402210716.AA21379@rho.uleth.ca>
Source record: 270728
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

20 FEBRUARY, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT
------------------------------------------------------------

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 051, 02/20/94
10.7 FLUX=108 90-AVG=106 SSN=033 BKI=4433 2222 BAI=014
BGND-XRAY=B2.0 FLU1=2.8E+07 FLU10=3.4E+06 PKI=4333 3222 PAI=013
BOU-DEV=046,042,023,023,015,010,015,010 DEV-AVG=023 NT SWF=01:087
XRAY-MAX= M4.0 @ 0141UT XRAY-MIN= B1.7 @ 2355UT XRAY-AVG= C2.1
NEUTN-MAX= +003% @ 2220UT NEUTN-MIN= -003% @ 0125UT NEUTN-AVG= +0.2%
PCA-MAX= +1.3DB @ 2000UT PCA-MIN= -0.2DB @ 0400UT PCA-AVG= +0.4DB
BOUTF-MAX=55346NT @ 0522UT BOUTF-MIN=55310NT @ 1900UT BOUTF-AVG=55333NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+057,+000,+000
GOES6-MAX=P:+115NT@ 1830UT GOES6-MIN=N:-078NT@ 0509UT G6-AVG=+082,+040,-031
FLUXFCST=STD:110,110,110;SESC:110,110,110 BAI/PAI-FCST=015,040,020/020,045,030
KFCST=2334 4334 4556 6554 27DAY-AP=003,004 27DAY-KP=2112 0111 1211 2111
WARNINGS=*PROTON;*PCA;*GSTRM;*AURMIDWRN
ALERTS=**MINFLR:M4.0/3B@0141UTC,N09W02(7671);**SWEEP:II=3@0108UTC;
**SWEEP:IV=3@0116UTC;**PROTN10:BEGIN:0300UTC,IN-PROGRESS;
**PROEN100;**PCA
!!END-DATA!!

NOTE: The Effective Sunspot Number for 19 FEB 94 was 45.0.
The Full Kp Indices for 19 FEB 94 are: 3o 3- 4o 4- 3o 3- 4- 3-
The 3-Hr Ap Indices for 19 FEB 94 are: 15 14 30 22 15 14 21 13
Greater than 2 MeV Electron Fluence for 20 FEB is: 1.8E+08

SYNOPSIS OF ACT
--------------------

Solar activity was moderate. Region 7671 (N09W15)
produced an M4/3B flare early in the period. The event attained
maximum at 0141Z, and included Types II and IV sweep, as well
as a burst of 190 sfu at 2695 MHz. The large circular filament
located at the perimeter of the Region over the past few days,
disappeared during the activity, and the main spot has since
fragmented into at least two pieces. Since this impulsive
```

flare, the region has done little of significance.

STD CORRECTION: The SESC has mistakenly stated that this flare was impulsive. It was not. It was an impressive long-decay event with x-rays remaining above M-class levels for 87 minutes. Major Types II and IV sweeps accompanied the flare. The Type II had an estimated shock velocity of approximately 1,400 km/sec (+/- 200 km/sec). This flare occurred in the general vicinity of extremely intense Ca XV emissions that were observed from the area when it first rotated into view over a week ago. A correction to the proton flux observed from this flare is also given below.

Solar activity forecast: solar activity is expected to be low. Additional M-class activity is not expected from Region 7671.

The geomagnetic field has been at quiet to active levels. A satellite proton event at greater than 10 MeV began at 0300Z. This activity is attributable to the flare/CME event from Region 7671 at 0141Z. A sharp onset, typical of well-connected events, preceded a peak of 74 pfu at 0915Z. The fluxes have decayed slightly during the day, but still hover near the 50 pfu level. A small signature at greater than 100 MeV was also seen, roughly one order of magnitude above background. Equipment problems at Thule prohibit a precise assessment of a polar cap absorption, but other data suggest it may be on the order of 3-4 db. This is the first solar proton event since March, 1993.

STD UPDATE: Protons at greater than 10 MeV have since soared to levels almost a magnitude higher than those given in the SESC report. The current preliminary maximum flux at greater than 10 MeV is 350 pfu at 04:05 UTC on 21 February. PCA has also increased accordingly.

Geophysical activity forecast: the geomagnetic field is expected to be unsettled to active for the next 24 hours. Flare/CME effects are expected to dominate the last 48 hours when minor storm conditions should prevail. Episodes of major storming at all latitudes are distinctly possible. Proton fluxes are not expected to increase with the passage of a shock, expected early on Feb. 22. The slow decay is likely to persist throughout the forecast period.

Event probabilities 21 feb-23 feb

Class M 10/10/10
Class X 01/01/01
Proton 10/10/10
PCAF In Progress

Geomagnetic activity probabilities 21 feb-23 feb

A. Middle Latitudes
Active 25/20/20
Minor Storm 25/50/35
Major-Severe Storm 05/30/15

B. High Latitudes
Active 20/10/20
Minor Storm 30/50/35
Major-Severe Storm 15/40/25

HF propagation conditions continued near-normal for the low and middle latitudes. High and polar latitudes have observed a very strong level of signal degradation over the last 24 hours due to the strong proton-related polar cap absorption (PCA) which is in-progress at the present time. Practically all transpolar paths are experiencing useless propagation, while transauroral paths are experiencing very poor to useless propagation. High signal absorption is expected to continue over the next 24 to 36 hours. Early on 22 February, an interplanetary shock related to the M4.0/3B coronal mass ejection should arrive, producing additional geomagnetic and auroral-related signal degradation down to possibly even the lower latitude regions. The disturbance, after it arrives, should last approximately 24 to 36 hours with lingering residual degradation persisting over the higher latitudes for several days thereafter.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7671 N11W14 189 0280 DAO 08 012 BET
7674 S14E09 166 0000 AXX 00 001 ALPHA
7669 N08W34 209 PLAGE
7670 N09W24 199 PLAGE
7672 N03W24 199 PLAGE
REGIONS DUE TO RET
NMBR LAT
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 20 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0104 0141 0216 7671 N09W02 M4.0 3B 2400 190 II/IV

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 20 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
20/A1637 21/B1157 N08W10 DSF M4.0 72 3 3
20/A0816 21/B0200 S06E04 DSF

INFERRED CORONAL HOLES. LOCATIONS VALID AT 20/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
19 Feb: 0254 0302 0312 B7.3
1050 1055 1059 B4.0
1636 1703 1714 B5.1
1913 1933 1949 B6.6

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 004 (100.0)

Total Events: 004 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1877. RB 314 Semantics 4/7

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 07:24:32 UTC
From: enge@almaden.ibm.COM
Message-ID: <199402210726.XAA00658@ucsd.edu>
Source record: 270729

Bid: $RACESBUL.314

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.314 RELEASE DATE: February 21, 1994

Subject: MGT - Semantics 4/7 - Commun. Director & Radio Officer

DIRECTOR OF COMMUNICATIONS. Until the mid-Seventies this was a common title in government circles for the individual in charge of public safety communications systems, operation, direction, maintenance, procurement, planning and budgets. Then the title began to shift to an entirely different occupation -- that of public information and public affairs. Thus began the shift in semantics from COMMUNICATIONS to TELECOMMUNICATIONS.

RADIO OFFICER. There has probably been less confusion over this title than any other because it has been in the FCC Rules since the 1950's. The Radio Officer is responsible to the civil defense director for the RACES program. Some governments make a distinction between a Radio Officer and a RACES Radio Officer. A Radio Officer is also the RACES officer and is knowledgeable of all the public safety communications systems in his or her jurisdiction. The radio officer may indeed be employed to be in charge of those systems. A RACES Radio Officer, on the other hand, is responsible only for the RACES. We encourage the recruitment and assignment of a full spectrum radio officer whenever possible. To be effective, any radio officer must be interested in far more than the four walls, the floor and the ceiling of the Emergency Operations Center.

Series authored by Stanly E. Harter, originally titled "From My Lookout". Edited for digital transmission. (Continued. Series of 7) eom.

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

1878. RB 314 Semantics 4/7

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 07:24:32 UTC
From: Roy Engehausen <enge@almaden.ibm.com>
Message-ID: <$racesbul.314.1994@ampr.org>
Source record: 270730
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Bid: $RACESBUL.314

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.314 RELEASE DATE: February 21, 1994

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RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

1879. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 07:28:55 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.94Feb21022855@prince.cs.columbia.edu>
Source record: 270731

jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:

> In article <2jqtltINNkan@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers)
writes:
> > ....
> >By the way, be sure to read alt.radio.pirate; .....
>
> _NOW_ I understand your stance, Dana; now I understand why you continue to
> come to the defense of suspected illegals.
>
> Hmmm, I wonder if there might be a bit of piracy in your past. That might
> explain your defending those I chastise for promoting illegal operations.
> Maybe you're feeling a little guilty?

Jeff, I'm afraid you've gone 'round the bend here. This kind of
argument went out with McCarthy, didn't it? I think you're a bit
overzealous in desiring to {pro,per}secute "suspected illegals", too.
Now I guess I'm one of your suspects too, even though I am not now,
nor have I ever been, involved with pirate radio. :-)

BTW, if you're serious about wanting to work against the pirates,
wouldn't that mean that you should read alt.radio.pirate, as Dana
says, along with any other information you can get on them? Whatever
the source, "Know your enemy" sounds like sound advice.
-Steve, WB3I

1880. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 08:10:32 UTC
From: slay@netcom.com
Message-ID: <slayCLKEpK.29K@netcom.com>
Source record: 270732

Patrick Tatro (patrick_tatro@stortek.com) wrote:
: When practicing for my code test I use the Morse Academy software on my
: computer. I'm finding my keyboard code speed is now 14wpm but my paper code
: speed is still at about 10 to 11wpm.
: Would the VEC's kick me out if I brought a laptop to a code test session or
: should I wait until my paper speed catches up to my keyboard speed?
: Opinions requested.
: 73's Patrick Tatro N0WCG

First - good choice on Morse Academy. Joe Speroni AH0A/7J1AAA wrote it
in order to get his XYL to become a ham (she's now an EXTRA). The
s/w is grossly over engineered - but I use it for practice as well
at >40 wpm.

Second - when I headed up the VE Team in Tokyo, Japan we would permit
examinees to use keyboards specifically because we had passed out so
many public domain versions of Joe's Morse Academy - everyone was
fully accustomed to keyboards. The ONLY problem I have seen, and
I only saw it once - is that an examinee used the spell checker in his
word processing program to check his copy. He was NOT a native
speaker of English (he was actually European, not Japanese) and
as a habit he always used the spell checker. He was quite frank
about it - never realized it was a no-no. Well, he took the test
again and passed. But that caused me to notify the ARRL/VEC to
suggest to VEs that when examinees use keyboards - the VE should
make sure that the spell checker is not used - regardless of the
fact that it would be almost useless anyway.

Cheers de Sandy WA6BXH/7J1ABV slay@netcom.com

1881. Truce b/t Jeff and Dana (was: RAMSEY FX TRANSCEIVER)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 10:16:14 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLKKJ3.K96@news.Hawaii.Edu>
Source record: 270733

In article <POPOVICH.94Feb21022855@prince.cs.columbia.edu> popovich@prince.cs.columbia.edu (Steve Popovich) writes:
>
>
>Jeff, I'm afraid you've gone 'round the bend here. This kind of
>argument went out with McCarthy, didn't it? I think you're a bit
>overzealous in desiring to {pro,per}secute "suspected illegals", too.

Sorry but it's in my blood; I had too many years of having to put up with jammers and hecklers and interference on our U.S. Coast Guard frequencies; try to work a distress while some fishing boat crew off Mexico is singing into their mic... You see, I have a MUCH different set of experiences than any of you in this matter. And a very different viewpoint, too.

As federal officers we couldn't do much other than complain to the DOT and FCC; but now as a civilian I can and will take a more active role in trying to silence these federal lawbreakers (hey - maybe I should become an O.O.)

Let me add this: Neither I, nor any of my fellow Coast Guardsmen, EVER experienced willful interference on ANY CW frequency; when it happened it occured on the voice frequencies. (Ha! a plug for CW.)

Recall the Australian ham who complained a few months back (on .policy) about 30 and 40 meters being terrorized by illegals - he fears that the Aussies will lose both bands to these people.

>
>BTW, if you're serious about wanting to work against the pirates,
>wouldn't that mean that you should read alt.radio.pirate, as Dana
>says, along with any other information you can get on them? Whatever
>the source, "Know your enemy" sounds like sound advice.
> -Steve, WB3I

Steve - the point is to get Dana off my back. I'm sorry to keep mentioning the 6mhz air-to-ground freq incident that occured on .cb but I felt that posting those freqs was wrong - dead wrong - and I voiced my opinion as such. Dana took the liberty to try to discredit me on .cb (calling me a `hamster cop') and his post made him sound as if he was defending the person (who gave out the air-to-ground channels as a gathering place for pirates); but over here he makes it sound like I'm picking on him. He did the same thing when I inquired about why someone was selling a linear amp on .cb (again calling me a hamster cop).

I'll happily call for a truce if he'll quit pestering me.
[And I don't really believe that Dana was himself ever a pirate; I

just question his motives for what appears (to me) his coming to
their defense.]

Alright, I'm QRT on this issue. dit dit

==
Jeffrey Herman NH6IL jherman@hawaii.edu, who, in his spare time, cannibalizes
old TV sets to make QRP transmitters (CW, of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500 kc CW)
NMC6 (U.S. Coast Guard Group Monterey)

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.
==

1882. personal communication Australia <-> USA

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 10:44:20 UTC
From: simonm@koel.mel.dit.CSIRO.AU
Message-ID: <1994Feb21.104420.14516@mel.dit.csiro.au>
Source record: 270734
Cross-posted to: aus.radio,rec.radio.amateur.misc

Hi,
I'm trying to find ways to communicate with my fiancee who
lives in the USA. As I was wandering around the Internet trying to
figure out how to get my computer-illiterate sweetheart onto the
Internet with real-time chatting with IRC or even "talk", I thought of
the idea of radio.

I guess I am a radio illiterate. I try and look for the FAQs,
but it's really scary doing a directory listing and thousands of files
scroll by at 9600 baud.

Is it possible at all for my fiancee and I to purchase some
radio equipment and talk to each other? The long distance telephone
bills are a killer, so I think a couple of thousand dollars worth of
radio equipment would be a good investment.

Is the implementation of my idea legal? Would we need or want
a scrambling device? Or is there some sort of "radio etiquette" out
there that requires me to talk to other radio hams and join radio
clubs and stuff... all I want to do is talk business and pleasure with
my future wife (ain't love grand)

An idea of where to start and whatto do would be helpful,
because I honestly have no clue.

If possible, please email your responses.

cheers,
--
Simon.McClenahan@mel.dit.csiro.au \CSIRO Supercomputing Support Group
CSIRO Division of Information Technology\ tel: +61 3 282 2623
723 Swanston St, Carlton 3053 AUSTRALIA \ fax: +61 3 282 2600
TRUE STORY: Man inverts singular matrix and lives to tell!

1883. Re: RF Power Amp stages, design. Help needed!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 12:30:11 UTC
From: elendir@enst.fr
Message-ID: <2ka9gj$l7o@cismsun.univ-lyon1.fr>
Source record: 270735

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <1994Feb19.123710.1@ntuvax.ntu.ac.sg> asirene@ntuvax.ntu.ac.sg writes:
: [...]
: >increased power output?
: Well it's usually not quite that simple. Sure it's possible to modify an
: existing PA to output more power. But the key things are impedance matching
: and drive levels when changing out the PA transistor for a higher power one.

Usually, the formula is : Rout = (Vcc - Vsat)^2 / Pout. It doesn't take
into account the Cout of the transistor, of course. Once you have calculated
the Rout for the current Vcc and Pout, you have to design the matching filter
to bring (up) the Rout to 50 ohms. Vsat is the saturation voltage of the
transistor.

: In fixed equipment, it's often possible to go to a higher supply voltage,
: say double that of the original stage, and if the transistor beta and drive
: level are sufficient to also double current output, then your load impedance
: can remain the same, and the output matching network doesn't have to be
: modified while your power has increased fourfold. Note however, that input
: impedance to the active device will also often be different after you change
: devices, and that has to be matched as well.

Overall, don't forget that many transistor are design to operate at 13.8 V
and not higher, so if you attempt to increase the voltage, it burns out even
if you have no ROS.

: >Another thing about transistor selection, will a VHF transistor work well in a HF
circuit?
: Device gain usually doubles for every octave reduction in operating
: frequency. VHF transistors can have so much gain at HF that stage
: stability can be hard to achieve. Other than that, for Class C operation,
: use of VHF rated transistors in HF circuits is doable. You do have to

Yes, many VHF devices are unstable at HF frequencies, because the gain is
increased while the transcapacitance increases also. The best solution is to
design a neutrodyne stage, or to carefully design the stage, thereby limiting
the oscillation. Be careful also not to be faced with parasitic VHF/UHF, as
sometimes while the transistor is stable at HF, it is unstable at VHF. So
compute the Stern factor at each frequency, and be careful also of the shift
of the matching network, which can sometimes reflect VHF with the proper phase
to make it oscillate. The best way to handle this is to insert low-pass filters
after the stage.

Vince. (12 weeks, and waiting)
--
PSG Vainqueurs de la coupe de France 1982, 1983, 1993

PSG Champions de France 1985/86 1/2 Finaliste C3: 1993
PSG PARIS SAINT GERMAIN FC --- NOTRE HISTOIRE DEVIENDRA LEGENDE.

1884. need e-mail aa6bb or ka6v/7 and qsl info sv2asp/a

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 12:37:20 UTC
From: "Andy B.Fyodorov" <rw3ah@emercom.msk.su>
Message-ID: <AA0iAQjqc6@emercom.msk.su>
Source record: 270736

Hi folks!

I would like to know E-MAIL address of KA6V/7 or AA6BB
the QSL managers of last 3Y0 DXpedition and
QSL information of Appolo SV2ASP/A.

73 thanx in advance Andy - RW3AH (rw3ah@emercom.msk.su)

1885. htx-202 audio mod (?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 13:09:50 UTC
From: ah301@yfn.ysu.edu
Message-ID: <ah301-210294080950@sy_j.pgh.wec.com>
Source record: 270737
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

I recently got an htx202 and since I've been using it, I have gotten signal reports that my audio is low. someone mentioned that radio shack will do an audio circuit mod for free if it is under warranty. anybody here knows what the mod is ? and if it can be done without taking it to the RS service center which is open only at a very inconvenient time.

jerry
N3RKD

1886. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 13:17:06 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb21.131706.14375@tellab5.tellabs.com>
Source record: 270738

In article <761496652snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>In article <CLC6Dp.Hz6@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
>
>[snips out a bunch of point-counter point hamblaster stuff]
>
> > You know, this IS starting to sound like an ad. The above exchange
> > could have been conducted via email; it sounds a bit contrived,
> > doesn't it?
> >
> > Jeff NH6IL
>
> Oh God, what next? I hope they don't start advertising frequencies on 6 MHz.
>
How can it be an ad?
The Hamblaster isn't being sold, even on the "black market"!

>
> Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
>Internet: jangus@skyld.grendel.com | a fanciful dimension to any
> US Mail: PO Box 4425 Carson, CA 90749 | story."
> Phone: 1 (310) 324-6080 | Peking Noodle Co.
>

1887. Hamblaster Update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 13:54:01 UTC
From: jwa@tellabs.com
Message-ID: <1994Feb21.135401.17403@tellab5.tellabs.com>
Source record: 270739

2-15-94

I hope that this will clear up a few questions about
the Hamblaster.

Disclaimer

This IS NOT an ad. The Hamblaster is not a product
that's being sold to amateurs or any other group.
It's a 3 year effort by myself and Will Torgrim N9PEA.
We have been doing this as a hobby, hopefully, to
improve Amateur radio. Unless we are ready to sell
the Hamblaster as a product or if we can get someone
to back us, I will continue to post our progress.

Finnally, we have spent thousands of dollars to develope
the Hamblaster and we haven't earned a single penny
for our efforts. So how can this be an ad?

The Hamblaster is not a software package. It requires a
special sound card that uses a Texas Instruments TMS320C25
DSP to run filters or audio demodulators. It can interface
to a TNC via a TTL digital port and replace the TNC's poor
filtering.

It's not compatible with other sound cards but it can
co-exist with them. I use my Soundblaster Pro and Hamblaster
together. I can, for example, run a filter on the the Hamblaster,
connect it's output the Soundblaster and record a CW signal using
the SB software under the Windows environment.

More "info"

1) External Power supply

I think one feature that separates the Hamblaster
from other sound boards is it's ability to run on
an external 12 volt supply. When a filter or modem
is loaded, you can turn off the computer and it
will stay active.

When it's connected to a PK-232, there's no need
to leave the computer on in order to keep the DSP
alive. Right now, my PK232/Hamblaster is runing
and it's been operating for about two weeks.

There still some developement work being done and
I'm told that the power supply will be on a small

PC board and sold as an option for about $20.00.

2) Adaptive (LMS) filter

There's ongoing developement in this area. We are
planing (I don't think this has been done before)
to add controls to the LMS algorithm.

Eureka! It works! 2-21-94

I just received a call from Will last night but I
wasn't home. My answer machine got it. He held
the phone next to the speaker and I heard SSB with
a carrier and some other interferance. He pressed
a button on his computer and the hetrodyne was gone.

I don't have any details about the software except
that it works. I'll keep you posted.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

1888. ftp for files

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 14:01:00 UTC
From: pat.wilson@pplace.com
Message-ID: <5c.13488.23.0N17A716@pplace.com>
Source record: 270740

In your experience, what is the best site to ftp for ham files? I am looking to fill up my phoneline bbs with amateur files. I would like to find the best sources for the newer files that come out, or is there a single source?

N0RDQ

1889. Re: Help-Best Antenna Feed Methods

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 14:55:52 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb21.145552.20957@ke4zv.atl.ga.us>
Source record: 270741

In article <xI2q2K-.jquist@delphi.com> John Quist <jquist@delphi.com> writes:
>Please give me some ideas on the best ways to feed antennas through walls,
>windows without trashing siding, walls etc. Does anyone make an energy
>efficient
>device that you can put in a window that could feed all types of antenna
>lines. Does anyone have plans for such?

As is the case with automobile antenna installations, the best advice
is to *get out the drill*, however, you can use a block of wood as
a feedthru in a window if your lease won't let you drill the wall.
Drill the wood, put it in the window, and close the window against it.
If you don't mind replacing the glass when you move, you can also just
drill the glass for your antenna feedthrus. (Note there are tricks
to successfully drilling glass. If you don't know them, consult someone
who does.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1890. Re: New 2m radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 15:24:24 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb21.152424.21097@ke4zv.atl.ga.us>
Source record: 270742

In article <dward.761767686@wyvern.wyvern.com> dward@.infi.net (Dale Ward) writes:
>OK. I need some advice. I'm returning to the air after a long absence and
>would like recommendations on what type of 2m vhf-fm radio to purchase. I
>desire portability, so that probably means an HT. In addition to brand
>names, what features should I get -- at a minimum, as well as "nice to have"
>for future operation. I travel by vehicle around the SE US, so will need to
>be able to access many different repeaters. So, what do you say?

If you travel in your own, or your company's, car, you'll be much happier,
as will all those who have to listen to your signals, if you install a
mobile rig and proper antenna rather than trying to make do with a HT.
If you use rentals, you may be stuck with a HT, or a "bagphone" equivalent
consisting of a small mobile rig such as the Icom IC229A, gell cell,
cigarette plug adaptor, and a magmount antenna. You won't have satisfactory
results with just the rubber dummy load that comes on HTs except in rare
locations, and their low power, susceptability to intermod when used with
an outside antenna, and low audio output will make you miserable in the car.

With the proliferation of 440 MHz activity in much of the country, you
may also want to consider a dualband radio. I consider Alinco the value
leader for function per dollar, but Yaesu and Icom also make good radios.
I don't particularly like Kenwood VHF radios due to a history of problems,
but others seem to think they're acceptable. If you're set on a 2 meter
only HT, then the Radio Shack HTX202 is an excellent value with good
intermod rejection. Most of the others on the market today try to pretend
that they're GP scanners as well as two way radios, and thus suffer the
problems inherent in wide receiver front ends.

My choice in my vehicle is the Alinco 590, and my HT is the Yaesu FT470.
Both perform acceptably for the uses to which I put them. I wouldn't
consider using the HT in the car, however, since it's wide front end
causes it to suffer extreme intermod when used on an external antenna.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1891. Re: UHF repeater antenna bug

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 15:53:41 UTC
From: CSLE87
Message-ID: <CSLE87-210294095341@145.1.114.19>
Source record: 270743

In article <761466217.AA09706@psybbs.durham.nc.us>,
Dave.Hockaday%f160.n151.z1@psybbs.durham.nc.us (Dave Hockaday) wrote:

>
> To: ALL
> Subj: REPEATER ANTENNA PROBLEMS...
>
> I have a situation on a UHF repeater installation that has me
> puzzled. I could certainly use any input that might be out there...
> Here are the system specifics...Antenna: Anli A-1000 (looks like the
> Diamond x-500 inside and out). We have one of these antennas down in
> Wilson, NC on the 147,30+ repeater and it performs very nicely on VHF.
> It was quite an improvement over a sick 4 bay dipole array that was
> up....Feedline: 200 feet of Andrews Heliax 7/8". The feedline is
> terminated with a UHF connector on the bottom, a jumper of RG-225
> connects the lower end of the hardline to the duplexers. The upper end
> of the heliax is terminated with a type N connector. Another short
> jumper (about 2 feet long) of RG-225 connects the hardline to the
> antenna. The antenna is mounted on top of a 150 foot tower.

I don't recognize RG-225 by number - are you SURE that it is 50 ohms?

> At the duplexers, looking up through the first rg-225
> jumper/hardline/jumper/antenna I see about 22 watts out with about 5
> coming back(!!).

SERIOUS TROUBLE HERE!!

> This is measured with a URM-120 mil-spec directional
> wattmeter...a Daiwa uhf swr meter sees about 2.5:1(!).

Don't condemn the wattmeter yet - it has a different length
pickup element and is probably telling the truth.

> Now, if I move
> the URM-120 to the hardline input (immediately after the first jumper)
> I see about 28 watts out with 3 coming back and about 1.7:1 on the
> Daiwa. I climbed the tower, terminated the hardline at the top with a
> 50 ohm dummy load that's good to 1 ghz, came back down, pumped 20 watts
> on UHF directly into the hardline at the bottom. I measured about 11
> watts making it out the top (the specs for at 450 mhz are about
> 2.8db/200 ft)...about right for the length...

Critical measurement missing... what was the apparent VSWR
when you had the 50 ohm pure resistive termination on the end
of the line? It should have been 1.0 if the cable and wattmeter
are both good, and I'll bet both wattmeters would show 1.0.

> It seems to me that the
> feedline impedance is more like either 38ish or 75ish ohms with that
> type of response...The antenna measures flat at the feedpoint, but the
> rest of the system is a bit nutty. With the reflected power at
> the duplexers, I'm having a little desense.

If you measured the antenna VSWR with both meters DIRECTLY at
the base of the antenna, what did each of them show? You should
have gotten 1.0 with both meters, telling you that the top
jumper cable was bad.

> Any ideas on the problem?? It really has me stumped...Oh yeah, if I
> vary the length of the jumper at the top between the hardline and
> antenna, the reflected power and swr at the bottom runs all over the
> place!! Please help if you have any input. 73 de WB4IUY
> ___
> X OLX 2.2 X "What ?!? This isn't the file section ?!?"

Your last statement tells all. If the SWR varies that much
with cable length, you definitely DO have a high VSWR in the
antenna. I suspect you took a lightning hit and smoked the
antenna. The lightning probably melted out the solder joints
between the coaxial sections that make up the antenna, so it
still radiates, but with the main lobe nowhere near the horizon.

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

Some of the opinions expressed above aren't even claimed by the author!
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

1892. ARLP007 Propagation de KT7H ZCZC

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 16:18:25 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlp007.1994@ampr.org>
Source record: 270744
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB PROP @ ARL $ARLP007
ARLP007 Propagation de KT7H ZCZC
AP21 QST de W1AW Propagation Forecast Bulletin 7 ARLP007
radio amateurs

Unstable geomagnetic conditions finally started settling down this week. A very disruptive coronal hole in the Sun's Southern hemisphere was the cause of all the grief. Conditions may worsen again on the day this bulletin is released, and again around March 6 when the recent disruptive region rotates back into view on the solar disk.

Look for flux values to drop after this weekend, reaching a minimum around 85 on March 2 or 3.

For the DX contest this weekend, look for a flux between 100 and 105, and A and K indices dropping after Friday.

Sunspot Numbers from February 10 through 16 were 49, 49, 53, 72, 59, 59 and 71, with a mean of 58.9. 10.7 cm flux was 94.2, 93.1, 97.6, 97.8, 101, 103.8 and 104.7, with a mean of 98.9.

The path projection for this weekend is from Orem, Utah to Bolivia.

80 meters should be open from 0100z to 1030z, with the best signals around 0300z. 40 meters should be open from 0030z to 1130z, with the best conditions from 0100z to 1000z. 30 meters should be good from 2330z to 1200z, with the best signals from 0130z to 1000z. 20 meters should be good after 2200z until 0230z on most days, until 0530z on some days, and on a few days until 0800z. The peak period for 20 meters should be from 0000z to 0230z. 17 meters should be open from 1430z to 0200z, with the best time around 2230z to 0130z. 15 meters should be open from 1530z to 0030z, with the best signals late in that period. 12 meters looks good from 1600z to 2300z. The best signals on 10 meters should be around 1800z, with a possibility of openings from 1700z to 2200z on most days. On some days 10 meters could open as early as 1500z and close as late as 0130z.
NNNN
/EX

1893. Re: A transmission line loss question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 16:21:21 UTC
From: CSLE87
Message-ID: <CSLE87-210294102121@145.1.114.19>
Source record: 270745

In article <CLG4pu.5vw@hpcvsnz.cv.hp.com>, tomb@lsid.hp.com (Tom Bruhns) wrote:

> I have a perverse question about feeding an antenna with a coaxial
> transmission line. This is intended as food for thought. (You've
> been warned ;-)
>
> Assume you have a 50 ohm antenna you want to use on a single
> frequency in the two meter band. You will be feeding it with
> about 100 feet of coax, which will be cut to an exact integer
> multiple number of half-wavelengths on the operating frequency.
> Which of the following two transmission lines will you choose
> to give lower loss?
>
> A. 50 ohm air-insulated copper line with 1" OD
>
> B. 75 ohm air-insulated copper line with 1" OD -- in other
> words, same line as in (A), but a smaller center conductor.
>
> 73, K7ITM

This one comes under the "Brain-Teaser of the Month" category.
However, the solution is not that difficult. The 50 ohm cable
will always exhibit 1.0 VSWR at the radio end, since it has
the same impedance as the antenna.

The 75 ohm line will have more than double the I^2*R losses
(VSWR^2 = 2.25) because the peak current is 1.5 times that of 50
ohm cable.

AND NOW REALITY ENTERS THE PICTURE:
To make things even worse for the 75 ohm mismatched cable, the
difficulty of adjusting the line length as the copper expands
and contracts with ambient temperature is aggravated by the black
plastic jacket that raises the temperature during summer sunlight
but does not help during winter nights. Therefore the transmitter
sees a load phase angle that varies with outdoor ambient
temperature as the 75 ohm physical line changes electrical length.

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

Some of the opinions expressed above aren't even claimed by the author!
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN

1894. IRC questions ...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 16:27:47 UTC
From: tavernin@sun1.interlan.com
Message-ID: <CLL1qB.KBs@rd1.InterLan.COM>
Source record: 270746

How many Internation Reply Coupons are need for return postage of a
QSL card ... does the number of IRCs differ from country to country?
or is one IRC all that is necessary to send?

Thanks,

Victor Tavernini, KE4JMY
Racal-Datacom, Inc.

tavernin@sun1.interlan.com

1895. Re: callsign server info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 16:32:47 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <CLL1yn.Jlr@cscsun.rmc.edu>
Source record: 270747

Scott Ehrlich (wy1z@netcom.com) wrote:
: telnet callsign.cs.buffalo.edu 2000

: also

: telnet electra.cs.buffalo.edu 2000

: Same system.

As a system admin, I think you'll be doing the folks at Buffalo a major
favor by using the alias they've set up. It is there for two reasons:

1) So that it'll be easy to remember. Callsign is pretty discriptive.

2) So that they can change the underlying real machine if they need to.
You won't see the switch if you use the published alias. If you
insist on using the real name, you'll be out of luck. You'll also
either have to waste bandwidth here or to the guys at buffalo to
see if it still works or whatever. Please use the alias!!!!
--
David Tiller | Network Administrator | Voice: (804) 752-3710 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
"Drunk, [Beowulf] slew | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
no hearth companions." | Ashland, Va 23005 | 77d 31' 32.19" W |

1896. MOTOROLA MITREK

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 16:34:45 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <1994Feb21.163445.3119@umr.edu>
Source record: 270748

Does anyone have ant experiance, hints, or tips on converting a Motorola Mitrek VHF band radio into a repeater?

I would appreciate any comments.

Thanks, N0WFL Scott Sidener sidener@crunch.nuc.umr.edu

1897. Jef Harmon (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 16:48:20 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-210294094730@waters.corp.mot.com.corp.mot.com>
Source record: 270749

In article <CLJo0C.9t6@news.Hawaii.Edu>, jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) wrote:

> In article <2jqtltINNkan@abyss.West.Sun.COM> myers@pongo.West.Sun.COM (Dana Myers) writes:
> > .....
> >By the way, be sure to read alt.radio.pirate; .....
>
> _NOW_ I understand your stance, Dana; now I understand why you continue to
> come to the defense of suspected illegals.
>
> Hmmm, I wonder if there might be a bit of piracy in your past. That might
> explain your defending those I chastise for promoting illegal operations.
> Maybe you're feeling a little guilty?
>
> And don't say ``Get over it Jeff'' because now I will always suspect your
> past.

I have to wonder if there is a living person who's past Jef *doesn't* suspect?

How is your potty patrol going Jeff? Still finding nastly people misbehaving in the bathrooms at U of H?

1898. Re: Callsign allocations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 17:00:21 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2kapb5$ess@bigfoot.wustl.edu>
Source record: 270750

hamilton on BIX (hamilton@BIX.com) wrote:
: oo7@astro.as.utexas.edu (Derek Wills) writes:

: >hamilton@BIX.com (hamilton on BIX) asks:

: >>>But what can you do to lookup an international callsign? I'm not
: >>>aware if there's even an ascii text file out there someplace that would
: >>>allow me to do even the simplest lookup of the prefix to determine
: >>>what country it's from. (This month's CQ contains such a list, but
: >>>you can bet I'm not ready to key it in myself. :-)

: >>>What machine-readable resources are available for looking up international
: >>>calls?

: > Don't people read words and books by eye any more? The ARRL log
: > books and many other sources have all this information listed on
: > a couple of pages - you know, printing on paper. When you hear
: > an unfamiliar callsign, you look at the piece of paper. It's
: > much like looking in a dictionary - a real book, that is, not an
: > "on-line word source".

: > Can you tell that I was born before computers became popular?

: Thank you for your helpful, warm remarks.

: NOT!!

: Look, let's not be a jerk. It should have been clear from my post,
^^^^^^^^^^^^^^^^^^^^^^^^

I think this goes for you too, Doug. His response didn't look too much
like a flame; don't turn this into a flame war. Remember that everybody
is entitled to his own opinion, even if it isn't the same as yours.

: which in its original form mentioned that I had a listing from this
: month's CQ but that I really wanted something in electronic form,
: that if I wanted something on paper, I already had it. The reason
: I like things in computer readable form is because my office is
: absolutely overflowing with paper! If I go away for a week, the
: amount of new paper that arrives in the mail will more than fill
: one of those boxes Hammermill uses for 10 reams of copy paper.
: We're talking about a serious problem with too goddam much paper!

I hope you're recycling!!! You can *really* save some trees out there.

: Yours,
: Doug Hamilton hamilton@bix.com Ph 508-358-5715
: Hamilton Laboratories, 13 Old Farm Road, Wayland, MA 01778-3117

1899. c

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 17:16:50 UTC
From: ic5@unix.brighton.ac.uk
Message-ID: <1994Feb21.171650.13497@unix.brighton.ac.uk>
Source record: 270751

```
--
*****************************************************************************
* *
* There`s only one way of life.... Ian Connelly, *
* And that`s your own.............. BSc (Hons) Computer Science Yr2. *
* University of Brighton. *
* ic5@uk.ac.brighton.unix *
* *
* Forget the disclaimer, I`m always wrong. *
*****************************************************************************
```

1900. Ramsey debate

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 17:34:18 UTC
From: JMG@tntech.edu
Message-ID: <01H9588FB5AWEGO7NI@tntech.edu>
Source record: 270752

Haven't felt it was appropriate to get back in the
middle of the debate, but I was very offended at the comments made
directly at me. People on the network and across the country know me..
I have never had anyone call me a liar, and to my knowledge haven't
had any problems with anyone I have personally dealt with
(giving and receiving information, and buying and selling equipments).
I have people calling many nights during the week to ask for help and
ask general questions.. haven't had a problem with any of them.

I am always most willing to "look in the mirror". Been happy with what I
see. What I related on the net was a documented experience I had with
John Ramsey, no more, no less. It was based on facts not fiction and had
nothing to do with his personal being outside the realm of my experience
with him. When I called him a "liar" I think I specifically related the
lie he told me.. this seemed reasonable. I was also very offended that
he was saying things to customers on the phone that were negative about
me (also documented). In contrast, I don't know of an instance where I
have lied to ANYONE... it is not something I think is a good attribute
and never do it knowingly. I think I was not negative about the building
of the Ramsey kit and remember specifically saying I thought the
building of it was in fact fun up till the final alignment (so please be
accurate when you attempt to call someone a liar with absolutely no
information).

I know I am not in the least guilty of any immoral or unprofessional
behavior...and think it may be time to let this drop.. I was just trying
to relate an experience to help people avoid problems I personally
encountered. I have heard MANY other people relate problems with this
company or I would have not said anything to start with.

73.. this is suppose to be a supportive, fun hobby .. isn't it.

Jeff, AC4HF (and proud of it)

1901. RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 17:45:50 UTC
From: jangus@skyld.grendel.com
Message-ID: <761852750snx@skyld.grendel.com>
Source record: 270753

In article <CLJo0C.9t6@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu spews:

[nothing of importance as usual]
>
> Jeff NH6IL
>

For Christs sake Jeff. Give it a fucking rest.

I voted for Bush both times, how about accusing me of murder since I had
a hand in electing the Commander in Chief that ordered Desert Storm?

By the way, lists of frequencies used by various agencies are published
in books and magazines in most electronics type stores. How about telling
me that Radio Shack promotes jamming the police. Heh?

Tom Kneitel (spelling?) pushes his frequency compendium by splattering
the word SECRET in 3" high caps across the cover. How about it? Is he
promoting jamming various services? Perhaps instead he could be accused
of aiding and abetting drug dealers by publishing the DEA comm channels.

Since you seem to have to have the last word, and constantly stir up shit
over non-issues how about we create a new newsgroup for you.

rec.radio.pendantic

Simple and efficient. You can cover amateur, CB and commercial without
cross-posting. You might even get a few of the others with a flair to
the verbose to join you over there.

Bottomline disclaimer for the humor impaired. Yup, I used the F-word.
If you're too lazy to scan the news before forwarding it onto the RF
via packet, it's your problem, not mine. Re-read your copy of part 97.

Side Note: How many remember Uncle Toms Cabin in Popular Electronics?

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

1902. More Amateur spectrum going to Industry?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 18:11:52 UTC
From: bruce@pixar.com
Message-ID: <1994Feb21.181152.11320@pixar.com>
Source record: 270754

> From: millar@nhqvax.sanders.lockheed.com (Jeffrey R. Millar)
> Subject: Industry gets more Amateur Spectrum
> Message-ID: <millar.77.000832F7@nhqvax.sanders.lockheed.com>
> Date: Thu, 17 Feb 94 13:12:39 GMT
>
> The Commerce Dept, in conjunction with DoD plans to give 200 MHz of spectrum
> space in the 1200 - 4800 MHz area to industry. This includes 2300-2310 and
> 2402-2417 MHz. One annoying aspect, the 2402-2417 MHz segment goes to
> industry in August 1994 without a comment and review period.
>
> We need to gear up to fight this. Without a 2400 MHz allocation, repeaters
> in this band won't work.

This is an NTIA study (see other postings). The comment period runs through May. I don't know when the FCC gets involved, but I would assume they have to be involved at some point.

We should indeed mobilize to prevent industry use on this band. A key part of this would be to present the history of sharing with industry on 900 MHz, which has resulted in a near exclusion of Amateur traffic from the band.

I would think that the performance of ARRL is going to be critical on this one (please everybody hold the pessimism postings - I know, but they are all we have). Would anyone from ARRL like to post on this?

Thanks

Bruce Perens

1903. DJ-580 modifications

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 18:13:23 UTC
From: gereiswi@nmsu.edu
Message-ID: <2katk3INN69@dns1.NMSU.Edu>
Source record: 270755

I just purchased an Alinco DJ-580 which has already been modified
to recieve aircraft down to ca. 120 MHz on VHF and 810-900MHz on UHF. Are
there any other interesting mods that I might be able to do?
Also, there is a plug for "stereo out" (VHF left channel, UHF
right). When I plug this in, using a standard stereo jack, there is an
occasional squeeling noise. The mono jack does not do that. Suggestions?
Thanks in advance,
George

1904. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 18:58:35 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <CLL8pn.LAM@cscsun.rmc.edu>
Source record: 270756

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <2970520692.0.p01258@psilink.com> TJA@Panix.Com writes:
: >>
: >>Would the VEC's kick me out if I brought a laptop to a code test session or
: >>should I wait until my paper speed catches up to my keyboard speed?
: >
: > I run the VE sessions for our local club here in Stamford, CT
: >and using a laptop is perfectly fine in a word processor or editor mode.
: >You may just have to show it to them first. If they give you are hard time
: >just fly out here and we'll let you use one!

: Or bring in your Royal or Smith Corona portable typewriter. Even the FCC
: allowed you to copy by mill back in the 1960s.

I agree in principle, but wouldn't that be a little loud and distracting
for the others? A pc keyboard is loud enough! How about cheating? What
would stop a dishonest person from peering at the keyboard as the characters
were typed?? Inquiring minds, and all that....
--
David Tiller | Network Administrator | Voice: (804) 752-3710 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
"Drunk, [Beowulf] slew | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
no hearth companions." | Ashland, Va 23005 | 77d 31' 32.19" W |

1905. WARNING UPDATE: Satellite Anomaly Warning Update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 19:05:40 UTC
From: oler@rho.uleth.ca
Message-ID: <9402211905.AA25146@rho.uleth.ca>
Source record: 270757
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

POT

UPDATED: 15:00 UT, 21 FEBRUARY

/\

ATTENTION:

Protons at greater than 10 MeV peaked at 10,000 pfu shortly after the
arrival of a large interplanetary shock front at 09:00 UTC which measured 93
nT at ground-levels. Protons have since fallen and are expected to fall
below event levels of 10 pfu by the end of the UTC day.

Geosynchronous satellites are experiencing magnetopause crossings and
can expect to see additional magnetopause crossings throughout the remainder
of this UTC day. This disturbance is fairly energetic.

** End of Warning **

1906. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 19:17:31 UTC
From: kg7bk@indirect.com
Message-ID: <CLL9L8.5AM@news.direct.net>
Source record: 270758

Jesse L Wei (jlw3@cec2.wustl.edu) wrote:

: I only hope you're arguing (well maybe just contradicting) just for the
: sake of doing so. --jesse

Hi Jesse, my server died and my last posting apparently didn't make it. This original posting was pure sarcasm, I called it ridiculous in the posting, and I never, never thought anyone would take it seriously. I appologize to anyone who did. The whole purpose was to hand Jeff a mirror.

73, Cecil, kg7bk@indirect.com

1907. Re: Ramsey mod list? (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 19:19:40 UTC
From: kg7bk@indirect.com
Message-ID: <CLL9ot.5CD@news.direct.net>
Source record: 270759

: Someone has set up a library of mods including those for the FXs and I just
: can't remember where it is but it was no more than a couple of weeks ago.

The Ramsey mods are on world.std.com under /pub/hamradio/mods/ramsey

73, Cecil, kg7bk@indirect.com

1908. TS830s FOR SALE!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 19:48:42 UTC
From: ahall@ux4.cso.uiuc.edu
Message-ID: <2kb36q$o4k@vixen.cso.uiuc.edu>
Source record: 270760

Hello everyone,

Have to get this off quick, or I'll be late to class.

Synton Amateur Radio Club of the University of Illinois at Urbana Champaign,
is selling off it's old equipment in the hopes of bettering it's
DX station.

Help us get a great rig!

TS-830s --> $550 starters.

Give me an e-mail message!!!

73's
Allen Hall
n9rzc@uiuc.edu
Pres. Synton Amateur Rado Club UIUC

1909. Re: A transmission line loss question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 20:16:21 UTC
From: barnaby@world.std.com
Message-ID: <CLLCBB.37M@world.std.com>
Source record: 270761

CSLE87 (Karl Beckman) writes:

>In article <CLG4pu.5vw@hpcvsnz.cv.hp.com>, tomb@lsid.hp.com (Tom Bruhns)
>wrote:

[Perverse Question re 50 vs 75 ohm coax deleted]
[Answer to perverse question deleted]

>AND NOW REALITY ENTERS THE PICTURE:
>To make things even worse for the 75 ohm mismatched cable, the
>difficulty of adjusting the line length as the copper expands
>and contracts with ambient temperature is aggravated by the black
>plastic jacket that raises the temperature during summer sunlight
>but does not help during winter nights. Therefore the transmitter
>sees a load phase angle that varies with outdoor ambient
>temperature as the 75 ohm physical line changes electrical length.

Sheesh Karl,
As a "computer guy" trying to get reacquainted with radio after 25 years
in the digital (read virtual) world. I'm feeling a bit queasy back here
in analog world, having to be concerned with the temperature and color
of the plastic jacket. Ya know, a compendium of this stuff would be
just great for explaining those random problems computers experience
that we can't explain:
The color of the cable is wrong
The phase of the moon is not right
Gamma rays
etc.
I never cease to be amazed at the little things.
Thanks for your post
Barnaby barnaby@world.std.com AA1IB

1910. Re: repeater list

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 20:41:08 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Feb21204108@mipgsun.mipg.upenn.edu>
Source record: 270774

>The ARRL is making empty threats. The data in the repeapter directory is
>no more propiratary than the information in the phone book. In fact Wayne
>Green was putting out a directory before the ARRL and they stole it from
>him according to Wayne.

Well, the ARRL might very well be making empty threats but the fact
remains that THEY can pay more for lawyers than I can; the ARRL is not
threatening the body of amateurs in general but ME specifically. Even
if they are entirely wrong, I am instantly bankrupt when they file a
suit and I have to hire a lawyer to defend me. Since they have the
bigger stick, they can do absolutely anything they want. Thus, I am
forced to put the online repeater database project on hold until such
time as this matter is clarified. Innovation through litigation.

I have asked the folks over at ARRL HQ for a clarification about their
letter. In particular, I ask whether they believe that they have
proprietary control over the FACTS of the database. More ominously,
they also claim that my format in some way infringes upon their
copyright. While this might require only a small adjustment in the
data format, their letter is not clear to me; they may be claiming
ownership to the entire idea of organizing repeater information by
state, location, frequency, etc.

Until such time as the ARRL replies to my queries, or I can figure out
some way around their legal threats, the project is on hold.
Effectively, I must obtain ARRL permission before I can continue and
it probably is not in their best interest to have someone come up with
a usable alternative to their directory.

>Fortunatly there is an answere in the American
>Civil Liberties Union. Give them a ring or if you don't want too I will
>and get their oppinion. The ACLU scares the shit of anybody they bring
>their guns to bare on.

While this is indeed one possibility, the problem is that I must
continue and risk legal exposure. I must rely on the ACLU to be
willing to defend me and I must hope that the legal system indeed will
end up ruling my way. Until a court rules, the ACLU opinion is just
that- an opinion. While I am definitely incensed at the ARRL for
their actions (and I am a member also), I am not sure I care about
this project enough to risk everything.

To be honest though, I am curious what the ACLU thinks of the matter.
Prior to starting on this project, I did ask for an opinion on the
matter and was told that the ARRL holds a copyright on the format but
not on the data itself since FACTS can not be copyrighted.

1911. Post quake repeater integrity

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 21:01:17 UTC
From: vinpic@netcom.com
Message-ID: <vinpicCLLEE8.5op@netcom.com>
Source record: 270762

Would appreciate hearing from anyone with experience using repeaters in the Los Angeles area just after the earthquake. Did they hold up as a reliable means of disaster commnuications?

--
Peter Douglas vinpic@netcom.com
President Vincent Pictures, Los Angeles

1912. repeater list

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 21:03:39 UTC
From: gcouger@olesun.okstate.edu
Message-ID: <1994Feb21.210339.16580@osuunx.ucc.okstate.edu>
Source record: 270763

The ARRL is making empty threats. The data in the repeapter directory is no more propiratary than the information in the phone book. In fact Wayne Green was putting out a directory before the ARRL and they stole it from him according to Wayne. It's a shame that the ARRL (I am a member) can think just because they have fuzzy balls they can threaten person with no means of hiring council. Fortunatly there is an answere in the American Civil Liberties Union. Give them a ring or if you don't want too I will and get their oppinion. The ACLU scares the shit of anybody they bring their guns to bare on.
Gordon AB5Dg

1913. Re: IRC questions ...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 21:08:16 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-210294140407@waters.corp.mot.com.corp.mot.com>
Source record: 270764

In article <CLL1qB.KBs@rd1.InterLan.COM>, tavernin@sun1.interlan.com
(Victor Tavernini) wrote:

> How many Internation Reply Coupons are need for return postage of a
> QSL card ... does the number of IRCs differ from country to country?
> or is one IRC all that is necessary to send?

One IRC is first class (surface) postage from any IPU country to the US.
Note that not all countries belong to the IPU (International Postal Union).

For most countries you really want air mail, and that is where things get
difficult. The Air Mail rate ranges from 2 to 10 IRCs depoending on the
country (of course the ones where surface mail is awfull want 10 IRCs :-)

This changes from time to time, so you need to check the K6JO (?) QSL
managewr list or a recent callbook for the latest info.

BTW *never* buy IRCs fromthe post office, send a check for $10 to a QSL
manager and ask to buy some IRCs - he gets more than the post office will
give him and they cost you less! When I last did that they were around 30
cents apiece that way.

Good DX! Mike AA4MW

1914. IPS Daily Report

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 23:05:59 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Feb21.230559.11770@ips.oz.au>
Source record: 270765
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 21 February 1994
Summary for 21 February and Forecast up to 24 February
IPS Warning 06 was issued on 17 Feb and is current for
interval 20-23 Feb.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 105/054

1B. SOLAR FORECAST
22 February 23 February 24 February
Activity Low Low Low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 105/054

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : major storm

Estimated Indices : A K Observed A Index 20 February
Learmonth 45 2126 6664
Fredericksburg 54 13
Planetary 60 13

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
22 Feb 50 Minor storm.
23 Feb 35 Active to minor storm.
24 Feb 20 Active to minor storm.

2C. MAGNETIC COMMENT
Shock in field was observed at 0900Z 135nT. Major storm levels
observed after shock. Shock due to M4 flare.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH

21 Feb fair-normal fair-normal poor-fair
PCA Event : In progress.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
22 Feb poor poor poor
23 Feb fair poor poor
24 Feb normal fair poor
3C. GLOBAL HF PROPAGATION COMMENT
Continuing geomagnetic activity is degrading global HF propagation
conditions. PCA event has degraded high lat HF comms.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were 10-20% enhanced until dawn then depressed 10-20%

T index: 64

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
22 Feb 0 About 20% below predicted monthly values.
23 Feb 15 About 15% below predicted monthly values.
24 Feb 20 About 15% below predicted monthly values.

Predicted Monthly T Index for February is 30.

4C. AUSTRALIAN REGION COMMENT
Degraded and depressed HF conditions are expected over the next
three days due to recurrent/flare and dissappearing filament
activity.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

1915. Re: repeater list

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-21 23:21:04 UTC
From: timi@mendel.berkeley.edu
Message-ID: <timi-210294152104@kos4mac22.berkeley.edu>
Source record: 270766

In article <1994Feb21.210339.16580@osuunx.ucc.okstate.edu>,
gcouger@olesun.okstate.edu (Gordon Couger) wrote:

>The ARRL is making empty threats. The data in the repeapter directory
>is no more propiratary than the information in the phone book. [...]

There is only one thing to worry about. While the information in the
ARRL directory is public domain, the info in the online database
directory was collected by the ARRL. I would worry that using this
information without permission would be like copying a road map
without paying the map's publisher.

This is not to say that we can't "reverse-engineer" ARRL's directory.
We could get the information from the regional repeater coordinators.

[...]
> The ACLU scares the sh*t of anybody they bring their guns to bare on.
[...]

The threat of a hundred naked ACLU lawyers waving the flip side of
their hinnies at you is enough to scare anyone. =%^O
But I think that having ACLU lawyers bringing their expertise "to
bear" on the problem would be effective too.

The ACLU might be interested. It is a case of a private organization
attempting to privatize and limit access to information that is in
the public domain.

- Tim Ikeda (timi@mendel.berkeley.edu)

1916. Re: HTX-202 or HTX-404

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 02:27:07 UTC
From: jtriolo@delphi.com
Message-ID: <9402212125593.jtriolo.DLITE@delphi.com>
Source record: 270767

>I am a scanner enthusiast, and am now interested in getting into amateur
>radio since listening to the local "hams" on my scanner. I have
>a couple quick questions, some of which may even be in a FAQ if it exists,
>but I'll throw them all out here, since I know you are the people to ask.
>
>1) To get started, I'm considering a portable that I can get quick. I'm
>considering the RS HTX-202 and HTX404, but I don't know the difference
>between the two "bands", which is more active, which is better.

You will get more use out of the HTX-202 2m radio (144-148MHz). In most cities, 2 meters is considerably more active than 70cm (440MHz, what the HTX-404 covers). Here in the Richmond area, there are about 12 2m repeaters, compared to 3 or 4 70cm machines. However, if you live in a larger city, you'll find that the two bands are fairly even. That seems to be the case up in Ohio.

>2) I often hear about amateur repeaters. I know what a repeater is, and
how
>it works, but is my understanding that there are repeaters installed for
>use by amateur radio operators correct. Who installed them, who can use
>them, and what does it cost.

Any amateur operator with a Technician Class license or higher can set up a repeater. All you need is a tower site, a coordinated repeater pair (Where this pair comes from depends on what part of the country you're in), and a lot of equipment. Most importantly, it takes lots of money, which is why the majority of repeaters are supported by clubs.

>3) Finally, my wife works near Dayton, Ohio during the week, and we live
>near Toledo. If we both had HT-202 or HT-404 's, could we communicate
>with each other. Not without repeaters, I'm sure, so I guess this question
>involves the repeater questions.

A good repeater would be the key to talking between Dayton and Toledo. Just one repeater wouldn't do the trick, but there is an extensive netowrk of repeaters throughout the state where you could talk between the two cities.

Hope this helps!

Jason D. Triolo -- Colonial Heights, VA | ----------
Amateur Radio: KD4ACG | This space for rent.
Internet : JTRIOLO@delphi.com | Call today!
Fidonet : 1:264/219.1 | ----------

1917. Re: Repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 02:27:31 UTC
From: jtriolo@delphi.com
Message-ID: <9402212125594.jtriolo.DLITE@delphi.com>
Source record: 270768

>- Can repeaters in fact be used to place local telephone calls? If so,
> is there a charge for this service? Is it limited?

Yes. Some repeaters have autopatch capability. Most of those are club-sponsored repeaters which require you to support the club for autopatch access. Of course, business calls are prohibited, and you must keep in mind that everyone is listening to your call! The club I'm with here in Richmond limits your call to 3 minutes, and aside from club dues, local calls are no extra charge. For those of us who are a long-distance call between the repeater and our homes, they cover $1.00 of the long-distance charges. Check with some of your local radio clubs to find out what their policies are.

>- What are the legal restrictions on amateur radio traffic? Are data
> connections allowed?

Data conections are allowed. It's called packet radio. Some packet links are even connected to the Internet. Listen around 145.000 to 145.100MHz. You may hear an occasional packet burst down there.

>- What baud rate could I reliably connect at through a radio link?
>

On the 2m band, most links are 1200 baud, which is sufficient for local communication. Many sites that forward large amounts of traffic are experimenting with 9600 baud connections.

Hope this helps!

73 de Jason, KD4ACG

Jason D. Triolo -- Colonial Heights, VA | ----------
Amateur Radio: KD4ACG | This space for rent.
Internet : JTRIOLO@delphi.com | Call today!
Fidonet : 1:264/219.1 | ----------

1918. Re: Callsign allocations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 02:27:47 UTC
From: jtriolo@delphi.com
Message-ID: <9402212125595.jtriolo.DLITE@delphi.com>
Source record: 270769

>> Don't people read words and books by eye any more? The ARRL log
>> books and many other sources have all this information listed on
>> a couple of pages - you know, printing on paper. When you hear
>> an unfamiliar callsign, you look at the piece of paper. It's
>> much like looking in a dictionary - a real book, that is, not an
>> "on-line word source".
>
>> Can you tell that I was born before computers became popular?

I'm GLAD that I don't have to invest in a $30.00 callbook (well, $60.00, for both North America and DX). They're out of date before they're ever in your hands! It's much cheaper for me to telnet to a more updated site than throw away an obsolete $30.00 book. The telnet sites are also more detailed!

Jason D. Triolo -- Colonial Heights, VA | ----------
Amateur Radio: KD4ACG | This space for rent.
Internet : JTRIOLO@delphi.com | Call today!
Fidonet : 1:264/219.1<-out of svc. | ----------

1919. selcal13.zip - Hams: Maritime SITOR selcall translator v1.3

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 02:32:45 UTC
From: wtpz2234@servus.rus.uni-stuttgart.de
Message-ID: <9402220232.kp5742@SimTel.Coast.NET>
Source record: 270770
Cross-posted to: comp.archives.msdos.announce,rec.radio.info,rec.radio.amateur.misc

I have uploaded to the SimTel Software Repository (available by anonymous
ftp from the primary mirror site OAK.Oakland.Edu and its mirrors):

pub/msdos/hamradio/
selcal13.zip Hams: Maritime SITOR selcall translator v1.3

SELCALL is a translation program to translate selective calling signals
of the maritime mobile service (MMS) CCIR 476-3 SITOR radio teletype
service between their numeric values and printable 4-letter-represen-
tations. The ZIP-file contains an EXE, a TPU and a DOC file.

Changes: Program now knows about coast stations, enhanced documentation.

Uploaded by the author. selcal13.zip has replaced selcal12.zip.

73,

Ralf
- -
Ralf Kloth
dl4ta@db0lx (packet radio bbs)
wtpz2234@servus.rus.uni-stuttgart.de

1920. Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 02:43:44 UTC
From: baxter@kuhub.cc.ukans.edu
Message-ID: <1994Feb21.204344.59186@kuhub.cc.ukans.edu>
Source record: 270771

This past month, Honda sent out a recall notice for their 90-91 Accords. They were wanting to replace a part in the distributor which failed when the car got high mileage.

I had this recall work done on my car a couple of weeks ago, and now have terrible ignition noise on 2 meters and 440. Before this work had been done, the ignition had been really quite quiet -- now it is nearly unbearable.

One fellow ham said the thought that he'd read something about this on packet or in one of the ham magazines.

Has anyone else had this problem? The local Honda folks seem lukewarm about fixing this problem they created, probably because theyt really don't understand it.

Any one dealt with Honda about this problem?

Thanks.

Kirk Baxter, N0FPZ/VK1KU

1921. Re: PSE HELP regarding my CBA '94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 03:17:20 UTC
From: Leland Van Koten <leevankoten@delphi.com>
Message-ID: <psxl2bA.leevankoten@delphi.com>
Source record: 270772

Thomas Planke <planke@hekla.Systemtechnik.TU-Ilmenau.DE> writes:

>After the change of callsigns in (East) Germany I don't know
>whether my callsign is noticed with the correct address or not
>in the international part of the CallBook
>and whether my old callsign Y32JK is still included.

Thomas -- The Y32JK call is not listed (at least so far as I can find). In fact, none of the old GDR calls seem to be listed in this year's edition.

The address for the DL5ATP call is listed as Thomas Planke, Postfach 113, D-98693 Ilmenau. Hope this is one is correct!

73 de Lee/KE3FB in Maryland
leevankoten@delphi.com

1922. Satellite progs on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 04:14:06 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLLyFJ.IpF@netcom.com>
Source record: 270773
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc

I have now placed some satellite tracking programs on World:

- stsplus.zip

- stsorbit.zip

- traksat {trak300a.zip & trak300b.zip} (latest version of traksat)

They are available via anonymous FTP via

ftp ftp.std.com:/pub/hamradio/pc/satellite

If you have any problems, questions, or comments, please e-mail them to me.

I tried very hard to search for stsplus through many archie searches, and
only found one site which carried it. I hope that by making it available
on World it will be easier to obtain.

73,
Scott, WY1Z

```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
================================================================================
```

--


```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
================================================================================
```

1923. Re: Jef Harmon (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 05:04:15 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLM0r4.EJG@news.Hawaii.Edu>
Source record: 270775

In article <rcrw90-210294094730@waters.corp.mot.com.corp.mot.com> rcrw90@email.mot.com (Mike Waters) writes:
>
>I have to wonder if there is a living person who's past Jef *doesn't*
>suspect?
>
>How is your potty patrol going Jeff? Still finding nastly people
>misbehaving in the bathrooms at U of H?

Who's Jef?

Yeah, those `guys' are still passing their diseases to each other in the restrooms on campus. The campus police are finally starting to arrest them for lewd conduct and solicitation.

I guess I should have put a smiley or two in the rec.radio.pirate post. I really don't believe that Dana has ever done anything illegal. Him and I will never see eye-to-eye on some things.

QRT. dit dit

73 Mike,
Jeff NH6IL

1924. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 07:49:32 UTC
From: holdwick_marc@macmail1.rtsg.mot.com
Message-ID: <holdwick_marc-220294134932@mac-am-47.cig.mot.com>
Source record: 270776

In article <1994Feb21.204344.59186@kuhub.cc.ukans.edu>,
baxter@kuhub.cc.ukans.edu wrote:

> This past month, Honda sent out a recall notice for their 90-91 Accords.
> They were wanting to replace a part in the distributor which failed when
> the car got high mileage.
>
> I had this recall work done on my car a couple of weeks ago, and now have
> terrible ignition noise on 2 meters and 440. Before this work had been
> done, the ignition had been really quite quiet -- now it is nearly
> unbearable.
>
> Kirk Baxter, N0FPZ/VK1KU

My parents have a 1990 Accord which failed to start one day. It was traced to a bad ignition module. About a year after my dad had it replaced (out of his own pocket) Honda sent out a notice referring to this problem and reimbursed my father.

I'm not sure if a new style of ignition module was used. Perhaps that is the problem. Could you ask the dealership what EXACTLY was "fixed". If a new part was used what part did it replace?

If it is something other than the ignition module I would be really interested in knowing as I have a high milage (140k) 1985 Chevy Caprice which has *terrible* ignition noise. I have checked all of the usual items: Plugs, cables but to no avail. I think there might be a problem in the distributor. (I'm sure that SOMEWHERE, in some police garage there is a mechanic who has solved my EXACT problem - too bad there isn't a rec.radio.police.caprice.RFI newsgroup)

73,

Marc - N8KWX

1925. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 07:56:03 UTC
From: mcduffie@unlinfo.unl.edu
Message-ID: <2kcdqj$nto@crcnis1.unl.edu>
Source record: 270777

rcrw90@email.mot.com (Mike Waters) writes:

>The need is not to show that someone *is* or *could* cheat, but for them to
>prove that they *could not* cheat.. If you want to use some piece of
>equipment in a testing session *you* must show that (a) you are not using
>it to cheat and (b) it won't disturb the other test takers.

Oh, we are back to guilty_until_proven_innocent now? Be real!

>Showing an empty hard drive or none at all is one very easy way to do this.
> Certainly there are other waysto do this. Remember the onus in not on the
>VEs to try to anticipate every possible way for someone to cheat, but to
>ensure fair tests

You failed to answer the question. What has a hard drive got to do
with cheating? How is a hard drive going to help you cheat?

Gary

1926. Re: Satellite Tracking Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 12:25:12 UTC
From: 71371.1257@compuserve.com
Message-ID: <1994Feb22.122512.18239@afit.af.mil>
Source record: 270578

In article <steve.761771155@netsys.com>, steve@NETSYS.COM (Steve Eigsti) writes:
|> david@stat.com (David Dodell) writes:
|>
|> >I am interested in obtaining a good satellite tracking program for
|> >tracking some of the amateur birds. Recommendations on shareware /
|> >commercial packages would be appreciated.
|>
|> >David wb7tpy
|>
|> >---
|> >Editor, HICNet Medical Newsletter
|> >Internet: david@stat.com FAX: +1 (602) 451-1165
|> >Bitnet : ATW1H@ASUACAD
|>
|> Try Traksat, ftp to oak.oakland.edu it is in the msdos/satelite directory
|>
|> Steve K5SE
|>

You may also want to try the newly-uploaded PC-Track version 3.0, in the
same location.

Tom Johnson
71371.1257@compuserve.com

1927. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 12:59:06 UTC
From: greg@netcom.com
Message-ID: <gregCLMMqJ.131@netcom.com>
Source record: 270579

In article <CLFDMz.ICJ@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>"Well I will say it flat out:" Jeff Gold "is a liar. I caught him at it
>first hand and won't" read any more of his magazine articles. Everything
>in quotes is from Jeff's posting to the subject of John Ramsey.
>
>In the first paragraph of his recent magazine article he tells us that
>there is something "magical" about ham radio. That's a lie, Jeff. It is
>all simple physics.

No way. Saturday nite, I tossed 30 feet of wire over a 16-foot tree
limb, and promptly worked St. Martin on 75M SSB, and up and down the
East Coast on 160. Without magic, that's not possible. :-)
>
>He also says that every one of the radios he built has given him pleasure.
>Then in his Internet posting he talks about getting mad, experiencing
>difficulties, and problems with the FTR-146. One of those statements is a
>lie.

He didn't say what kind of pleasure. Perhaps he enjoyed dropping the FTR-146
from the top of the tower :-)

I quite enjoy Jeff's lucid, 'you can do it' approach to his QST writings.
Reminds me of early DeMaw. Keep it up Jeff.

Greg

1928. Re: Satellite Tracking Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 13:09:05 UTC
From: 71371.1257@compuserve.com
Message-ID: <1994Feb22.130905.18916@afit.af.mil>
Source record: 270580

In article <steve.761771155@netsys.com>, steve@NETSYS.COM (Steve Eigsti) writes:
|> david@stat.com (David Dodell) writes:
|>
|> >I am interested in obtaining a good satellite tracking program for
|> >tracking some of the amateur birds. Recommendations on shareware /
|> >commercial packages would be appreciated.
|>
|> >David wb7tpy
|>
|> >---
|> >Editor, HICNet Medical Newsletter
|> >Internet: david@stat.com FAX: +1 (602) 451-1165
|> >Bitnet : ATW1H@ASUACAD
|>
|> Try Traksat, ftp to oak.oakland.edu it is in the msdos/satelite directory
|>
|> Steve K5SE
|>

You also may want to try PC-Track Version 3.0, newly uploaded to the
same directory and to garbo.uwasa.fi in pc/ham

Tom Johnson
71371.1257@compuserve.com

1929. Re: Satellite Tracking Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 13:25:28 UTC
From: johnsotc@sd2.af.mil
Message-ID: <1994Feb22.132528.19252@afit.af.mil>
Source record: 270581

In article <steve.761771155@netsys.com>, steve@NETSYS.COM (Steve Eigsti) writes:
|> david@stat.com (David Dodell) writes:
|>
|> >I am interested in obtaining a good satellite tracking program for
|> >tracking some of the amateur birds. Recommendations on shareware /
|> >commercial packages would be appreciated.
|>
|> >David wb7tpy
|>
|> >---
|> >Editor, HICNet Medical Newsletter
|> >Internet: david@stat.com FAX: +1 (602) 451-1165
|> >Bitnet : ATW1H@ASUACAD
|>
|> Try Traksat, ftp to oak.oakland.edu it is in the msdos/satelite directory
|>
|> Steve K5SE
|>

You also may want to try PC-Track Version 3.0, newly uploaded to the
same site, and also to garbo.uwasa.fi in pc/ham.

Tom Johnson
71371.1257@compuserve.com

1930. Re: Satellite Tracking Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 13:44:57 UTC
From: johnsotc@sd2.af.mil
Message-ID: <1994Feb22.134457.19522@afit.af.mil>
Source record: 270582

In article <steve.761771155@netsys.com>, steve@NETSYS.COM (Steve Eigsti) writes:
|> david@stat.com (David Dodell) writes:
|>
|> >I am interested in obtaining a good satellite tracking program for
|> >tracking some of the amateur birds. Recommendations on shareware /
|> >commercial packages would be appreciated.
|>
|> >David wb7tpy
|>
|> >---
|> >Editor, HICNet Medical Newsletter
|> >Internet: david@stat.com FAX: +1 (602) 451-1165
|> >Bitnet : ATW1H@ASUACAD
|>
|> Try Traksat, ftp to oak.oakland.edu it is in the msdos/satelite directory
|>
|> Steve K5SE
|>

You might also try PC-Track Version 3.0, newly uploaded to the same site
and to garbo.uwasa.fi in pc/ham.

Tom Johnson
71371.1257@compuserve.com

1931. Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 14:20:31 UTC
From: clh6w@faraday.clas.Virginia.EDU
Message-ID: <CLMqI7.Bvn@murdoch.acc.Virginia.EDU>
Source record: 270583

I've got some bad interference on 80 through 10
meter bands from an electric fence about 500
feet away. The effect is very sharp clicks
about 3-4 per second. Analog noise blanker
works some but not 100%.

Anyone have any cures?

Tnx,
Ned Hamilton, AB6FI

1932. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 14:41:45 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CLMrHM.8pC@hpqmoea.sqf.hp.com>
Source record: 270584

A somewhat appropriate quote from the bloke who invented the geosynchronous satellite:

****

"Any sufficiently advanced technology is indistinguishable from magic"

- Arthur C Clarke

****

The word "sufficiently" is for lawyers to argue over.

David

1933. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 14:53:20 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb22.145320.25898@ke4zv.atl.ga.us>
Source record: 270585

In article <CLL8pn.LAM@cscsun.rmc.edu> dtiller@cscsun.rmc.edu (David Tiller) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: Or bring in your Royal or Smith Corona portable typewriter. Even the FCC
>: allowed you to copy by mill back in the 1960s.
>
>I agree in principle, but wouldn't that be a little loud and distracting
>for the others? A pc keyboard is loud enough! How about cheating? What
>would stop a dishonest person from peering at the keyboard as the characters
>were typed?? Inquiring minds, and all that....

Well in my experience, the FCC had their Instructograph's volume turned
up so loud a hundred manual typewriters couldn't have drowned it out.
It un-nerved me to hear it echoing down the hall. They'd also let you
use cans if you brought your own, and your own key for the sending test
too. (Wish I'd known that in advance, their key sucked.)

As for cheating by watching someone's fingering of their keyboard,
I'd never thought of that. Seems to me that would take as much
practice as just conditioning yourself to copy the Code.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1934. Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 15:01:59 UTC
From: n4hy@runner.ccr-p.ida.org
Message-ID: <N4HY.94Feb22150159@runner.ccr-p.ida.org>
Source record: 270678

Creative Technology DSP folks have given me an unbelievable reply. The Sound Blaster 16 with ASP has been on the market for some time now and people are still scrambling for information. It seems it will not soon be forthcoming. They have said to me that they are going to keep their Advanced Signal Processor chip, its programming model, etc. a secret. The shortsightedness of companies in this area is never ending. The secrets inevitably come out and the people who could make their product for them are to put off by this attitude. An open system always sells better than a closed one and inevitably leads to applications the developers never dreamed of. I had several in mind which they will now have done on a competitors card. If you can believe it, they had the gall to ask detailed technical questions about modems without answering a single technical questions other than to tell me the development system cost $5200. FORGET IT. I will develop using the Cardinal or Hamblaster depending on which turns out to be more open about its architecture and/or the most versatile for our applications.

Bob
--
Robert W. McGwier | n4hy@ccr-p.ida.org Interests: ham radio,
Center for Communications Research | scouts, astronomy, golf (o yea, & math!)
Princeton, N.J. 08520 | ASM Troop 5700, ACM Pack 53 Hightstown
(609)-279-6240(v) (609)-924-3061(f)| I used to be a Buffalo . . . NE III-120

1935. Re: Tone Burst Whistle?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 15:06:03 UTC
From: clmorgan@miavx3.mid.muohio.edu
Message-ID: <1994Feb22.100603.1983@miavx3.mid.muohio.edu>
Source record: 270586

In article <T95sHc5w165w@stat.com>, david@stat.com (David Dodell) writes:
> I have an ICOM 24AT which I would like to use with tone burst. Is there
> a way to do this easily?
>
> I understand that someone sells a tone-burst whistle which immitates the
> tone to prevent internal modification of a radio.
>
> Anyone heard or know where I can get one of these?
>
> david
>
> ---
> Editor, HICNet Medical Newsletter
> Internet: david@stat.com FAX: +1 (602) 451-1165
> Bitnet : ATW1H@ASUACAD

Back in the "good-ole-days", we made whistles from short (approx 4")
lengths of brass tubing. Sometimes the tubing could be salvaged from
a VHF or UHF antenna; sometimes acquired from a hobby shop. ID, as I
recall, was 0.25".

A notch cut in the side, approx 1.5" from one end, and final "trimming"
of the tube, acquired the desired tone. (In the order of 1800Hz, I think)

Worked pretty well ... considering the investment ... but did take some
practice to become competent.

Have fun!

73 >< Carl
K8NHE

1936. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 15:16:12 UTC
From: clmorgan@miavx3.mid.muohio.edu
Message-ID: <1994Feb22.101612.1984@miavx3.mid.muohio.edu>
Source record: 270587

In article <rohvm1.mah48d-180294104722@136.141.220.39>, rohvm1.mah48d@rohmhaas.com (John E. Taylor III) writes:
> In article <CLC8su.DCt@news.direct.net>, kg7bk@indirect.com (Cecil Moore)
> wrote:
>
>>
>> Your experience has been different from mine. I had 100 times the trouble
>> out of Heathkits that I had with Ramsey kits. You probably weren't around
>> for the '50s when it was a miracle if a Heathkit ever worked.
>>
>
> Really?! I've built Heathkits from the original oscilloscope and AT-1
> transmitter right up through their kit 2-m HT, and had _very_ few problems
> that weren't my own stupidity (back in the '50's I was known to make a cold
> solder joint occasionally). Think I had one bad relay in my HW-100 that
> they promptly replaced, can't recall any other problems in well over twenty
> kits.
>
> Only built one Ramsey kit, their 40-m qrp transmitter. Very simple
> circuit, but it doesn't work. (Oscillator stage is okay, but the final
> doesn't amplify.) Haven't had a chance to troubleshoot it yet, so can't
> rule out my own stupidity, but Ramsey doesn't have a good track record with
> me.
>
> --
> 73 de John Taylor W3ZID
> rohvm1.mah48d@rohmhaas.com

I, too, have to disagree with the observation regarding Heathkits. From back in the 50's (that's 1950s folks) when I built my first one, I'd never had a problem that wasn't of my own making.

My experience leads me to belive Heathkit (may they RIP) has been unfairly slammed ... by far, I believe, the Heathkit builders were successful and had an excellent learning experience.

The kits were developed, and manuals written, not for graduate engineers but for the folks in the front lines. The number of Heath products in use through the years, as well as today, certainly attest to the quality of their product.

I've never done a RAMSEY kit, so no comment here.

73 >< Carl
K8NHE

1937. Re: Ramsey HF QRP Rigs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 15:33:26 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2kd8k6$lro@news.acns.nwu.edu>
Source record: 270588

In article <CLJx9F.2tH@news.direct.net>,
Cecil Moore <kg7bk@indirect.com> wrote:
>>Now, have you, Cecil, or anyone else, built any of Ramsey's HF QRP xmtrs?
>>For $30 I might get one of those pup's for 20M (but from what I hear I
>>think a low pass filter might be in order).
>>
>>73, Jeff NH6IL
>
>No, Jeff, I haven't built one and don't know anyone who has but, like you,
>would be interested in hearing from anyone who has.

I did not build one, but I debugged and fixed one for a friend who
could not get it to work. And for good reasons.

The receiver is a knock-off of the Neophyte Receiver from QST. The
air variable in the VFO is replaced by a reverse biased 1N4002. It
is unstable and drifts like crazy.

The transmitter is a knock-off of W7ZOI's universal qrp tx with `Ramsey
special' mods. The L-C tuned interstage coupling, which required toroids,
has been replaced by broadband r-c coupling. The problem: parasitics
galore. It took a lot of work to get it tamed and put out a reasonable
amount of power.

My one thought as I debugged and fixed these kits was: The mods were
to reduce component cost, never mind the effect on performance.

Sort of sums up my opinion of Ramsey kits.

Rajiv dit l dit
aa9ch l
r-dewan@nwu.edu ********** =
* rajiv aa9ch/m * =
* r-dewan @nwu.edu * l
* iambic cmos super2 * l
********* kwd ts50 tx bugcatcher * l
* *l
* *** *** *H
* * * * * *H
base* *kenwd850*vert*80mloop* *kent**
*** ***

1938. Dumming down of A.Radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 15:49:15 UTC
From: gdavis@griffin.uvm.edu
Message-ID: <gdavis.761932155@griffin>
Source record: 270589

Well, its sad, but then I suppose all of society in dumbing down,
why should we expect amateur radio to be different?

If you doubt what I'm saying, read a few packet bulletins and then tell
me if the writer was even literate.
I'm not talking about typos... we all make these... without an editor or
the time to proof.

I'm talking about horrible spelling and grammatical errors in basic syntax
and sentence constructions.
If the writer cannot compose a coherent sentence, then why should we
believe they are enough of an in focus thinkers to bother reading?

I had one idiot on packet jump all over me for typos of a minor
punctuation ommission. Then go one in this one 200 byte diatribe to
spell grammar (grammer) and lose as (loose).
You would have though that this idiot,who was so intent on drawing
attention to construction, grammar, and punctuation errors would have
gone to the trouble to check his own!

--
******** Gary E. Davis***** WQ1F *****
The most common of all follies is to believe passionately in the
palpably not true. It is the chief occupation of mankind.-H.L.Mencken

1939. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 15:56:15 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLMuxr.20F@ucdavis.edu>
Source record: 270590

Steve Popovich (popovich@prince.cs.columbia.edu) wrote:

: Jeff, I'm afraid you've gone 'round the bend here. This kind of
: argument went out with McCarthy, didn't it? I think you're a bit
: overzealous in desiring to {pro,per}secute "suspected illegals", too.
: Now I guess I'm one of your suspects too, even though I am not now,
: nor have I ever been, involved with pirate radio. :-)

Now if you would please just provide the names of all those you know who are or have, in the past, been involved with pirate radio, we can probably clear your name and allow you to reclaim your good name. What? We lnow better than that, if you didn't know any pirates would you really be commenting on this thread? Please just tell us what you know and everything will be alright. All we need are a couple of names, don't woory they'll be given the same opportunity as you to clear their names.

dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* The only thing I can officially say for the University is: *
* What I say is in no way related to oficial University policy *
--

1940. Re: RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 15:56:29 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-220294085532@waters.corp.mot.com.corp.mot.com>
Source record: 270591

In article <761852750snx@skyld.grendel.com>, jangus@skyld.grendel.com (Jeffrey D. Angus) wrote:

> Bottomline disclaimer for the humor impaired. Yup, I used the F-word.
> If you're too lazy to scan the news before forwarding it onto the RF
> via packet, it's your problem, not mine. Re-read your copy of part 97.

I only think it is sad that a whole area of amateur radio is inhibited by fear of the "seven deadly words" which one must never say aloud lest the wrath of the FCC gods descend!

Sigh - that is silly and pedantic in its own right. IMHO

1941. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 16:02:45 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2kdab5$9gi@network.ucsd.edu>
Source record: 270592

USENET Fool Lame Excuse Number Three: "it wasn't meant seriously. I posted it just to see what kind of a reaction I would get."

Those who will not learn from history are condemned to repeat it.
- Brian

1942. Passed General written, how long do I have to pass code?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 16:05:15 UTC
From: bruceo@loki.isc-br.com
Message-ID: <1994Feb22.160515.24890@isc-br.isc-br.com>
Source record: 270593

I passed my General written exam a while back, but was only able to copy 5 wpm.

Does anyone know how long I have to pass the 13 wpm before I have to take the written exam over again?

Thanks....

bruceo@loki.isc-br.com
N7RWO
--

Bruce Oscarson | bruceo@mail.spk.olivetti.com
Olivetti North America |
N7RWO | ma-bell (509) 927-5437

1943. Re: Jef Harmon (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 16:06:35 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-220294090414@waters.corp.mot.com.corp.mot.com>
Source record: 270594

In article <CLM0r4.EJG@news.Hawaii.Edu>, jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) wrote:

> In article <rcrw90-210294094730@waters.corp.mot.com.corp.mot.com> rcrw90@email.mot.com (Mike Waters) writes:
> >
> >I have to wonder if there is a living person who's past Jef *doesn't*
> >suspect?
> >
> >How is your potty patrol going Jeff? Still finding nastly people
> >misbehaving in the bathrooms at U of H?
>
> Who's Jef?

No wonder my Kill file entry wasn't working - easily fixed.

Thank you!

> Yeah, those `guys' are still passing their diseases to each other in
> the restrooms on campus. The campus police are finally starting to arrest
> them for lewd conduct and solicitation.

And you don't even see the problem people have with your fixation on the subject do you?

Sigh.

> I guess I should have put a smiley or two in the rec.radio.pirate
> post. I really don't believe that Dana has ever done anything illegal.
> Him and I will never see eye-to-eye on some things.

I guess I won't either.

BTW my Local Notice to Mariners this month stated that 500Khz CW was discontinued to allow 518Khz SITOR - the CG feels that is a much more useful service I guess. Oh well.

1944. Re: htx-202 audio mod (?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 16:07:15 UTC
From: cottle@prism.sps.mot.com
Message-ID: <1994Feb22.160715.210@newsgate.sps.mot.com>
Source record: 270595
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <ah301-210294080950@sy_j.pgh.wec.com> writes:
> I recently got an htx202 and since I've been using it, I have gotten
> signal reports that my audio is low. someone mentioned that radio
> shack will do an audio circuit mod for free if it is under warranty.
> anybody here knows what the mod is ? and if it can be done without
> taking it to the RS service center which is open only at a very
> inconvenient time.
>
> jerry
> N3RKD

Often when I talked to people they were able to guess I was using
an HTX202 based on the audio levels. I took mine to the local
repair center, and the tech said mine was about as low as he had
seen it. I think it is more like a quick adjustment rather than
a mod.

I believe it works better now, because I have asked folks and they
say that the audio is sufficient.

By the way, record all of your memory settings. When you get your
radio back, its memory will be clear.

--
R i c k C o t t l e
Email:cottle@prism.sps.mot.com

1945. Daily Summary of Solar Geophysical Activity for 21 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 16:07:34 UTC
From: oler@rho.uleth.ca
Message-ID: <9402221607.AA28823@rho.uleth.ca>
Source record: 270596
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

21 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

NOTE: The background xray flux, minimum, and average x-ray flux values are
estimated values. Contamination of the x-ray sensors during the
strong proton event prevented an accurate determination of x-ray
values for numerous hours during the UTC day.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 052, 02/21/94
10.7 FLUX=105 90-AVG=106 SSN=017 BKI=1236 6645 BAI=042
BGND-XRAY=B1.8 FLU1=1.2E+09 FLU10=7.5E+07 PKI=2237 7756 PAI=060
BOU-DEV=008,013,032,191,166,195,066,092 DEV-AVG=095 NT SWF=00:000
XRAY-MAX= C1.3 @ 0903UT XRAY-MIN= B1.0 @ 0844UT XRAY-AVG= B1.5
NEUTN-MAX= +002% @ 0850UT NEUTN-MIN= -007% @ 1825UT NEUTN-AVG= -1.5%
PCA-MAX= +9.7DB @ 0940UT PCA-MIN= +0.2DB @ 0430UT PCA-AVG= +2.4DB
BOUTF-MAX=55406NT @ 2342UT BOUTF-MIN=55245NT @ 1724UT BOUTF-AVG=55320NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+064,+000,+000
GOES6-MAX=P:+242NT@ 1344UT GOES6-MIN=P:-168NT@ 1346UT G6-AVG=+090,+037,-027
FLUXFCST=STD:105,105,100;SESC:105,105,100 BAI/PAI-FCST=050,025,010/050,030,020
KFCST=5556 6554 4455 5432 27DAY-AP=004,017 27DAY-KP=1211 2111 1353 4432
WARNINGS=*PROTON;*PCA;*FORBUSH;*GSTRM;*AURMIDWRN;*AURLOWWCH;*MAGPAUSE
ALERTS=**MAGPAUSE;**PROTN10:MAX=10000PFU@0910UTC;**MAGSI:93NT@0900UTC;
PCA:MAX=~15DB;FORBUSH:MAX=-7%@1825UTC;**MAJSTRM:BEGIN=0900UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 20 FEB 94 was 39.3.
The Full Kp Indices for 20 FEB 94 are: 4o 3+ 3o 3- 3- 2+ 2+ 2-
The 3-Hr Ap Indices for 20 FEB 94 are: 30 19 15 13 12 10 10 6
Greater than 2 MeV Electron Fluence for 21 FEB is: 1.1E+09

SYNOPSIS OF ACT

Solar activity was very low. Region 7671 (N10W28)
continues to be somnolent since its M4/3B flare of 20 Feb.
Weather has hampered patrol the past 24 hours, but the few

reports received indicate continued decay in that region. A new as yet unnumbered region may be coming into view in the northeast.

Solar activity forecast: solar activity is expected to be low.

The geomagnetic field began the period at quiet to unsettled conditions. The passage of a shock, thought generated by a CME associated with the M4/3B flare yesterday, brought major storming immediately after the sudden commencement measuring 92 nanotesla at boulder at 0900Z. Fluxes of greater than 10 MeV protons increased dramatically with the passage of this unusually fast shock, reaching 10,000 pfu also at 0900Z. Those fluxes have steadily declined since, and are now near 10 pfu. The transit time for this shock was a short 31 hours. During the time period 1200-1800Z, the polar cap absorption event registered levels in the neighborhood of 15 dB. A Forbush decrease of approximately 5 percent began midway through the day.

Geophysical activity forecast: the geomagnetic field is expected to persist at major to severe storm levels for the next 24 hours. The disturbance should gradually abate over time, giving way to unsettled to active conditions by February 24. The greater than 10 MeV protons are likely to return to background values over the next 24-36 hours.

Event probabilities 22 feb-24 feb

Class M 05/05/05
Class X 01/01/01
Proton 05/05/05
PCAF In Progress

Geomagnetic activity probabilities 22 feb-24 feb

A. Middle Latitudes
Active 05/15/25
Minor Storm 45/30/20
Major-Severe Storm 50/30/05

B. High Latitudes
Active 05/10/25
Minor Storm 30/25/25
Major-Severe Storm 65/45/10

HF propagation conditions were essentially useless over the high and polar latitudes, as well as most upper-middle latitude regions. PCA and severe geomagnetic and auroral storming resulted in intense absorption, very strong and widespread spread-F and auroral sporadic-E over the upper middle to polar latitude paths. Lower latitude paths saw fair

to good propagation. Conditions appear to be stabilizing and
should begin improving during this UTC day (22 February).
However, a return to near-normal conditions may not be observed
for the higher latitude paths for several days yet. Middle and
low latitude paths should see near-normal conditions return by
about 23 February if storming ends right away, or 24 February
if relatively strong residual activity continues. A coronal
hole disturbance may keep levels of geomagnetic activity
elevated somewhat, preventing higher latitudes from returning
to near-normal until later this week.

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==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7671 N10W28 190 0290 DAO 06 007 BET
7669 N08W47 209 PLAGE
7670 N09W37 199 PLAGE
7674 S14W04 166 PLAGE
REGIONS DUE TO RET
NMBR LAT
7664 S13 036

LISTING OF SOLAR ENERGETIC EVENTS FOR 21 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 21 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 21/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
63 S20E09 S28E04 N08W15 N08W15 174 ISO POS 006 10830A
64 N60E89 N20W06 N30W11 N60E14 141 EXT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
20 Feb: 0104 0141 0216 M4.0 3B 7671 N09W02 190 92 140
0745 0748 0800 B5.0
1352 1356 1401 B3.9 SF 7671 N07W06
1545 1604 1613 B4.2 SF 7670 N12W26

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7670: 0 0 0 1 0 0 0 0 001 (25.0)
Region 7671: 0 1 0 1 0 0 1 0 002 (50.0)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (25.0)

Total Events: 004 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
20 Feb: 0104 0141 0216 M4.0 3B 7671 N09W02 II,IV

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1946. AIDS testing on Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 16:08:19 UTC
From: jangus@skyld.grendel.com
Message-ID: <761933299snx@skyld.grendel.com>
Source record: 270597

I knew that would get somebodies attention... This was on the Packet BBS
this morning. I can only say that Leonard is well meaning, but geeze people
please learn to use that pesky capslock key, and them funny . and , symbols.
My first thought on reading this that Wayne was going to sell plans for an
AC line cord and two alligator clips.

-- Here it is in its orginal form.

55 lines from WA2IHI 2/21/94 10:23 pm {General}
To: INFO @ WW Re: ELECT.AIDS TREATMT.FREE PLANS

R:940218/1351Z @:KE2VW.#WNY.NY.USA.NA #:50478 [Colden] Z:14080 $:50478_KE2VW

>From: WA2IHI@KE2VW.#WNY.NY.USA.NA
To : ALL@WW

FEB 14, 1994

URGENT IMPORTANT AIDS NEWS FLASH!!

IVE JUST LEARNED THAT WAYNE GREEN THE PUBLISHER OF 73 AMATEUR RADIO TODAY
HAS PRINTED UP SOME PAMPHLETS WITH FULL CONSTRUCTION PLANS AND DETAILS
EXPLAINING PROPER USE OF THE 2 SIMPLE ELECTRONIC CIRCUITS DEVELOPED BY
HIS FRIEND PHYSICIST ROBERT BECK WHICH HAVE SHOWN PROMISE IN DISABLING
AND POSSIBLY CURING THE HIV VIRUS. YOU SHOULD HAVE RECEIVED AN EARLIER
BULLETIN FROM ME EXPLAING HOW WAYNE GREEN FIRST
WROTE ABOUT THIS EXCITING TREATMENT IN HIS MONTHLY EDITORIAL OF 73,
IN THE FEB 94 ISSUE AND THAT HE PROMISED HE WOULD PRINT THE CONSTRUCTION
PLANS IF HE GOT 1000 REQUESTS FOR IT. WELL HE HAS DECIDED FOR HUMANITIES
SAKE TO DO SO NOW IN PAMPHLET FORM AND IS MAILING COPIES TO THOSE WHO
WRITE/FAX/CALL HIS OFFICE AND ASK FOR IT. ALSO HE IS SENDING OUT FREE
TO THOSE WHO HAVE ALLREADY WRITTEN REQUESTING HE PUBLISH IT. HE IS DOING
THIS FREE AND IF YOUVE ALLREADY WRITTEN TELLING HIM TO PRINT IT IN THE
MAGAZINE, YOU SHOULD WRITE/FAX/CALL AGAIN ASAP TO ENSURE YOUR NOT OVER
LOOKED AND GET YOUR COPY IT MIGHT NOT BE PRINTED IN THE MAGAZINE DUE TO
LACK OF INTEREST SO TELL YOUR FRIENDS AND AIDS PATIENTS AND THIER SUPPORT
GROUPS EXC. AND OPEN MINDED DOCTORS AND NURSES SO THEY CAN GET STARTED
AND MAYBE SAVE LIFES OR AT LEAST AID IN THIS RESEARCH. AS PER WHAT HE
WROTE ABOUT IN THE EDITIRIAL, THE 2 CIRCUITS SHOULD ONLY COST ABOUT
$100 IN PARTS FROM ANY RADIO PASTS STORE AND EASILY BUILT BY ANY HAM/
ELECTRONIC TECHNICIAN. THE TREATMENT IS DRUG FREE, NON INVASIVE AND
HAS NO SIDE EFFECTS, AND ONLY TAKES A FEW MINUTES A DAY FOR A FEW WEEKS
SO WRITE/FAX/CALL WAYNE
& STAFF AT 73 MAGAZINE ASAP--AT-WAYNE GREEN INC. 70 ROUTE 202N
PETERBOROUGH NH 03458 TEL-603-924-0058 FAX-603-924-9327

PS: ANYONE MAY WRITE ME ABOUT THIS OR WHATEVER--LEONARD DE FAZIO
FROM: WA2IHI @KE2VW.#WNY.NY.USA.NA 31 ELMWOOD AVE.
BATAVIA NY 14020
MY WARMEST REGARDS AND BEST WISHES TO ALL.

--
Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

1947. Re: MOTOROLA MITREK

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 16:22:41 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2kdbgh$a3o@network.ucsd.edu>
Source record: 270598

In article <1994Feb21.163445.3119@umr.edu> sidener@crunch.nuc.umr.edu (Scott Sidener) writes:
>
> Does anyone have ant experiance, hints, or tips on converting a Motorola Mitrek VHF >band radio into a repeater?

Tune up the radio in the conventional manner.

Drill a 1/2" hole in the side of the radio just above the first IF stage coil; install a bulkhead BNC female connector. Chop the receive antenna lead off the antenna relay and use this connector to bring it out of the radio to your duplexer.

Clip out diodes D1, D2, and D403.

Add a control system. All the connections you need are on the control connector on the front of the radio.

Voila' - it's a repeater.

- Brian

1948. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 17:25:17 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2kdf5t$gc6@bigfoot.wustl.edu>
Source record: 270599

Gary McDuffie Sr (mcduffie@unlinfo.unl.edu) wrote:
: rcrw90@email.mot.com (Mike Waters) writes:

: >The need is not to show that someone *is* or *could* cheat, but for them to
: >prove that they *could not* cheat.. If you want to use some piece of
: >equipment in a testing session *you* must show that (a) you are not using
: >it to cheat and (b) it won't disturb the other test takers.

: Oh, we are back to guilty_until_proven_innocent now? Be real!

How about, "prevention is the best medicine"??? If you be sure that a person can't cheat, he most likely won't. I'm quite aware of this as a student full time; I've been told at the MCAT, for example, although there are physics and chemistry problems, calculators are not allowed, watches are not allowed that make any noise whatsoever, including beeping at the hour. You are not considered guilty, but they want to preclude the possibilities of any cheating. This is the whole purpose of proctors, or VE's. I've gone to things like math contests, where I had to demonstrate that my programmable calculator was empty, i.e., reset it, and let the proctors see the prompt, "reset ok."

: >Showing an empty hard drive or none at all is one very easy way to do this.
: > Certainly there are other waysto do this. Remember the onus in not on the
: >VEs to try to anticipate every possible way for someone to cheat, but to
: >ensure fair tests

: You failed to answer the question. What has a hard drive got to do
: with cheating? How is a hard drive going to help you cheat?

Somebody may say that you can have a program hooked to a mic that copies code. There are definitely those that can do so, given the proper audio input. Now the chances oF someone doing that *is* slim, but still the possibility exists.

All in MHO, and the institution can (disclaimer) think anything; whether or not it is what I do is purely coincidental.

--jessE

1949. Re: Jeff Gold

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 17:27:58 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2kdfau$gc6@bigfoot.wustl.edu>
Source record: 270600

David Stockton (dstock@hpqmoca.sqf.hp.com) wrote:

: A somewhat appropriate quote from the bloke who invented the
: geosynchronous satellite:

: **********

: "Any sufficiently advanced technology is indistinguishable from
: magic"

: - Arthur C Clarke

: **********

: The word "sufficiently" is for lawyers to argue over.

: David

There was an episode about this point on a Star Trek TNG sometime back. . .
Not like I'd know, or anything :)

--jessE
(no I don't intentionally capitalize the E, the newsreader does it for me.)

1950. Exam element credit - 1 yr.!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 17:33:59 UTC
From: ham@wam.umd.edu
Message-ID: <2kdfm7$o6m@cville-srv.wam.umd.edu>
Source record: 270601

You have ONE YEAR EXACTLY from the date of passing an exam element to use it
for getting a higher class license.

Someone noted that they passed the General written, but haven't passed 13 wpm.
You have exactly 1 year from the date of passing your general exam to pass
the 13 wpm exam (i.e. utilize the General written credit), after which the
written exam credit will expire.

Scott NF3I

I don't remember if it's, for example, Nov. 7, 1993 - Nov. 6, 1994, or
Nov. 7, 1993 - Nov. 7, 1994 (last day inclusive?)

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 123 QSLed on dipoles __________| Dipoles! Antenna!

1951. FTP site for kenwood mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 17:34:13 UTC
From: hawk@hawk.sps.mot.com
Message-ID: <1994Feb22.173413.1837@newsgate.sps.mot.com>
Source record: 270602

I need an FTP site with Kenwood MODS. Thanks ahead of time.
email me at hawk@hawk.sps.mot.com

regards,
George Hawkins KI5X

George Hawkins Internet: hawk@hawk.sps.mot.com
Motorola Digital Signal Processors UUCP: cs.utexas.edu!oakhill!hawk!hawk
Semiconductor Products Sector Motorola Internal Email - R12137
6501 William Cannon Drive West Phone (512) 891-4543
Austin Texas 78735-8598 FAX (512) 891-2947

1952. Looking for HT storage suggestions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 17:37:31 UTC
From: witness@unixhub.SLAC.Stanford.EDU
Message-ID: <CLMzMK.EJw@unixhub.SLAC.Stanford.EDU>
Source record: 270603

Hi. Primarily I'm a disaster service worker who uses ham radio more for need than recreation, so keeping my HT always on my person isn't always the most practical option. Extra bulk, the risk of accidental damage, and infrequent use make it impractical. However, I DO need to keep it within ready reach at all times. One option is my car. My concern about storing it in the trunk of my car (along with my disaster supplies) is the summer heat and sun. I do not know what temperature specifications exist for most HTs (does anyone have any?), but I do know the NiCad batteries are rated up to 45 Celcius for storage. In the summer sun of California, I would think that the trunk of my car could get well over 55 Celcius.

Is this a concern that should keep me from storing an HT in my trunk during the summer months? Anyone have any similar experiences or wisdom to share?

thanks in advance --
73 de KD6QPY
greg
--
witness@slac.stanford.edu -- Provided by the management for your protection

1953. Re: Help wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 17:51:18 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-220294123803@136.141.220.39>
Source record: 270604

In article <1994Feb17.123246.20415@oxvax>, laczik@vax.oxford.ac.uk wrote:

> I am thinking about getting a Kenwood TS-440S or a Yaesu FT-757GX.
> I would be most interested to hear about your experience with either
> of them, or even better a comparison between the two.

I've got a TS-440S-AT about which I have mixed feelings (but _mostly_ good). As a mobile rig and for general all-round use, it's nice; it has some problems with a high-QRM environment like a contest that might be improved by more filtered stages or something. It's got adequate selectivity from the 500-Hz filter on CW, but a really strong nearby signal can "pump" the AGC (that's a new term I saw here recently, but it certainly describes the effect well). Be nice if you could just shut off the AGC completely.

Quality control has been something of a problem. When I got it, the CPU died; it went back to the shop for a couple of months, they fixed and returned it, and the same thing happened again. Finally they said the problem was a bad socket for the CPU; they replaced that (but they'd had it for about four of the first six months I owned it), and it's worked fine ever since (five or six years, now). The other problem has been poor contact on the oscillator board. The oscillator that covers 20 meters quit working; I did a bit of troubleshooting, and tracked it down to a cold joint on the board. I re-soldered it, and 20 has been fine ever since. But the oscillator for 10 meters just recently did the same thing; I haven't had a chance to do the troubleshooting yet, but I don't expect it to be a serious problem to fix. One good thing is that you can get to the circuits fairly easily.

It lacks an output/input for a transverter; this is annoying me right now, as I'd like to use it as an IF for 2 meters and 70 cm. If that's not a concern, ignore the comment.

In its defense, I should add that I use it hard, dragging it in and out of the house, and operating it from the car. It runs off a car battery nicely at reduced power for emergency operation, and has enough bells and whistles to (almost) keep me happy.

Get one with the built-in antenna tuner. When I bought it, I was really looking for one without it--big mistake in hindsight. I'm really glad I could only find the ones _with_ the tuner.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1954. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 17:51:50 UTC
From: steve@hi.com
Message-ID: <steve-220294124902@brainiac.hi.com>
Source record: 270605

In article <1994Feb21.131706.14375@tellab5.tellabs.com>, jwa@tellabs.com (John W. Albert) wrote:
> How can it be an ad?
> The Hamblaster isn't being sold, even on the "black market"!

Presumably when the Hamblaster is available for sale, you will reimburse internet sites for the cost of transmitting your Hamblaster advertisements^H^H^H^Hmessages?

Steve Byan internet: steve@hicomb.hi.com
Hitachi Computer Products (America), Inc.
1601 Trapelo Road phone: (617) 890-0444
Waltham, MA 02154 FAX: (617) 890-4998

1955. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 17:58:54 UTC
From: glenne@sad.hp.com
Message-ID: <CLn0M7.7E1@srgenprp.sr.hp.com>
Source record: 270606

Severe basenote drift acknowledged. (:>)

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
> Arrgh, I knew that. Signal drops with the *square* of distance, so it's
> 6 db per doubling. The 119 db figure is correct though. The biggest loss
> happens in that first mile.

The term "pathloss" can be misleading since in freespace signal isn't
lost. Radio waves are divergant. The illuminated area increases as the
square of the distance. Focus the power better and you get more in the
receiving "bucket". With constant antenna aperture (physical size once
you get beyond dipoles) this is more effectively done at shorter
wavelengths/higher frequencies.

Signals appear to drop because the aperture of the antenna "catching"
it is getting smaller compared to the total illuminated area at 1/D^2.
This is exactly why shorter paths and shorter wavelengths are better.

> I think that my point here is that LOS paths aren't practical for most
> amateur data links. The ability to get LOS paths is very terrain specific,
> and very $$$ specific. They either require fortuitous high sites, or
> very expensive microwave towers.

This is true, but if we are considering "competetive" information
systems and networks, something that can hold a candle to 10's or 100's
of Kbs *to the user* we have to consider how to efficiently pipe
information around. If we can't find a way to make shorter and better
quality paths practical, in the end we aren't going to be able to
compete with the alternatives.

> I agree it isn't practical to get multi-megabit systems below the
> microwave frequencies. What I think you're overlooking is the physical
> and financial impossibility of building the number of short hops that
> LOS requires in most of the country in order to do the higher rate
> channels. Amateurs can't do like the phone company and put up million
> dollar relay sites every 15-30 miles. The expense isn't in the equipment,
> it's in the *sites*. Amateurs don't have eminent domain, or the financial
> resources of a major public utility. Amateurs are going to have to accept
> lower data rates in order to stretch out the distance between available
> sites enough to make the system practical.

I guess our difference is in what we consider acceptable. I agree that
building a network is difficult and costly but I'm of the opinion that
if amateur radio is to stay viable and interesting in the sorts of ways
it has in the past; public service, emergency and a playground for the
"lay" technically inclined, that it has to have something to offer which

is at least similar to that which is available elsewhere. I'm not implying that we have to outdo the phone company but that in the information age we had better be able to transfer information reasonably well in contrast to the alternate commercial methods.

I don't see "new blood" being too enamored with a 100 bps to-the-user performance(I'm being charitable, most longhaul amateur datacomm is a good deal slower than this)over AR if 1000 times that is availble elsewhere.

While this isn't quite the case yet, it isn't far off. The "backbone" for the commercial system is constantly improving and a wireless connection to the "last mile" is about to rain on us from a multitude of vendors. I might point out that this backbone is effective because it uses short wavelengths and focussed energy; microwave/millimeterwave terrestrial and satellite networks and the really shortwave/focussed/guided medium: fiber.

> Power is cheap. Sites are few and expensive. We have to be able to use
> the sites *we can get* to build the network. Unlike a public utility,
> we can't just go out and condemn ideal sites where we need them for
> our microwave links. All of our path engineering has to revolve around
> what we can do with the sites we can get.

I agree that sites are of great value. I suppose a geostationary sites would be extremely valuable to amateurs but I don't agree that power is cheap nor really all that effective at making high information volume systems. Once one leaves quality paths, the cost of maintaining quality data flow is tremendous. Not only can't we generate enough power to overcome the additional losses and path variabilities cheaply but the excess power (that which doesn't get wasted in heating up the countryside) goes into removing the channel from reuse by other links (QRM). We need to be finding ways to use *less* power, not more, and not just because of the FCC mandate either.

Access to suitable sites may be one area where amateurs have an advantage over the big service providers. We are at least grass roots and already involved with repeaters and remote bases. Amateurs have a lot of "ins". Even the big telecom companies haven't been able to write off their huge investments and go out and replace all their old equipment in one fell swoop. If amateurs plan appropriately, we *might* be able to target something which will have value in the years to come. If we don't, I'm afraid that as a hobby, we haven't much hope of staying interesting.

> The link budget calc I did showed that a 90 mile forward scatter path
> has a path loss of 198 db at 219 MHz for a 56 kb bandwidth. That's doable
> with ordinary amateur beams and brick amplifiers, given the sensitivity
> of existing RF modems.
>

> > Your second 21 mile link obviously *isn't* LOS!
>
> Yes it is. We can *see* the antennas at each end.

I probably should have said "quality" instead of LOS. That your shorter
path has more loss than the longer one shows that it has a problem.

> >Local clutter is probably degrading things severely.
> >Antennas help a lot (2 dB of system improvement per dB of antenna gain)
> >but a poor path degrades things much faster than antennas can fix it.
> > That "nestled end" that you call line-of-sight is clearly far from it.
> >See my comment above about most practical links losing 15-40 dB as
>
> The problem we have is severe multipath because the beamwidth of our
> antennas illuminates buildings on either side of the path. That same

That's what I meant by "local clutter". And notice that throwing power at it
in the situation probably doesn't fix it if the problem is multipath.

> path *does* work at 7 GHz because we have a commercial link there using
> 6 foot dishes at each end that does not suffer multipath. The narrower
> beam doesn't illuminate the multipath generating reflectors.

And that points out part of the value of microwave, small antennas give
you a more focussed beam. The 7 GHz system probably can run a good deal
less transmitter power and at the same time provide more opportunitiy for
reuse of the channel because it doesn't spray power so widely.

> Well I agree we can't compete with the phone company. Their resources
> are vastly greater than anything we could muster. But we can do a *lot*
> better than 1200 baud for our users. And *that* horribly slow speed has

I doubt that we can provide simultaneous 1200 bps to-the-user for even a
small fraction of US amateurs with a network of 56 kbps links at VHF.
And to date, very few users have seen anything near 1200 bps *throughput*
with the most common system.

> been enough to interest 20% of our ham population sufficiently to make
> packet their primary operating mode, and has been enough to get hundreds
> of high site nodes and digis installed around the country. With those sites
> in hand, we can do a pretty good job of upgrading the network to 56 kb.
> That's a 47 times improvement over what we've got. We can do that for
> about $8 each per year from active packeteers, and a lot of volunteer
> labor.

I hope you are right that such a network could maintain interest in AR,
but I guess I don't believe it. Not if someone potentially interested
can get inexpensive worldwide connectivity with high throughput and a
host of services and if wireless connection to all this is also economical.
Once there is fiber to the home, things just get worse for a lowspeed,
RF-bound system.

> The highest traffic flows are on the user MANs. In some cases where
> local topographic conditions permit, those MANs could be shifted to

> higher speed. But for the intercity trunks, I don't think we can do

Higher speed cluster access was the point of our Hubmaster protocol (ARRL CNC #9). And it may be that social and other common interest issues keep the highest information volume local. However, even if the backbones don't have to be orders of magnitude faster than the local channels, the local channels have to be fast enough to be "interesting". This isn't going to happen with a small amount of VHF spectrum in most urban areas (if interested, see my other paper in CNC #9). With realizable antennas, the beamwidths are going to be wide and the available channel speed will be divided among the users. Very rapidly, a busy 56kbps channel becomes slower than a quiet 1200 bps channel. A highspeed link does not a highspeed network make.

> megabit microwave trunks nationwide. There are just too many miles
> where there are no hams, and no suitable sites for the asking. Current
> inter-MAN traffic demand doesn't justify it even if we could do it,
> but I suspect that "build it and they will come" would be in effect
> if we could possibly do it. I just don't see any way we could get
> the sites. Even if the telcos *gave* us their old microwave sites,
> I don't think we could find the manpower to maintain them.

I don't have an answer either except that perhaps a few geostationary transponders could do a lot for long haul and perhaps mitigate the problem. In any case, we *must* make effective use of resources if we are to pull it off. This means efficient energy/information transfer which is going to require focussed beams and/or guided waves. This simply isn't going to be possible at VHF.

It may be that AR will have to use existing carriers, like the IP encapsulation presently done using the Internet, for long haul. I'm not sure that in the longterm I can identify the value added by amateur radio if this trend is taken to the limit. In any case, I think there is no question that we are going to have to coordinate and cooperate. This is why I would hate to see a plan which falls short of the necessary minimum required to suceed.

I guess I'm changing my mind about what "build it and they will come" means in AR. I'm afraid it means:

build it all, everything in place to provide highspeed user access worldwide, user access h/w, s/w and a host of free services and applications.

offer it for "less than you can imagine" (certainly less than the XYL pain-threshold of $500 or so), available by charge card from all the mail order suppliers

make it totatally turnkey, there must be no way for the user to mess it up

and they will come. They will complain that it was done wrong, doesn't work well enough, is a ripoff and they could have done it better. *but* they will come and use it.

My apologies to the original poster for this severe drift. I'll QRT now.

73
Glenn n6gn

1956. Re: Passed General written, how long do I have to pass code?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 18:34:48 UTC
From: ace@reality-tech.com
Message-ID: <2kdj88$4ti@titan.Reality-Tech.COM>
Source record: 270607

You have one year and you will need the certificate of completion you should hace received when you passed it.

73 and good luck

Anthony Scandurra
KA2FFS

1957. Smallest, lightest 2 meter HT? (Backpacking)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 18:37:23 UTC
From: turner@safety.ICS.UCI.EDU
Message-ID: <9402221037.aa26716@paris.ics.uci.edu>
Source record: 270608

Anyone have an opinion on the smallest and lightest 2 meter HT out there on the market (even if it is not currently sold new?) I would require a watt or a little more output, PL tones, but don't really care about memories much. I would require some sort of alkaline battery pack.

My plan is to hike a long piece of the High Sierra, or possibly a long stretch of the Appalachian Trail from Maine south for the summer. I just turned 40, and things are looking bleak from the inside, I need a lot of time to think.

So, I am going to backpack, and must go for 7 to 10 days at a time without resupply. All my items must be light and pack very well. The two luxury items I plan to take are an HT for 2 meters, and the NorCal 40 CW transceiver, for weekly contacts and any possible emergency. I may take one or the other alone, but the next few months of planning and shakedown cruises will tell the tale.

SO.....anyone ever look into this? I am NOT concerned with brands, ruggedness is not the main factor here either. Weight and size are the controlling dimensions.

Clark
WA3JPG

P.S. Anyone else planning long backpacking runs down the AT or the Sierras this summer?

1958. COHERENT CW

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 18:38:28 UTC
From: depaul@spk.hp.com
Message-ID: <CLn2G4.2ps@spk.hp.com>
Source record: 270609

Hello.

Does anyone have information on Coherent CW?? I read that by using this
refined mode of cw you get 20 db increase in S/N...

Does anyone know of articles, kits, experiences with this?

Thanks,

Marc DePaul
depaul@hpspksf.spk.hp.com
wq
:wq

1959. QSL Bureau help (Stupid question)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 18:51:44 UTC
From: sltmw@cc.usu.edu
Message-ID: <1994Feb22.125144.11540@cc.usu.edu>
Source record: 270610

Stupid question time!!

I can't remember the protocol for getting QSL cards from the Bureaus. Can some kind soul remind me what size SASE to send, if I should include money, or just stamps, etc.....

I am just now getting back into HF, so I should have a decent set of wallpaper waiting...

Thanks and 73!

--

Daniel D Holmes " " - Marcel Marceau
Internet: SLTMW@CC.USU.EDU
AmprNet: N7NKR @ N7NKR.HOME.AMPR.ORG 44.40.1.43 [located in Salt Lake City]
N7NKR @ N7NKR.AMPR.ORG 44.40.12.10 [located in Logan]

1960. Travelling to Egypt

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 19:20:48 UTC
From: turini@gdls.com
Message-ID: <2kdlug$nvb@gdls.com>
Source record: 270611
Cross-posted to: rec.radio.amateur.misc,rec.travel

I will be travelling to Cairo in the near future. I have been told to forget about bringing any amateur radio equipment as there is no possibility of getting an operating license there.

But I was also told by the ARRL to not even bring a short wave receiver/alarm clock/AM/FM Radio as they were very strict on any type of radio equipment.

Does anyone have any first hand knowledge of this?

Thanks

Bill

1961. FCC FTP Site Operational

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 19:46:18 UTC
From: rjk@clark.net
Message-ID: <2kdnea$1j6@explorer.clark.net>
Source record: 270612

The FCC's anonymous ftp site is operational. There is not much there yet, but at least it is on-line. Here is the text of an FCC News Release issued today, and a copy of the README file I picked up at the site.

--
Bob Keller (KY3R) rjk@telcomlaw.win.net Tel +1 301.229.5208
rjk@clark.net CompuServe 76100,3333 Fax +1 301.229.6875

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News media information 202/632-5050
Recorded listing of releases and texts
202/632-0002

NEWS
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

This is an unofficial announcement of Commission action. Release of the full text of a Commission order constitutes official action. See _MCI_v._FCC_, 515 F.2d 385 (DC Circ 1974)

February 22, 1994

FCC TO MAKE DOCUMENTS AVAILABLE ON INTERNET

On February 22, the FCC will begin making some of its information available through Internet. Starting today, the FCC Daily Digest, the FCC News Releases, some Public Notices, and speeches by Commission officials will be accessible. The file name by which each document can be accessed will appear in the Daily Digest. In the future, the Commission will be making more of its documents available through Internet.

The FCC's Internet address is ftp.fcc.gov

- FCC -

Office of Public Affairs contact: Rosa Prescott at (202) 632-5050.

---------- cut here ----------
ftp.fcc.gov
README:

CONSTRUCTION AREA

Welcome to the FCC's online Archives. In the very near future we will be providing anonymous ftp access to the Daily Digest, Press Releases, Public Notices, and many other FCC staples. We also plan to provide mailservs and mailing list subscriptions to some services.

Since we have only been on the internet since February 15, 1994, we are still under construction. Services will be added on slowly. Please submit any comments or suggestions to wolodkin@fcc.gov. Please do not send me requests to be added to mailing lists as announcements will be made regarding this at a later date.

--------------------------------- cut here ---------------------------------

--
Bob Keller (KY3R) rjk@telcomlaw.win.net Tel +1 301.229.5208
rjk@clark.net CompuServe 76100,3333 Fax +1 301.229.6875

1962. Low power Bird slugs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 19:47:49 UTC
From: groverc@gvgadg.gvg.tek.com
Message-ID: <8377@gold.gvg.tek.com>
Source record: 270613

Is there a Bird slug available that would do a credible job
of measuring <5w signals in the range 3-30MHz?

WT6P

1963. Public Apology

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 20:07:48 UTC
From: kg7bk@indirect.com
Message-ID: <CLn6L1.85v@news.direct.net>
Source record: 270614

>In article <2k49diINNmp0@abyss.West.Sun.COM> myers@pongo.West.Sun.COM
>-(Dana Myers) writes:
>You're missing the point entirely! Either that or you refuse to see it.
>The "Jeff Gold" post was intentionally insulting and inflammatory, and

I want to publicly appologize to any innocent party I have offended with my humor. Anyone who knows me will tell you I am a gentleman devil's advocate with an offbeat sense of humor. The "Jeff Gold" post was 100% black humor... I meant to poke fun at Jeff, not insult him... you know, let he who is without sin cast the first stone...the pot calling the kettle black... sacarsm... I've also apologized to Jeff in private.

>it completely flies in the face of your earlier statement that Jeff
>Gold is "less than human".

Please forgive my bad spelling. The statement should have been, "Anyone who calls another a liar in public is less than humane." I still believe that... most people over 45 do believe that way.

>Attacking Jeff Gold because you don't
>like his postings *doesn't* belong on rec.radio.amateur.misc

It wasn't an attack. It was my feebleminded attempt at humor. But you believe it is OK to call an individual a liar on rec.radio.amateur.misc???? This all started when Jeff posted his two-year old, archived flame against Ramsey. I didn't object to his or anybody else's slam of Ramsey products. I objected to his emotional outburst and airing his private dirty laundry agenda (for the Nth time) on a technical news group. I poked fun at Jeff... nothing more.

>Does anyone else see the irony?... Jeff NH6IL

Yup, someone bad-mouthing a bad-mouther for bad-mouthing a bad-mouther seems ironic to me and most of my Internet friends are still laughing. Again, I'm truly sorry if I offended any innocent party.

73, Cecil, KG7BK

1964. Re: Coax minimum-loss impeance

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 20:12:03 UTC
From: tomb@lsid.hp.com
Message-ID: <CLn6s3.5Bt@hpcvsnz.cv.hp.com>
Source record: 270615

I recently wrote:

: OK, carrying this one step further, the outer-diameter/inner-diameter
: ratio for min loss under these conditions is 3.59:1. With air
: dielectric, this is the 77 ohm cable. But if the dielectric is
: polyethelene, commonly used in WWII vintage cables, the impedance
: is ... 51.02 ohms! By the way, doing the same thing for solid
: Teflon gives 52.9 ohms, still really close to 50.

Some follow-up thoughts to this.

Independent of impedance, and indpendent of conductor configuration (coaxial, 2-wire open line, 4-wire line, twin-ax, etc.), if you start with air-insulated line and replace the air with dielectric with a dielectric contstant greater than air, the impedance of the line will drop. Under matched condtions (which will be the lowest loss for that line), you would have to put more current in the line for the same power delivered to the load. Because the increased current causes greater I^2*R loss in the conductors, the line will have greater loss than the air-insulated line--even with a dielectric which is completely non-dissipative.

If you then make the conductor(s) smaller to get back to the original impedance in the same volume, you will further increase the line loss.

If you can use the same condutors at a higher impedance, the loss will be lower: you can do this with open-wire line, at least up to the point where the spacing allows radiation that significantly adds to the loss (and might also cause other problems, like messing up an antenna pattern or causing a security leak).

1965. DIY Audio Notch Filter ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 20:22:16 UTC
From: harland@otter.mech.ubc.ca
Message-ID: <2kdpho$b34@nntp.ucs.ubc.ca>
Source record: 270616

Does anybody have plans for a DIY audio notch filter ?
Am I looking to build one that has both variable centre
frequency and bandwidth.

MFJ sell a unit that is just what I am looking for,
but the price is more than I am will to pay. In their
unit you can adjust both centre frequency and bandwidth
independently.

I have found a circuit that uses an OP-amp and three
resistors. The problem is that it is not possible to
vary the bandwith / centre frequency with out messing
up the other or the gain. I suppose this circuit may
work but it would not be very useable.

I am not a elecronics wiz but I have built circuits
in the past, so I am not afraid to give this a try.

Thanks, Harland

--

Harland MacKenzie "Once you have eliminated
Department of Mechanical Engineering the impossible, what ever
University of Brithish Columbia remains, no matter how
Vancouver, B.C. Canada improbable, must be the
truth",
Internet: harland@mech.ubc.ca Sir Arthur Conan Doyle
CompuServe: 72162,2245

1966. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 20:28:24 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-220294132332@waters.corp.mot.com.corp.mot.com>
Source record: 270617

In article <1994Feb22.101612.1984@miavx3.mid.muohio.edu>,
clmorgan@miavx3.mid.muohio.edu wrote:

> In article <rohvm1.mah48d-180294104722@136.141.220.39>, rohvm1.mah48d@rohmhaas.com (John E. Taylor III) writes:
> > In article <CLC8su.DCt@news.direct.net>, kg7bk@indirect.com (Cecil Moore)
> > wrote:
> >> Your experience has been different from mine. I had 100 times the trouble
> >> out of Heathkits that I had with Ramsey kits. You probably weren't around
> >> for the '50s when it was a miracle if a Heathkit ever worked.
> > Really?! I've built Heathkits from the original oscilloscope and AT-1
> > transmitter right up through their kit 2-m HT, and had _very_ few problems
> > that weren't my own stupidity (back in the '50's I was known to make a cold
> > solder joint occasionally).
> I, too, have to disagree with the observation regarding Heathkits. From
> back in the 50's (that's 1950s folks) when I built my first one, I'd
> never had a problem that wasn't of my own making.

I suppose I have to add my voice to the chorus of Heathkit supporters! I too have built dozens of their kits from the late 50s on, a few of them still in use in my shack!

I had a few problems with missing parts and a few defective parts. The only "puzzler" I can remember was a piece of glass in a tube on my SB101. The receiver would work upside down on the bench, but would go dead when I turned it right side up. Replacing the tube fixed it - the rig worked great when I sold it 10 years later!

Heathkit - RIP.

1967. Dayton parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 20:36:40 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2kdqco$7lq@geraldo.cc.utexas.edu>
Source record: 270618

pat.wilson@pplace.com (Pat Wilson) reports:

>>I have heard many, many, many from this area who are not interested if
>>they have to walk everywhere. Seems the buses would make them a small
>>fortune if they were circumspect. Oh well.

This sort of conjures up the stereotype of the ham who is too lazy
to get out of his operating chair and walk somewhere. Someone once
told me that Real DXers[tm] have country counts equal to their weight
in lbs.

From what I've seen of the typical hamfest ham, most of them could
do with a bit more walking around.

Derek "cab!" Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

1968. Re: AIDS testing on Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 20:55:12 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-220294155107@136.141.220.39>
Source record: 270619

In article <761933299snx@skyld.grendel.com>, jangus@skyld.grendel.com
(Jeffrey D. Angus) wrote:

>> URGENT IMPORTANT AIDS NEWS FLASH!!
>>
>> IVE JUST LEARNED THAT WAYNE GREEN THE PUBLISHER OF 73 AMATEUR RADIO TODAY
>> HAS PRINTED PAMPHLETS
>> EXPLAINING PROPER USE OF 2 SIMPLE ELECTRONIC CIRCUITS
>> WHICH HAVE SHOWN PROMISE IN DISABLING
>> AND POSSIBLY CURING THE HIV VIRUS.

If this is a joke, it is in _very_ poor taste. If the original author was
serious (or if Wayne is serious...I guess that's possible) then our descent
into a technological dark age has accelerated frighteningly. No wonder
people believe RF causes cancer!

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

1969. Re: Passed General written, how long do I have to pass code?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 21:31:27 UTC
From: ah301@yfn.ysu.edu
Message-ID: <ah301-220294163128@sy_j.pgh.wec.com>
Source record: 270620

In article <1994Feb22.160515.24890@isc-br.isc-br.com>,
bruceo@loki.isc-br.com (Bruce Oscarson) wrote:

>
> I passed my General written exam a while back, but was only able to
> copy 5 wpm.
>
> Does anyone know how long I have to pass the 13 wpm before I have to
> take the written exam over again?
>
>
> Thanks....
>
>
> bruceo@loki.isc-br.com
> N7RWO
> --

where I took my exams, if you do not pass the codes, they don't let you
take the written exams (makes sense). So your being able to take the
written exam without the 13 wpm is something new to me.

N3RKD

1970. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 21:32:50 UTC
From: leber@panther.warm.inmet.com
Message-ID: <CLnAIr.76s@inmet.camb.inmet.com>
Source record: 270621

I'd like to hear other opinions about this also. My 1988 Acura Integra (another Honda product, for those who may not know) has exhibited a fair amount of ignition noise since it was new. It's not coming through the power cord, as it exists even on battery operated rigs.

I've had them check everything they could, and replaced the distributor cap and rotor. I also had the 'ignitor' replaced on recall (whatever that is). It's still pretty noisy on my 2 m. HT and scanner.

Any ideas? (other than get rid of the car, I mean)

Cheers,
Tom
--

Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
"Smother technology and it rebels." - Max Headroom

1971. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 21:32:53 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-220294142200@waters.corp.mot.com.corp.mot.com>
Source record: 270622

In article <2kcdqj$nto@crcnis1.unl.edu>, mcduffie@unlinfo.unl.edu (Gary McDuffie Sr) wrote:

> rcrw90@email.mot.com (Mike Waters) writes:
>
> >The need is not to show that someone *is* or *could* cheat, but for them to
> >prove that they *could not* cheat.. If you want to use some piece of
> >equipment in a testing session *you* must show that (a) you are not using
> >it to cheat and (b) it won't disturb the other test takers.
>
> Oh, we are back to guilty_until_proven_innocent now? Be real!

No one is being accused of anything - just making sure the test is fair for all.

> >Showing an empty hard drive or none at all is one very easy way to do this.
> > Certainly there are other waysto do this. Remember the onus in not on the
> >VEs to try to anticipate every possible way for someone to cheat, but to
> >ensure fair tests
>
> You failed to answer the question. What has a hard drive got to do
> with cheating? How is a hard drive going to help you cheat?

As I stated in my previous post, I have no idea how you might use a hard drive to cheat and I don't care! That is my answer - IT DOESN'T MATTER!

I would feel the same about bringing in absolutly anything that is not needed in the exam room - a dictionary, a book on morse code, or a tape recorder all fall into that class.

My point is that you shouldn't have any question of cheating.

This is not a contest to see what creative things you can do to "get around" the VEs - they are volunteers who are trying to help people show they are qualified and "sticking their necks out" to do so I might add. If someone cheats in one of my VE sessions *my* license and reputation is on the line! I don't intend to risk either just to be a "nice guy", but I will do all I can to help someone who has a legitimate problem.

If you don't like it then you are free either to do it better or try to find someone else who will, certainly it won't cost *me* any money or any sleep.

If I run the testing session you will have to show me that you don't have anything that could allow you to cheat - period. I suspect that you will find just about every other VE feels the same way.

1972. Re: Looking for HT storage suggestions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 22:08:42 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-220294150607@waters.corp.mot.com.corp.mot.com>
Source record: 270623

In article <CLMzMK.EJw@unixhub.SLAC.Stanford.EDU>,
witness@unixhub.SLAC.Stanford.EDU (Greg Sherwin) wrote:

> Is this a concern that should keep me from storing an HT in my trunk during
> the summer months? Anyone have any similar experiences or wisdom to share?

Don't know about the specs, but off and on I have kept my IC24AT and before
that a Motorola HT under the front seat of my car in the Arizona sun for
many years. I make sure they are out of the direct sunlight, but don't do
anything else special.

I have an Alinco DR590 that has been in the car full time for three years
now without problems.

Bottom line IMHO is that you shouldn't have any trouble with reasonable
care, although you might shorten the life of the NiCads some.

1973. ARLB020 SM election results

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 22:19:02 UTC
From: marcbg@netcom.com
Message-ID: <$arlb020.1994@ampr.org>
Source record: 270624
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

SB QST @ ARL $ARLB020
ARLB020 SM election results

ZCZC AG84
QST de W1AW
ARRL Bulletin 20 ARLB020
>From ARRL Headquarters
Newington CT February 22, 1994
To all radio amateurs

SB QST ARL ARLB020
ARLB020 SM election results

Ballots have been counted in Section Manager elections for North Carolina, Pacific. Their terms of office begin April 1, 1994.

The results are as follows:

In the North Carolina Section
Eugene Ribas, Jr N4UMI, 179
Carl Smith, N4AA, 675
Reed Whitten, AB4W, 726
Whitten was declared elected.

In the Pacific Section
Chester Koga, NH6YW, 113
Bob Schneider, AH6J, 141
Schneider was declared elected.

Six other Sections were not contested. The following were declared elected.

In the Eastern New York Section
Paul Vydareny, WB2VUK

In the Eastern Pennsylvania Section
Robert Stanhope, KB3YS

In the Louisiana Section
Lionel Oubre, K5DPG

In the San Diego Section
Patrick Bunsokd, WA6MHZ

In the South Dakota Section
Roland Cory, W0YMB

In the Virginia Section
Edward Dingler, N4KSO
NNNN
/EX
--
==========
Marc B. Grant Voice Mail: 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com
==========

1974. Re: Looking for HT storage suggestions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 22:19:50 UTC
From: julian@bongo.tele.com
Message-ID: <1994Feb22.221950.7378@bongo.tele.com>
Source record: 270625

In article <CLMzMK.EJw@unixhub.SLAC.Stanford.EDU> witness@unixhub.SLAC.Stanford.EDU (Greg Sherwin) writes:
>My concern about
>storing it in the trunk of my car (along with my disaster supplies) is
>the summer heat and sun. I do not know what temperature specifications
>exist for most HTs (does anyone have any?), but I do know the NiCad batteries
>are rated up to 45 Celcius for storage. In the summer sun of California,
>I would think that the trunk of my car could get well over 55 Celcius.

A Ni-Cad may not leak at 45 celsius, but the self discharge
rate will be so high that the battery pack will be useless when you
need it. You would have to recharge the battery pack daily. If you
want a radio with instant emergency usefulness, consider a
walkie-talkie with Lithium Batteries. It will have a shelf life of
about 10 years.

Failing that, keep the radio in the trunk, keep a couple of
packs with alkalines in the glove compartment and use the batteries
somewhere else after 6 months. You may also keep a Ni-Cad pack in the
car, but it should be recharged weekly in the summer.

Note that Ni-Cads are have terrible self discharge curves.
Sitting on a shelf, a Ni-Cad pack will be pretty flat after a month.
An Alkaline pack will be fine after 18 Months. The best batteries for
storage are Lithium. But they are hard to find and no company that I
know of currently makes lithium battery packs for walkie-talkies.

>Is this a concern that should keep me from storing an HT in my trunk during
>the summer months? Anyone have any similar experiences or wisdom to share?

The batteries and the electronics will be happier if kept
cool. I store Alkalines in the Freezer and Ni-Cads in the fridge -
right next to the beer.
--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

1975. ARLX008 Invitation to Cuba

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 22:26:04 UTC
From: marcbg@netcom.com
Message-ID: <$arlx008.1994@ampr.org>
Source record: 270626
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

SB SPCL @ ARL $ARLX008
ARLX008 Invitation to Cuba

ZCZC AX40
QST de W1AW
Special Bulletin 8 ARLX008
>From ARRL Headquarters
Newington CT February 17, 1994
To all radio amateurs

SB SPCL ARL ARLX008
ARLX008 Invitation to Cuba

Invitation to Cuba

The Cuban Amateur Radio community has invited American amateurs to participate in a joint operation with Cuban amateurs in the 1994 ARRL June VHF QSO Party.

ARRL Oklahoma Section Manager Joe Lynch, N6CL, was invited to lead the group, during a visit to Cuba the week of February 7. The operation would take place from Bellomonte. Officials of the Federacion Radioaficionados de Cuba (FRC) said they also have taken under consideration a proposal from an American group for a joint operation from Cuba on the HF bands in 1995.

Lynch, in Cuba for a week as a member of a Methodist Church work team, extended greetings from ARRL officials, presented FRC President Ing. Pedro Rodriguez, CO2RP, with a certificate of participation for the June 1993 ARRL VHF QSO Party, and also presented an author's certificate to Arne Coro, CO2KK, for his article in December 1993 QST.

Lynch's informal meetings with FRC officials were publicized on radio, television, and in the print media.

Joe Lynch is VHF editor of CQ Magazine and also is editor of the QCWA Journal.
NNNN
/EX

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==========
Marc B. Grant Voice Mail: 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com

==========

1976. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 22:32:28 UTC
From: aa813@cleveland.Freenet.Edu
Message-ID: <2ke15s$9e4@usenet.INS.CWRU.Edu>
Source record: 270627

In a previous article, baxter@kuhub.cc.ukans.edu () says:

>This past month, Honda sent out a recall notice for their 90-91 Accords.
>They were wanting to replace a part in the distributor which failed when
>the car got high mileage.

>I had this recall work done on my car a couple of weeks ago, and now have
>terrible ignition noise on 2 meters and 440. Before this work had been
>done, the ignition had been really quite quiet -- now it is nearly
>unbearable.
>
>One fellow ham said the thought that he'd read something about this on packet
>or in one of the ham magazines.
>
>Has anyone else had this problem? The local Honda folks seem lukewarm about
>fixing this problem they created, probably because theyt really don't
>understand it.
>
>Any one dealt with Honda about this problem?
>
>Thanks.
>
>Kirk Baxter, N0FPZ/VK1KU
>
>
I believe the part in question is the IGNITER. It looks like a large
two-bladed fuse. I have a 1990 Civic which was nice and quiet until I had
Honda tune it up. Then it was noisy. That went on for about 7 months.
Then the darn thing failed. No warning. It just quit.

I got the igniter replaced and the noise went away.

I suggest that you suggest to Honda that they try another igniter and see
if that cures your noise problem.

Hope that this solves your problem and that it does not fail on you.

73, Joe N8IPC

1977. Re: Dayton parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 23:22:03 UTC
From: fms@sw.stratus.com
Message-ID: <2ke42t$144@transfer.stratus.com>
Source record: 270679

oo7@astro.as.utexas.edu (Derek Wills) writes:
> pat.wilson@pplace.com (Pat Wilson) reports:
>
> >>I have heard many, many, many from this area who are not interested if
> >>they have to walk everywhere. Seems the buses would make them a small
> >>fortune if they were circumspect. Oh well.
>
> This sort of conjures up the stereotype of the ham who is too lazy
> to get out of his operating chair and walk somewhere. Someone once
> told me that Real DXers[tm] have country counts equal to their weight
> in lbs.
>
> From what I've seen of the typical hamfest ham, most of them could
> do with a bit more walking around.
>
>
> Derek "cab!" Wills (AA5BT, G3NMX)
> Department of Astronomy, University of Texas,
> Austin TX 78712. (512-471-1392)
> oo7@astro.as.utexas.edu

Well, yeah, it does sort of conjure up that stereotype.

But even Daytonites don't walk.

Last year at Dayton, we were staying at the Radisson (with the rest of the RTTY types!). After an afternoon of wandering around the show, I had myself a craving for a bit of orange juice. I'd have ordered from room service, but I wasn't about to pay that kind of money for simple OJ. I checked at the gas station right there at the Radisson -- no luck. I asked at the front desk if there was some place I could go. They suggested a mall down the street. Having no car, I asked them if the mall was within walking distance. Their answer was to strongly suggest that I NOT walk along the road, no matter how far I was going, because the road was DANGEROUS. Of course, I DID end up walking along the road -- across the street and down to the convenience store a half-block down. No death or dismemberment, but it wasn't a good time, either (no sidewalk except across the I-75 bridge, rushing traffic, etc.)...

I'm personally hoping that the Radisson is going to be running shuttles to the show, because I don't relish sitting in the traffic jam (which happened last year, even with loaded busses) for an hour or more in a Standard-Shift vehicle, and it's WAAAAAY too far from the Radisson to walk, even if the road wasn't 'DANGEROUS', as the folks at the Radisson claim.

73 de Faith "It's HOW far???" N1JIT
--

Faith M. Senie InterNet: fms@vos.stratus.com
Stratus Computer, Inc. InterNet: fms@hoop.sw.stratus.com
55 Fairbanks Blvd. Pkt Radio: n1jit@wa1phy.ma.usa.na
Marlboro, MA 01752 Phone: (508)460-2632

Curiosity doesn't flourish among the burned-out...

1978. Ramsey Argument (was: Dana Myers (was: Jeff Gold))

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-22 23:38:21 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940222153821_730@ccm.hf.intel.com>
Source record: 270680

Text item: Text_1

>Subject : Dana Myers (was: Jeff Gold (was: John Ramsey))
>In article <2k49diINNmp0@abyss.West.Sun.COM> myers@pongo.West.Sun.COM
>-(Dana Myers) writes:
>You're missing the point entirely! Either that or you refuse to see it.
>The "Jeff Gold" post was intentionally insulting and inflammatory, and

I want to publicly appologize to any innocent party I have offended with my humor. Anyone who knows me will tell you I am a perfect gentleman with an offbeat sense of humor. The "Jeff Gold" post was 100% black humor... I meant to poke fun at Jeff, not insult him... you know, let he who is without sin cast the first stone...the pot calling the kettle black... sacarsm...

>it completely flies in the face of your earlier statement that Jeff
>Gold is "less than human".

Please forgive my bad spelling. The statement should have been, "Anyone who calls another a liar in public is less than humane." I still believe that... most people over 45 do believe that way.

>Attacking Jeff Gold because you don't
>like his postings *doesn't* belong on rec.radio.amateur.misc

And you believe it is OK to call an individual a liar on rec.radio.amateur.misc???? This all started when Jeff posted his two-year old, archived flame against Ramsey. I didn't object to his or anybody else's slam of Ramsey products. I objected to his emotional outburst and airing his private dirty laundry agenda (for the Nth time)on a technical news group.

>Does anyone else see the irony?... Jeff NH6IL

Yup, someone bad-mouthing a bad-mouther for bad-mouthing a bad-mouther seems ironic to me and most of my Internet friends. Again, I'm truly sorry if I offended an innocent party.

73, Cecil, KG7BK

1979. Re: FT530 dtmf decoding

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 00:22:01 UTC
From: sknapp@iastate.edu
Message-ID: <2ke7j9$d6u@news.iastate.edu>
Source record: 270681

David Willmore <willmore@iastate.edu> wrote:
>>DTMF Decoding
>
>>A nifty little "feature" that isn't mentioned in the manual.
>>Steps to follow:
>>1) tune to the freq you want to monitor and turn on the code squelch
>>2) press Function-Page(Code) to select a code memory
>>3) dial up to memory #7
>>4) watch the dtmf's scroll by as they are heard by the radio!
>
>Sorry, but it's in the manual. :) IMHO, the manual is very poor, but,
>from the Icom manuals I have seen, well above par for the course.

The manual says something about the last 3 DTMF digits being displayed
in memory 7, but did not mention the fact that it scrolls! :)

My old Icom manuals had more pictures and charts than my FT-530 book
does. I liked that. The FT-530's manual is also incorrect in a few
places, REALLY annoying. Oh well...still a good radio...

Steven M. Knapp Computer Engineering Senior
sknapp@iastate.edu Vice President Cyclone Amateur Radio Club
Iowa State University; Ames, IA; USA Durham Center Operations Staff

1980. Need Small RF Tx/Rx

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 00:30:24 UTC
From: lewcobb@jupiter.sun.csd.unb.ca
Message-ID: <1994Feb23.003024.15282@jupiter.sun.csd.unb.ca>
Source record: 270682

am looking for a small low power (<1 watt) tx/rx modules that can be
commercially designed into a small microprocessor control system for
a piece of hydraulic equipment over a distance of about 100 feet. Does
anyone know where I might obtain some devices in the UHF/VHF region that
would be simple to interface to? Ideally, I would pump TTL serial data into the Tx module
at 1200-9600 baud and at the other end, out would pop the TTL data
from the Rx module. I am not concerned with errors as I can packetize the data
and protect it sufficiently with CRCs etc. What I am concerned about is that
I am a microprocessor person and I don't want to become an RF designer to
implement this otherwise straightforward project! Actually, flea power
might be sufficient such as 100mW. Some may want to point me in the
right direction here as well.

Thanks for any help!

Please e-mail me directly
Lewis Cobb
lewcobb@unb.ca

1981. Ham Distribution Net

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 02:02:05 UTC
From: ab5sm@netcom.com
Message-ID: <ab5smCLnMzJ.GJs@netcom.com>
Source record: 270683

Hello --

I am the coordinator for the Ham Distribution Net and have been
posting notices of new files to the newsgroup for a couple of months
now. It appears that files arriving at ftp.fidonet.org and mirrored
to ftp.halcyon.com are not remaining there long enough for internet
readers to ftp the files.

HDN is looking for an ftp site that is willing to mirror either
ftp.fidonet.org or ftp.halcyon.com as new files arrive and allow
the Ham Distribution Net to advertise your ftp site as the official
internet HDN headquarters and not to remove the files after x days.

If you are in a position to help provide a home for the Ham Distribution
Net here on internet please e-mail me at the address below.

lee - ab5sm ab5sm@txnp.uscourts.gov
Ham Distribution Net
--
ab5sm@netcom.com

1982. Re: Boring WWV Programs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 05:05:22 UTC
From: armond@delphi.com
Message-ID: <ZE+J+ha.armond@delphi.com>
Source record: 270684

very good and clever response, 73, N6WR,

1983. Daily Summary of Solar Geophysical Activity for 22 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 05:27:58 UTC
From: oler@rho.uleth.ca
Message-ID: <9402230528.AA01893@rho.uleth.ca>
Source record: 270685
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

22 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

NOTE: The GOES greater than 2 MeV electron detectors are contaminated during
high energy proton events. For this reason, the electron fluence
values for 20 to 22 February are suspect and should be disregarded.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 053, 02/22/94
10.7 FLUX=106.7 90-AVG=106 SSN=068 BKI=7844 3312 BAI=059
BGND-XRAY=B1.7 FLU1=3.8E+07 FLU10=2.8E+05 PKI=7645 4333 PAI=046
BOU-DEV=201,342,061,067,038,028,006,013 DEV-AVG=094 NT SWF=00:000
XRAY-MAX= C1.2 @ 0234UT XRAY-MIN= B1.5 @ 1056UT XRAY-AVG= B2.5
NEUTN-MAX= +000% @ 2035UT NEUTN-MIN= -006% @ 0735UT NEUTN-AVG= -2.8%
PCA-MAX= +0.4DB @ 0010UT PCA-MIN= -0.2DB @ 1015UT PCA-AVG= +0.1DB
BOUTF-MAX=55441NT @ 0105UT BOUTF-MIN=55316NT @ 1756UT BOUTF-AVG=55342NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+050,+000,+000
GOES6-MAX=E:+142NT@ 0330UT GOES6-MIN=N:-131NT@ 0344UT G6-AVG=+078,+066,-046
FLUXFCST=STD:105,105,100;SESC:105,105,100 BAI/PAI-FCST=025,015,010/030,020,015
KFCST=4455 5432 3445 4332 27DAY-AP=017,016 27DAY-KP=1353 4432 2343 3433
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**FORBUSH;**MAJSTRM;**PROTN10:ENDED
!!END-DATA!!

NOTE: The Effective Sunspot Number for 21 FEB 94 was 42.2.
The Full Kp Indices for 21 FEB 94 are: 2o 2o 3o 7- 7- 7- 5- 6o
The 3-Hr Ap Indices for 21 FEB 94 are: 8 9 14 110 103 122 42 87
Greater than 2 MeV Electron Fluence for 21 FEB is: 1.6E+08

SYNOPSIS OF ACT

Solar activity was low. Just one unobserved C-class event
was recorded. Region 7671 (N10W42) continues its slow decay.
Three new regions were assigned, 7675 (S12E41), 7676 (N09E50),
and 7677 (N20W12).

Solar activity forecast: solar activity is expected to be
low.

The geomagnetic field has been at predominantly major
storm levels the past 24 hours. Intervals of severe storm
conditions were observed in nighttime sectors. This disturbance
has gradually weakened throughout the day. The greater than 10
MeV proton event ended at 0050Z. The polar cap absorption ended
at 1525Z.

Geophysical activity forecast: the geomagnetic field is
expected to be at active to minor storm levels during the
next 24 hours. Episodes of major storming may occur in
nighttime sectors. A small coronal hole now positioned
near W30 may further fuel the activity in the near term.
Strictly unsettled conditions are anticipated by Feb. 25.

Event probabilities 23 feb-25 feb

Class M 05/05/05
Class X 01/01/01
Proton 05/05/05
PCAF Yellow

Geomagnetic activity probabilities 23 feb-25 feb

A. Middle Latitudes
Active 15/20/15
Minor Storm 25/20/10
Major-Severe Storm 25/10/01

B. High Latitudes
Active 15/25/20
Minor Storm 25/20/15
Major-Severe Storm 35/15/05

HF propagation conditions over the high and polar latitude
paths continued to be essentially useless throughout the day.
Moderate to periods of strong degradation were also observed
throughout the day over many middle latitude regions, although
some improvements are gradually becoming apparent over these
regions. Gradual improvements are expected over the next 72
hours, although a return to near-normal conditions is not
expected for several days yet, particularly over the high and
polar latitude paths where residual substorm activity and
renewed activity from the above-noted coronal hole may keep
propagation at poor to very poor levels for much of this week.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE

7671 N10W42 191 0290 DAO 06 010 BET
7675 S12E41 108 0040 CAO 06 006 BET
7676 N09E50 099 0030 BXO 09 008 BET
7677 N20W12 161 0010 BXO 03 004 BET
7669 N08W60 209 PLAGE
7670 N09W50 199 PLAGE
7674 S14W17 166 PLAGE
REGIONS DUE TO RET
NMBR LAT
7664 S13 036
7665 N03 029

LISTING OF SOLAR ENERGETIC EVENTS FOR 22 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP SWF
NO EVENTS OBSERVED

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 22 FEBRUARY, 1994

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
63 S30W12 S30W17 S28W40 S04W30 187 ISO POS 008 10830A
64 N40W02 N10W22 N25W36 N40W02 179 ISO POS 015 10830A
65 S18E53 S30E43 S18E34 S10E36 117 ISO POS 003 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
21 Feb: 0459 0504 0511 B2.5
0635 0651 0658 B5.5
1704 1707 1711 B3.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 003 (100.0)

Total Events: 003 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.

All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

1984. Re: Passed General written, how long do I have to pass code?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 05:41:06 UTC
From: slay@netcom.com
Message-ID: <slayCLnx4J.3tF@netcom.com>
Source record: 270686

Bruce Oscarson (bruceo@loki.isc-br.com) wrote:
: I passed my General written exam a while back, but was only able to
: copy 5 wpm.

: Does anyone know how long I have to pass the 13 wpm before I have to
: take the written exam over again?

At the time for your exam, you should have been issued a CSCE for the written and CW elements you were able to pass. That CSCE is valid for exactly one year - and no more. [I had a fellow who came in to our exam session one year plus one day after his CSCE had been issued and very unfortunately, it was no longer valid.]

Cheers de Sandy WA6BXH/7J1ABV slay@netcom.com

1985. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 05:44:23 UTC
From: armond@delphi.com
Message-ID: <RqzI+RX.armond@delphi.com>
Source record: 270687

Dana Myers <myers@cypress.West.Sun.COM> writes:

> * This Extra supports the abolition of the 13 and 20 WPM tests *

This Extra supports the abolition of those who support the abolition of
the 13 and 20 WPM tests.

1986. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 06:06:38 UTC
From: jason@yar.cs.wisc.edu
Message-ID: <2kerpe$duh@spool.cs.wisc.edu>
Source record: 270688

In article <RqzI+RX.armond@delphi.com>, <armond@delphi.com> wrote:
>Dana Myers <myers@cypress.West.Sun.COM> writes:
>
>> * This Extra supports the abolition of the 13 and 20 WPM tests *
>
>This Extra supports the abolition of those who support the abolition of
>the 13 and 20 WPM tests.

This Extra supports the abolition of delphi posters from the net.
--
Jason J. Hanson | 1510 Tripp Circle #VI309 | (608) 264-1079
Univ. of Wisconsin | Madison, WI 53706-1294 | Ham: N9LEA (Extra)
-- jason@yar.cs.wisc.edu =*+++= n9lea@n0ary.#nocal.ca.usa.na --

1987. Re: RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 06:12:36 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLnyL1.Hx3@news.Hawaii.Edu>
Source record: 270689

In article <761852750snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>In article <CLJo0C.9t6@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu spews:
>
> [nothing of importance as usual]
> >
> > Jeff NH6IL
> >
>
> For Christs (sic) sake Jeff. Give it a f*****g rest.
>

OUCH! My goodness, Jeff; no need to get so upset.

> I voted for Bush both times, how about accusing me of murder since I had
> a hand in electing the Commander in Chief that ordered Desert Storm?
>
> By the way, lists of frequencies used by various agencies are published
> in books and magazines in most electronics type stores. How about telling
> me that Radio Shack promotes jamming the police. Heh?

Context. Context is everything. Go back and check it yourself and you'll see why I got upset at the original poster.

My last comment on this (Ha!) is: Don't fly at night, for that's when the pilot of your aircraft will be trying to use 6 MHz.

73 to you Jeff,
Jeff NH6IL [looks like I'm talking to myself...]

1988. Re: Jef Harmon (was Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 06:23:57 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLnz3x.I7B@news.Hawaii.Edu>
Source record: 270690

In article <rcrw90-220294090414@waters.corp.mot.com.corp.mot.com> rcrw90@email.mot.com (Mike Waters) writes:
>
>And you don't even see the problem people have with your fixation on the
>subject do you?

No fixation. But I do have to use the facility at least once per day - hard to ignore what goes on; should I close my eyes?

>BTW my Local Notice to Mariners this month stated that 500Khz CW was
>discontinued to allow 518Khz SITOR - the CG feels that is a much more
>useful service I guess. Oh well.

That's old news. BUT the HF maritime CW bands are still jumping with activity and the C.G. is still monitoring them, so CW on the high seas frequencies is still very much in use.

Jeff NH6IL

1989. ACE Communications - good? bad?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 06:54:29 UTC
From: andrew@zone4.ocunix.on.ca
Message-ID: <2keuj5$jpu@zone4.ocunix.on.ca>
Source record: 270691

I'm thinking of buying a scanner from ACE Communications in Indianapolis, Indiana. I sent a request for info to their fax line, and called their tech support; both times, I got ignored---so I'm kind of wary. Nonetheless, they've got the best price I've seen. I'd like to hear comments about them one way or another---anybody do business with them? I'm especially interested if you did business with them from a country other than the USA, since that's my situation... but *any* info would be helpful.

Thanks...

Andrew Jr.
--
Andrew Cornwall
andrew@zone4.ocunix.on.ca

1990. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 08:10:36 UTC
From: janc@icebox.iceonline.com
Message-ID: <CLo3wq.ICo@iceonline.com>
Source record: 270692

>I'd like to hear other opinions about this also. My 1988 Acura Integra (another
>Honda product, for those who may not know) has exhibited a fair amount of
>ignition noise since it was new. It's not coming through the power cord, as it
>exists even on battery operated rigs.
>
>I've had them check everything they could, and replaced the distributor cap
>and rotor. I also had the 'ignitor' replaced on recall (whatever that is).
>It's still pretty noisy on my 2 m. HT and scanner.
>
>Any ideas? (other than get rid of the car, I mean)

Yes. Have them replace your ignition wires with low-noise type. I believe
that they are sometimes called Silicon Ignition Wires - but I may be wrong.
When I replaced the wires on my Bronco II, it made a world of difference.

: If you eat a live toad first thing in the
janc@icebox.iceonline.com : morning, nothing worse will happen to you all
: day.
: To you or the toad.

1991. Re: AIDS testing on Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 08:17:17 UTC
From: kevin@beacons.cts.com
Message-ID: <1994Feb23.081717.775@beacons.cts.com>
Source record: 270693

In article <rohvm1.mah48d-220294155107@136.141.220.39> rohvm1.mah48d@rohmhaas.com (John E. Taylor III) writes:
>In article <761933299snx@skyld.grendel.com>, jangus@skyld.grendel.com
>(Jeffrey D. Angus) wrote:
>
>>> URGENT IMPORTANT AIDS NEWS FLASH!!
>>>
>If this is a joke, it is in _very_ poor taste. If the original author was
>serious (or if Wayne is serious...I guess that's possible) then our descent
>into a technological dark age has accelerated frighteningly. No wonder
>people believe RF causes cancer!

Well if it works then Wayne can say he invented RTTY and SSB, and
in his spare time, found the cure for AIDS. ;-)

____
| ___ |
Kevin Sanders, KN6FQ | o o _/ o o | Try Boatanchors
kevin@beacons.cts.com | o o @ o o | For A Real Lift
|_____________|

1992. MSK receiver?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 12:34:02 UTC
From: tm@koppelo.cs.tut.fi
Message-ID: <TM.94Feb23143402@koppelo.cs.tut.fi>
Source record: 270694
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

Does anyone know where to find or how to build a radio receiver that
picks up MSK (minimium shift keying) modulated 100 bits/sec data
transmitted on aprox 300 kHz carrier signal?

This would be used to receive differential GPS-corrections from a
reference station.

Any pointers?
--

Tatu Mannisto Tampere Univ. of TeXnology
+358 31 434 456 home Internet: tm@cs.tut.fi
+358 31 162 951 work (HB230)

1993. Re: Exam element credit - 1 yr.!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 13:01:35 UTC
From: burke_br@adcae1.comm.mot.com
Message-ID: <1994Feb23.130135.2494@lmpsbbs.comm.mot.com>
Source record: 270695

In article o6m@cville-srv.wam.umd.edu, ham@wam.umd.edu (Scott Richard Rosenfeld) writes:
}You have ONE YEAR EXACTLY from the date of passing an exam element to use it
}for getting a higher class license.
}
}Someone noted that they passed the General written, but haven't passed 13 wpm.
}You have exactly 1 year from the date of passing your general exam to pass
}the 13 wpm exam (i.e. utilize the General written credit), after which the
}written exam credit will expire.
}
}Scott NF3I
}
}I don't remember if it's, for example, Nov. 7, 1993 - Nov. 6, 1994, or
}Nov. 7, 1993 - Nov. 7, 1994 (last day inclusive?)
}
}--
}73, _________ _________ The
} \ / Long Original
}Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
} WAC-CW/SSB WAS DXCC - 123 QSLed on dipoles __________| Dipoles! Antenna!

Actually, you have 365 days, so watch out during leap years.
Bruce, WB4YUC

1994. Re: AIDS testing on Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 13:19:28 UTC
From: greg@netcom.com
Message-ID: <gregCLoICG.4sK@netcom.com>
Source record: 270696

In article <rohvm1.mah48d-220294155107@136.141.220.39> rohvm1.mah48d@rohmhaas.com (John E. Taylor III) writes:
>In article <761933299snx@skyld.grendel.com>, jangus@skyld.grendel.com
>(Jeffrey D. Angus) wrote:
>
>>> URGENT IMPORTANT AIDS NEWS FLASH!!
>>>
>>> IVE JUST LEARNED THAT WAYNE GREEN THE PUBLISHER OF 73 AMATEUR RADIO TODAY
>>> HAS PRINTED PAMPHLETS
>>> EXPLAINING PROPER USE OF 2 SIMPLE ELECTRONIC CIRCUITS
>>> WHICH HAVE SHOWN PROMISE IN DISABLING
>>> AND POSSIBLY CURING THE HIV VIRUS.
>
>If this is a joke, it is in _very_ poor taste. If the original author was
>serious (or if Wayne is serious...I guess that's possible) then our descent
>into a technological dark age has accelerated frighteningly. No wonder
>people believe RF causes cancer!
>
No, it's not a joke. Wayne Green seems to believe he has found the
cure. He editorializes about it in the same column in which he
expounds the virtues of cold fusion. And psience. Well, anyway,
he's been on that toot for several months now.

Perhaps his next 'small business venture' will be a medicine show
and carnival.

(Too bad you can't make effective hand gestures on USENET :-))

Greg

1995. QSL info needed for 5B4ADA

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 13:37:39 UTC
From: jwittich@b4pph107.bnr.ca
Message-ID: <1994Feb23.133739.10833@brtph560.bnr.ca>
Source record: 270697

Hi, guys. Someone on the local packet-cluster node is asking
for QSL info for 5B4ADA. The QSL manager data base shows a manager
in Croatia for 5B4ADA. He said he believes there is a W2
manager also. Can anyone shed some light? I also worked this
station and would much rather QSL to a US manager rather than try
to get one in and out of 9A.
Thanks. 73. -=Jeff=-

--
****
jwittich@bnr.ca * BNR claims they know nothing of my
AC4ZO * employment here.
****

1996. Re: Rolling RF NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 14:06:13 UTC
From: CSLE87@email.mot.com
Message-ID: <CSLE87-230294080613@145.1.114.19>
Source record: 270698

In article <holdwick_marc-220294134932@mac-am-47.cig.mot.com>,
holdwick_marc@macmail1.rtsg.mot.com (Marc Holdwick) wrote:

>
> My parents have a 1990 Accord which failed to start one day. It was traced
> to a bad ignition module. About a year after my dad had it replaced (out
> of his own pocket) Honda sent out a notice referring to this problem and
> reimbursed my father.
>
> I'm not sure if a new style of ignition module was used. Perhaps that is
> the problem. Could you ask the dealership what EXACTLY was "fixed". If a
> new part was used what part did it replace?
>
> If it is something other than the ignition module I would be really
> interested in knowing as I have a high milage (140k) 1985 Chevy Caprice
> which has *terrible* ignition noise. I have checked all of the usual
> items: Plugs, cables but to no avail. I think there might be a problem in
> the distributor. (I'm sure that SOMEWHERE, in some police garage there is
> a mechanic who has solved my EXACT problem - too bad there isn't a
> rec.radio.police.caprice.RFI newsgroup)
>
>
> 73,
>
> Marc - N8KWX

I had a Mercury Topaz that exhibited similar problems for
about two months, after which the ignition coil failed and
I sat at the side of the road for a while. When the dealer
replaced the coil, all the noise problems went away, and they
even left my big coaxial capacitor in place on the lead to the
new coil. The Topaz also had an electric fuel pump inside the
gasoline tank which generated tremendous amounts of RF hash.
Ford has a standard RF filter for the fuel pump.

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

Some of the opinions expressed above aren't even claimed by the author!
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

1997. Special Events Question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 14:06:57 UTC
From: kr4ah@pegasus
Message-ID: <2kfnu1$1fq@pegasus.cc.ucf.edu>
Source record: 270699

[No readable article body recovered]

1998. Re: QSL info needed for 5B4ADA

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 14:30:54 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2kfpau$i49@news.acns.nwu.edu>
Source record: 270700

In article <1994Feb23.133739.10833@brtph560.bnr.ca>,
Jeffrey Wittich <jwittich@b4pph107.bnr.ca> wrote:
> Hi, guys. Someone on the local packet-cluster node is asking
>for QSL info for 5B4ADA. The QSL manager data base shows a manager
>in Croatia for 5B4ADA. He said he believes there is a W2
>manager also. Can anyone shed some light? I also worked this
>station and would much rather QSL to a US manager rather than try
>to get one in and out of 9A.

I got the card from Croatia by sending a SAE and an IRC to:
Tomislav Polak
Brace Domany 16/XIX
41000 Zagreb
Republic of Croatia

Best of luck

Rajiv
aa9ch
r-dewan@nwu.edu

1999. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 14:39:26 UTC
From: ag821@yfn.ysu.edu
Message-ID: <2kfpqu$id6@news.ysu.edu>
Source record: 270701

In a previous article, leber@panther.warm.inmet.com (Thomas Leber) says:

>I'd like to hear other opinions about this also. My 1988 Acura Integra (another
>Honda product, for those who may not know) has exhibited a fair amount of
>ignition noise since it was new. It's not coming through the power cord, as it
>exists even on battery operated rigs.
>
>I've had them check everything they could, and replaced the distributor cap
>and rotor. I also had the 'ignitor' replaced on recall (whatever that is).
>It's still pretty noisy on my 2 m. HT and scanner.
>
>Any ideas? (other than get rid of the car, I mean)
>
>Cheers,
>Tom
>--
>---------------------------
> Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
> "Smother technology and it rebels." - Max Headroom
>

I have a 1987 Acura Integra.. I run a Ten Tec Argonaut 509 both SSB adn CW.

I had some ignition noise problems at first. I rewired all the power directly
to the battery and purchased the Radio Shack noise suppression kt (think
about $15). Seemed to take care of the problem. Still get noise from over
head power lines.. but on most highways.. no problem

73

Jeff, AC4HF
--
Jeff M. Gold, AC4HF
Manager, Academic Computing Support
Tennessee Technological University

2000. RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 15:09:16 UTC
From: jangus@skyld.grendel.com
Message-ID: <762016156snx@skyld.grendel.com>
Source record: 270702

In article <CLnyL1.Hx3@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
> >
> > For Christs (sic) sake Jeff. Give it a f*****g rest.
^^^^^^^^^^^^ ^^^^^^^
If you're going to note corrections to my english,
then how about noting the correction to my language too.

> Context. Context is everything. Go back and check it yourself and you'll
> see why I got upset at the original poster.

I watched the entire episode from the start on rec.radio.cb. From what
I saw you got your wannabe basket-weave belt accessories in a knot when
someone posted a list of 6 MHz frequencies and then you went ballistic
when Dana joined in the discussion.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2001. Re: repeater list

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 15:17:07 UTC
From: a229aa@email.sps.mot.com
Message-ID: <a229aa-230294081435@hofbrau.sps.mot.com>
Source record: 270703

This whole issue is just another indication that the ARRL is more interested in protecting itself than serving the amateur community. How can the ARRL possibly claim copyright on data collected and compiled by individual volunteers from sources other than the ARRL? Surely they don't believe the volunteers sat down and transcribed the contents of the ARRL repeater directory... I have one of those and it's the last place I look for valid information (lots of inaccurate listings for Arizona). Since the ARRL doesn't seem to pursue other published repeater directories (go look in any HRO across the country), it would seem it has no legal claim to data or format. I might add that those rags usually charge money, Conway's on-line directory is free.

Is the ARRL just upset because somebody beat them to it? Internet users have been asking for an on-line directory for years. Now that somebody has finally taken the challenge, the ARRL gets nasty and legal instead of helpful and supportive.

I am a member of the ARRL and I am not happy. I expect the ARRL to be out there fighting the battles that really matter such as spectrum disappearing to the government auction block, streamlining the FCC's licensing procedures, and protecting our rights to communicate. Instead I get an ARRL that seems only concerned with protecting itself (fighting with other VEC's about who's going to administer callsigns, defending high speed CW code tests, and this directory matter).

They better take a clue from the NRA. If the ARRL wants to be another organization that slowly erodes its own members support and continually loses influence, then it can continue to pursue these petty matters. If however, the ARRL wants to be a leader, grow in support and influence, then it better start listening to the members and doing whatever it takes to help the amateur community.

--
* Chris Terwilliger, AA7WD a229aa@email.sps.mot.com *
* Motorola AA7WD@N7MRP.AZ.USA.NA *
* Phoenix Corporate Research Labs those who forget the past *
* 2100 E. Elliot Rd. EL508 are condemned to repeat it *
* Tempe, AZ 85284 - George Santayana *

2002. Hammarlund HQ105TR - What is it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 15:40:37 UTC
From: karayan@blitzen.cc.bellcore.com
Message-ID: <2kftdl$pmu@blitzen.cc.bellcore.com>
Source record: 270704

In a local antique store I found an old Hammarlund boatanchor with model number HQ105TR. My question is simple: What is it?

The owner claims that it is a ham rig, but I'm not sure. In the back there are provisions for coax, and two jacks that LOOK like mike and key, but are unmarked. The bandspread knob has markings for CB channels (!), which confuses the issue. From the dials I can see that coverage is 2-30 MHz. Could it be a receiver only?

Also, is it worth the $60 they are asking for, assuming working order? Any help would be appreciated.

Tnx de

George Karayannopoulos N2OWO
karayan@cc.bellcore.com Bellcore, Red Bank, NJ
Disclaimer: The opinions expressed here are mine and not my employer's.

--

George Karayannopoulos N2OWO
karayan@cc.bellcore.com Bellcore, Red Bank, NJ
Disclaimer: The opinions expressed here are mine and not my employer's.

2003. Ramsey Mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 15:58:43 UTC
From: kg7bk@indirect.com
Message-ID: <CLoppv.E54@news.direct.net>
Source record: 270705

Someone said that between 30 and 225 MHz, transmitter spurs are limited to 60dB down from the carrier. That is true only of transmitters running 25 watts or more. The limit for transmitters running less than 25 watts is 25uW or -40dB whichever is larger. The Ramsey FX-146 is limited to 25uW spurs by FCC rules. That means the 3.7 watt FX-146 tested by the ARRL had to meet a -52dBc spec, not a -60dBc spec. My silent key buddy, Bob, W7FEZ, tuned his FX-146 for 2.5 watts output. We tested it on a spectrum analyzer before and after the modification. Spurs were at -48dBc before and -54dBc after. It had to meet a -50dBc spec at a 2.5 watt output. That's where the earlier -48dB and -50dB figures came from. I think 10 log(3.7/.000025) is 51.7 dB.

The Ramsey mods are on world.std.com under /pub/hamradio/mods/ramsey. For those without accounts, ftp.std.com is supposed to work.

73, Cecil, kg7bk@indirect.com

2004. ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 16:00:49 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199402231618.IAA20284@ucsd.edu>
Source record: 270706

>I'm an ARRL member, and considering ARRL put a fair amount of effort into
>compiling the Repeater Directory, I'd feel they weren't using my money
>wisely if they did _not_ enforce their copyright to the Directory. I doubt
>they said they _own_ the _facts_ represented there, but still you can't
>just rip off their effort to create your own competing directory, on-line
>or printed. Many city directories bury errors in their compilations, and
>have sued people who reproduce those same errors.

I don't know how much "work" would be included in the repeater directory that is direct league work. they get their "feed" from the repeater coordination bodies around the country (in the belief that the only good repeater is a coordinated repeater). i have heard a news story on the radio about how southern bell's copyright on a yellow pages book does not cover facts like where the advertiser is. They do have the copyright on the way their book is assembled.

There are multiple callbook sources. The league even backed one of 'em for a while with their blessing (they sold it..).

Maybe if the online callbook guys make it easy for MACC, et al. to submit data to them, they could produce a book that cannot be said to infringe on the ARRL publication since it's based on the same facts as the ARRL book because it's taken from the same sources as the ARRL's book.

I have a real big problem with the idea that there are deliberate errors purposely induced into what should be a reference book. Maybe we should start a "repeater directory accuracy project" to confirm all the listings in the ARRL directory to see if content errors exist.

Maybe this extends to the handbook (egad!). It would not be good if it does.

bill wb9ivr

2005. ARLX007 2 meters a life saver

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 16:06:21 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlx007.1994@ampr.org>
Source record: 270707
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB SPCL @ ARL $ARLX007
ARLX007 2 meters a life saver

ZCZC AX39
QST de W1AW
Special Bulletin 7 ARLX007
From ARRL Headquarters
Newington CT January 26, 1994
To all radio amateurs

SB SPCL ARL ARLX007
ARLX007 2 meters a life saver

2 meters a life saver

Amateur Radio may have saved a life when Diana Carlson, KC1SP, used a local repeater to report a possible suicide attempt to police.

Carlson, of Hudson, New Hampshire, was on her way to work at GenRad in Concord, Massachusetts, the morning of January 10, when she and another motorist observed a man climbing the railing of the Merrimack Bridge into the city. The man's auto was parked directly in front of Carlson.

While the other motorist talked to the man, Carlson first tried a call on 146.52, which she knew was sometimes monitored by the Westford, Massachusetts police, then switched to the 147.120 repeater in Billerica. Larry Garneau, N1QEZ, who was mobile, responded and passed the message to his wife, Virginia Garneau, N1QFA, who telephoned police.

An officer of the Tyngsboro Police arrived in time to pull the 27-year-old man from the railing of the bridge.

Carlson's husband David is N1JYX, her son is KA1VWX, and her daughter is KA1VUA.
NNNN
/EX

2006. Re: A transmission line loss question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 16:16:47 UTC
From: tomb@lsid.hp.com
Message-ID: <CLoqK0.K5n@hpcvsnz.cv.hp.com>
Source record: 270708

Alan Bloom (alanb@sr.hp.com) wrote:
: Tom Bruhns (that's me) (tomb@lsid.hp.com) wrote:

: : Which of the following two transmission lines will you choose
: : to give lower loss?

: : A. 50 ohm air-insulated copper line with 1" OD

: : B. 75 ohm air-insulated copper line with 1" OD -- in other
: : words, same line as in (A), but a smaller center conductor.

: Great quiz question. The answer is that the 75 ohm line with the
: 1.5:1 SWR will have higher loss than the 50 ohm line with 1:1 SWR.

What? Only one answer?? Doesn't anybody else out there want to
give it a go?

73, K7ITM

2007. Re: Low power Bird slugs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 16:31:18 UTC
From: cheech@med.unc.edu
Message-ID: <2kg0cm$kq7@bigblue.oit.unc.edu>
Source record: 270709

In article <8377@gold.gvg.tek.com>, <groverc@gvgadg.gvg.tek.com> wrote:
>
>Is there a Bird slug available that would do a credible job
>of measuring <5w signals in the range 3-30MHz?
>
>WT6P

The lowest power slug available from Bird for 2-30 MHz is the Model 50H. It does 50 Watts full scale.

I suspect that the problem with HF is that the pickoff element is such a small fraction of a wavelength at HF that it can't get enough power to drive the meter. Other manufacturers may make a compatible slug that will do lower power, but all I've got is the Bird catalog.

They do make a multirange meter (the 4410) that will give you 1 Watt full scale at 2-30 MHz. All you need is $599 + $179/slug that you just have to get rid of. Fat Chance.

Prices are from the 1991 catalog. They've probably gone up.

Greg AC4YT
cheech@med.unc.edu

2008. Re: Low power Bird slugs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 16:52:26 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-230294115226@k4dii.ksc.nasa.gov>
Source record: 270710

In article <8377@gold.gvg.tek.com>, groverc@gvgadg.gvg.tek.com wrote:
> Is there a Bird slug available that would do a credible job
> of measuring <5w signals in the range 3-30MHz?

WT6P-

I assume you refer to the common Bird model 43 wattmeter. According to the 1992 Bird catalog, the lowest power slug for 2-30 MHz, is the 50H, 50 watt element. Whether a <5 watt reading would be "credible" or not, is doubtful.

At the top of that frequency range, there is the 5A, 5 watt element for 25-60 MHz. The 1 watt and 2.5 watt elements aren't available below 30 MHz. The "milliwatt" elements aren't available below 70 MHz.

If you haven't bought your wattmeter yet, there is the Bird model 4310, which can use a single slug (4410-3) for 2-30 MHz, to switch-select 0-1, 3, 10, 100, 300, 1000 watts. Slug 4410-10 covers 25-80 MHz, with 0-0.1, 0.3, 1, 3, 10, 30,100 watts. In the 1986 price list, the 4410 was $495, the 4410-3 was $150 and the 4410-10 was $125. I'm fairly sure the prices are higher now!

As a point of interest, the model 43 is rated at 5% of full scale, while the 4310 is rated at 5% of any READING above 20% of full scale.

73, Fred, K4DII

2009. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 16:52:56 UTC
From: fms@sw.stratus.com
Message-ID: <2kg1l8$6ee@transfer.stratus.com>
Source record: 270711

janc@icebox.iceonline.com (Jan Chojnacki) writes:
> >I'd like to hear other opinions about this also. My 1988 Acura Integra (another
> >Honda product, for those who may not know) has exhibited a fair amount of
> >ignition noise since it was new. It's not coming through the power cord, as it
> >exists even on battery operated rigs.
> >
> >I've had them check everything they could, and replaced the distributor cap
> >and rotor. I also had the 'ignitor' replaced on recall (whatever that is).
> >It's still pretty noisy on my 2 m. HT and scanner.
> >
> >Any ideas? (other than get rid of the car, I mean)
>
> Yes. Have them replace your ignition wires with low-noise type. I believe
> that they are sometimes called Silicon Ignition Wires - but I may be wrong.
> When I replaced the wires on my Bronco II, it made a world of difference.
>

If his Acura behaves like my '88 Honda Civic Wagon does, replacing the ignition wires won't do a thing for him. Nor will replacing spark plugs, grounding the hood, etc. I've been trying for almost 2 years now to de-noise my wagon. The igniter replacement I had to have done back in September (car death) didn't help, either; it may have hurt a bit, I'm not sure anymore (I'm somewhat used to the noise now, so it would have to change rather drastically for me to notice).

My next car's gonna be something non-Honda... :-/

73 de Faith N1JIT
--
Faith M. Senie InterNet: fms@vos.stratus.com
Stratus Computer, Inc. InterNet: fms@hoop.sw.stratus.com
55 Fairbanks Blvd. Pkt Radio: n1jit@wa1phy.ma.usa.na
Marlboro, MA 01752 Phone: (508)460-2632

Curiosity doesn't flourish among the burned-out...

2010. Chevy Ignition Noise (was Honda ignition recall - now NOISE!!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 16:56:25 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <BTtQjGG8yvBU057yn@dorsai.dorsai.org>
Source record: 270712

In article <holdwick_marc-220294134932@mac-am-47.cig.mot.com>, Marc Holdwick wrote:
>
> If it is something other than the ignition module I would be really
> interested in knowing as I have a high milage (140k) 1985 Chevy Caprice
> which has *terrible* ignition noise. I have checked all of the usual
> items: Plugs, cables but to no avail. I think there might be a problem in
> the distributor. (I'm sure that SOMEWHERE, in some police garage there is
> a mechanic who has solved my EXACT problem - too bad there isn't a
> rec.radio.police.caprice.RFI newsgroup)

The problem is in the alternator. Somewhere around 30-40,000 miles
something will let go in the regulator. In addition to the increased
noise, you will notice an over voltage. Instead of the nominal 13.1 volts,
you will get something like 14.x volts. The car will still run good,
and for a long time too. You may notice a slight glow to the "alt" light
on the dash board at night. That is your cue that something is wrong.

I've had this happen twice, on my Citation, (which was an early model run
and had the predecessor alternator as on the Caprice), and on my old
Dodge's heavy duty alternator. BTW the Citation kept going until I sold it
at 75,000 miles, but the Dodge alternator conked out on the highway at
55,000 miles.

--
< ^^>
< "Big Steve" Coletti >
< Shortwave Listener, Broadcaster, Computer Consultant >
< and all around nice guy >
< Internet: bigsteve@dorsai.dorsai.org ==== S.COLETTI2@genie.geis.com >
< UUCP: Steve_Cole@islenet.com ==== steveny@lopez.marquette.mi.us >
< Fidonet: 1:278/712 US Mail: P.O. Box 396, New York, NY 10002 >
< Voice: +1 212 995-2637 >
~~~~~~
~~~~~~

2011. Re: Ramsey Mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 17:01:30 UTC
From: myers@pongo.West.Sun.COM
Message-ID: <2kg25a$kbm@newscast.West.Sun.COM>
Source record: 270713

In article <CLoppv.E54@news.direct.net> kg7bk@indirect.com (Cecil Moore) writes:
>Someone said that between 30 and 225 MHz, transmitter spurs are limited
>to 60dB down from the carrier. That is true only of transmitters running
>25 watts or more. The limit for transmitters running less than 25 watts
>is 25uW or -40dB whichever is larger.

Well, "someone" was me. Sorry about that; it is indeed true that
transmitters between 30 and 225 MHz are limited to -60dBc spurs, except
that transmitters under 25W are limited to -40dBc spurs, never to exceed
25uW. A 200mW transmitter, for example, can have no spur greater than
20uW. The "whichever is larger" statment confused me at first; I think
the correct statement is "whichever is smaller", since a -50dBc spur
is smaller than a -40dBc spur.

This is really a policy discussion, and I've set the followups line
to rec.radio.amateur.policy.

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

2012. Heathkits

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 17:15:41 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940223091541_10@ccm.hf.intel.com>
Source record: 270714

Text item: Text_1

>My experience leads me to belive Heathkit (may they RIP) has been unfairly
>slammed ... by far, I believe, the Heathkit builders were successful and
>had an excellent learning experience. 73 >< Carl K8NHE

Sorry Carl, didn't mean to slam Heathkit. My point was that in any
normal distribution of customers, by definition, there will be some on
each end of the spectrum outside the three sigma limit. Experiences
outside the three sigma limit ON EITHER END of the normal distribution
are not good points of reference. My experience with six Heathkits was
worse than my experience with four Ramsey FXs but I am only one point on
either distribution and I don't know exactly where either of my
experiences fall on the plot. We tend not to hear from customers with
average experiences.

73, Cecil, kg7bk@indirect.com

2013. Reflectometer Question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 17:27:30 UTC
From: mehdizm@esvx19.es.dupont.com
Message-ID: <1994Feb23.172730.28966@es.dupont.com>
Source record: 270715

I am trying to find information on various refelctometers on the
market (SWR meters). I know about the one MFJ sells for under $200.
I have heard of a mfgr. named Morris (?). Does anybody know about them
or any other manufacturer of reflectometers?

2014. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 17:33:05 UTC
From: andyw@aspen32.cray.com
Message-ID: <1994Feb23.113305.7405@hemlock.cray.com>
Source record: 270716

In article <N4HY.94Feb22150159@runner.ccr-p.ida.org>, n4hy@runner.ccr-p.ida.org (Bob McGwier) writes:
>
> Creative Technology DSP folks have given me an unbelievable reply. The
> [Bobs obvious disapointment with CT's myopic world view deleted...]
> to be more open about its architecture and/or the most versatile for our
> applications.

This must be some holy creed inside CT, since they did the same thing to *BSD developers a while back, so most developers switched efforts to the Gracillis card. Gracillis were more than willing to let people develop software for their card - if they have a comparable product, I suggest you contact them, you may be pleasantly surprised.

Be sure to post repetative, boring posts of your progress so that we may compare it with the Hambluster :-)

--
andyw N0REN/G1XRL

andyw@aspen.cray.com Andy Warner, Cray Research, Inc. (612) 683-5835

2015. NEED RADIO

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 17:40:36 UTC
From: al166010@aniachi.her.itesm.mx
Message-ID: <2kg4ek$96n@aniachi.her.itesm.mx>
Source record: 270717

Need a used radio. Motorola 2mts P110 or else.

2016. Examination Opportunities Scheduled 2/23/94 to 5/9/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 17:57:57 UTC
From: bjahnke@arrl.org
Message-ID: <1993@bjj>
Source record: 270718
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

AMATEUR RADIO EXAMINATION OPPORTUNITIES

****

Special Note: Amateur Radio licenses usually arrive between 8 and 10 weeks after the test session. The FCC considers their processing time to be 90 days--from the date they receive the application. The FCC usually receives the application one to two weeks after the test session (once the VE Team and the coordinating VEC have completed their processing).

Note: Codeless Technician to Technician w/HF upgraders (who pass a Morse code test) will not receive a new license from the FCC. The existing Technician license plus the CSCE conveying the Morse code test credit is the only documentation issued for use of the additional HF privileges.

****

The following test session information is provided by the ARRL/VEC for the upcoming six to eight week period. For further information, please contact the test session CONTACT PERSON at the telephone number provided. If necessary, you may contact the ARRL/VEC at 203-666-1541 x282 for additional information. Electronic mail may be forwarded to the ARRL/VEC via USENET at "bjahnke@arrl.org" or via MCI Mail to MCI ID: 653-2312 or 215-5052.

Although the test session information presented here does not indicate whether walk-ins are accepted or not, most test sessions do allow walk-ins. We encourage you, however, to always contact the CONTACT PERSON at the telephone number provided so that the VE Team is aware that you be attending the test session.

STILL NEED TO PREPARE FOR YOUR EXAM?

If you would like information on how to become licensed; or how to locate Amateur Radio clubs, instructors, licensing classes and/or Novice examiners in your area; please contact the ARRL Educational Activities Department (EAD) at 203-666-1541 x219. The EAD can also provide information on recommended study materials. Electronic mail may be forwarded to the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to MCI ID: 215-5052.

EXAM LISTINGS - DEFINITION OF FIELDS

STATE
Test Date,VEC,City,,Contact Phone,Contact Person

The SECOND field in the following listing specifies the VEC
which is coordinating this examination. This single-character
designator denotes the VEC as defined below. An "A" (for example)
indicates that this examination is coordinated by the ARRL/VEC.

For further information on any examinations listed, or if you do not
find any examinations listed for your area, you may contact
any of the coordinating VECs below.

A = ARRL/VEC, 225 Main St, Newington, CT 06111; (d) 203-666-1541
The 1994 test fee is $5.75.

X = Anchorage ARC, 2628 Turnagain Parkway, Anchorage, AK 99517;
(d) 907-786-8121, (n) 907-243-2221 (or) 907-276-5121
(or) 907-274-5546

C = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
205-536-3904

N = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
704-596-2168

D = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
708-486-8019

E = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.

G = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
818-892-2068, 805-822-1473.

J = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368;
504-831-1613. Test fee for 1994 is $5.00.

K = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
808-235-4132

L = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
(d) 301-572-5124, 301-317-7819, (n) 301-588-3924

M = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
414-774-6999. Test fee for 1994 is $5.00.

H = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
301-724-0674

P = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313

R = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926

S = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
408-255-9000

T = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
919-841-7576

W = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
Knoxville, TN 37912-2500; 615-688-7771.
The 1994 test fee is $5.75.

5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
The 1994 test fee is $5.75.

EXAMINATION OPPORTUNITIES IN YOUR AREA:

ALASKA
03/02/94,X,Anchorage,,907-243-2221,Roger Hansen
03/16/94,X,Eagle River,,907-243-2221,Roger Hansen
04/06/94,X,Anchorage,,907-243-2221,Roger Hansen
04/20/94,X,Eagle River,,907-243-2221,Roger Hansen
05/04/94,X,Anchorage,,907-243-2221,Roger Hansen

ALABAMA
02/26/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
03/03/94,A,Pell City,,205-594-5687,Ernie Cone
03/05/94,A,Clanton,,205-646-2687,Bill Hamm
03/12/94,A,Fort Payne,,205-657-5204,Albert Bible
03/17/94,A,Decatur,,205-353-8266,Richard W Navarre
03/26/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
04/07/94,A,Pell City,,205-594-5687,Ernie Cone
04/09/94,A,Fort Payne,,205-657-5204,Albert Bible
04/30/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
05/05/94,A,Pell City,,205-594-5687,Ernie Cone

ARKANSAS
03/01/94,A,Ft Smith,,501-474-2309,Gary Yates
03/05/94,A,Conway,,5013291451,Glenn A King
03/08/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
03/12/94,A,Little Rock,,501-753-2207,Dora Anna Graziani
03/12/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
03/19/94,A,Gasseville,,501-430-5123,Gerald Gaige
03/19/94,A,N Little Rock,,501-888-7517,Chuck Jamison
03/24/94,A,Ft Smith,,501-474-2309,Gary Yates
04/05/94,A,Crossett,,318-281-2900,Eugene S Winfree
04/05/94,W,Trumann,,501-483-6530,Al Fisher
04/09/94,A,Conway,,5013291451,Glenn A King
04/09/94,A,Little Rock,,501-666-6337,William L James
04/09/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
04/12/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
04/16/94,A,Gasseville,,501-430-5123,Gerald Gaige
04/16/94,A,N Little Rock,,501-888-7517,Chuck Jamison

ARIZONA
04/02/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R
04/06/94,A,Tempe,,602-838-1215,Roger Hightower
04/16/94,A,Flagstaff,,602-774-8308,Bill Sinton

05/07/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R

CALIFORNIA
02/26/94,A,Culver City,,310-459-0337,Scott V Swanson
02/26/94,A,Fairfield,,916-662-0801,Gerald D Newton
02/26/94,A,Fresno,,209-227-3684,William Post
02/26/94,A,Gilroy,,408-842-1484,Ed Vines
02/26/94,A,Hawthorne,,213-778-4625,Don Cain
02/26/94,A,Vacaville,,707-429-4878,Barbara J Zemaitis KM6AC
03/01/94,A,Culver City,,213-292-6423,C Lutz
03/05/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
03/05/94,A,Novato,,415-883-9789,Logan Z Edwards
03/05/94,A,Ontario,,909-391-4254,Bob Malaby
03/08/94,A,Yuba City,,916-673-0868,Homer Oliver
03/09/94,A,Apple Valley,,619-244-4601,Walker Schofield
03/12/94,A,Clearlake,,707-994-9620,Chris Lutman
03/12/94,A,Jackson,,209-295-7947,Barbara Brown
03/12/94,A,Modesto,,209-883-2968,Chet Jensen
03/12/94,A,Oakhurst,,209-683-8772,Robert Tauxe, W6JTA
03/12/94,A,Redding,,916-243-6339,Kenna Pine
03/12/94,A,Roseville,,916-645-1663,Lyle Kraft
03/12/94,A,Stockton,,209-883-2968,Chet Jensen
03/16/94,A,San Diego,,619-222-4043,Rod McLennan
03/19/94,A,Corona,,909-735-0284,John Miller, NF6Y
03/19/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
03/19/94,A,Monterey,,408-663-0710,Michael C Marchini
03/19/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
03/20/94,A,Hercules,,415-467-2467,William C Eugenio
03/26/94,A,Fairfield,,916-662-0801,Gerald D Newton
03/26/94,A,Fresno,,209-227-3684,William Post
03/26/94,A,Petaluma,,707-762-9414,Dale Westerterp WB6TMS
03/26/94,A,Ridgecrest,,619-375-7245,Lloyd Brubaker
03/27/94,A,Rialto,,909-883-4082,Bruce Scholes
04/02/94,A,Apple Valley,,619-240-4546,Raymond Key
04/02/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
04/02/94,A,Ontario,,909-391-4254,Bob Malaby
04/04/94,A,Lancaster,,805-948-1865,Adrienne J Sherwood
04/09/94,A,Camarillo,,805-388-2488,George Kreider
04/09/94,A,Fontana,,909-829-8837,Rick Avery
04/09/94,A,Santa Rosa,,707-527-0981,Dave New
04/09/94,A,Sonora,,209-962-7146,Carl H Croci
04/10/94,A,Clearlake,,707-994-9620,Chris Lutman
04/16/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
04/16/94,A,Long Beach,,310-431-8998,Ken Newkirk
04/16/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
04/23/94,A,Weed,,916-926-2535,Irv Astmann
04/30/94,A,Culver City,,310-459-0337,Scott V Swanson
04/30/94,A,Fairfield,,916-662-0801,Gerald D Newton
04/30/94,A,Fresno,,209-227-3684,William Post
05/07/94,A,Cupertino,,408-984-8353,ARRL Info Hotline

05/07/94,A,Ontario,,909-391-4254,Bob Malaby
05/07/94,A,Yuba City,,916-673-0868,Homer Oliver

COLORADO
02/26/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
03/11/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
03/12/94,A,Boulder,,303-460-3744,Skip Cubbedge
03/12/94,A,Denver,,303-360-7293,Glenn Schultz
03/12/94,A,Fort Collins,,303-484-8315,J Trenton Hays
03/14/94,A,Boulder,,303-530-2903,Barbara McClune
03/16/94,A,Windsor,,303-484-3989,Don St John
03/26/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
04/02/94,A,Boulder,,303-530-2903,Barbara McClune
04/09/94,A,Denver,,303-360-7293,Glenn Schultz
04/09/94,A,Greeley,,303-353-3577,Richard S Hubbard
04/11/94,A,Windsor,,303-484-3989,Don St John
04/23/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
05/07/94,A,Grand Junction,,303-245-2973,E.D. Percifield
05/09/94,A,Boulder,,303-530-2903,Barbara McClune

CONNECTICUT
02/23/94,A,Shelton,,203-735-9476,Leroy Thomas
02/26/94,A,Bloomfield,,203-243-1611,Don Wilson
03/05/94,A,Brookfield,,203-438-0218,Frank Sileo
03/05/94,A,Gales Ferry,,203-376-2216,Rick George, KD1LC
03/05/94,A,Norwalk,,203-847-2541,Ray Hilson WB1U
03/06/94,A,Milford,,203-933-5125,Gary Burlock, N1BM
03/08/94,A,Thomaston,,203-283-1044,Steven Dziadik
03/10/94,A,Farmington,,203-621-3222,John McLaughlin
03/12/94,A,Coventry,,203-742-5422,Mark Ireland
03/12/94,A,Portland,,203-635-5289,Wayne K Irwin
03/13/94,A,Bristol,,203-379-5708,Susan Fredrickson
03/17/94,A,West Hartford,,203-529-3743,Paul Lombardo
03/23/94,A,Shelton,,203-735-9476,Leroy Thomas
04/10/94,A,Milford,,203-933-5125,Gary Burlock, N1BM
04/12/94,A,Portland,,203-635-5289,Wayne K Irwin
04/12/94,A,Thomaston,,203-283-1044,Steven Dziadik
04/14/94,A,Farmington,,203-621-3222,John McLaughlin
04/16/94,A,Coventry,,203-742-5422,Mark Ireland
04/21/94,A,West Hartford,,203-529-3743,Paul Lombardo
04/27/94,A,Shelton,,203-735-9476,Leroy Thomas
05/01/94,A,Milford,,203-933-5125,Gary Burlock, N1BM

DELAWARE
03/12/94,A,Dover,,302-697-6178,Robert W Baker
03/19/94,A,Wilmington,,302-478-2757,Gisele Walls, K3WAJ
04/10/94,A,Wilmington,,302-695-3344,Chet Thayer

FLORIDA
02/24/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
02/26/94,A,Jensen Beach,,407-466-5648,William D Shisle

03/01/94,A,New Port Richey,,813-849-1224,Fred Marchman
03/01/94,A,Tallahassee,,904-875-2588,Jennifer Erdman
03/05/94,A,Marianna,,904-526-1849,Grady R Watson
03/05/94,A,Plantation,,,Bruce A Burke
03/09/94,A,Hollywood,,305-920-6960,Russel Sweeten
03/11/94,A,Homestead,,305-255-1057,Joe Chwick AC4TV
03/12/94,A,Port Charlotte,,813-625-3915,Jim Hope
03/12/94,A,Valparaiso,,904-243-9720,Bill Hord
03/15/94,A,Zephyrhills,,813-782-4693,Orrin Brawn
03/17/94,A,Vero Beach,,407-567-3979,Roger K Snyder
03/19/94,A,Bradenton,,813-756-2823,Franklin F Morton
03/19/94,A,Englewood,,813-697-7946,John Fogle
03/19/94,A,Lake Worth,,407-582-7617,T Graf Buckenmaier
03/19/94,A,Melbourne,,407-724-6183,William Newkirk
03/24/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
03/26/94,A,Fort Pierce,,407-466-5648,Bill Shisler
03/31/94,A,Cape Coral,,813-574-3467,Phyllisian West
04/05/94,A,New Port Richey,,813-849-1224,Fred Marchman
04/05/94,A,Tallahassee,,904-875-2588,Jennifer Erdman
04/08/94,A,Homestead,,305-255-1057,Joe Chwick AC4TV
04/09/94,A,Port Charlotte,,813-625-3915,Jim Hope
04/13/94,A,Hollywood,,305-920-6960,Russel Sweeten
04/16/94,A,Englewood,,813-697-7946,John Fogle
04/16/94,A,Lake Worth,,407-582-7617,T Graf Buckenmaier
04/16/94,A,Melbourne,,407-724-6183,William Newkirk
04/16/94,A,Palm Coast,,904-446-5769,Thomas E Holley, Sr
04/16/94,A,Panama City,,904-785-3547,James McQuagge
04/21/94,A,Vero Beach,,407-567-3979,Roger K Snyder
04/23/94,A,Fort Pierce,,407-466-5648,Bill Shisler
04/28/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
05/03/94,A,New Port Richey,,813-849-1224,Fred Marchman
05/03/94,A,Tallahassee,,904-875-2588,Jennifer Erdman

GEORGIA
02/24/94,A,Savannah,,912-925-1243,Spence Harrison
02/26/94,W,Dalton,,706-259-5625,Bert Coker
02/28/94,A,Cleveland,,706-865-5144,William M Lee
03/07/94,A,Marietta,,404-993-9758,Delaine L McCarthy
03/07/94,W,Rock Springs,,706-866-1200,Alan Painter
03/08/94,A,Thomasville,,912-226-2785,Robert Rowan
03/12/94,W,Augusta,,404-798-1918,Ed Butorajac
03/13/94,A,Cartersville,,404-975-1309,Mark Swicord
03/15/94,A,Douglasville,,404-489-1021,Mike Flammia
04/03/94,A,Lavonia,,706-356-1748,Barney M Barningham Sr
04/04/94,A,Marietta,,404-993-9758,Delaine L McCarthy
04/09/94,A,Fort Gordon,,706-798-5060,Carroll Norton
04/10/94,A,Cartersville,,404-975-1309,Mark Swicord
04/30/94,W,Dalton,,706-259-5625,Bert Coker
05/02/94,A,Marietta,,404-993-9758,Delaine L McCarthy
05/02/94,W,Rock Springs,,706-866-1200,Alan Painter

05/08/94,A,Cartersville,,404-975-1309,Mark Swicord

IOWA
02/26/94,A,Ames,,515-292-4504,FS Hird
02/26/94,A,Council Bluffs,,712-322-1454,Lorraine Bogle
03/12/94,A,Clinton,,319-242-9486,Roger Gorzney
03/18/94,A,Sioux City,,402-494-6070,Michael Nickolaus NF0N
03/27/94,A,Davenport,,319-355-5517,Roger Franke
04/16/94,A,Ames,,515-292-4504,FS Hird
04/29/94,A,Sioux City,,402-494-6070,Michael Nickolaus NF0N
04/30/94,A,Council Bluffs,,712-322-1454,Lorraine Bogle

IDAHO
03/02/94,A,Athol,,208-683-2094,Robert Swain
03/02/94,A,Hailey,,208-726-4074,Dale Gillette
03/12/94,A,Boise,,208-343-9153,Lem Allen
04/06/94,A,Athol,,208-683-2094,Robert Swain
04/23/94,A,Pocatello,,208-237-4910,James Luderman
05/04/94,A,Athol,,208-683-2094,Robert Swain

ILLINOIS
03/05/94,A,Belleville,,618-588-4477,Kenneth R Davis, KF9IA
03/06/94,A,Paris,,217-463-2213,Robert Nelson
03/09/94,A,Chicago,,312-465-0981,Michael Leibovitz
03/10/94,A,Antioch,,708-395-0999,Anthony Viverito
03/10/94,A,Beardstown,,217-245-2061,Tim Childers
03/12/94,A,Oak Forest,,708-448-0580,David Brasil, NF9N
03/12/94,A,Sandoval,,618-532-6606,Alva L King, Jr
03/14/94,A,Hanover Park,,708-483-8523,William Rudd
03/15/94,A,Burr Ridge,,708-325-3840,Roger Adams
03/17/94,A,Athens,,217-544-5374,Gary Britz KF9OI
03/19/94,A,Qunicy,,217-224-8526,Michael L Nowack
03/26/94,A,Chicago,,312-233-0605,Harold Pritchard Jr
04/02/94,A,Belleville,,618-588-4477,Kenneth R Davis, KF9IA
04/09/94,A,Mt Vernon,,618-244-7987,L C McDuffle
04/09/94,A,Oak Forest,,708-448-0580,David Brasil, NF9N
04/13/94,A,Chicago,,312-465-0981,Michael Leibovitz
04/14/94,A,Antioch,,708-395-0999,Anthony Viverito
04/14/94,A,Beardstown,,217-245-2061,Tim Childers
04/17/94,A,Danville,,317-793-3573,Betty Collins
04/19/94,A,Burr Ridge,,708-325-3840,Roger Adams
04/21/94,A,Athens,,217-544-5374,Gary Britz KF9OI
04/23/94,A,Chicago,,312-233-0605,Harold Pritchard Jr
05/01/94,A,Paris,,217-463-2213,Robert Nelson
05/07/94,A,Belleville,,618-588-4477,Kenneth R Davis, KF9IA

INDIANA
02/26/94,A,Indianapolis,,317-291-3569,Joseph A Cirillo
03/05/94,A,New Castle,,317-288-0481,Peggy Coulter
03/12/94,A,Chesterton,,219-762-2887,William Peterson
03/12/94,A,Evansville,,812-985-0109,Cecil E. West

03/18/94,A,Highland,,219-923-8308,Charles Sufana
03/19/94,A,Franklin,,317-736-6320,Eugene McMarty
03/20/94,A,Auburn,,219-665-6777,Sandra K Parker
03/26/94,A,Michigan City,,219-874-3386,Robert Lyles
04/02/94,A,Muncie,,317-288-0481,Peggy Coulter
04/03/94,A,Terre Haute,,812-466-2122,Fred Mahalek
04/09/94,A,Chesterton,,219-762-2887,William Peterson
04/16/94,A,Franklin,,317-736-6320,Eugene McMarty
04/16/94,A,Highland,,219-923-8308,Charles Sufana
04/16/94,W,New Albany,,812-246-6377,Dick Truax
04/23/94,A,Indianapolis,,317-291-3569,Joseph A Cirillo
04/29/94,A,Chesterton,,219-762-2887,William Peterson
05/07/94,A,New Castle,,317-288-0481,Peggy Coulter

KANSAS
03/01/94,A,Hays,,913-743-2712,Andy Oldham
03/15/94,A,Fort Scott,,316-223-0158,Robert Adams AA0IM
03/16/94,A,Andover,,316-775-0300,Leanna R Gordon
04/09/94,A,Topeka,,913-267-6455,Milo McNall
04/20/94,A,Andover,,316-775-0300,Leanna R Gordon

KENTUCKY
02/25/94,A,Henderson,,502-827-0257,Len Raymer
03/05/94,A,Cave City,,,Charles Rice
03/06/94,A,Westwood,,606-324-4763,Joseph Craycraft
03/12/94,W,Middlesboro,,606-248-0046,Andrew A Pitt
03/26/94,A,Elizabethtown,,502-351-2559,Willie M Lee, Jr
04/09/94,W,Middlesboro,,606-248-0046,Andrew A Pitt

LOUISIANA
03/06/94,5,New Orleans,,,Angelo Glorioso
03/12/94,A,Lafayette,,318-984-5781,John R Myrick, Jr
03/12/94,A,West Monroe,,318-396-3507,Donald C Frantom, Sr
03/13/94,A,Lafayette,,318-984-5781,John R Myrick, Jr
03/14/94,A,Baton Rouge,,504-766-0200,Shirl E Cook
04/09/94,A,Lafayette,,318-984-5781,John R Myrick, Jr
04/17/94,A,Lacombe,,504-674-2563,Eulon T Passman, Jr
05/01/94,5,New Orleans,,,Angelo Glorioso
05/07/94,A,Lafayette,,318-984-5781,John R Myrick, Jr

MASSACHUSETTS
02/25/94,A,Holyoke,,413-245-3228,Jim Mullen
03/01/94,A,Bedford,,617-377-2438,Edward W Hanna
03/05/94,A,Marshfield,,508-746-6184,Jeff Alves
03/06/94,A,Northampton,,413-245-3228,James Mullen
03/09/94,A,Billerica,,508-851-2886,Bruce Anderson
03/12/94,A,Marlboro,,508-485-7006,Robert Levine
03/12/94,A,Pittsfield,,413-458-8219,Adrian Sebborn
03/13/94,A,Fall River,,508-676-8641,Jesse Medeiros N1KBI
03/13/94,A,Gloucester,,508-922-3307,Albert Hamilton
03/16/94,A,Lunenburg,,508-534-9377,Tom Duffy

03/20/94,A,Westborough,,401-333-2129,Robert Beaudet W1YRC
03/23/94,5,Cambridge,,617-253-3776,Nick Alterndburnd
03/25/94,A,Holyoke,,413-245-3228,Jim Mullen
04/09/94,A,Marlboro,,508-485-7006,Robert Levine
04/10/94,A,Framingham,,508-877-0563,Richard Marshall
04/10/94,A,Gloucester,,508-922-3307,Albert Hamilton
04/13/94,A,Billerica,,508-851-2886,Bruce Anderson
04/16/94,A,Marion,,508-991-4291,David W Dextradeur
04/17/94,A,Southwick,,413-566-3010,Yorke Phillips
04/20/94,5,Cambridge,,617-253-3776,Nick Alterndburnd
04/22/94,A,Holyoke,,413-245-3228,Jim Mullen
04/27/94,A,Lunenburg,,508-534-9377,Tom Duffy
05/08/94,A,Gloucester,,508-922-3307,Albert Hamilton

MARYLAND
02/27/94,A,White Plains,,301-932-6412,JD Delancy
02/28/94,A,Easton,,410-943-1229,Parker Durham, N3ISW
03/06/94,5,Landover,,301-773-2898,Freddie Battle
03/06/94,A,Palmer Park,,301-773-2898,Freddie Battle
03/12/94,L,Davidsonville,,301-761-7115,Nancy Alley, NT3Z
03/19/94,L,Laurel,,301-572-5124,John Creel, WB3GXW
03/26/94,A,Port Deposit,,410-378-2771,Louis Busby
04/03/94,5,Landover,,301-773-2898,Freddie Battle
04/09/94,L,Davidsonville,,301-761-7115,Nancy Alley, NT3Z
04/16/94,L,Laurel,,301-572-5124,John Creel, WB3GXW
04/24/94,A,Hagerstown,,301-714-0688,W. Page Pyne, WA3EOP
04/25/94,A,Hagarstown,,301-714-0688,W Page Pyne, WA3EOP
05/01/94,5,Landover,,301-773-2898,Freddie Battle
05/01/94,A,Palmer Park,,301-773-2898,Freddie Battle

MAINE
03/30/94,A,Brunswick,,207-725-5155,Stephen A Hanks
04/29/94,A,Alfred,,207-985-4825,John V DiLiddo

MICHIGAN
02/24/94,A,Battle Creek,,616-964-6328,Dick Holcomb
02/24/94,A,Oak Park,,313-544-4114,Mark Sherman
02/26/94,A,Allegan,,616-673-5340,Bryan Lane
02/26/94,A,Corunna,,517-288-6844,Aubrey M Clarke
03/01/94,A,Milford,,313-887-2130,Marilyn Moore, N8GTZ
03/03/94,A,Gowen,,616-754-9213,Larry Alman
03/05/94,A,Harvey,,906-249-3837,Richard Schwenke
03/05/94,A,Mt Clemens,,313-294-1567,Donald Olszewski
03/05/94,A,Saginaw,,517-624-9094,Ed King
03/12/94,A,Dearborn,,313-676-6248,Motor City Radio Club
03/12/94,A,Flint,,810-743-3980,Tom Sanders N8DYN
03/12/94,A,Hastings,,616-948-3034,David Watson
03/12/94,A,Kalamazoo,,616-327-2529,Wray I Marshall
03/12/94,A,Port Huron,,810-364-9640,Leon T Switzer
03/12/94,A,Roscommon,,517-275-4661,Richard L Maki
03/13/94,A,Stevensville,,616-471-5869,Ken Simpson, KU8Y

03/19/94,A,Flint,,810-634-6077,Bill Coale
03/19/94,A,Howell,,313-437-2277,Kenneth W Meier
03/19/94,A,Lansing,,517-484-4855,Peter Lycos, KM8K
03/26/94,A,Corunna,,517-288-6844,Aubrey M Clarke
04/09/94,A,Charlotte,,517-645-2378,Mark Korroch
04/09/94,A,Houghton,,906-337-2542,George R Thurner
04/16/94,A,Flint,,810-634-6077,Bill Coale
04/16/94,A,Howell,,313-437-2277,Kenneth W Meier
04/16/94,A,Manistee,,616-723-2119,Elmer Stamp
04/23/94,A,Allegan,,616-673-5340,Bryan Lane
04/23/94,A,Corunna,,517-288-6844,Aubrey M Clarke
04/24/94,A,Stevensville,,616-471-5869,Ken Simpson, KU8Y
04/27/94,A,Trenton,,313-676-6248,Motor City Radio Club

MINNESOTA
02/24/94,A,Rochester,,507-288-6121,Richard J Baker
03/01/94,A,Bemidji,,218-243-2002,Gurnee Bridgman
03/03/94,A,Rochester,,507-288-6121,Richard J Baker
03/05/94,A,St Paul,,612-222-7253,John Bellows
03/19/94,A,Cottage Grove,,612-459-8678,David Harrell
04/02/94,A,St Paul,,612-222-7253,John Bellows
04/09/94,A,N Branch,,612-444-9814,Bradley Fern
04/16/94,A,Cottage Grove,,612-459-8678,David Harrell
05/07/94,A,St Paul,,612-222-7253,John Bellows

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02/26/94,A,St Louis,,314-647-3223,Ronald Lemons
03/03/94,A,Jefferson City,,314-635-3362,Alan Braun
03/05/94,A,Kennett,,314-738-2752,David Wilkins
03/05/94,A,Moberly,,816-263-2717,Sam Fischer
03/07/94,A,Jackson,,314-866-2622,Gerald Grasso
03/07/94,A,Lebanon,,417-532-7710,Bill J Wheeler
03/08/94,A,Columbia,,918-423-5716,Dewey Bennett
03/12/94,A,Hannibal,,314-221-8618,Clifford H Ahrens
03/18/94,A,Thayer,,417-264-7948,Joseph P Frommel
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04/04/94,A,Jackson,,314-866-2622,Gerald Grasso
04/07/94,A,Jefferson City,,314-635-3362,Alan Braun
04/12/94,A,Columbia,,918-423-5716,Dewey Bennett
04/16/94,A,Cape Girardeau,,314-264-2791,John E Clark
04/23/94,A,St Louis,,314-647-3223,Ronald Lemons
05/05/94,A,Jefferson City,,314-635-3362,Alan Braun
05/07/94,A,Kennett,,314-738-2752,David Wilkins

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03/08/94,A,Booneville,,601-286-8924,Karl Bullock
03/10/94,A,Ocean Springs,,601-875-0222,Stan Hecker
03/12/94,A,Vicksburg,,601-638-3362,Brent Lamb
03/13/94,A,Laurel,,601-764-2708,John Vanderslice

04/14/94,A,Ocean Springs,,601-875-0222,Stan Hecker

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03/01/94,A,Great Falls,,406-452-7289,George Forsyth
03/19/94,A,Billings,,406-656-6987,Donald Whitcomb
04/05/94,A,Great Falls,,406-452-7289,George Forsyth
05/03/94,A,Great Falls,,406-452-7289,George Forsyth

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02/26/94,A,Charlotte,,704-532-4926,Robert R. Rochelle
03/06/94,A,Newton,,704-324-4148,Don A Duckett
03/12/94,A,Durham,,919-544-5729,Terrence J Murphy
03/12/94,A,Yadkinville,,919-699-8469,Darlene Cox
03/19/94,A,Fayetteville,,910-497-6589,Frederick New
03/19/94,W,Leicester,,704-683-1400,Larry E York
03/19/94,A,Morehead City,,919-247-6240,Cecil Pennington
03/19/94,A,Smithfield,,919-554-2154,David Hockaday
03/26/94,A,Rocky Mount,,919-442-6131,Bill Thomas
03/29/94,A,Durham,,919-544-5729,Terrence J. Murphy
04/09/94,W,Marion,,704-724-4007,Cecil D Potter
04/09/94,A,Wilmington,,919-791-0484,Sam Franklin
04/16/94,A,Greenville,,919-752-3901,B. Simon Jaworski
04/16/94,A,Smithfield,,919-554-2154,David Hockaday
04/16/94,W,Spindale,,704-245-6334,AB Brackett
04/23/94,W,Asheville,,704-684-1543,Lewis Linn

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03/10/94,A,Devils Lake,,701-266-5646,Bill Kurtti
03/15/94,A,Minot,,701-839-6635,Gerald Cushing
03/19/94,A,West Fargo,,701-232-2749,Mike Beaton
04/19/94,A,Minot,,701-839-6635,Gerald Cushing

NEBRASKA
02/27/94,A,Lincoln,,402-486-1400,John Hauner
03/05/94,A,N Platte,,308-532-8577,E A Coleman
03/29/94,A,Omaha,,402-553-2610,Brian Zdan
04/24/94,A,Lincoln,,402-486-1400,John Hauner

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03/10/94,A,Manchester,,603-485-9170,Paul R Paradis N1IZZ
03/26/94,A,Newport,,603-543-1389,Conrad Ekstrom
04/21/94,A,Salem,,603-434-4490,Denise Cabana

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02/26/94,A,Raritan,,908-231-0009,Roger Schroeder N2LAQ
03/05/94,A,Denville,,201-347-7723,Bonita Johnson
03/05/94,A,Plainfield,,,Julian Clarke
03/07/94,A,Sayreville,,908-442-9215,George Miller

03/09/94,A,Fort Monmouth,,908-532-5354,Gerald Silverman
03/12/94,A,Cranford,,201-263-2837,Ed Guida
03/19/94,A,Bayonne,,201-435-5953,Robert Tarantula
03/19/94,A,Pennington,,609-737-1723,Don Wright
03/19/94,A,Ramsey,,201-445-5924,Andrew G Birmingham
03/22/94,A,Bloomfield,,201-338-8357,Carl Nyman
03/25/94,A,Fair Lawn,,201-797-0151,Peter Adely, Sr K2MHP
04/02/94,A,Plainfield,,,Julian Clarke
04/10/94,A,Ewing Township,,609-737-1723,Don Wright
04/13/94,A,Fort Monmouth,,908-532-5354,Gerald Silverman
04/16/94,A,Bayonne,,201-435-5953,Robert Tarantula
04/23/94,A,Rio Grande,,609-522-6819,John O'Neil
04/26/94,A,Bloomfield,,201-338-8357,Carl Nyman
05/07/94,A,Plainfield,,,Julian Clarke

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04/02/94,A,Clovis,,505-762-0522,Harold Landsperg

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03/05/94,A,Henderson,,702-565-0242,Janet Welsh
03/12/94,A,Minden,,702-265-3430,Carl Chaplin
04/02/94,A,Henderson,,702-565-0242,Janet Welsh
04/16/94,A,Reno,,702-826-0329,Jesse Bond
05/07/94,A,Henderson,,702-565-0242,Janet Welsh

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03/04/94,A,Oriskany,,315-853-5700,William L Effland
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03/05/94,A,N Tonawanda,,716-634-5276,Vern Siegel
03/05/94,A,Queensbury,,518-792-6994,Rick Critcher
03/06/94,A,Albany,,518-452-8700,Armand Canestraro
03/06/94,A,Bronx,,718-538-0258,Alcangel Viera
03/06/94,A,Yonkers,,914-963-0689,Harold J Parks
03/07/94,A,Schenectady,,518-399-1793,Charles Haynes, KA2VNP
03/09/94,A,Pomona,,914-357-0712,Steve Koeper
03/12/94,A,Lake Huntington,,914-932-8544,Frank Szabo
03/12/94,A,Modena,,914-566-0936,Dan Conna
03/12/94,A,Troy,,518-283-2337,Harry Hovey, WF2B
03/16/94,A,Lancaster,,716-937-3592,Charles Koester
03/19/94,A,Kingston,,914-382-2103,Frank Sainsbury
03/20/94,A,New York,,212-853-6847,Harry Y Xu
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03/21/94,A,New York,,212-456-5224,Jerry Cudmore
03/26/94,A,Blue Point,,516-581-4595,Leonard Buonaiuto
03/26/94,A,Upton,,516-282-5467,Nick Franco
03/27/94,A,N Lindenhurst,,516-888-5576,Thomas Tiniski
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04/04/94,A,Schenectady,,518-399-1793,Charles Haynes, KA2VNP
04/09/94,A,Bath,,607-569-2353,James White, KV2W
04/09/94,A,Jamestown,,716-488-1524,Jack Nord
04/09/94,A,Lake Huntington,,914-932-8544,Frank Szabo
04/09/94,A,N Tonawanda,,716-634-5276,Vern Siegel
04/13/94,A,Pomona,,914-357-0712,Steve Koeper
04/16/94,A,Troy,,518-283-2337,Harry Hovey, WF2B
04/20/94,A,Lancaster,,716-937-3592,Charles Koester
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04/22/94,A,Southhold,,516-323-3646,Ralph Williams
04/23/94,A,Blue Point,,516-581-4595,Leonard Buonaiuto
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04/25/94,A,New York,,212-456-5224,Jerry Cudmore
04/26/94,A,Brooklyn,,718-259-1771,Edward E Genoino, WA2NDA
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05/01/94,A,Yonkers,,914-963-0689,Harold J Parks
05/01/94,A,Yonkers,,914-969-1053,Otto Supliski
05/02/94,A,Schenectady,,518-399-1793,Charles Haynes, KA2VNP
05/03/94,A,N Lindenhurst,,516-888-5576,Thomas Tiniski
05/04/94,A,Poughkeepsie,,914-297-4238,Bob Harris
05/06/94,A,Cooperstown,,607-965-8008,Keith Blissn
05/07/94,A,Islip,,516-234-0589,Addison Levi
05/07/94,A,N Tonawanda,,716-634-5276,Vern Siegel
05/07/94,A,Queensbury,,518-792-6994,Rick Critcher

OHIO
02/26/94,A,Canton,,216-453-5896,Richard Stellarini
02/26/94,A,Norwood,,513-574-1653,Betty Reilly
02/27/94,A,Napoleon,,419-599-5866,Marlyn J Krueger
03/01/94,A,Canfield,,216-755-1000,Rich Marsteller
03/01/94,A,Clyde,,419-684-7822,John W Faggionato
03/05/94,A,Cincinnati,,513-891-7556,Herbert C Blasberg
03/06/94,A,LaGrange,,216-647-5116,Ola Slone
03/06/94,A,Napoleon,,419-599-5866,Marlyn J Krueger
03/07/94,A,Akron,,216-733-4495,Paul Davis
03/08/94,A,Salem,,216-337-6544,Bob Tullis
03/12/94,A,Akron,,216-972-7677,Kenneth R Teleis
03/12/94,A,Beaver Creek,,513-426-6699,Mr Francis Swope
03/12/94,A,Hamilton,,513-868-7012,Theodore Wilson
03/12/94,A,Maumee,,419-693-3023,Ross H Mergenthaler
03/12/94,A,West Union,,513-544-3763,Jerry Paquette
03/12/94,A,Westerville,,614-861-6916,William Tabor
03/13/94,A,Conneaut,,814-665-9124,Norma Vanderhoff

03/15/94,A,Tiffin,,419-447-9515,Gregg Fletchner
03/17/94,A,Youngstown,,216-534-1394,James Viele
03/19/94,A,Greenville,,513-548-3010,Leon Harshbarger N8QAL
03/19/94,A,Lebanon,,513-746-2092,Sherman E Winkle
03/19/94,A,Springfield,,513-322-5020,Terry Mefford
03/20/94,A,Eaton,,513-456-6777,Curtis Scholl
03/20/94,A,Elyria,,216-647-5116,Ola Sloane
03/26/94,A,Akron,,216-882-6883,Herbert Wanzie
03/27/94,A,Coshocton,,614-622-3470,Robert Manson
03/27/94,A,Madison,,216-266-2113,R Scott Farnham
04/02/94,A,Cincinnati,,513-891-7556,Herbert C Blasberg
04/02/94,A,Columbus,,614-866-5531,James Kerr
04/02/94,A,Sandusky,,419-433-3441,Gary Howell
04/03/94,A,LaGrange,,216-647-5116,Ola Slone
04/05/94,A,Canfield,,216-755-1000,Rich Marsteller
04/09/94,A,Hamilton,,513-868-7012,Theodore Wilson
04/09/94,A,Maumee,,419-693-3023,Ross H Mergenthaler
04/09/94,A,Mount Vernon,,614-625-5504,Michael W White
04/10/94,A,Cleveland Hts,,216-321-5567,Fred Taub
04/16/94,A,Lebanon,,513-746-2092,Sherman E Winkle
04/16/94,A,Mansfield,,419-522-2593,Dwayne Meadows
04/17/94,A,Elyria,,216-647-5116,Ola Sloane
04/30/94,A,Dayton,,513-426-8717,Charles Gauder
05/01/94,A,LaGrange,,216-647-5116,Ola Slone
05/03/94,A,Canfield,,216-755-1000,Rich Marsteller
05/03/94,A,Clyde,,419-684-7822,John W Faggionato
05/07/94,A,Cincinnati,,513-891-7556,Herbert C Blasberg
05/07/94,A,Westerville,,614-861-6916,William Tabor
05/08/94,A,Marion,,614-499-3565,Stephen Eckard

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03/05/94,A,Bartlesville,,918-333-9161,George Wiszneauckas
03/05/94,A,Elk City,,405-243-1094,Jerrell Sanderson
03/12/94,A,Norman,,405-329-1681,John Copeland
03/15/94,A,Durant,,405-924-7868,R J Kuhlmeier
03/15/94,A,Miami,,918-542-7142,Gary Sherard
03/26/94,A,Vinita,,918-256-2716,Jimmie Willits
04/09/94,A,Norman,,405-329-1681,John Copeland
04/09/94,A,Ponca City,,405-762-1966,Mark E Byard
04/19/94,A,Miami,,918-542-7142,Gary Sherard

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02/23/94,A,Salem,,503-588-7685,Bill Berry
02/24/94,A,Coos Bay,,503-756-5693,Chuck Sawyer
03/05/94,A,Lincoln City,,503-994-3113,Carl E Schmauder
03/09/94,A,Roseburg,,503-672-7564,Anne Wolfe
03/19/94,A,Newport,,503-563-3866,Philip Smith
04/02/94,A,Lincoln City,,503-994-3113,Carl E Schmauder
04/10/94,A,Portland,,503-642-5803,Edith Litvin
04/16/94,A,Newport,,503-563-3866,Philip Smith
04/19/94,A,Newberg,,503-538-4301,Colin Lamb

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02/23/94,A,Warminster,,215-343-3494,Tom Michaud
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02/25/94,A,Allentown,,215-740-0666,Victor Tropiano
02/26/94,A,Lebanon,,717-367-2230,Roger L Engle
02/26/94,A,Pittsburgh,,412-885-8073,Dennis Tanner
02/27/94,A,Williamsport,,,Vincent Bardsley
03/04/94,A,Nazareth,,610-767-4778,John Greenage
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03/05/94,A,Mt Pleasant,,,David J Rath
03/05/94,A,Tamaqua,,717-668-3098,A R Breiner
03/09/94,A,Dunmore,,717-689-9688,Raymond A Collins
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03/12/94,A,Honesdale,,717-253-5201,Vincent J Banville
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03/17/94,A,East Stroudsburg,,717-424-0945,Dave Haney
03/19/94,A,Beaver Falls,,412-843-6560,Thomas Peluso
03/19/94,A,Cranberry,,814-676-8307,Thomas Rea
03/19/94,A,Elco,,412-938-8125,Lou Furlong
03/21/94,A,Telford,,215-679-5764,Warren Erdman
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03/25/94,A,Allentown,,215-740-0666,Victor Tropiano
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04/02/94,A,Pittsburgh,,412-563-2379,Jim Cottrill
04/09/94,A,New Kensington,,412-782-5130,Donald McDaniel, KJ3Q
04/09/94,A,Shrewsbury,,717-235-0273,Carol Kirschman
04/11/94,A,Jim Thorpe,,717-386-2797,Anne M Keiser
04/13/94,L,Scranton,,717-342-8591,Art Sposto
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04/15/94,A,Tamaqua,,717-668-3098,Allen R Breiner
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04/16/94,A,Meadville,,814-724-1413,James Cihon
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04/18/94,A,Telford,,215-679-5764,Warren Erdman
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04/30/94,A,Reading,,215-678-8976,Harry Hoffman

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RHODE ISLAND
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03/20/94,W,Sumter,,803-775-9106,Dan Mask
04/02/94,W,Greenville,,803-297-1617,Sue L Chism
04/12/94,W,Spartanburg,,803-585-4919,H Peter Theiler
04/16/94,A,Charleston,,803-871-4368,Cyrus E. Frank
04/16/94,W,Columbia,,803-345-3373,Ray Rogers
04/30/94,W,Greenville,,803-297-1617,Sue L Chism

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03/12/94,A,Rapid City,,605-348-6564,Neal @ DAY 605-394-1298

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02/26/94,W,Memphis,,901-795-5923,Stan Moore
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03/05/94,A,Oak Ridge,,615-483-8042,Douglas A Campbell
03/12/94,A,Nashville,,615-824-7216,Murray G Jones, K4ANH
03/13/94,W,Jasper,,615-942-5116,Charles Wooten
03/14/94,W,Athens,,615-263-9300,Evan Ray
03/18/94,A,Shelbyville,,615-684-4104,Donna Parker
03/19/94,A,Columbia,,615-381-6814,Charles Miller
03/19/94,W,Knoxville,,615-688-7771,Ray Adams
03/19/94,W,Memphis,,901-795-5923,Stan Moore
03/26/94,W,Greeneville,,615-638-7056,Jack Creed
03/26/94,W,Memphis,,901-795-5923,Stan Moore
03/27/94,A,Sparta,,615-761-5007,Charles A Nielsen Sr
03/31/94,W,Memphis,,901-795-5923,John Hall
04/02/94,W,Paris,,901-247-5489,Mackie Gallimore
04/09/94,A,Murfreesboro,,615-459-6296,Don Moore
04/09/94,W,Rockwood,,615-354-4281,Richard Spillee
04/10/94,W,Jasper,,615-942-5116,Charles Wooten
04/11/94,W,Maryville,,615-982-5839,Carroll Peabody
04/16/94,W,Johnson City,,615-743-5144,Charles Hensley
04/16/94,W,Knoxville,,615-688-7771,Ray Adams
04/16/94,W,Memphis,,901-795-5923,Stan Moore
04/21/94,W,Jamestown,,615-879-8626,Mike Ledbetter
04/23/94,W,Memphis,,901-795-5923,Stan Moore

04/24/94,A,Sparta,,615-761-5007,Charles A Nielsen Sr
04/28/94,W,Memphis,,901-795-5923,John Hall
05/07/94,A,Cookeville,,615-537-6537,George Droke
05/08/94,W,Jasper,,615-942-5116,Charles Wooten
05/09/94,W,Athens,,615-263-9300,Evan Ray

TEXAS
02/26/94,A,Abilene,,915-672-8889,Peggy Richard
02/26/94,5,Dallas,,214-480-1903,Bill Warner
02/26/94,A,Orange,,409-886-2732,Sid Phillips
02/26/94,A,Tomball,,713-351-8930,Paul Frantz
03/05/94,A,Austin,,512-345-7281,Larry C Gunter
03/08/94,A,Houston,,713-682-6897,Cass Germany
03/11/94,A,Dallas,,214-525-8015,William E Reves Jr
03/12/94,A,Houston,,713-488-4426,James Heil
03/12/94,A,McGregor,,817-859-5374,James M Lang
03/12/94,A,Midland,,915-694-9450,Bill Anderson
03/18/94,A,Lake Jackson,,409-265-6439,Benton R Webb
03/19/94,5,Austin,,512-327-6184,Jim Greenwood
03/19/94,A,Midland,,915-694-9450,Bill Anderson
03/26/94,5,Dallas,,214-480-1903,Bill Warner
03/26/94,A,Tomball,,713-351-8930,Paul Frantz
04/02/94,A,El Paso,,915-544-5863,Gorden L Howard
04/03/94,A,McKinney,,903-455-2746,Charles Borneman
04/09/94,A,Houston,,713-488-4426,James Heil
04/09/94,A,Midland,,915-694-9450,Bill Anderson
04/12/94,A,Houston,,713-682-6897,Cass Germany
04/23/94,A,Abilene,,915-672-8889,Peggy Richard
04/23/94,5,Dallas,,214-480-1903,Bill Warner
04/23/94,A,Tomball,,713-351-8930,Paul Frantz
04/30/94,A,Waco,,817-859-5374,Alma P Lang
05/07/94,A,Austin,,512-345-7281,Larry C Gunter
05/07/94,A,McGregor,,817-859-5374,James M Lang

UTAH
03/02/94,A,Farmington,,801-292-8110,L Brent Thomas
04/02/94,A,Salt Lake City,,801-582-2438,Gordon R Smith

VIRGINIA
02/26/94,A,Fredricksburg,,703-373-7076,Carolyn Cavanagh, AC4SK
02/26/94,A,Richmond,,804-798-5048,Rick Cook
02/26/94,A,Vienna,,703-620-1727,Ron Natalie
03/02/94,A,Lynchburg,,804-386-4653,William L Dail
03/05/94,A,Yorktown,,804-898-8031,Ed Brummer
03/05/94,A,Yorktown,,804-898-8031,Ed Brummer, W4RTZ
03/12/94,L,Alexandria,,703-455-1510,Frank Mackey
03/26/94,5,Gloucester,,804-484-2857,Fran Sterling
03/30/94,A,Lynchburg,,804-386-4653,William L Dail
04/09/94,L,Alexandria,,703-455-1510,Frank Mackey
04/09/94,A,Harrisonburg,,703-856-8012,Marshall Cooper
04/09/94,A,Richmond,,804-798-5048,Rick Cook

04/10/94,5,Virginia Beach,,804-424-4764,Bill Verebely
04/27/94,A,Lynchburg,,804-386-4653,William L Dail
04/30/94,A,Williamsburg,,804-253-2811,Andrew Swanson
03/11/94,A,Burlington,,802-878-6454,Ralph T Stetson III
03/19/94,A,Rutland,,802-773-0775,Walt Deinzer
04/08/94,A,Burlington,,802-878-6454,Ralph T Stetson III
02/23/94,A,Everett,,206-542-0285,Dwayne E Broderson
02/26/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
02/26/94,A,Marysville,,206-335-5158,Loren Hole
03/05/94,A,Ephrata,,509-754-3847,W J Edwards
03/08/94,A,Burley,,206-876-1399,David Brooks
03/08/94,A,Everett,,206-355-7759,L. R. Luchi
03/13/94,A,Tukwila,,206-523-9117,Harry Lewis
03/19/94,A,Sultan,,206-793-0319,Ernie Allsop
03/23/94,A,Everett,,206-542-0285,Dwayne E Broderson
03/23/94,A,Marysville,,206-335-5158,Loren Hole
03/26/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
03/26/94,A,Tacoma,,206-845-7652,Jerry Seligman
04/02/94,A,Ephrata,,509-754-3847,W J Edwards
04/02/94,A,Vancouver,,206-892-7291,Wayne Schuler
04/10/94,A,Tukwila,,206-523-9117,Harry Lewis
04/12/94,A,Everett,,206-355-7759,L. R. Luchi
04/16/94,A,Sultan,,206-793-0319,Ernie Allsop
04/17/94,A,College Place,,509-525-7003,Mable Babbitt
04/23/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
04/23/94,A,Marysville,,206-335-5158,Loren Hole
04/27/94,A,Everett,,206-542-0285,Dwayne E Broderson
05/07/94,A,Ephrata,,509-754-3847,W J Edwards
05/08/94,A,Tukwila,,206-523-9117,Harry Lewis

WISCONSIN
02/26/94,A,Tomahawk,,715-453-4633,Terry M Collins
03/05/94,A,Racine,,414-658-8390,William Firchow
03/12/94,A,Madison,,608-832-6631,Mark Jenks
03/19/94,A,Appleton,,414-788-3823,Larry Siebers
03/26/94,A,Menomonie,,715-235-3998,James P Ley
04/09/94,A,Madison,,608-832-6631,Mark Jenks
05/07/94,A,Manitowoc,,414-788-3823,Larry Siebers

WEST VIRGINIA
03/06/94,A,Clarksburg,,304-624-5186,Joseph R Chiado
03/21/94,A,Morgantown,,304-366-0132,Robert Robinson
04/16/94,A,Martinsburg,,301-834-8831,Lester M. Reynolds

WYOMING
03/05/94,A,Cody,,307-568-2349,Jerry Pyle
04/30/94,A,Cheyenne,,307-637-8634,Wilson Sellner

EXAMINATION OPPORTUNITIES OUT

03/12/94,A,Belgium,,32-11439164,Ronald A.L. Torfs
03/05/94,A,England,,0462-812571,Leland Vandervort

02/26/94,A,Germany,,49-0-67253462,Stephen Hutchins, KN6G
03/26/94,A,Japan,,243-6092,Paul W Jackson USN
04/17/94,A,Saipan,,670-234-6323,David Hardt

GUAM
03/20/94,A,Adelup,,627-646-7611,Harry Y Taguchi

US VIRGIN ISLANDS
04/09/94,A,St Croix,,809-778-3156,Frank Jaeger

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2017. US License Examination Opportunities Scheduled 2/23/94 to 5/9/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 17:58:43 UTC
From: bjahnke@arrl.org
Message-ID: <1995@bjj>
Source record: 270719
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

AMATEUR RADIO EXAMINATION OPPORTUNITIES

****

Special Note: Amateur Radio licenses usually arrive between 8 and 10 weeks after the test session. The FCC considers their processing time to be 90 days--from the date they receive the application. The FCC usually receives the application one to two weeks after the test session (once the VE Team and the coordinating VEC have completed their processing).

Note: Codeless Technician to Technician w/HF upgraders (who pass a Morse code test) will not receive a new license from the FCC. The existing Technician license plus the CSCE conveying the Morse code test credit is the only documentation issued for use of the additional HF privileges.

****

The following test session information is provided by the ARRL/VEC for the upcoming six to eight week period. For further information, please contact the test session CONTACT PERSON at the telephone number provided. If necessary, you may contact the ARRL/VEC at 203-666-1541 x282 for additional information. Electronic mail may be forwarded to the ARRL/VEC via USENET at "bjahnke@arrl.org" or via MCI Mail to MCI ID: 653-2312 or 215-5052.

Although the test session information presented here does not indicate whether walk-ins are accepted or not, most test sessions do allow walk-ins. We encourage you, however, to always contact the CONTACT PERSON at the telephone number provided so that the VE Team is aware that you be attending the test session.

STILL NEED TO PREPARE FOR YOUR EXAM?

If you would like information on how to become licensed; or how to locate Amateur Radio clubs, instructors, licensing classes and/or Novice examiners in your area; please contact the ARRL Educational Activities Department (EAD) at 203-666-1541 x219. The EAD can also provide information on recommended study materials. Electronic mail may be forwarded to the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to MCI ID: 215-5052.

EXAM LISTINGS - DEFINITION OF FIELDS

STATE
Test Date,VEC,City,,Contact Phone,Contact Person

The SECOND field in the following listing specifies the VEC
which is coordinating this examination. This single-character
designator denotes the VEC as defined below. An "A" (for example)
indicates that this examination is coordinated by the ARRL/VEC.

For further information on any examinations listed, or if you do not
find any examinations listed for your area, you may contact
any of the coordinating VECs below.

A = ARRL/VEC, 225 Main St, Newington, CT 06111; (d) 203-666-1541
The 1994 test fee is $5.75.

X = Anchorage ARC, 2628 Turnagain Parkway, Anchorage, AK 99517;
(d) 907-786-8121, (n) 907-243-2221 (or) 907-276-5121
(or) 907-274-5546

C = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
205-536-3904

N = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
704-596-2168

D = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
708-486-8019

E = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.

G = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
818-892-2068, 805-822-1473.

J = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368;
504-831-1613. Test fee for 1994 is $5.00.

K = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
808-235-4132

L = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
(d) 301-572-5124, 301-317-7819, (n) 301-588-3924

M = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
414-774-6999. Test fee for 1994 is $5.00.

H = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
301-724-0674

P = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313

R = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926

S = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
408-255-9000

T = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
919-841-7576

W = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
Knoxville, TN 37912-2500; 615-688-7771.
The 1994 test fee is $5.75.

5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
The 1994 test fee is $5.75.

EXAMINATION OPPORTUNITIES OUT

03/12/94,A,Belgium,,32-11439164,Ronald A.L. Torfs
03/05/94,A,England,,0462-812571,Leland Vandervort
02/26/94,A,Germany,,49-0-67253462,Stephen Hutchins, KN6G
03/26/94,A,Japan,,243-6092,Paul W Jackson USN
04/17/94,A,Saipan,,670-234-6323,David Hardt

GUAM
03/20/94,A,Adelup,,627-646-7611,Harry Y Taguchi

US VIRGIN ISLANDS
04/09/94,A,St Croix,,809-778-3156,Frank Jaeger

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2018. Re: Travelling to Egypt

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 18:06:34 UTC
From: Lois White <LMWHITE@SLACVM.SLAC.STANFORD.EDU>
Message-ID: <94054.100634LMWHITE@SLACVM.SLAC.STANFORD.EDU>
Source record: 270720
Cross-posted to: rec.radio.amateur.misc,rec.travel

In article <2kdlug$nvb@gdls.com>, turini@gdls.com (Bill Turini) says:
>
>I will be travelling to Cairo in the near future. I have been told to forget
>about
>bringing any amateur radio equipment as there is no possibility of getting an
>operating license there.
>
>But I was also told by the ARRL to not even bring a short wave receiver/alarm
>clock/AM/FM Radio as they were very strict on any type of radio equipment.
>
>Does anyone have any first hand knowledge of this?
>
There will be no problem taking an ordinary shortwave/alarm/am/fm radio
into Egypt for your own use. If there are restrictions on radio equipment,
it is probably on the type which can broadcast as well as receive.

2019. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 18:16:00 UTC
From: tskloss@zeus.tamu.edu
Message-ID: <23FEB199413162911@zeus.tamu.edu>
Source record: 270721

In article <CLnAIr.76s@inmet.camb.inmet.com>, leber@panther.warm.inmet.com (Thomas Leber) writes...
>I'd like to hear other opinions about this also. My 1988 Acura Integra (another
>Honda product, for those who may not know) has exhibited a fair amount of

Besides buying AMERICAN, there may not be a fix to your problem. The acura may have independant coils for each spark plug (found on a few high perf. imports). These may not have been shielded very well causing ignition interference.

I have noticed that on many powerful ignition systems (e.g. single engine airplanes) there is so much noise that the S-meter on my HT always stays at about 3 to 5 (out of 9 max) when squelched out. Shut the motor off and the noise goes away. This is EMP noise, due to large transient current implulses that transmits broad-band noise.

Listen to your noise. If it sounds like a sine-wave that varies pitch with rpm, then it is alternator noise. If it sounds like static electricity (pops or clicks) that varies with rpm, then it is ignition noise. Try a filter from RS on the power leads, other than that buy AMERICAN.

-tim

2020. Re: Chevy Ignition Noise (was Honda ignition recall - now NOISE!!)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 18:25:00 UTC
From: tskloss@zeus.tamu.edu
Message-ID: <23FEB199413253411@zeus.tamu.edu>
Source record: 270722

In article <BTtQjGG8yvBU057yn@dorsai.dorsai.org>, bigsteve@dorsai.dorsai.org (Steve Coletti) writes...

>noise, you will notice an over voltage. Instead of the nominal 13.1 volts,
>you will get something like 14.x volts. The car will still run good,
>and for a long time too. You may notice a slight glow to the "alt" light

14.x Volts is an overcharge state that can fry your car's battery. It is not designed to take more than 14.4V max. 13.6-13.8 nominally.

-tim

2021. Re: Travelling to Egypt

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 18:33:57 UTC
From: khaled@science.ncsu.edu
Message-ID: <kmelsaye.762028437@zeus.csc.ncsu.edu>
Source record: 270723
Cross-posted to: rec.radio.amateur.misc,rec.travel

turini@gdls.com (Bill Turini) writes:

>I will be travelling to Cairo in the near future. I have been told to forget about
>bringing any amateur radio equipment as there is no possibility of getting an
>operating license there.

This could be true but not impossible!

>But I was also told by the ARRL to not even bring a short wave receiver/alarm
>clock/AM/FM Radio as they were very strict on any type of radio equipment.

What? This is not right. Do you expect that egyptians don't use any radio
at all or what? In fact the shortwave radio I own now was purchased
in Cairo. I guess it would be no problem to bring any of these stuff you
mentioned above, however, you may be asked to pay costumes unless you
declare that you are going to take them back with you on departure. Also,
you maybe surprised by the large number of sat. dishes in Cairo nowadays
if this is your image about Egypt :-)

Have a nice trip.

Khaled

--

Khaled M. F. El-Sayed | e-mail: khaled_elsayed@ncsu.edu
Department of Computer Science | Voice : 919-515-7533 (Office)
North Carolina State University | 919-515-7346 (CCSP Lab)
Raleigh, NC 27695-8207, U.S.A. | To be is to do!

2022. INTERNET -- PACKET gateway!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 18:42:30 UTC
From: ydupont@Qc.Bell.CA
Message-ID: <CLoxAu.96q@on.bell.ca>
Source record: 270724

I'm new to PACKET and I would like to know if it's possible to exchange mail between INTERNET and PACKET. Is there a gateway doing that? What's the procedure?

Please forgive me, if my question is stupid but I wanted to know!

Thanks.

Yvan Dupont, (VE2YDU)

Bell SYGMA, Telecom Solutions
30 Renaud, Loretteville (Qc) CANADA G2A 2K7
TEL: 418-843-7564 FAX: 418-842-9559
Internet: ydupont@Qc.bell.CA HAM: VE2YDU

Disclaimer: The opinions expressed here are mine and not my employer's.

2023. Re: two meter frequency allocations gdavis@griffin.uvm.edu (Gary Davis) says:

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 18:58:55 UTC
From: jwittich@b4pph107.bnr.ca
Message-ID: <1994Feb23.185855.19446@brtph560.bnr.ca>
Source record: 270725

> Our University station is struggling with the student association for
>funding and as a result we put a 2 meter- cross band- remote base on
>the air. At the time it seemed as if an acceptable input frequency
>would be in the miscellaneous (uses) allocation. We put our input on
>145.775 (an unused frequency in the area). Soon we we pounced on by
>the local coordinator who said we were in violation of part 97 since
>what we had was not a remote base, rather a repeater.

>However, the local coordinator has said that any radio that uses any
>form of automatic T/R switching constitutes a repeater!
>Therefore, he contends we are in violation of part 97?
>In any event we change frequencies today, but are there any opinions
>on exactly what constitutes a repeater.

>In my opinion, when the law was enacted, a repeater was construyed to
>be a remote system with inputs/outputs in the same band and not a box
>which is turned on or off before and after use.

>73-- Gary

Well, lets see what part 97 says under definitions:

(35) Repeater. An amateur station that automatically
retransmits the signals of other stations.

Yep, looks like you got a repeater, but so what? I can't find any thing
in part 97 that you are violating anyway. If you are causing interferance,
and are not coordinated, you would have to deal with it, but from what
you say, I see no violation here.

Can anyone else?
73. -=Jeff=-

--
****
jwittich@bnr.ca * BNR claims they know nothing of my
AC4ZO * employment here.
****

2024. 8P6AW EA6BE 4S7WP QSL routes?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 19:12:16 UTC
From: slay@netcom.com
Message-ID: <slayCLoyoJ.L20@netcom.com>
Source record: 270726

I would appreciate it if someone out there on the Net could
advise me of the QSL routes (callbook addresses) for
8P6AW - he was active during ARRL DX CW TEST; seemed to be a newcomer
EA6BE
4S7WP

Please reply directly to me and I will delete this posting.
Cheers de Sandy WA6BXH/7J1ABV slay@netcom.com

2025. Re: Hammarlund HQ105TR - What is it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 19:14:03 UTC
From: "F. Kevin Feeney" <fkf1@cornell.edu>
Message-ID: <2kg9trINN75u@newsstand.cit.cornell.edu>
Source record: 270727

In article <2kftdl$pmu@blitzen.cc.bellcore.com> karayannopoulos,
karayan@blitzen.cc.bellcore.com writes:
>In a local antique store I found an old Hammarlund boatanchor with model
number
>HQ105TR. My question is simple: What is it?
>
>The owner claims that it is a ham rig, but I'm not sure. In the back
there
>are provisions for coax, and two jacks that LOOK like mike and key, but
>are unmarked. The bandspread knob has markings for CB channels (!), which
>confuses the issue. From the dials I can see that coverage is 2-30 MHz.
>Could it be a receiver only?
>
>Also, is it worth the $60 they are asking for, assuming working order?
>Any help would be appreciated.
>
>Tnx de
>____
>George Karayannopoulos N2OWO
>karayan@cc.bellcore.com Bellcore, Red Bank, NJ
>Disclaimer: The opinions expressed here are mine and not my employer's.
>

They were a general coverage receiver similar to the HQ100, but I think
with
different bandspread tuning, and a little one or two tube cw/am
transmitter
in the back that ran about 1-5 watts. Crystal controlled and ran on 11/10
meters
back when they were both ham bands I believe. (I'm pretty sure about the
10/11
part, I'm just not sure if 11 was still a ham band when the HQ105 was new
or
whether they were type approved for CB as well as 10 meters.) Might even
have
gone to other bands such as 15 meters or lower. I don't think it covered
80-10
though, although the receiver did.

I had use of a HQ100 for a while and owned a 170 - both seemed to be
pretty solid
for their day (late 60's early 70's) and I wouldn't turn down one now.
For listening
to broadcast SWL stations and doing some very casual hamming should be
fine. The

170/180 series had much better filtering and tuning for serious ham operating.

Don't know if you can still get crystals to fit the rig for cb use, or if it would
even be type approved - don't expect to get them off the shelf at radio shack.
FT243 types multiplied up to whatever ham bands it covers are probably easily
found at hamfests, friends shacks, etc...

Have fun.

kevin, WB2EMS

2026. cannot access cs.buffalo.edu ftp

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 19:20:23 UTC
From: ah301@yfn.ysu.edu
Message-ID: <ah301-230294142023@sy_j.pgh.wec.com>
Source record: 270628

has cs.buffalo.edu anonymous ftp site stopped accepting anonymous logins ? It does not accept anonymous or ftp as user names anymore.

jerry
n3rkd

2027. How can I subscribe?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 19:32:00 UTC
From: FISHERB@a1.mec.mass.EDU
Message-ID: <01H98BOJ1018000446@mr.mec.mass.edu>
Source record: 270629

How can I subscribe to the various ham groups?

FISHERB@a1.mec.mass.edu (send all the mail you want, all answered).

The great give away-affordable housing.
For some employed woman, mothering is a hobby

2028. "DIY"?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 19:35:31 UTC
From: alanb@sr.hp.com
Message-ID: <CLozr8.2Cw@srgenprp.sr.hp.com>
Source record: 270630

Harland MacKenzie (harland@otter.mech.ubc.ca) wrote:
: Does anybody have plans for a DIY audio notch filter ?
^^^

I think I finally figured it out: DIY = "Do It Yourself" right?

(Still decoding Usenet abbreviations)

Alan Bloom

2029. Re: Passed General written, how long do I have to pass code?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 19:40:22 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199402231953.LAA24962@ucsd.edu>
Source record: 270631

>where I took my exams, if you do not pass the codes, they don't let you
>take the written exams (makes sense). So your being able to take the
>written exam without the 13 wpm is something new to me.
>N3RKD

I don't know of any reason why you can't take all the written tests w/o passing a code test first. You certainly can have written credit w/o having code credit.

a long time ago this was not the case, but today there is no reason not to go ahead and give someone a written. having that credit can be an incentive to get moving on the code. I know I had extra written credit twice (the first time a few years ago, i never got my code up. the 2nd time, i did make it after about 3-4 months....)

sounds like your VE team needs to get up to date. I know we do written credit only --

73, bill wb9ivr

2030. Re: Help - Need ARES Packet Software.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 19:44:08 UTC
From: bmiller@landesk.intel.com
Message-ID: <2kgbm8$t15@ornews.intel.com>
Source record: 270632

I have an old posting saying it the ARES packet program is available
at byugate.cs.byu.edu in the ARES directory. The program is called
ARESPACK (v3.0)
The posting was made by Keith keithm@wicat.com

Hope this helps

--
Brett Miller N7OLQ E-mail: brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

2031. Re: Heathkits

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 19:55:58 UTC
From: alanb@sr.hp.com
Message-ID: <CLp0pA.2yx@srgenprp.sr.hp.com>
Source record: 270633

Cecil A Moore (Cecil_A_Moore@ccm.hf.INTel.COM) wrote:

: ... My point was that in any
: normal distribution of customers, by definition, there will be some on
: each end of the spectrum outside the three sigma limit. ...

Right. Anecdotes do not a proof make.

However it seems clear that on average Heathkits were better designed, packaged and documented than Ramsey kits. I haven't built a Ramsey kit, but I have examined ones others have purchased. It seems like with every one I saw, I could see design problems just by looking at the schematic. I've seen some Heathkits with design flaws too, but not to that extent. And the Heath construction manuals were fabulous. They always prided themselves on the quality of their manuals and over the years they developed it into an art form. The Ramsey manuals are not bad, but they are not up to Heathkit standards.

I'm rooting for Ramsey. Amateur Radio needs a good kit company, with just the kinds of products that Ramsey offers. With better designs and quality control, they could be making a real contribution to the hobby.

AL N1AL

2032. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 20:14:38 UTC
From: tomb@lsid.hp.com
Message-ID: <CLp1KE.Iz@hpcvsnz.cv.hp.com>
Source record: 270634

William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:

: I have a real big problem with the idea that there are deliberate errors
: purposely induced into what should be a reference book. Maybe we should start
: a "repeater directory accuracy project" to confirm all the listings in the
: ARRL directory to see if content errors exist.

I was the one who did the Washington (state) part for Conway's project; my submission to him never saw the light of day because of the current hassle. I will say that I did a lot more than just copy the ARRL directory: most Western Washington repeaters in the list are ones I have personally confirmed. There are indeed corrections that I have included. One even came from DFing the repeater...bunny hunt practice.

I'd be willing to post my submission to Conway, with all the info that hasn't been independently verified deleted. Any interest?

73, K7ITM

2033. Re: Passed General written, how long do I have to pass code?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 20:39:46 UTC
From: ham@wam.umd.edu
Message-ID: <2kgeui$lnl@cville-srv.wam.umd.edu>
Source record: 270635

>>where I took my exams, if you do not pass the codes, they don't let you
>>take the written exams (makes sense). So your being able to take the
>>written exam without the 13 wpm is something new to me.
>>N3RKD
>
>I don't know of any reason why you can't take all the written tests w/o
>passing a code test first. You certainly can have written credit w/o having
>code credit.
>
>a long time ago this was not the case, but today there is no reason not to go
>ahead and give someone a written. having that credit can be an incentive to
>get moving on the code. I know I had extra written credit twice (the first
>time a few years ago, i never got my code up. the 2nd time, i did make it
>after about 3-4 months....)
>
>sounds like your VE team needs to get up to date. I know we do written credit
>only --

Most VE teams today will give credit for ANY element passed. You don't
even need to take them in order. Theoretically, you could start at Extra,
and work DOWN to Novice, although at testing sessions we generally
recommend that people work UPwards. Occasionally, we have had a person
come in and have not realized that the "No-code Tech" exam ALSO consisted
of ELEMENT 2! So they are totally unprepared to take the Novice test,
and fail miserably, but ace the Tech 3A exam. How anyone could study for
a license and NOT know this is beyond me, but I HAVE seen it happen.

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 125 QSLed on dipoles __________| Dipoles! Antenna!

2034. ITU callsign blocks

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 20:44:24 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLp2y0.9IC@news.Hawaii.Edu>
Source record: 270636

A week or two ago someone asked about an online source of callsign prefixes;
I mentioned the ARRL email server's filed entitled DXCC but that does not
contain a complete list of prefixes. This one does: ITU-CALLS, again from
the ARRL server (info@arrl.org)

Jeff NH6IL

2035. Re: two meter frequency allocations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 21:21:47 UTC
From: jwittich@b4pph107.bnr.ca
Message-ID: <1994Feb23.162147.536@cup.edu>
Source record: 270637

gdavis@griffin.uvm.edu (Gary Davis) says:
Message-ID: <1994Feb23.185855.19446@brtph560.bnr.ca>
Sender: jwittich@b4pph107 (Jeffrey Wittich)
Date: Wed, 23 Feb 1994 18:58:55 GMT
Organization: Bell-Northern Research, Ottawa, Canada
Lines: 40

> Our University station is struggling with the student association for
>funding and as a result we put a 2 meter- cross band- remote base on
>the air. At the time it seemed as if an acceptable input frequency
>would be in the miscellaneous (uses) allocation. We put our input on
>145.775 (an unused frequency in the area). Soon we we pounced on by
>the local coordinator who said we were in violation of part 97 since
>what we had was not a remote base, rather a repeater.

>However, the local coordinator has said that any radio that uses any
>form of automatic T/R switching constitutes a repeater!
>Therefore, he contends we are in violation of part 97?
>In any event we change frequencies today, but are there any opinions
>on exactly what constitutes a repeater.

>In my opinion, when the law was enacted, a repeater was construyed to
>be a remote system with inputs/outputs in the same band and not a box
>which is turned on or off before and after use.

>73-- Gary

Well, lets see what part 97 says under definitions:

(35) Repeater. An amateur station that automatically
retransmits the signals of other stations.

Yep, looks like you got a repeater, but so what? I can't find any thing
in part 97 that you are violating anyway. If you are causing interferance,
and are not coordinated, you would have to deal with it, but from what
you say, I see no violation here.

Can anyone else?
73. -=Jeff=-

--
****
jwittich@bnr.ca * BNR claims they know nothing of my
AC4ZO * employment here.
****

2036. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 21:41:02 UTC
From: andyw@aspen32.cray.com
Message-ID: <1994Feb23.154103.22949@hemlock.cray.com>
Source record: 270638

In article <1994Feb23.113305.7405@hemlock.cray.com>, I spluttered:
> [...]
> to the Gracillis card. Gracillis were more than willing to let people
> [...]

That should be Gravis, not Gracillis..
--
andyw N0REN/G1XRL

andyw@aspen.cray.com Andy Warner, Cray Research, Inc. (612) 683-5835

2037. Re: John Ramsey

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 21:44:32 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLp5q9.DDo@ucdavis.edu>
Source record: 270639

Jason Hanson (jason@yar.cs.wisc.edu) wrote:
: In article <RqzI+RX.armond@delphi.com>, <armond@delphi.com> wrote:
: >Dana Myers <myers@cypress.West.Sun.COM> writes:
: >
: >> * This Extra supports the abolition of the 13 and 20 WPM tests *
: >
: >This Extra supports the abolition of those who support the abolition of
: >the 13 and 20 WPM tests.

: This Extra supports the abolition of delphi posters from the net.

Well,
Here is a really interesting example of how to treat the no-code
license. Think of Delphi as the internet equivelent to a no-code
ticket. Delphi brought a lot of new users into the internet just as the
no-code ticket brought a bunch of new hams in to amateur radio. Delphi,
like the no-code ticket is a good way for the uninitiated (those without
elmers) to get involved with a great communication medium. Instead of
flaming this guy or suggesting we abolish all Delphi users, it may be
more productive to suggest that he ftp from rtfm.mit.edu the FAQ for
news.announce.newusers or news.newusers.questions perhaps you could
read the FAQ directly from the newsgroups. There are also netiquette
docs out there, if you need some, I'll help find them for you.
Or if that doesn't work we can just give Jeff his address and he can
include it in this weeks call to the FCC. You never know this message
was sent via RF somewhere along the way!!!

Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* The only thing I can officially say for the University is: *
* What I say is in no way related to oficial University policy *
--

2038. Re: Nude amateur radio clubs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 21:45:39 UTC
From: kr4ah@pegasus.cc.ucf.edu
Message-ID: <2kgiq3$nmp@pegasus.cc.ucf.edu>
Source record: 270640

While contemplating bellybuttons William VanHorne spake thusly:

> Hardly. If you're nude, you can't wear one of those nifty baseball caps
> with your name and callsign on it. What's the point of being in ham
> radio if you don't wear your baseball cap? Sheesh.

> ---Bill VanHorne

Bill,
Just curious, but I always thought that if you were wearing merely
a baseball cap, with or without your name and callsign, you were
generally considered to be nude.
I guess it just depends on where you hang your baseball cap ;).

--

John Meaker

Disclaimer: I am not responsible.

2039. Super Morse 4.10 is out!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 21:48:49 UTC
From: dino@cam.org
Message-ID: <dino-230294164850@dino.hip.cam.org>
Source record: 270641
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.equipment

I read a note somewhere that 4.06 was available from some FTP site.
Well super Morse 4.10 is out and available on Compuserve and possibly
somewhere on the NET. If you can't find it, let me know and if someone
tells me how to get permission to PUT it on their FTP server, I can send it
there.

73 de dino

--
"""""""""""""""""""""
| Dino Moriello """""""""""""""""""""""
| PO BOX 105 Internet: dino@CAM.ORG """""""""""""""""""""
| Radisson,Quebec Compuserve: 76120,1472 Tel.: 514-974-0773 |
| CANADA J0Y 2X0 Packet: VE2DM@VE2FKB 819-638-8281 |
"""

Please E-mail replies since I can't always read the USENET postings.

2040. Re: RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 21:50:48 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLp60o.Dn3@ucdavis.edu>
Source record: 270642

Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:

: I watched the entire episode from the start on rec.radio.cb. From what
: I saw you got your wannabe basket-weave belt accessories in a knot when
^^^^^^^^^^^^^^^^^^^^^^^^

I love it!! Can I have this for my very own?

P.S. If Jeff is as uptight about gays as he is about the use of the
airwaves is he a hamster and gerbil cop? :-)

cheers,
Dan
--
---
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
---
* The only thing I can officially say for the University is: *
* What I say is in no way related to oficial University policy *

2041. Re: Special Events Question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 21:56:38 UTC
From: kr4ah@pegasus.cc.ucf.edu
Message-ID: <2kgjem$o6o@pegasus.cc.ucf.edu>
Source record: 270643

I'm sorry about the vacuois post. I'm using a new news reader
and it takes a little getting used to. This is what I meant to
post previously.

I am part of a group of hams that is planning a special event
for July 4 - 10, 1994. None of us has had any experience with this
kind of thing and we have a few questions that someone in this
group may be able to answer.

1) Is the period of July 4 - 10 a good or bad time?
2) We wanted to send a commemorative certificate and a QSL
card. Is it OK to ask the contact to send a 9x12 SASE?
Will this reduce the number of contacts appreciably?
3) How is the best way to spread the word about this event?
4) None of the hams involved has had a call or address for
long enough to be in any older callbook. How should the
QSL information be handled? Sending an address over the
air can be a problem. How can this be avoided?
5) Are there any hidden obstacles lurking out there to take
us by surprise?

Thanks for any input.

John -=- kr4ah.

Disclaimer: I am not responsible for the actions
of any Alpha-Hotels other than myself.

2042. 5B4ADA

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 22:06:27 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2kgk13$j40@geraldo.cc.utexas.edu>
Source record: 270644

jwittich@b4pph107.bnr.ca (Jeffrey Wittich) asks:

>> Hi, guys. Someone on the local packet-cluster node is asking
>>for QSL info for 5B4ADA. The QSL manager data base shows a manager
>>in Croatia for 5B4ADA. He said he believes there is a W2
>>manager also. Can anyone shed some light? I also worked this
>>station and would much rather QSL to a US manager rather than try
>>to get one in and out of 9A.

The manager is 9A2AJ, who is one of the world's best QSLers.
He is mgr (and probably the op) for several other Cyprus
operations - P31A, P30ADA etc. I've never heard of a W2
mgr, but your card will get a reply just as fast via 9A2AJ
as it will from a typical W manager - probably much faster.

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

2043. Re: Dayton parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 22:16:48 UTC
From: CUNNINGHAM_A@whqvax.picker.com
Message-ID: <1994Feb23.221648.9890@picker.com>
Source record: 270645

> This sort of conjures up the stereotype of the ham who is too lazy
> to get out of his operating chair and walk somewhere. Someone once
> told me that Real DXers[tm] have country counts equal to their weight
> in lbs.
>
> From what I've seen of the typical hamfest ham, most of them could
> do with a bit more walking around.

I among other DXers (actually my DXCC count is very close to my weight as I approach Honor Roll) could lose a few pounds. Then there are slim guys like Chod Harris. We're not all overweight.

As for Dayton, a walk to Salem Mall down the hill ain't unpleasant at all unless its a downpour (like '93), or freezing (like '82), or tropical like many other years. My group's philosophy (Armageddon ARC, Cleveland and the World) is to use the busses. Once you're hooked on letting them drive you to a nearby mall or your hotel, you'll never want to park again. You do get some dirty looks with a Johnson Viking II straddled on your lap, though.

Tis the season when hearts turn to Dayton. 73s....

Al N8AGU

2044. Re: Heathkits

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 22:23:06 UTC
From: CUNNINGHAM_A@whqvax.picker.com
Message-ID: <1994Feb23.222306.10096@picker.com>
Source record: 270646

> >My experience leads me to belive Heathkit (may they RIP) has been unfairly
> >slammed ... by far, I believe, the Heathkit builders were successful and
> >had an excellent learning experience. 73 >< Carl K8NHE
>
> Sorry Carl, didn't mean to slam Heathkit. My point was that in any
> normal distribution of customers, by definition, there will be some on
> each end of the spectrum outside the three sigma limit. Experiences

My points: Some of "my generation" of high-school kids in the 60's built
Heathkits for fun, not just success or education, and

And for the hams in the 50's (especially) the Heath product
line was a lower cost alternative to buying off-the-shelf
ham gear. Unfortunately, by the 70's Heath was costly compared
with import competition.

73s Al N8AGU near Cleveland ----> On the great Lake Erie...

2045. Re: Ramsey Mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 22:29:24 UTC
From: hess@boi.hp.com
Message-ID: <CLp7t1.I5t@boi.hp.com>
Source record: 270647

Cecil Moore (kg7bk@indirect.com) wrote:
: Someone said that between 30 and 225 MHz, transmitter spurs are limited
: to 60dB down from the carrier. That is true only of transmitters running
: 25 watts or more. The limit for transmitters running less than 25 watts
: is 25uW or -40dB whichever is larger. The Ramsey FX-146 is limited to
: 25uW spurs by FCC rules. That means the 3.7 watt FX-146 tested by the
: ARRL had to meet a -52dBc spec, not a -60dBc spec. My silent key buddy,
: Bob, W7FEZ, tuned his FX-146 for 2.5 watts output. We tested it on a
: spectrum analyzer before and after the modification. Spurs were at -48dBc
: before and -54dBc after. It had to meet a -50dBc spec at a 2.5 watt
: output. That's where the earlier -48dB and -50dB figures came from.
: I think 10 log(3.7/.000025) is 51.7 dB.

: The Ramsey mods are on world.std.com under /pub/hamradio/mods/ramsey.
: For those without accounts, ftp.std.com is supposed to work.

: 73, Cecil, kg7bk@indirect.com

--
The statements/opinions expressed here are not necessarily those of the
Hewlett-Packard Company. HP paid a research firm millions of dollars to
get their own opinions, and has made it clear they do not wish to share mine.

Kevin C. Hess (KB7UKR) Hewlett-Packard Network Printer Division
hess@hpdmd48.boi.hp.com (208) 396-3384 Boise, Idaho 83704

Are we at last brought to such humiliating and debasing degradation, that we
cannot be trusted with arms for our defense? ... If our defense be the
real object of having those arms, in whose hands can they be trusted with
more propriety, or equal safety to us, as in our own hands? - Patrick Henry

It is criminal to teach a people not to defend themselves if they are the
constant victims of brutal assualt. - Malcom X

2046. Re: two meter frequency allocations

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 23:03:25 UTC
From: drt@world.std.com
Message-ID: <CLp9Dq.Gx@world.std.com>
Source record: 270648

Jeffrey Wittich (jwittich@b4pph107.bnr.ca) wrote:
: > Our University station is struggling with the student association for
: >funding and as a result we put a 2 meter- cross band- remote base on
: >the air. At the time it seemed as if an acceptable input frequency
: >would be in the miscellaneous (uses) allocation. We put our input on
: >145.775 (an unused frequency in the area). Soon we we pounced on by
: >the local coordinator who said we were in violation of part 97 since
: >what we had was not a remote base, rather a repeater.

: >However, the local coordinator has said that any radio that uses any
: >form of automatic T/R switching constitutes a repeater!
: >Therefore, he contends we are in violation of part 97?
: >In any event we change frequencies today, but are there any opinions
: >on exactly what constitutes a repeater.

: >In my opinion, when the law was enacted, a repeater was construyed to
: >be a remote system with inputs/outputs in the same band and not a box
: >which is turned on or off before and after use.

: >73-- Gary

: Well, lets see what part 97 says under definitions:

: (35) Repeater. An amateur station that automatically
: retransmits the signals of other stations.

: Yep, looks like you got a repeater, but so what? I can't find any thing
: in part 97 that you are violating anyway. If you are causing interferance,
: and are not coordinated, you would have to deal with it, but from what
: you say, I see no violation here.
:
: Can anyone else?
: 73. -=Jeff=-

Yeah. 145.775 is out of repeater subband. See 97.205b.

-drt

|David R. Tucker KG2S drt@world.std.com|

2047. Re: Hammarlund HQ105TR - What is it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-23 23:51:42 UTC
From: rovero@oc.nps.navy.mil
Message-ID: <CLpBM8.LAD@taurus.cs.nps.navy.mil>
Source record: 270649

In <2kftdl$pmu@blitzen.cc.bellcore.com>, karayan@blitzen.cc.bellcore.com (karayannopoulos,george) writes:
>In a local antique store I found an old Hammarlund boatanchor with model number
>HQ105TR. My question is simple: What is it?
>

It is a combination general coverage receiver (more or less equivalent to the HQ-100) and a CB transceiver. Yup; CB.

P.J. Rovero Internet: rovero@oc.nps.navy.mil
Code OC/Rv Packet: kk1d@k6ly
Naval Postgraduate School
Monterey, CA 93943

2048. Re: Hammarlund HQ105TR - What is it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 00:09:02 UTC
From: slay@netcom.com
Message-ID: <slayCLpCF3.37t@netcom.com>
Source record: 270650

karayannopoulos,george (karayan@blitzen.cc.bellcore.com) wrote:
: In a local antique store I found an old Hammarlund boatanchor with model number
: HQ105TR. My question is simple: What is it?

: The owner claims that it is a ham rig, but I'm not sure. In the back there
: are provisions for coax, and two jacks that LOOK like mike and key, but
: are unmarked. The bandspread knob has markings for CB channels (!), which
: confuses the issue. From the dials I can see that coverage is 2-30 MHz.
: Could it be a receiver only?

: Also, is it worth the $60 they are asking for, assuming working order?
: Any help would be appreciated.

Okay - I am not sure about this one - but let me give it a stab.
The HQ-105TR is *basically* an HQ-100 (100C if it has an analog clock)
general coverage 2-30MHz radio receiver PLUS a 5 watt AM CB transmitter.
The rig was manufactured by Hammarlund back in the late 50's and/or
early 60's.

I used the HQ-100C receiver with fairly good results for a few years
in the mid-60s as part of my Novice station. As to whether it is
worth $60 - hmmmm - well, if you want to work CB - I wouldn't buy
it for that purpose. If you want to do some shortwave listening with
an old tube-type rig for nostaglic purposes - sure, why not? Personally,
I would not bother with that rig. I would find something else, especially
if you want to monitor the ham bands.

Cheers de Sandy
WA6BXH/7J1ABV slay@netcom.com

2049. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 00:09:48 UTC
From: dts@world.std.com
Message-ID: <CLpCGE.JvH@world.std.com>
Source record: 270651

In article <CLo3wq.ICo@iceonline.com> janc@icebox.iceonline.com (Jan Chojnacki) writes:
>>I'd like to hear other opinions about this also. My 1988 Acura Integra (another
>>Honda product, for those who may not know) has exhibited a fair amount of
>>ignition noise since it was new. It's not coming through the power cord, as it
>>exists even on battery operated rigs.
>>
>>I've had them check everything they could, and replaced the distributor cap
>>and rotor. I also had the 'ignitor' replaced on recall (whatever that is).
>>It's still pretty noisy on my 2 m. HT and scanner.
>>
>>Any ideas? (other than get rid of the car, I mean)
>
>Yes. Have them replace your ignition wires with low-noise type. I believe
>that they are sometimes called Silicon Ignition Wires - but I may be wrong.
>When I replaced the wires on my Bronco II, it made a world of difference.

If it is a noisy honda, fixing the wires will not help. The RFI is
coming directly from the igniter area in the distributor cap
neighborhood, and radiates very nicely into your antenna, and that of
passing cars.

When driving my truck, I can always tell if a honda is passing by. Unfortunately
when in our Honda, it is hard to get away from the noise...

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

2050. Re: RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 00:28:48 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLpDC0.K4s@news.Hawaii.Edu>
Source record: 270652

In article <762016156snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>In article <CLnyL1.Hx3@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
> > >
> > > For Christs (sic) sake Jeff. Give it a f*****g rest.
> ^^^^^^^^^^^^ ^^^^^^^
> If you're going to note corrections to my english,
> then how about noting the correction to my language too.

`Sic' does not denote a correction. And I editted out a few letters because I got flamed in the `a' in December for saying the `a' word.

>
> > Context. Context is everything. Go back and check it yourself and you'll
> > see why I got upset at the original poster.
>
> I watched the entire episode from the start on rec.radio.cb. From what
> I saw you got your wannabe basket-weave belt accessories in a knot when
> someone posted a list of 6 MHz frequencies and then you went ballistic
> when Dana joined in the discussion.

I went ballistic as soon as I saw the 6mhz freqs posted as a place for pirates to use. I was debating with the poster prior to Dana joining in.

As I've said, I've got an entirely different outlook of this topic due to my Coast Guard days than anyone else one here. I don't expect you to understand or appreciate my views. And from what I hear from other Coast Guard units, what I experienced while at Monterey and here in Honolulu (willful interference during distress communications) was mild.
Willful interference on the ham bands doesn't jeopardize lives like it does on the aero and maritime channels. Get out of the narrow world that you live in, Jeff; there's more to the RF spectrum than the ham bands.

Jeff NH6IL

2051. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 02:21:37 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLpIK1.n0u@news.Hawaii.Edu>
Source record: 270653

In article <761496652snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>In article <CLC6Dp.Hz6@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
>
>[snips out a bunch of point-counter point hamblaster stuff]
>
> > You know, this IS starting to sound like an ad. The above exchange
> > could have been conducted via email; it sounds a bit contrived,
> > doesn't it?
> >
> > Jeff NH6IL
>
> Oh God, what next? I hope they don't start advertising frequencies on 6 MHz.

My goodness, Jeff; are you my shadow? Just because we share the same name doesn't mean you have to follow me around like a pesty little brother.

And don't rile the hamblasters - they insist they are NOT advertising.

Jeff NH6IL

2052. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 02:34:20 UTC
From: wier@merlin.etsu.edu
Message-ID: <wier-230294203421@198.213.12.234>
Source record: 270654

In article <23FEB199413162911@zeus.tamu.edu>, tskloss@zeus.tamu.edu (SKLOSS, TIMOTHY WILLIAM) wrote:

> or clicks) that varies with rpm, then it is ignition noise. Try a filter
> from RS on the power leads, other than that buy AMERICAN.
>
> -tim

Sorry tim - that's not the solution. There has been a group of Jeep Cherokee
owners who have been trying for YEARS to quiet up our vehicles, and so far absolutely nothing works. In our case, the noise seems to be coming from the fuel injector circuits/computer...

I get a continueous S9 on my HF rig in the car - I even get noise on my factory installed FM radio!

======== insert usual disclaimers here ============
Bob Wier, East Texas State U., Commerce, Texas
keeper of the Adobe Photoshop, MC68HC11, ICOM mailing lists
wier@merlin.etsu.edu (watch for address change)

2053. Re: RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 02:36:07 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLpJ87.8r@news.Hawaii.Edu>
Source record: 270655

In article <CLp60o.Dn3@ucdavis.edu> ez006683@chip.ucdavis.edu (Daniel D. Todd) writes:
>Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:
>
>
>: I watched the entire episode from the start on rec.radio.cb. From what
>: I saw you got your wannabe basket-weave belt accessories in a knot when
> ^^^^^^^^^^^^^^^^^^^^^^^^
>
>I love it!! Can I have this for my very own?
>
>
>P.S. If Jeff is as uptight about gays as he is about the use of the
>airwaves is he a hamster and gerbil cop? :-)

I don't get it - what's a wannabe basket-weave belt? What's gerbils got
to do with gays? Is this 2 meter talk?

Jeff

2054. Re: RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 03:11:27 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLpKv4.4qs@ucdavis.edu>
Source record: 270656

Jeff Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:

: I don't get it - what's a wannabe basket-weave belt?

wannabe implies one who wishes or acts in a way more consistent with a
group of individuals of which they are not a member. It is usually
used in a derogatory fashion. For example some people call no-codes
wannabe hams. If one were to speak with an artificial French accent they
may be called a wannbe french(wo)man. And if one acts like it is their
responsibility to enforce laws when it is not they are often called
wannabe cops (can you say security officer?).
Most police uniforms include a leather belt (and often wallet) imprinted
with a basket-weave design.
ergo. You were called a wannabe cop.

: What's gerbils got to do with gays? Is this 2 meter talk?
It has nothing to do with 2 meters. Perhaps 2 feet, but not 2 meters. If
you don't know, you really don't want to know. (is there an
alt.fan.Richard.Gere? :-)

Now, tell me, are you a born again Christian? HOw tall are your?

Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* The only thing I can officially say for the University is: *
* What I say is in no way related to oficial University policy *
--

2055. Re: Satellite Tracking Programs ... any X versions out there?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 03:18:47 UTC
From: jim@n5ial.mythical.com
Message-ID: <1994Feb24.031847.1267@n5ial.mythical.com>
Source record: 270657

In article <HPaZHc3w165w@stat.com> david@stat.com (David Dodell) writes:

>I am interested in obtaining a good satellite tracking program for
>tracking some of the amateur birds. Recommendations on shareware /
>commercial packages would be appreciated.

I'm interested in this too...but with a slight variation. :-) I'd like
one that I can compile and run under Linux / X11R5 (Xfree86 mono, with a
fairly old server...it's the one that was distributed with the very first
tinyX distribution).

On a similar note, if anyone knows of any X-based wefax programs, I'd like
to know about that, too.

Btw, I don't have real ftp, so if they're on a BBS somewhere, or if you
happen to know the full site/path/filename (for e-mail ftp), that would
all be most helpful. I'm even open to having someone e-mail me source, as
long as they check with me first (I'll want to route it via a different
UUCP path than the default).

Thanks,
--jim

--
73 DE N5IAL (/4) < Running Linux 0.99 PL10 >
jim@n5ial.mythical.com ICBM: 30.23N 86.32W
|| j.graham@ieee.org Packet: N5IAL@W4ZBB (Ft. Walton Beach, FL)
E-mail me for information about KAMterm (host mode for Kantronics TNCs).

2056. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 04:03:00 UTC
From: dino@cam.org
Message-ID: <dino-230294230300@dino.hip.cam.org>
Source record: 270658

In article <1994Feb21.204344.59186@kuhub.cc.ukans.edu>,
baxter@kuhub.cc.ukans.edu wrote:

> This past month, Honda sent out a recall notice for their 90-91 Accords.
> They were wanting to replace a part in the distributor which failed when
> the car got high mileage.
>
> I had this recall work done on my car a couple of weeks ago, and now have
> terrible ignition noise on 2 meters and 440. Before this work had been
> done, the ignition had been really quite quiet -- now it is nearly
> unbearable.
>
> One fellow ham said the thought that he'd read something about this on packet
> or in one of the ham magazines.
>
> Has anyone else had this problem? The local Honda folks seem lukewarm about
> fixing this problem they created, probably because theyt really don't
> understand it.
>
> Any one dealt with Honda about this problem?
>
> Thanks.
>
> Kirk Baxter, N0FPZ/VK1KU

Well Kirk, I have had the same mod done about one month ago and have the
same noise problem as you. However, after my last tune up, about a year
ago they had changed the plugs and rotor among other things, and I noticed
the problem with the noise was also there at that time.

With time the noise should go away, relatively, if I go by what I
experienced after the tune up last year. I am still waiting for the
problem to go down right now. It's not too bad on good strong sigs, but
weaker ones get very hard to make out. I haven't tried any type of noise
filtering yet, but my power is directly at the battery and I do have a
choke I may try when I have the time.

Let me know what you find.

Bye---- from a fellow honda owner, Dino

--
"""""""""""""""""""""""
| Dino Moriello """""""""""""""""""""""
| PO BOX 105 Internet: dino@CAM.ORG """""""""""""""""""""""
| Radisson,Quebec Compuserve: 76120,1472 Tel.: 514-974-0773 |

| CANADA J0Y 2X0 Packet: VE2DM@VE2FKB 819-638-8281 |
"""

Please E-mail replies since I can't always read the USENET postings.

2057. QSL ROUTE FOR GS0KPW??

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 04:08:33 UTC
From: David Van Nuys <vannuysd@sonoma.edu>
Message-ID: <2kh982$ea@nic-nac.CSU.net>
Source record: 270659

I worked GS0KPW on 10/31 during the CQWW contest but don't have a
QSL route. Can you help?

Please send e-mail.

David

2058. Re: ftp for files

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 06:00:34 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLpsoz.5L0@netcom.com>
Source record: 270660

In article <5c.13488.23.0N17A716@pplace.com> pat.wilson@pplace.com (Pat Wilson) writes:
>In your experience, what is the best site to ftp for ham files? I am
>looking to fill up my phoneline bbs with amateur files. I would like to
>find the best sources for the newer files that come out, or is there a
>single source?
>
>N0RDQ

You are more than welcome to venture through the mod archives on World:
anonymously ftp into: ftp.std.com:/pub/hamradio/mods

The directory structure branches from this point per the different
manufactureres.

I still have a LOT of mods on disk which I haven't had time to view and
upload.

Please let me know what you think.

Thanks.

Scott

--

| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |

2059. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 07:10:09 UTC
From: tcj@netcom.com
Message-ID: <tcjCLpvwz.M5C@netcom.com>
Source record: 270661

Conway Yee (yee@mipg.upenn.edu) writes:

> Recently, I received a polite letter from the ARRL lawyers
> threatening legal action if I continue on this project.
> Specifically, they state that the ARRL owns the FACTS present in the
> repeater directory and that the format of the database infringes
> upon the ARRL copyright.

John E. Taylor III (rohvm1.mah48d@rohmhaas.com) replies:

> I'm an ARRL member, and considering ARRL put a fair amount of effort
> into compiling the Repeater Directory, I'd feel they weren't using
> my money wisely if they did _not_ enforce their copyright to the
> Directory.

I'm an ARRL member, too, but I couldn't disagree more with John's opinion on this issue.

The ARRL Repeater Directory is a wonderfully handy little publication, and at six bucks a pop it's also one of the best deals around. I buy three of them whenever a new edition comes out: one for the shack, one for the car, and one that lives in the portable radio bag with the HTs. But for all its utility the Directory suffers from the same limitations as any hardcopy publication. For example,

o I live in an area blessed with tons of repeater activity. When I pull in a signal on a frequency with which I am unfamiliar, it's a painstaking task to identify all of the candidate repeaters. An online database could easily support this with a frequency lookup qualified by geographic are, distance from my QTH as calculated from great circle coordinates or grid square, etc.

o Keeping abreast of the local repeaters while traveling is also difficult since the Directory is usually not organized according to my travel route. With an online directory, I could extract and print a "repeater itinerary" that I could scan from top to bottom during the course of my trip.

o Although exploring the packet network via digipeaters is somewhat passe these days, I used to find it handy to select only high-level repeaters for this purpose. With location and altitude information from an online database, it would be possible to build theoretically promising paths for exploration.

I'm sure that other folks can think of many practical applications for an online database of repeater information that I haven't mentioned here, and I'll bet that may of then would be difficult or impossible armed only with

The ARRL directory.

While I certainly recognize the ARRL's right and obligation to protect its commercial interests, its primary purpose is supposed to be furthering the art and practice of amateur radio. When these two objectives come into conflict I for one expect it League to support the latter objective without even a moment of hesitation. The day the League's fiscal interests take priority over the best interests of amateur radio is the day my membership terminates.

I generally avoid the frequent ARRL flamefests in this forum, but this one really bothers me. Conway, I strongly encourage you to post the text of the letter you received from the League's counsel. Does anyone in the Pacific Division know if Brad Wyatt can be reached via the Internet?

And just for the record, I'd *still* buy my three annual copies of the Directory even if an online database were available.

Todd, KB6JXT

2060. RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 08:05:53 UTC
From: jangus@skyld.grendel.com
Message-ID: <762077153snx@skyld.grendel.com>
Source record: 270662

In article <CLpDC0.K4s@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:

> In article <762016156snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey > D. Angus) writes:
> >
> >In article <CLnyL1.Hx3@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu > writes:
> > > >
> > > > For Christs (sic) sake Jeff. Give it a f*****g rest.
> > ^^^^^^^^^^^^ ^^^^^^^
> > If you're going to note corrections to my english,
> > then how about noting the correction to my language too.
>
> `Sic' does not denote a correction. And I editted out a few letters
> because I got flamed in the `a' in December for saying the `a' word.

a-word. addams apple, armpit, appendage what a-word are you referring to?

Sic indicates that you purposely left something incorrect. Therefore you imply that what I wrote is in someway incorrect. I left off the ' in the possesive case. Excuse me.

> > > Context. Context is everything. Go back and check it yourself and you'll
> > > see why I got upset at the original poster.
> >
> > I watched the entire episode from the start on rec.radio.cb. From what
> > I saw you got your wannabe basket-weave belt accessories in a knot when
> > someone posted a list of 6 MHz frequencies and then you went ballistic
> > when Dana joined in the discussion.
>
> I went ballistic as soon as I saw the 6mhz freqs posted as a place for
> pirates to use. I was debating with the poster prior to Dana joining in.

Some poor boob asked where other than the FCC mandated 27 MHz frequencies were the "pirates" been know to operate. Some other poor boob followed up with a list of where he had heard that type of operation.

> As I've said, I've got an entirely different outlook of this topic due
> to my Coast Guard days than anyone else one here. I don't expect you to
> understand or appreciate my views. And from what I hear from other
> Coast Guard units, what I experienced while at Monterey and here in
> Honolulu (willful interference during distress communications) was
> mild.
> Willful interference on the ham bands doesn't jeopardize lives like it
> does on the aero and maritime channels. Get out of the narrow world that
> you live in, Jeff; there's more to the RF spectrum than the ham bands.
>

> Jeff NH6IL
>

Speaking of narrow worlds buddy, how long have you been out of the Coast Guard? Isn't it time to face the fact you're not in uniform anymore?

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2061. RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 08:09:17 UTC
From: jangus@skyld.grendel.com
Message-ID: <762077357snx@skyld.grendel.com>
Source record: 270663

In article <CLp60o.Dn3@ucdavis.edu> ez006683@chip.ucdavis.edu writes:

>
> Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:
>
>
> : I watched the entire episode from the start on rec.radio.cb. From what
> : I saw you got your wannabe basket-weave belt accessories in a knot when
> ^^^^^^^^^^^^^^^^^^^^^^^^
>
> I love it!! Can I have this for my very own?

Yes. Be it know that from this day and so forth Daniel Todd is granted an unlimited license to use/abuse my "wannabe basket-weave belt" comment in anyway he sees fit.

> P.S. If Jeff is as uptight about gays as he is about the use of the
> airwaves is he a hamster and gerbil cop? :-)

Your right, he *is* pretty touchy about that. Perhaps something happened to him in the Coast Guard that he's not telling us about.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2062. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 08:24:39 UTC
From: dplabriola@ccgate.dp.beckman.com
Message-ID: <dplabriola.16.00086977@ccgate.dp.beckman.com>
Source record: 270533

In article <wier-230294203421@198.213.12.234> wier@merlin.etsu.edu (Bob Wier) writes:
>Subject: Re: Honda ignition recall - now NOISE!!
>From: wier@merlin.etsu.edu (Bob Wier)
>Date: Thu, 24 Feb 1994 02:34:20 GMT

>In article <23FEB199413162911@zeus.tamu.edu>, tskloss@zeus.tamu.edu
>(SKLOSS, TIMOTHY WILLIAM) wrote:

>> or clicks) that varies with rpm, then it is ignition noise. Try a filter
>> from RS on the power leads, other than that buy AMERICAN.
>>
>> -tim

>Sorry tim - that's not the solution. There has been a group of Jeep
>Cherokee
>owners who have been trying for YEARS to quiet up our vehicles, and so far
>absolutely nothing works. In our case, the noise seems to be coming from
>the fuel injector circuits/computer...

Just helped out a friend at work with one of these Jeeps... It appears to have been the fuel injectors. I provided him with several of large clamp on ferrite slabs. He applied them close to the control box. It appears that they use some type of chopper drive on the stepper motors/solenoids within the fuel injectors.

The "beads" are approximately 1" long, .25 ID and .6 OD with a 60 ohm impedance starting in the low MHz... available from FairRite if I am not mistaken. They come as two halfs in a plastic holder so they can be added without taking connectors apart.

The noise level was significantly reduced... D. Labriola (N6CNB)......

2063. Re: FT530 dtmf decoding

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 09:57:21 UTC
From: jdwhite@iastate.edu
Message-ID: <2khtm1$nvm@news.iastate.edu>
Source record: 270664

In article <2ke7j9$d6u@news.iastate.edu>,
Steven M. Knapp <sknapp@iastate.edu> wrote:
>David Willmore <willmore@iastate.edu> wrote:
>>>DTMF Decoding

... 8< snip! ...

>>Sorry, but it's in the manual. :) IMHO, the manual is very poor, but,
>>from the Icom manuals I have seen, well above par for the course.
>
>The manual says something about the last 3 DTMF digits being displayed
>in memory 7, but did not mention the fact that it scrolls! :)
>
>My old Icom manuals had more pictures and charts than my FT-530 book
>does. I liked that. The FT-530's manual is also incorrect in a few
>places, REALLY annoying. Oh well...still a good radio...

I have to agree with Steve. I've seen manuals for the FT-411e and the 5200. The 5200 is adequate, but there are a few items that are not explained very clearly. The 411e manual just plain bites! My Icom W2A manual is clearly written with lots of pictures and diagrams to help convey concepts. This may not have been true of Icom manuals in the past, but in this day and age it's obvious that Icom puts a lot more time and effort into their manuals than Yaesu does. Not a slam on their products (my 5200 is great!), just their documentation.
--
Jason D. White Durham Center Operations Staff
jdwhite@iastate.edu Repeater Chairman, Cyclone Amateur Radio Club
Iowa State University Packet: n0rwu @ ki0q.#cia.ia.usa.na
Ames, Iowa

2064. Re: QSL Bureau help (Stupid question)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 11:10:40 UTC
From: michaela@freenet2.scri.fsu.edu
Message-ID: <2ki1vg$hk6@freenet3.scri.fsu.edu>
Source record: 270665

Using 5" x 7 1/2" manila envelopes, place your call sign in the upper left hand corner (large, block style) on the front side + self-address and provide first class postage on each. Mail a handful of them to the 7th district QSL bureau and they will put them on file for you. Their address is:

Williamette Valley DX Club
P.O. Box 555
Portland, OR 97207

If you've been moderately active DX-wise, expect an envelope every three months or so; if very active, monthly.

Welcome back to the folds of HF! 73,

Michael Christie, K7RLS
Crawfordville, Florida

2065. Re: Super Morse 4.10 is out!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 12:26:11 UTC
From: ean@VFL.Paramax.COM
Message-ID: <1994Feb24.122611.2206@VFL.Paramax.COM>
Source record: 270666

In article <dino-230294164850@dino.hip.cam.org> dino@cam.org (Dino Moriello) writes:
>I read a note somewhere that 4.06 was available from some FTP site.
>Well super Morse 4.10 is out and available on Compuserve and possibly
>somewhere on the NET. If you can't find it, let me know and if someone
>tells me how to get permission to PUT it on their FTP server, I can send it
>there.
>
The latest on SIMTEL BBS is 4.04 so if you can post it there, do it, if
you can't post it there, send it to me and I'll do it.

--
Ed Naratil (All standard disclaimers apply)
ean@VFL.Paramax.COM Amateur Packet: w3bnr@wb3joe.#epa.PA.USA

2066. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 13:05:59 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CLqCE0.8xr@hpqmoea.sqf.hp.com>
Source record: 270667

Bob Wier (wier@merlin.etsu.edu) wrote:

: Sorry tim - that's not the solution. There has been a group of Jeep
: Cherokee
: owners who have been trying for YEARS to quiet up our vehicles, and so far
: absolutely nothing works. In our case, the noise seems to be coming from
: the fuel injector circuits/computer...

: I get a continueous S9 on my HF rig in the car - I even get noise on my
: factory installed FM radio!

: Bob Wier, East Texas State U., Commerce, Texas
: keeper of the Adobe Photoshop, MC68HC11, ICOM mailing lists
: wier@merlin.etsu.edu (watch for address change)

How about fitting, say, a Mazda 3.9 litre turbo-Diesel ? There are a number of firms modifying petrol (gasoline) Range Rovers in this way as a means of fighting 13 miles/gal and $4/gal here in Britain, so I wonder if there are similar operations in the US despite your much cheaper fuel. If the problem is so intractable, and a fix is so desirable that people have spent years on it, then this could be an appropriate solution.

I've noticed that all of the different spectrum monitoring vehicles that I've looked at in various countries were Diesel powered, even the light car based ones. It is one way of fixing all the ignition and fuel-injection interference problems with absolute certainty in one move.

I just had to filter the clock and wipers in my Diesel 4x4.

Cheers
David

2067. Re: Travelling to Egypt

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 13:33:49 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.94Feb24083349@gdstech.GRUMMAN.COM>
Source record: 270668
Cross-posted to: rec.radio.amateur.misc,rec.travel

When John, WB6??? went to Egypt in 1989, he applied for an
Egyptian Ham license. After a year of delays, and paying numerous
'fees', he was handed a real license, with call SU1EK. Many of
us worked him on DX nets then. But, it took a whole year!
And, several years later, PTT authorities there declared he had
been operating illegally, although he was on the air regularly
from Cairo for over 6 months. Try finding his call in official
listings today. It's all very 'controlled' by certain people.
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

2068. Re: Heathkits

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 13:39:39 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.762096291@hpuerca>
Source record: 270669

In <940223091541_10@ccm.hf.intel.com> Cecil_A_Moore@ccm.hf.INTel.COM (Cecil A Moore) writes:

>My experience with six Heathkits was
>worse than my experience with four Ramsey FXs but I am only one point on
>either distribution and I don't know exactly where either of my
>experiences fall on the plot. We tend not to hear from customers with
>average experiences.

I guess I had average experiences. In the past I have bought pre-owned Heathkits (SB-104) that I had trouble tuning up (ended up needing some non-obvious parts replaced). I have built five "major" kits, of which I had problems with one where I lifted and broke a trace (hard to find, but not Heathkits fault) on a HW-9. My keyer has never had ALL the status LEDs working at once: since I can't easily get the original part, I've tries substitutes with no success. Now I've given up. All the _functions_ work, even if I can't just glance at the LED display to see what it is I'm doing. No problems at all with other projects, including my handheld frequency counter. When I originally calibrated it following the Heath instructions, I subsequently took it to work to check it out on the calibration lab's equipment. It was so solid to all displayable precision the tech couldn't believe I'd constructed it. No complaints from this average user :-)

Cheers & 73 Ed Humphries N5RCK
Hewlett Packard NARC Atlanta GA

2069. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 14:18:00 UTC
From: greg@netcom.com
Message-ID: <gregCLqFq0.5w8@netcom.com>
Source record: 270670

'Of by and for the Radio Amateur...'

What an example of the ARRL 'not invented here' syndrome. I submit that:

1. League Pubs supposedly don't make money, so if a
workable free-ware replacement is available, great,
as it reduces costs associated with this very perishable
publication. Not to mention the costs associated with
obtaining it, since it's kind of hard to find at Walden
books.
2. There is one hell of a conflict-of-interest if the
ARRL wants to, at once, act as the official frequency
coordination authority, and then be proprietary with
the information which it collects. As a matter of
fact, it would seem that there is an unfair competitive
advantage.

As a League member I publically call upon the organization to make
available, at cost, the information it derives from its frequency
coordination activitys to Mr. Yee's project. Or perhaps for free,
since this gentleman is volunteering to do something "Of by and for
the Radio Amateur."

As far as I'm concerned, the League has two choices: either cooperate
with the on-line directory project, or at least get out of the way,
or abdicate its role as frequency coordinator for the United States,
resulting in chaos on the bands.

To me the choice is clear.

Mr. Sumner, get it done. And get out of the way.

Now.

Greg

P.S.: Personal to the ARRL reader of this newsgroup,
the 'worm' that sicced the legal sharks on Mr.
Yee in the first place: describing you as a
species of vermin is probably too good for you.
You know who you are. There's a bus leaving
in a little while. Be under it.

2070. Re: AIDS testing on Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 15:10:51 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-240294100603@136.141.220.39>
Source record: 270671

In article <gregCLoICG.4sK@netcom.com>, greg@netcom.com (Greg Bullough)
wrote:

> >In article <761933299snx@skyld.grendel.com>, jangus@skyld.grendel.com
> >(Jeffrey D. Angus) wrote:
> >>> IVE JUST LEARNED THAT WAYNE GREEN THE PUBLISHER OF 73 AMATEUR RADIO TODAY
> >>> HAS PRINTED PAMPHLETS
> >>> EXPLAINING PROPER USE OF 2 SIMPLE ELECTRONIC CIRCUITS
> >>> WHICH HAVE SHOWN PROMISE IN DISABLING
> >>> AND POSSIBLY CURING THE HIV VIRUS.
> >
> No, it's not a joke. Wayne Green seems to believe he has found the
> cure. He editorializes about it in the same column in which he
> expounds the virtues of cold fusion. And psience. Well, anyway,
> he's been on that toot for several months now.

Yeah, I had read in Science magazine that Wayne was going to be publishing
a new journal dealing with cold fusion. I suspect the only subscribers may
be Pons and Fleishmann (is that the right name for the other "discoverer"
of cold fusion? Workin' from memory here.), so hopefully it will cost him
a bundle and will fade quickly into obscurity. Fortunately, the rest of the
scientific community seems to have attended the wake for cold fusion, but
not these guys.

--
73 de John Taylor W3ZID | Run for your lives, the Luddites are
rohvm1.mah48d@rohmhaas.com | coming!

2071. Clubstations in Ukraine

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 15:14:38 UTC
From: kenneth@Lise.Unit.NO
Message-ID: <2kig8u$kfr@ugle.unit.no>
Source record: 270672

Hi,
I'm planning to stay in Kiev, Ukraine, this summer as an exchange student.
I'd really like to get in contact with amateurs - especially club stations -
which I can visit during my time there.

If anybody could point me to the right persons to contact, I'd appreciate it.

Thanks,

Kenneth, LA7GIA.

2072. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 15:20:00 UTC
From: tskloss@zeus.tamu.edu
Message-ID: <24FEB199410200675@zeus.tamu.edu>
Source record: 270673

>
>I get a continueous S9 on my HF rig in the car - I even get noise on my
>factory installed FM radio!
>
Your car's computer should be shielded. My chevy's is in a thick tin can, but
the injectors are in the clear. Your noise may be coming from an improperly
shielded computer rather than EMP noise generated when your car is injecting
fuel.

-tim

2073. Re: Special Events Question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 15:22:51 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-240294101558@136.141.220.39>
Source record: 270674

In article <2kgjem$o6o@pegasus.cc.ucf.edu>, kr4ah@pegasus.cc.ucf.edu (John Meaker) wrote:

> I am part of a group of hams that is planning a special event
> for July 4 - 10, 1994.

> 2) We wanted to send a commemorative certificate and a QSL
> card. Is it OK to ask the contact to send a 9x12 SASE?
> Will this reduce the number of contacts appreciably?

Indicate this in whatever publicity you send out. Also, you'll probably be asked on the air about how to get a QSL, and you can explain then, or just include in the exchange, "By the way, if you want our QSL/certificate, please send a 9x12 SASE to... No, I don't think it'll reduce the number of contacts; people contact special-events stations even when they don't want a card.

> 3) How is the best way to spread the word about this event?
> 4) None of the hams involved has had a call or address for
> long enough to be in any older callbook. How should the
> QSL information be handled? Sending an address over the
> air can be a problem. How can this be avoided?

Put the QSL address in your publicity. I'd recommend the following:
QST - Check their section on special-event operations, and get your information to them _early_ (like _now_).
CQ - Same thing. Send _early_.
WorldRadio - Same thing - all of these guys set up the issue for publi-
cation _'way_ in advance, so if you want to be listed, _send now_.
This newsgroup (and perhaps one of the other rec.radio.amateur groups) but this time, send a week or two before the event (as a reminder).
Packet Radio BBS system - also about two weeks before the event.

> 5) Are there any hidden obstacles lurking out there to take
> us by surprise?

Never participated myself, just enjoy working special-event stations.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

2074. Re: Heathkits

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 15:23:54 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2kigqa$gac@news.acns.nwu.edu>
Source record: 270675

In article <CLp0pA.2yx@srgenprp.sr.hp.com>, Alan Bloom <alanb@sr.hp.com> wrote:
>Cecil A Moore (Cecil_A_Moore@ccm.hf.INTel.COM) wrote:
>
>: ... My point was that in any
>: normal distribution of customers, by definition, there will be some on
>: each end of the spectrum outside the three sigma limit. ...
>
>Right. Anecdotes do not a proof make.
>
>However it seems clear that on average Heathkits were better designed,
>packaged and documented than Ramsey kits. I haven't built a Ramsey kit,
>but I have examined ones others have purchased. It seems like with every
>one I saw, I could see design problems just by looking at the schematic.
>I've seen some Heathkits with design flaws too, but not to that extent.
>And the Heath construction manuals were fabulous. They always prided
>themselves on the quality of their manuals and over the years they
>developed it into an art form. The Ramsey manuals are not bad, but they
>are not up to Heathkit standards.
>

Not only were the Heathkits, by and large, well designed from a functionality standpoint, they were specifically designed for the home-builder. This is a `critical success factor' for kits. For instance, the HW99, the last Heathkit that I worked on, had an on-board rf probe. You hooked up jumpers between portions circuits and the probe and aligned tuned circuits and oscillators using a vtvm and a freq counter. Clever.

I think that a well designed kit should be:
- easy to put together using simple tools
- be designed to work without requiring expensive instrumentation
. this may require very conservative designs
. design must deal with component to component variance in characteristics. For instance, for bipolar amp stages, have feed back to provide guaranteed gainn. Sure, this may require more stages, but the design will work for most builders.

It is the lack of this kind of design philosophy in Ramsey Kits that I do not like.

>I'm rooting for Ramsey. Amateur Radio needs a good kit company, with
>just the kinds of products that Ramsey offers. With better designs
>and quality control, they could be making a real contribution to the
>hobby.

We sure do need a good kit company. Unfortunately, Heathkit kit quit ham radio stuff before I got into it. :(

Rajiv
aa9ch
r-dewan@nwu.edu

2075. ARLB021 FCC call sign update

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 15:24:17 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlb021.1994@ampr.org>
Source record: 270676
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
SB QST @ ARL $ARLB021
ARLB021 FCC call sign update

ZCZC AG85
QST de W1AW
ARRL Bulletin 21 ARLB021
From ARRL Headquarters
Newington CT February 23, 1994
To all radio amateurs

SB QST ARL ARLB021
ARLB021 FCC call sign update

FCC ISSUED CALL SIGN UPDATE

The following is a list of the FCC's most recently issued call signs
as of February 1.

District Group A Group B Group C Group D
Extra Advanced Tech/Gen Novice

0 AA0QC KG0LB ++ KB0LQM
1 AA1IL KD1TP N1RGM KB1BFT
2 AA2RC KF2TQ N2XUK KB2QVZ
3 AA3GZ KE3LY N3RKG KB3BAU
4 AD4PJ KR4MI ++ KE4JKD
5 AB5SS KJ5UR ++ KC5FFG
6 AC6AC KN6XZ ++ KE6FCN
7 AB7BD KI7VO ++ KC7ANO
8 AA8NZ KG8GR ++ KB8RKQ
9 AA9KB KF9TV N9WBZ KB9IWX
Hawaii ++ AH6NF WH6SG WH6CRC
Alaska ++ AL7PM WL7QG WL7CHL
Virgin Is. WP2F KP2CC NP2HG WP2AHU
Puerto Rico ++ KP4WG ++ WP4MNB

++All call signs in this group have been issued in this area.
NNNN
/EX
```

2076. West Coast Live - News Digest February 23 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 15:24:44 UTC
From: jangus@skyld.grendel.com
Message-ID: <762103484snx@skyld.grendel.com>
Source record: 270677

In article <199402230404.UAA15913@mail.netcom.com> essmjf@netcom.com writes:

> Sedge Thomson's West Coast Live
> San Francisco's Live Radio Show to the World
>
> February 23, 1994
>
> Table of Contents:

Well, I guess it fits in here. A bunch of amateurs on the radio....

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2077. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 15:41:33 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-240294103246@136.141.220.39>
Source record: 270528

In article <199402231618.IAA20284@ucsd.edu>,
William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:

> I don't know how much "work" would be included in the repeater directory that
> is direct league work. they get their "feed" from the repeater coordination
> bodies around the country (in the belief that the only good repeater is a
> coordinated repeater). i have heard a news story on the radio about how
> southern bell's copyright on a yellow pages book does not cover facts like
> where the advertiser is. They do have the copyright on the way their book is
> assembled.

All the disclaimer stuff about my not being an attorney...that's my
understanding of copyright law. Facts are public domain, but the
presentation of those facts is protectable by copyright. Also, I seem to
recall that, even though the effort may have been relatively small, still
the courts seem to have looked askance at merely copying somebody else's
listing without doing any original work yourself, and then claiming it's
your own. ARRL at least assembles the input from the different
coordinators.

> Maybe if the online callbook guys make it easy for MACC, et al. to submit data
> to them, they could produce a book that cannot be said to infringe on the ARRL
> publication since it's based on the same facts as the ARRL book because it's
> taken from the same sources as the ARRL's book.

Yes! If whoever it was that wanted to do the on-line directory were to
contact the coordinators himself, or solicit e-mail listings of repeaters
here...that sort of thing, then that, as I understand it, is okay. (Insert
"I am not an attorney" disclaimer here again)

> I have a real big problem with the idea that there are deliberate errors
> purposely induced into what should be a reference book. Maybe we should start
> a "repeater directory accuracy project" to confirm all the listings in the
> ARRL directory to see if content errors exist.

Not suggesting that the ARRL does this...I think the city directory guys
put in a few phantom addresses or something, which doesn't really affect
the overall accuracy. I'm working from memory of something I read in the
BNA Patent, Trademark & Copyright Journal a few years ago.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

2078. Suggestion for a layman...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 15:55:56 UTC
From: Joseph Chen <r0207009@ccms.ntu.edu.tw>
Message-ID: <1994Feb24.155556.27368@ccds3.ntu.edu.tw>
Source record: 270529

Hi,

I'm totally new to the field of ham-radio. Any information about ftp-able faqs and/or suggestion is appreciated. More specifically, where can one find the faq about communication terms? cq? Thanks!

Joseph Chen

PS. Please e-mail me!

2079. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 16:02:59 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2kij3j$h2e@news.acns.nwu.edu>
Source record: 270530

In article <2kietb$9bb@dancer.cc.bellcore.com>,
sohl,william h <whs70@dancer.cc.bellcore.com> wrote:
>In article <CLp1KE.Iz@hpcvsnz.cv.hp.com>, Tom Bruhns <tomb@lsid.hp.com> wrote:
>>William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:
>>
>>: I have a real big problem with the idea that there are deliberate errors
>>: purposely induced into what should be a reference book. Maybe we should start
>>: a "repeater directory accuracy project" to confirm all the listings in the
>>: ARRL directory to see if content errors exist.
>
>My following post includes a layman's set of interpretations/opinions
>relative to some legal issues...Bottom line, I'm not a lawyer, but
>here's my opinion, treat it accordingly.
>
>First, I'm an ARRL member and a Local Gov't Liason (LGL) in the ARRL field
>organization, but that doesn't mean I agree with all positions of ARRL.
>I missed the initial thread of this discussion,but from the two recent
>posts it appears ARRL has threatened legal action against someone
>providing (or intending to provide) an "online" version of a repeater
>directory. It also appears that ARRL has determined that some of
>the data included in this "online" directory must have been taken
>from the ARRL Repeater Directory because there are certain
>identical pieces of data that were created (e.g. a deliberate
>misspelling of a town name, callsign, etc.) as such in the ARRL
>publlished directory to use as a means of identifying data from
>the ARRL directory which has been used to create other databases.
>The ARRL then claims that using that information is a violation of
>their copyright on their Repeater Directory.

<snip>

Instead of getting hung up on legalities, let us look at from a
rational/economic view point.

Consider the following scenario. Assume that there is no method of enforcing
copyright on lists of facts. Also assume that it costs money to get a list
together. In absence of copyright, no one will be willing to compile the
list as they will surely lose money. This is because the moment they get
the list together, others will rip them off. The end result will be no
handy-dandy list for us to use. We will be worse off for sure.

So, what seems to be desirable is:
- to let copyright be used to ensure that people who invest in collecting
data get a fair return on their investment and
- yet, do not let copyright be used to prevent any one else from investing

money in compiling the facts.

These two seem to be in conflict. Salting the list with false entries is a great way out as the presence of these erroneous entries in some one else's list is prima facia evidence that they have not gathered data independently and are just ripping off the list.

So, in my opinion, ARRL is following the best strategy possible. If Yee's list is independently gathered then there should be and will be no problem whatsoever.

Rajiv
aa9ch
r-dewan@nwu.edu

2080. This Week on Spectrum 02/26/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 16:07:48 UTC
From: spectrum@starcomm.overleaf.com
Message-ID: <2kijck$69s@starcomm.overleaf.com>
Source record: 270531
Cross-posted to:
rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.scanner,rec.video.satellite,rec.radio.cb,alt.radio.scanner,alt.radio.pirate

If you ever wanted to build a radio station from the ground up, listen
to Spectrum this week. Our guest is Mike Venditti. Over the years he
has built 51 radio stations. Mike has a wealth of stories about the
broadcast business to share with everyone. In addition he is an antique
radio collector and broadcast historian.
--
Spectrum airs live Sunday at 0300 UTC (2200 EST Saturday) on:

WWCR, 5810 KHz, Nashville, TN (World Wide)
WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Omega Radio Network, Galaxy III, X17, 5.8 MHz WIDE audio. (Satellite)

Spectrum is rebroadcast:

Sunday at 1500 EST, on WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Monday at 0400 UTC (2300 EST Sunday),
on WWCR, 7435 KHz, Nashville, TN (World Wide)

--
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+1 800-787-SPECTRUM, +1 908-671-4209

2081. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 16:22:13 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-240294091440@129.188.192.6>
Source record: 270532

In article <762082813snx@skyld.grendel.com>, jangus@skyld.grendel.com (Jeffrey D. Angus) wrote:

>
> In article <CLnz3x.I7B@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes: >
> > That's old news. BUT the HF maritime CW bands are still jumping with
> > activity and the C.G. is still monitoring them, so CW on the high seas
> > frequencies is still very much in use.
>
> And what frequencies might those be? How about posting them so we can
> practice our CW listening to *real manly men* pounding brass. (Unless
> of course you're afraid that some anal rententive might accuse you of
> promoting the jamming of HF maritime CW ops...)

They are usually easy to spot, they are the loud CW signals that are calling CQ for hours at a time between the ham bands. Usually next to a SITOR or FAX signal. Sounds like electronic keyers (or computers :-) to me though - no one sends that regularly by hand for hours at a time.

I listen to them occasionally and rarely hear any actual traffic passed - but then I guess Jeff would say I am listening to the wrong HF band or something.

The traffic numbers seem to increment by 2-3 a day for the stations I monitor. I did hear a "traffic list" (waiting for transmission) that had 10 messages in it once though. They do keep *very* busy I guess :-)

I will post frequencies if I remember to write them down tonight.

Mike AA4MW

2082. Re: Super Morse 4.10 is out!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 16:31:21 UTC
From: pineapp@netcom.com
Message-ID: <pineappCLqLw9.9GM@netcom.com>
Source record: 270534

In article <dino-230294164850@dino.hip.cam.org> dino@cam.org (Dino Moriello) writes:
>I read a note somewhere that 4.06 was available from some FTP site.
>Well super Morse 4.10 is out and available on Compuserve and possibly
>somewhere on the NET. If you can't find it, let me know and if someone
>tells me how to get permission to PUT it on their FTP server, I can send it
>there.
>
>73 de dino
>
>--
> """""""""""""""""""""""
> | Dino Moriello """""""""""""""""""""""
> | PO BOX 105 Internet: dino@CAM.ORG """""""""""""""""""""
> | Radisson,Quebec Compuserve: 76120,1472 Tel.: 514-974-0773 |
> | CANADA J0Y 2X0 Packet: VE2DM@VE2FKB 819-638-8281 |
> """
> Please E-mail replies since I can't always read the USENET postings.
What are the fixes and enhancemnets of 4.10 that was not availble
with 4.06????

--
.---+--------------------------.
INTERNET: pineapp@netcom.com (DC436)	Daniel Curry WB6STW
AMPRNET : dan@wb6stw.ampr.org [44.4.20.144]	E-:-) Ham Radio Operator
AX.25 : wb6stw@n0ary.#NOCAL.CA.USA.NA	Redwood City, CA USA
'---+--------------------------'

2083. used gear info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 16:31:49 UTC
From: JMG@tntech.edu
Message-ID: <01H99DY9QKROELNNS3@tntech.edu>
Source record: 270535

HI,

I am working on writing an article whose purpose it will be to help new
hams in their search for used HF gear.

I am very interested in personal opinions/comments that might help in
this matter.

here is the proposed outline:

HF Rigs, Buying Used Gear

- Some tubes vs all transistors and what it means to ham
- what bands does it cover (WARC?)
- what modes does it have (CW/SSB/FM/FSK)
- built in vs. external power supply
- size
- price range
- extras: RIT,XIT, adjustable IF, filtering, computer control for banswitching and such,
option available, dual VFO and its use, speech processing, other
- good bets in different price ranges
- is rig especially good on one mode (cw vs ssb)
- can rig be easily turned down to QRP levels (optional section)
- built in cw keyer or filters

thanks...

73

Jeff, AC4HF

2084. Re: Special Events Question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 16:38:29 UTC
From: dale@sequent.com
Message-ID: <1994Feb24.163829.2676@sequent.com>
Source record: 270536

kr4ah@pegasus.cc.ucf.edu (John Meaker) writes:

> I am part of a group of hams that is planning a special event
>for July 4 - 10, 1994. None of us has had any experience with this
>kind of thing and we have a few questions that someone in this
>group may be able to answer.

Hi John. I organized a special event for Oregon's birthday (Feb 14)
a year ago -- Feb. 14, 1993. We had a couple stations operating
two different bands for a weekend. Most of this was 10 and 20 meters,
and just a few on 15 meters. We operated SSB, staying in the least
restrictive portion of the band -- in other words, General section
of the 20 meter phone band.

Contact QST in advance to get your special event listed in their
"special events" column. You can also do this with CQ and probably
73 magazine. That will help because you can just mention that for
contact information for many of the contacts. You will still have
to give a mailing address over the air. Just state every few contacts
that you will be giving it soon, and then every 5 minutes or so give
the mailing address.

It is absolutely OK to ask for a SASE. I stated that we had a
certificate, send SASE and QSL card for certificate, 9X12 envelope
with $0.59 postage if you don't want the certificate folded.

Plan on having just QSL cards show up, as well as envelopes
with insufficient postage -- common on the 9X12's which require
$0.59, you will have those show up with just $0.29. You will even
get some of those postage due. I just paid the postage due and
sent a folded certificate when just a QSL card came in the mail.

You will have most of the responses show up within a couple weeks,
but expect some to show up much later. I had one response about
6 months after our special event. For our weekend special event
we made over 900 contacts, sent out over 500 certificates. So I
would figure on slightly better than 50% of the contacts will QSL.

Best advice is to listen to some special events before you do yours.
See what style of operation you like, and what seems to work and
what doesn't. You could also see if there is a special event taking
place in your area and volunteer to work a couple hours on that.
Talk to someone in a ham club in your area that has worked a number
of special events and ask to take a look at the certificates to get
some ideas of what you want to do for yours.

73 & good luck, Dale. N7PEX

--
dale@sequent.com OR uunet!sequent!dale OR N7PEX@K7IQI.OR.USA.NA
Dale Mosby 503-578-9842 N7PEX // Sequent Computer Systems, Inc.
15450 SW Koll Parkway // Beaverton, Or. 97006-6063

2085. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 16:44:15 UTC
From: dts@world.std.com
Message-ID: <CLqMHt.GAs@world.std.com>
Source record: 270537

In article <1994Feb23.120537.4087@arrl.org> ehare@arrl.org (Ed Hare (KA1CV)) writes:
>baxter@kuhub.cc.ukans.edu wrote:
>
>: This past month, Honda sent out a recall notice for their 90-91 Accords.
>: They were wanting to replace a part in the distributor which failed when
>: the car got high mileage.
>
>: I had this recall work done on my car a couple of weeks ago, and now have
>: terrible ignition noise on 2 meters and 440. Before this work had been
>: done, the ignition had been really quite quiet -- now it is nearly
>: unbearable.
>
>: Has anyone else had this problem? The local Honda folks seem lukewarm about
>: fixing this problem they created, probably because theyt really don't
>: understand it.
>
>: Any one dealt with Honda about this problem?
>
>Kirk,
>
>If he still works at Honda, the fellow who wrote their EMC policy is:
>
>American Honda Motor Company, Inc.
>National Consumer Affairs
>Richard Downing
>1919 Torrance Blvd.
>Torrance, CA 90501-2746
>(213) 783-2000
>
>His letter also has the following phone number, but I am not sure that
>the area code is correct: (310) 783-3260.
>
>For those that are interested, when asked if the installation of typical
>ham equipment would affect their cars, he says "Simply put, this has not
>been a 'problem' for Honda automobile products." FWIW.
>
>73 from ARRL HQ, Ed

If this is the same fellow I talked to at American Honda last year, I'll be curious to see what kind of response anyone gets. The man was unpleasant and condescending on the telephone. He basically indicated that he had told Ed Hare that there was no problem, so why was I bothering him?

My basic feeling after the call was: "OK, I won't bother you again, or buy your product ever again". I got the impression from comments made by the

regional FCC fellow who talked at Manchester, NH last year that the FCC is concerned with the excessive RF emissions from automobile systems. He also praised Chrysler for spending significant dollars to build a test chamber and make their vehicles RF quiet. His comments have sparked some interest with me in buying from Chrysler.

Oh, and the Chrysler person who wrote their EMC policy indicated the proper ordering code when having a car constructed to ensure low RF emissions electronic modules will be used (adds maybe $17 to the sticker price).

Dan N1JEB
--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

2086. Super Morse version 4.04 question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 17:08:49 UTC
From: rwiley@magnus.acs.ohio-state.edu
Message-ID: <2kimv1$ed5@charm.magnus.acs.ohio-state.edu>
Source record: 270538

I have been using Super Morse version 4.04 for a while now, and have encountered a problem while attempting to use it in Windows v. 3.1. When I attempt to have it send code, it groups letters together. For example, if I had it send the word 'AT', it comes out with a letter W. This, however, does not happen if I shut down windows, and load it from DOS. I don't really believe my system would be in question (486 SX-25 w/4 megs of RAM), since it's a fairly normal setup. Any suggestions?

Thanks and 73 de Bob, N8MMR
--
=-=-=-

2087. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 17:19:46 UTC
From: rwiley@magnus.acs.ohio-state.edu
Message-ID: <2kinji$eff@charm.magnus.acs.ohio-state.edu>
Source record: 270539

Dan,

I was wondering what (if anything) you (or anyone else for that matter) might have heard about the recent lines of GM automobiles. The time has come that I am thinking about a newer automobile. I would certainly like to come to the dealership knowledgeable about any problems of RF noise, RF shutting down the internal engine computer, ect. There really *should* be a printout somewhere of such problems. Maybe Ralph Nader will do that next. 8-)

Thanks and 73 de Bob, N8MMR
--
=-=-=-

2088. Re: Travelling to Egypt

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 18:49:31 UTC
From: rohan@nmrc.ucc.ie
Message-ID: <CLqsAK.9G2@nmrc.ucc.ie>
Source record: 270540
Cross-posted to: rec.radio.amateur.misc,rec.travel

I have just returned from a trip to Egypt, Jordan and Syria. I had no problem with my radio (a small Sony FM/MW/SW): the only electronic equipment customs are interested in seems to be video cameras with custom checks being of format:

Do you have a video camera?
No.
Fine, next.

On my way into Jordan, from Syria, I noticed that radios were listed as being restricted but there were no real checks.

Michael.

--
Michael Rohan, rohan@nmrc.ucc.ie
NMRC, Cork, Ireland. +353-21-276871 x 4792

2089. Re: Dumming down of A.Radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 18:52:31 UTC
From: bcoleman@hayes.com
Message-ID: <8709.2d6cbf2f@hayes.com>
Source record: 270541

In article <gdavis.761932155@griffin>, gdavis@griffin.uvm.edu (Gary Davis) writes:

[Hmm. I think he meant "dumbing" in the subject.]

> I'm not talking about typos... we all make these... without an editor or
> the time to proof.

Well, if you are going to critique the writing of others, it is best to get
your own house in order. Don't make those typos. Be more careful.

Otherwise, you might as well just live and let live.

> I had one idiot on packet jump all over me for typos of a minor
> punctuation ommission. Then go one in this one 200 byte diatribe to
^^^^^^^^^^^^^^^^^^^^^^^^^^

If there's a typo here, I can't figure it out. You're talking about something
having to do with a message your received, but I can't find a simple way to
edit what you sent to make it grammatically correct.

> spell grammar (grammer) and lose as (loose).

I see lose as loose all the time. Really burns me up.

> You would have though that this idiot,who was so intent on drawing
> attention to construction, grammar, and punctuation errors would have
> gone to the trouble to check his own!

Likewise.

--
Bill Coleman, AA4LR ! CIS: 76067,2327 AppleLink: D1958
Principal Software Engineer ! Packet Radio: AA4LR @ W4QO
Hayes Microcomputer Products, Inc. ! UUCP: uunet!hayes!bcoleman
POB 105203 Atlanta, GA 30348 USA ! Internet: bcoleman%hayes@uunet.uu.net
Disclaimer: "My employer doesn't pay me to have opinions."
Quote: "The same light shines on vineyards that makes deserts." -Steve Hackett.

2090. Getting Coax Seal OFF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 19:07:12 UTC
From: ericr@access3.digex.net
Message-ID: <ericr.762116748@access3>
Source record: 270542
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Can anyone suggest a decent method for taking Coax Seal *off* of a connector? It's a mess, and I'm not sure how to do it.

Please email your repsonses...

Thanks --
Eric

--
Eric Rosenberg WD3Q, EI4VPS, ZL0ADG, J20BY, etc.
338 14th Street, NE voice: +202-547-3441
Washington, DC 20002 USA fax: +202-547-3613
ericr@access.digex.com wd3q@amsat.org

2091. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 19:18:43 UTC
From: randolph@est.enet.dec.com
Message-ID: <CLqu28.4yx@ryn.mro.dec.com>
Source record: 270543

In article <199402231618.IAA20284@ucsd.edu>,
William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM writes...
>I have a real big problem with the idea that there are deliberate errors
>purposely induced into what should be a reference book. Maybe we should start
>a "repeater directory accuracy project" to confirm all the listings in the
>ARRL directory to see if content errors exist.

>bill wb9ivr

Ok, here's one... 147.345 repeater located in Webster, Mass. has been listed as being in "Princeton" since day 1, sometime back in the 70s. The repeater apparently was on Mt.Wachusett in Princeton for a short time on a test basis, but has been located in Webster since then. No one has noticed this in the past 15-20 years?
-Tom R. N1OOQ randolph@est.enet.dec.com

2092. Offer Extended: QRZ! Ham Radio CDROM: $15.95

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 19:46:00 UTC
From: mjohnsto@ditdah.Morse.Net
Message-ID: <1994Feb24.194600.3406@ditdah.Morse.Net>
Source record: 270544

Thanks to all who responded to our last posting several weeks ago, we've decided to extend our offer on the QRZ! Ham Radio CDROM. If you missed it, here you go again:

Morse Telecommunications is pleased to offer Walnut Creek CDROM's *new* QRZ! Ham Radio CDROM for only *$15.95*. This CD normally lists at $29.95 and includes:

* The entire US and Canadian Amateur Radio Callbooks

* Dos/Windows/Unix software to view the callbook

* Hundreds of PC compatible Ham programs

* Radio mods (Hypertext under Windows)

* TCP/IP Software, Packet Radio BBS software, Contest logging

* FCC part 97 rules and regulations, Amateur Radio Exam Question Pools

* USENET Ham Radio archives, ARRL Bulletins

* Soundblaster compatible .wav files for TNC testing

ORDERING

You can place an order by calling or emailing us. We accept Visa/Mastercard American Express. Orders are generally shipped the same day if received by 4PM EST.

You can call us at (800) 706-4046. International customers, please call us at (516) 887-4046. You can also email your orders to us for processing. The address is order@morse.net. Please be sure to indicate the item you wish, your name and shipping address, and credit card information. Be sure not to forget the expiration date. (Lots of folks do, and this delays the order because we can't process without it.)

--
Michael R. Johnston
mjohnsto@Morse.Net
Morse Telecommunications

2093. Cordless Phone - call setup

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 19:55:42 UTC
From: thweatt@rtsg.mot.com
Message-ID: <thweatt.762119742@mustang3>
Source record: 270545

I am interested in learning about the communications between the Base and the Hand-Set in setup and tear-down of a call. If you have a good technical understanding of this process, please email me. Does anyone know of any good book, which explains this wire-less interface? This is regarding Cordless not Cellular.

Thanks,
John

2094. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 21:18:56 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-240294141510@waters.corp.mot.com.corp.mot.com>
Source record: 270546

In article <rohvm1.mah48d-240294103246@136.141.220.39>,
rohvm1.mah48d@rohmhaas.com (John E. Taylor III) wrote:

> Not suggesting that the ARRL does this...I think the city directory guys
> put in a few phantom addresses or something, which doesn't really affect
> the overall accuracy. I'm working from memory of something I read in the
> BNA Patent, Trademark & Copyright Journal a few years ago.

As I recall, it was a Rand McNally map hich was copied, complete with a
town of "Ladron Texas". Apparently "Ladron" means thief in Spanish, which
was a rather nice touch IMHO. :-)

Whenever I make up a mailing list for a club etc. I usually include myself
under a pseudonym for just that reason too. I have caught some interesting
mis-use of Ham Club membership lists over the years by doing that!

Mike AA4MW

2095. online rpt idea

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-24 23:01:42 UTC
From: erik@peewee.chinalake.navy.mil
Message-ID: <CLr3yv.K29@avalon.chinalake.navy.mil>
Source record: 270547

What about a different approach, one worthy of usenet? If there were a newgroup called say, rec.radio.amateur.repeater dedicated to providing assistance and information about repeaters, people would provide info, ask questions, and somewhere, an archive site would accumulate repeater listings. The whole process happens naturally by itself, with no monitary interests involved (and no "leader" to lynch :-).

2096. Re: Honda noisy ignitions - part 2

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 00:37:10 UTC
From: aa813@cleveland.Freenet.Edu
Message-ID: <2kjh7m$lp6@usenet.INS.CWRU.Edu>
Source record: 270548

In a previous article, baxter@kuhub.cc.ukans.edu () says:

>Following my original post about noise in my Honda Accord, which started
>AFTER the installation of a new "ignitor" in my distributor, I talked
>to the service manager at my Honda dealership.
>
>He then called Honda's Customer Service Dept., in Arlington Hts, IL. After
>a few days, he finally got a call back from them.
>
>As you can expect, Honda will have nothing to do with their noise source
>which they added to my car, at their request. Their claim is that the
>part recall is needed to make the car run, and that the ham radio is not
>part of their car, therefore, it is of no concern to them.
>
>Needless to say, they haven't heard the end of this from me, but I CANNOT
>recommend Honda as a car for any amateur radio operator, given this attitude
>by the company.
>
>For note, I have bought 6 Hondas over the years. This will be the last
>Honda that I will own!
>
>For a company that has already lost it's lead as #1 in sales they can count
>out as being a future customer.
>
>Kirk Baxter, N0FPZ

My noise stopped after the new Igniter was put in. I wonder where they are
made?????

While my Honda was made in Ohio, I think I will go with a Canadian made
Ford next time....

Joe N8IPC

2097. Re: Getting Coax Seal OFF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 02:21:06 UTC
From: msmith@sct.edu
Message-ID: <2kjnai$1if8@st6000.sct.edu>
Source record: 270549
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

(Eric Rosenberg) writes:

>Can anyone suggest a decent method for taking Coax Seal *off* of a
>connector? It's a mess, and I'm not sure how to do it.

Well, the ideal thing to do would be to put electrical tape on the connector _BEFORE_ you put the coax seal on, but since that's too late... The hasty option would be to cut the connector off and put on a new one. If you want to save the connector then just get off whatever you can then use the ball of that to get the rest off. I hope that Coax Seal is similar to the tar or roll of really sticky black or beige stuff that most people use. (Also referred to as "Ickum-pucky" (don't ask me)) Otherwise, cut off the connector.

Good luck.

>Please email your repsonses...

Okay.

>Thanks --
>Eric

You're welcome.

Matt Smith
KD4HME

msmith@st6000.sct.edu
matt.smith@swsbbs.com
PGP Public Key available via finger

2098. Re: Chevy Ignition Noise

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 02:47:55 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <8LFRjGG8ybZD057yn@dorsai.dorsai.org>
Source record: 270550

In article <rohvm1.mah48d-240294104558@136.141.220.39>, John E. Taylor III wrote:
>
> Interesting. My Citation (1980) has had a couple of alternators die, and I
> appreciate the tip about the faint glow of the warning light, but I didn't
> hear any increase in noise associated with it. It's remarkably quied for
> HF mobile operation. Sorta hate to contemplate getting rid of it, but at
> 152,000 miles, I suspect someday it may go terminal on me.

I noticed a marked increase of noise on the AM band and a slight whine on
VHF after it happened on the Citation. The Dodge had some noise increase
on AM broadcast, but none detectable on VHF. I guess it all depends on
the condition of the noise suppresor and the actual alternator model and
problem itself.

--
< ^^>
< "Big Steve" Coletti >
< Shortwave Listener, Broadcaster, Computer Consultant >
< and all around nice guy >
< Internet: bigsteve@dorsai.dorsai.org ==== S.COLETTI2@genie.geis.com >
< UUCP: Steve_Cole@islenet.com ==== steveny@lopez.marquette.mi.us >
< Fidonet: 1:278/712 US Mail: P.O. Box 396, New York, NY 10002 >
< Voice: +1 212 995-2637 >
~~~~~~
~~~~~~

2099. Re: Hammarlund HQ105TR - What is it?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 02:57:55 UTC
From: lakeith@robins.af.mil
Message-ID: <2kjpfj$gn1@wrdis02.robins.af.mil>
Source record: 270551

karayannopoulos,george (karayan@blitzen.cc.bellcore.com) wrote:
: In a local antique store I found an old Hammarlund boatanchor with model number
: HQ105TR. My question is simple: What is it?

Would you believe a general coverage receiver and an 11 meter
transmitter in one box?

$60 sounds reasonable, if the thing works... Offer him $40 and see
what happens.. 8-D

73,

Larry, KQ4BY

2100. Collins Mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 04:10:58 UTC
From: GEITGEY%UKANVM.BITNET@vm42.CSo.uiuc.EDU
Message-ID: <199402250420.UAA24352@ucsd.edu>
Source record: 270552

Hi All,

Maybe this is not the right place to post this inquiry, but ...

Having searched the better known FTP sites for radio mods, and not finding what I am looking for, is there a site that has mods for Collins gear (any and all models)? I am making this request on the behalf of a non-ham friend.

IF (big if), there are mods for Collins rigs, would you please send them to me directly (unless there are others out there, who would benefit from this request).

BTW, does anybody know if K6ZTI has access to internet? If he does, give him my e-mail address. He should get a big kick out of this.

Thanks in advance,
Lynn Geitgey KB0LRB
geitgey@ukanvm.bitnet

2101. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 07:17:48 UTC
From: kgh@shell.portal.com
Message-ID: <CLrqxr.398@unix.portal.com>
Source record: 270553

Both sides of this question present good arguments, but I have a different slant on it, stemming from something a lawyer once told me.

The saying is: "The law is what you boldly maintain and cautiously defend."

It seems to me that the ARRL is doing some bold maintaining. If someone calls their bluff, they may then have to do some cautious defending, but ONLY if someone calls their bluff.

So from that standpoint also, the ARRL is taking a perfectly reasonable course.

Kim

rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:

>In article <2kietb$9bb@dancer.cc.bellcore.com>,
>sohl,william h <whs70@dancer.cc.bellcore.com> wrote:
>>In article <CLp1KE.Iz@hpcvsnz.cv.hp.com>, Tom Bruhns <tomb@lsid.hp.com> wrote:
>>>William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:
>>>
>>>: I have a real big problem with the idea that there are deliberate errors
>>>: purposely induced into what should be a reference book. Maybe we should start
>>>: a "repeater directory accuracy project" to confirm all the listings in the
>>>: ARRL directory to see if content errors exist.
>>
>>My following post includes a layman's set of interpretations/opinions
>>relative to some legal issues...Bottom line, I'm not a lawyer, but
>>here's my opinion, treat it accordingly.
>>
>>First, I'm an ARRL member and a Local Gov't Liason (LGL) in the ARRL field
>>organization, but that doesn't mean I agree with all positions of ARRL.
>>I missed the initial thread of this discussion,but from the two recent
>>posts it appears ARRL has threatened legal action against someone
>>providing (or intending to provide) an "online" version of a repeater
>>directory. It also appears that ARRL has determined that some of
>>the data included in this "online" directory must have been taken
>>from the ARRL Repeater Directory because there are certain
>>identical pieces of data that were created (e.g. a deliberate
>>misspelling of a town name, callsign, etc.) as such in the ARRL
>>publlished directory to use as a means of identifying data from
>>the ARRL directory which has been used to create other databases.
>>The ARRL then claims that using that information is a violation of
>>their copyright on their Repeater Directory.

><snip>

>Instead of getting hung up on legalities, let us look at from a
>rational/economic view point.

>Consider the following scenario. Assume that there is no method of enforcing
>copyright on lists of facts. Also assume that it costs money to get a list
>together. In absence of copyright, no one will be willing to compile the
>list as they will surely lose money. This is because the moment they get
>the list together, others will rip them off. The end result will be no
>handy-dandy list for us to use. We will be worse off for sure.

>So, what seems to be desirable is:
> - to let copyright be used to ensure that people who invest in collecting
> data get a fair return on their investment and
> - yet, do not let copyright be used to prevent any one else from investing
> money in compiling the facts.

>These two seem to be in conflict. Salting the list with false entries
>is a great way out as the presence of these erroneous entries in some one
>else's list is prima facia evidence that they have not gathered data
>independently and are just ripping off the list.

>So, in my opinion, ARRL is following the best strategy possible. If
>Yee's list is independently gathered then there should be and will be
>no problem whatsoever.

>Rajiv
>aa9ch
>r-dewan@nwu.edu

2102. Re: Dumming down of A.Radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 09:35:40 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CLrxBH.F2K@hpqmoea.sqf.hp.com>
Source record: 270554

Bill Coleman (bcoleman@hayes.com) wrote:

: Well, if you are going to critique the writing of others, it is best to get
^^^^^^^^
: your own house in order. Don't make those typos. Be more careful.

There must be one of the variants of Murphy's law at work here, or
else a dry sense of humour.
"Critique" is a French NOUN. The verb form is "faire la critique de..."
(literally "make the criticism of...."). The English verb is
"Criticise".

Correcting other people's grammar, spelling or punctuation is a
high-risk occupation. Someone will doubtlessly find errors in my
posting, but should they dare post, Murphy will get them too.

: I see lose as loose all the time. Really burns me up.

Moi aussi

: > You would have though that this idiot,who was so intent on drawing
: > attention to construction, grammar, and punctuation errors would have
: > gone to the trouble to check his own!

: Likewise.

What have I let myself in for ?

David GM4ZNX

2103. VK2SG RTTY DX Notes, 25 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 10:52:59 UTC
From: bulletin@n8emr.cmhnet.org
Message-ID: <1994Feb25.105259.6951@n8emr.cmhnet.org>
Source record: 270555
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
============================================================
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
============================================================

SB DX @ WW $RTDX0225
VK2SG RTTY DX Notes, 25 February
VK2SG RTTY DX Notes for week ending 25 February 1994 (BID RTDX0225)

Our information this week came from 9X5LJ, DJ3IW and the Central-
Europe DX Cluster Node DB0SPC, I5FLN, IK5AAX and the IK5PWJ Packet
Cluster, W2JGR and the NJ0M node of the Twin-Cities DX Packet Cluster,
W5KSI and ZS5S. Thank you all for your assistance.

Bandpass

Friday 18
DX not sleepin, just restin

Saturday 19
0114-14088 S92ZM
0707-14082 UN7LR
1110-21073 5Z4FO FEC
1516-14085 ZS9A
1520-21083 ZD7DP
1527-14088 ER3ED
1529-21088 V50CM
1537-14085 5R8DG
1542-14087 EX2U
1706-14087 5B4VX

Sunday 20
0843-21086 9N1AA
0843-21089 9M1AA
1045-21086 FR5ZU
1052-21083 TZ6FIC
1129-21085 ZD8M
1253-21083 ZD7DP
1355-21086 9H1ET
1358-21091 HJ4SAN
1401-14086 UT5DX
1407-14084 5B4VX
1421-14084 XU7VK
1448-14088 UN7LR
1450-14089 YL3FW
```

1455-21086 5R8DS
1627-14084 S59F
1633-14090 5B4ABU
1835-14087 ZS1CU
2230-14064 TY1PS Clover

Monday 21
1317-14086 EA8/ON8RI
1720-14083 V31WW
2044-14085 V31DV
2044-14090 J88BS
2052-14083 ZD7DP
2135-14086 V31EN
2209-14085 S92ZM
2156-14085 CO2JJ
2330-14085 V31DV

Tuesday 22
0113-14086 V31II
1634-14086 V31WW
1814-14087 V31EO QSL KF8NN
1954-14083 J88BS
2012-14085 V32GM
2017-14086 CO2KG
2019-14082 V31GM
2139-14085 V31MV
2339-14083 V31JU

Wednesday 23
1620-14088 HK1LAQ

Thursday 24
0021-14086 CX7BF
2006-14084 ZS0X QSL DJ6JC

Notes of Interest

Penguin Islands, ZS0 and Walvis Bay, ZS9. The government of South Africa has agreed to hand over the thirteen Penguin Islands and Walvis Bay to the Republic of Namibia on 28 February. Look for DJ6JC, DJ6SI and V51BI, using the call ZS0X, 23-28 February from Penguin Islands and ZS6EZ and G3XTT with the call ZS9Z, from Walvis Bay. They will both become part of Namibia beginning 1 March and more than likely be deleted as DXCC countries.

Desecheo, KP5. The planned DXpedition by a group of operators for March 1-7 has been cancelled. Permission to land has been denied because of a group of Haitian squatters. Until this can be resolved, no landing permission can be given.

Revilla Gigedo, XF4. This operation is now and will be on until March 4. Activity on all bands 10 thru 160 including RTTY. QSL Hector, XE1BEF.

Mayotte, FH. Hermann, DJ2BW should be signing FH/DJ2BW for a much needed one in RTTY from 1-9 March. KYFC

For next week's bulletin, send your Bandpass and Notes of Interest to Jules, W2JGR @ W2TKU.#SRQ.FL.USA.NA

Remember, DX Don't Sleep.

GL DE Bob, WB2CJL @ W5KSI.#NOLA.LA.USA.NA
/EX
SP KT7H @ N7DUO.WA.USA.NA

2104. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 13:18:02 UTC
From: kurdzo@gdc.COM
Message-ID: <1994Feb25.131802.28275@gdc.com>
Source record: 270556

baxter@kuhub.cc.ukans.edu wrote:
: This past month, Honda sent out a recall notice for their 90-91 Accords.
: They were wanting to replace a part in the distributor which failed when
: the car got high mileage.

: I had this recall work done on my car a couple of weeks ago, and now have
: terrible ignition noise on 2 meters and 440. Before this work had been
: done, the ignition had been really quite quiet -- now it is nearly
: unbearable.

I am now going through the same thing. 2m is extremely noisy now.
If you find a solution, please let me know.

--

Jim Kurdzo AA1GZ
General DataComm
Middlebury, CT 06762-1299
(203) 574-1118 x6443
kurdzo@gdc.com

2105. ORBS$056.OSCAR.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 13:36:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7665.99.0C38A31B@drig.com>
Source record: 270451

```
SB KEPS @ AMSAT $ORBS-056.O
Orbital Elements 056.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH,TX February 25, 1994
BID: $ORBS-056.O
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94051.71420822
Element set: 262
Inclination: 027.2097 deg
RA of node: 340.7072 deg
Eccentricity: 0.6035253
Arg of perigee: 156.2883 deg
Mean anomaly: 250.5966 deg
Mean motion: 02.05880368 rev/day
Decay rate: 3.95e-06 rev/day^2
Epoch rev: 8038
Checksum: 299

Satellite: UO-11
Catalog number: 14781
Epoch time: 94044.54889300
Element set: 664
Inclination: 97.7907 deg
RA of node: 65.0254 deg
Eccentricity: 0.0011279
Arg of perigee: 310.7761 deg
Mean anomaly: 49.2455 deg
Mean motion: 14.69144313 rev/day
Decay rate: 3.63e-06 rev/day^2
Epoch rev: 53215
Checksum: 306

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94054.03951801
Element set: 870
Inclination: 082.9206 deg
RA of node: 053.2129 deg
Eccentricity: 0.0011765
Arg of perigee: 346.0336 deg
Mean anomaly: 014.1062 deg
```

Mean motion: 13.72331508 rev/day
Decay rate: 2.5e-07 rev/day^2
Epoch rev: 33425
Checksum: 264

Satellite: AO-13
Catalog number: 19216
Epoch time: 94048.56858325
Element set: 880
Inclination: 057.8103 deg
RA of node: 267.6554 deg
Eccentricity: 0.7205099
Arg of perigee: 335.0990 deg
Mean anomaly: 002.8997 deg
Mean motion: 02.09722235 rev/day
Decay rate: -2.077e-05 rev/day^2
Epoch rev: 4350
Checksum: 331

Satellite: FO-20
Catalog number: 20480
Epoch time: 94046.42832899
Element set: 659
Inclination: 99.0216 deg
RA of node: 221.3367 deg
Eccentricity: 0.0539917
Arg of perigee: 255.4010 deg
Mean anomaly: 98.6634 deg
Mean motion: 12.83223845 rev/day
Decay rate: -1.4e-07 rev/day^2
Epoch rev: 18851
Checksum: 320

Satellite: AO-21
Catalog number: 21087
Epoch time: 94053.96716387
Element set: 432
Inclination: 082.9410 deg
RA of node: 227.2228 deg
Eccentricity: 0.0036055
Arg of perigee: 043.1176 deg
Mean anomaly: 317.3312 deg
Mean motion: 13.74533568 rev/day
Decay rate: 4.6e-07 rev/day^2
Epoch rev: 15389
Checksum: 300

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94044.66379265
Element set: 662

Inclination: 82.9220 deg
RA of node: 103.0678 deg
Eccentricity: 0.0030946
Arg of perigee: 91.8517 deg
Mean anomaly: 268.6203 deg
Mean motion: 13.74034946 rev/day
Decay rate: 4.3e-07 rev/day^2
Epoch rev: 15168
Checksum: 314

Satellite: ARSENE
Catalog number: 22654
Epoch time: 93338.80803910
Element set: 243
Inclination: 1.4104 deg
RA of node: 113.5274 deg
Eccentricity: 0.2936576
Arg of perigee: 161.9838 deg
Mean anomaly: 210.8642 deg
Mean motion: 1.42202044 rev/day
Decay rate: -8.7e-07 rev/day^2
Epoch rev: 299
Checksum: 278

/EX

2106. ORBS$056.MICRO.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 13:38:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7666.99.0C38A31C@drig.com>
Source record: 270557

```
SB KEPS @ AMSAT $ORBS-056.D
Orbital Elements 056.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH,TX February 25, 1994
BID: $ORBS-056.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94046.18347456
Element set: 964
Inclination: 98.5953 deg
RA of node: 132.5942 deg
Eccentricity: 0.0010599
Arg of perigee: 186.2827 deg
Mean anomaly: 173.8225 deg
Mean motion: 14.29823413 rev/day
Decay rate: 6.0e-07 rev/day^2
Epoch rev: 21215
Checksum: 317

Satellite: AO-16
Catalog number: 20439
Epoch time: 94045.75388848
Element set: 764
Inclination: 98.6038 deg
RA of node: 133.2765 deg
Eccentricity: 0.0010934
Arg of perigee: 188.0238 deg
Mean anomaly: 172.0765 deg
Mean motion: 14.29879034 rev/day
Decay rate: 7.6e-07 rev/day^2
Epoch rev: 21210
Checksum: 328

Satellite: DO-17
Catalog number: 20440
Epoch time: 94045.23034447
Element set: 763
Inclination: 98.6058 deg
RA of node: 133.0443 deg
Eccentricity: 0.0010965
Arg of perigee: 189.4352 deg
Mean anomaly: 170.6623 deg
```

Mean motion: 14.30017107 rev/day
Decay rate: 7.0e-07 rev/day^2
Epoch rev: 21204
Checksum: 266

Satellite: WO-18
Catalog number: 20441
Epoch time: 94045.76328214
Element set: 765
Inclination: 98.6054 deg
RA of node: 133.5798 deg
Eccentricity: 0.0011505
Arg of perigee: 188.3662 deg
Mean anomaly: 171.7330 deg
Mean motion: 14.29993172 rev/day
Decay rate: 5.9e-07 rev/day^2
Epoch rev: 21212
Checksum: 309

Satellite: LO-19
Catalog number: 20442
Epoch time: 94045.74960276
Element set: 763
Inclination: 98.6048 deg
RA of node: 133.7927 deg
Eccentricity: 0.0011921
Arg of perigee: 187.6862 deg
Mean anomaly: 172.4137 deg
Mean motion: 14.30087334 rev/day
Decay rate: 6.4e-07 rev/day^2
Epoch rev: 21213
Checksum: 308

Satellite: UO-22
Catalog number: 21575
Epoch time: 94046.13690949
Element set: 465
Inclination: 98.4466 deg
RA of node: 123.0432 deg
Eccentricity: 0.0007219
Arg of perigee: 301.1937 deg
Mean anomaly: 58.8542 deg
Mean motion: 14.36890610 rev/day
Decay rate: 1.13e-06 rev/day^2
Epoch rev: 13555
Checksum: 302

Satellite: KO-23
Catalog number: 22077
Epoch time: 94046.40390865
Element set: 360

Inclination: 66.0810 deg
RA of node: 174.9628 deg
Eccentricity: 0.0009874
Arg of perigee: 317.5713 deg
Mean anomaly: 42.4539 deg
Mean motion: 12.86284764 rev/day
Decay rate: -3.7e-07 rev/day^2
Epoch rev: 7112
Checksum: 311

Satellite: AO-27
Catalog number: 22825
Epoch time: 94046.21545311
Element set: 261
Inclination: 98.6626 deg
RA of node: 123.1936 deg
Eccentricity: 0.0008062
Arg of perigee: 202.2052 deg
Mean anomaly: 157.8775 deg
Mean motion: 14.27607193 rev/day
Decay rate: 5.8e-07 rev/day^2
Epoch rev: 2028
Checksum: 289

Satellite: IO-26
Catalog number: 22826
Epoch time: 94042.21058899
Element set: 261
Inclination: 98.6649 deg
RA of node: 119.2441 deg
Eccentricity: 0.0008529
Arg of perigee: 216.1988 deg
Mean anomaly: 143.8612 deg
Mean motion: 14.27708814 rev/day
Decay rate: 5.3e-07 rev/day^2
Epoch rev: 1971
Checksum: 325

Satellite: KO-25
Catalog number: 22830
Epoch time: 94045.75293537
Element set: 264
Inclination: 98.5674 deg
RA of node: 121.3071 deg
Eccentricity: 0.0011406
Arg of perigee: 172.0390 deg
Mean anomaly: 188.0975 deg
Mean motion: 14.28033386 rev/day
Decay rate: 5.3e-07 rev/day^2
Epoch rev: 2022
Checksum: 286

/EX

2107. ORBS$056.WEATH.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 13:41:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7667.99.0C38A31D@drig.com>
Source record: 270558

```
SB KEPS @ AMSAT $ORBS-056.W
Orbital Elements 056.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX February 25, 1994
BID: $ORBS-056.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94054.00302709
Element set: 723
Inclination: 099.0635 deg
RA of node: 103.0735 deg
Eccentricity: 0.0015048
Arg of perigee: 181.2398 deg
Mean anomaly: 178.9245 deg
Mean motion: 14.13590789 rev/day
Decay rate: 9.6e-07 rev/day^2
Epoch rev: 47421
Checksum: 311

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94054.04773810
Element set: 621
Inclination: 098.5080 deg
RA of node: 066.5227 deg
Eccentricity: 0.0013117
Arg of perigee: 304.7185 deg
Mean anomaly: 055.3324 deg
Mean motion: 14.24867071 rev/day
Decay rate: 2.20e-06 rev/day^2
Epoch rev: 38635
Checksum: 293

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94046.33979358
Element set: 262
Inclination: 82.5401 deg
RA of node: 5.5070 deg
Eccentricity: 0.0016642
Arg of perigee: 157.5160 deg
Mean anomaly: 202.6730 deg
```

Mean motion: 13.84706663 rev/day
Decay rate: 3.0e-07 rev/day^2
Epoch rev: 30549
Checksum: 289

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94039.99790931
Element set: 262
Inclination: 82.5380 deg
RA of node: 54.3969 deg
Eccentricity: 0.0015730
Arg of perigee: 222.0779 deg
Mean anomaly: 137.9138 deg
Mean motion: 13.16964807 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 26638
Checksum: 335

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94053.99344407
Element set: 528
Inclination: 099.1598 deg
RA of node: 040.1607 deg
Eccentricity: 0.0012083
Arg of perigee: 093.0795 deg
Mean anomaly: 267.2327 deg
Mean motion: 14.12962203 rev/day
Decay rate: 3.10e-06 rev/day^2
Epoch rev: 27909
Checksum: 303

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94053.01405594
Element set: 263
Inclination: 082.5171 deg
RA of node: 235.7306 deg
Eccentricity: 0.0014002
Arg of perigee: 188.3029 deg
Mean anomaly: 171.8434 deg
Mean motion: 13.84356715 rev/day
Decay rate: -8.0e-08 rev/day^2
Epoch rev: 25175
Checksum: 295

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94052.02689974
Element set: 989

Inclination: 082.5516 deg
RA of node: 350.2887 deg
Eccentricity: 0.0006980
Arg of perigee: 212.2401 deg
Mean anomaly: 147.8826 deg
Mean motion: 13.04401818 rev/day
Decay rate: .00000000 rev/day^2
Epoch rev: 20775
Checksum: 292

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94040.79306496
Element set: 762
Inclination: 82.5504 deg
RA of node: 309.6649 deg
Eccentricity: 0.0016176
Arg of perigee: 139.0978 deg
Mean anomaly: 221.1403 deg
Mean motion: 13.84188455 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 18299
Checksum: 328

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94054.01861085
Element set: 900
Inclination: 098.8401 deg
RA of node: 077.7921 deg
Eccentricity: 0.0014098
Arg of perigee: 329.5916 deg
Mean anomaly: 030.4941 deg
Mean motion: 14.01320674 rev/day
Decay rate: .00000000 rev/day^2
Epoch rev: 17771
Checksum: 283

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94054.04864341
Element set: 770
Inclination: 082.5221 deg
RA of node: 236.7821 deg
Eccentricity: 0.0013725
Arg of perigee: 010.4814 deg
Mean anomaly: 349.7177 deg
Mean motion: 13.83573158 rev/day
Decay rate: 6.9e-07 rev/day^2
Epoch rev: 17197
Checksum: 306

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94044.59202931
Element set: 670
Inclination: 82.5391 deg
RA of node: 256.9674 deg
Eccentricity: 0.0013673
Arg of perigee: 130.9218 deg
Mean anomaly: 229.3059 deg
Mean motion: 13.16460015 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 13509
Checksum: 285

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94054.09638815
Element set: 933
Inclination: 098.6271 deg
RA of node: 084.3280 deg
Eccentricity: 0.0012752
Arg of perigee: 206.9837 deg
Mean anomaly: 153.1243 deg
Mean motion: 14.22371048 rev/day
Decay rate: 1.95e-06 rev/day^2
Epoch rev: 14431
Checksum: 293

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94053.93518236
Element set: 675
Inclination: 082.5545 deg
RA of node: 197.4162 deg
Eccentricity: 0.0014020
Arg of perigee: 122.7542 deg
Mean anomaly: 237.5449 deg
Mean motion: 13.16822729 rev/day
Decay rate: -4.48e-06 rev/day^2
Epoch rev: 12142
Checksum: 304

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94054.05930183
Element set: 270
Inclination: 082.5499 deg
RA of node: 296.8811 deg
Eccentricity: 0.0022218
Arg of perigee: 184.0206 deg
Mean anomaly: 176.1276 deg
Mean motion: 13.83000854 rev/day

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Decay rate: 3.8e-07 rev/day^2
Epoch rev: 02431
Checksum: 288

/EX
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2108. ORBS$056.MISC.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 13:44:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7668.99.0C38A31E@drig.com>
Source record: 270445

```
SB KEPS @ AMSAT $ORBS-056.M
Orbital Elements 056.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX February 25, 1994
BID: $ORBS-056.M
TO ALL RADIO AMATEURS BT

Satellite: POSAT
Catalog number: 22829
Epoch time: 94045.75585944
Element set: 254
Inclination: 98.6608 deg
RA of node: 122.7699 deg
Eccentricity: 0.0009759
Arg of perigee: 191.0097 deg
Mean anomaly: 169.0872 deg
Mean motion: 14.28003980 rev/day
Decay rate: 7.2e-07 rev/day^2
Epoch rev: 2022
Checksum: 326

Satellite: MIR
Catalog number: 16609
Epoch time: 94054.03980340
Element set: 146
Inclination: 051.6181 deg
RA of node: 038.8441 deg
Eccentricity: 0.0004691
Arg of perigee: 353.6232 deg
Mean anomaly: 006.5389 deg
Mean motion: 15.60416322 rev/day
Decay rate: 2.2745e-04 rev/day^2
Epoch rev: 45824
Checksum: 287

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94053.98888941
Element set: 445
Inclination: 028.4687 deg
RA of node: 249.4717 deg
Eccentricity: 0.0005902
Arg of perigee: 337.3920 deg
Mean anomaly: 022.6910 deg
```

Mean motion: 14.90490673 rev/day
Decay rate: 1.784e-05 rev/day^2
Epoch rev: 01233
Checksum: 316

Satellite: GRO
Catalog number: 21225
Epoch time: 94045.19676059
Element set: 66
Inclination: 28.4619 deg
RA of node: 5.5021 deg
Eccentricity: 0.0003857
Arg of perigee: 262.4247 deg
Mean anomaly: 97.5914 deg
Mean motion: 15.40075712 rev/day
Decay rate: 4.645e-05 rev/day^2
Epoch rev: 3795
Checksum: 300

Satellite: UARS
Catalog number: 21701
Epoch time: 94050.07315151
Element set: 479
Inclination: 056.9834 deg
RA of node: 272.3681 deg
Eccentricity: 0.0002165
Arg of perigee: 100.1172 deg
Mean anomaly: 260.0857 deg
Mean motion: 14.96377326 rev/day
Decay rate: 3.162e-05 rev/day^2
Epoch rev: 13325
Checksum: 272

/EX

2109. ORBS$056.2L.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 13:47:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.7669.99.0C38A31F@drig.com>
Source record: 270447

```
SB KEPS @ AMSAT $ORBS-056.N
2Line Orbital Elements 056.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX February 25, 1994
BID: $ORBS-056.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10
1 14129U 83058 B 94051.71420822 .00000395 00000-0 99999-4 0 2625
2 14129 027.2097 340.7072 6035253 156.2883 250.5966 02.05880368 80388
UO-11
1 14781U 84021B 94044.54889300 .00000363 00000-0 69607-4 0 6647
2 14781 97.7907 65.0254 0011279 310.7761 49.2455 14.69144313532150
RS-10/11
1 18129U 87054 A 94054.03951801 .00000025 00000-0 27607-4 0 8705
2 18129 082.9206 053.2129 0011765 346.0336 014.1062 13.72331508334251
AO-13
1 19216U 88051 B 94048.56858325 -.00002077 00000-0 00000 0 0 8803
2 19216 057.8103 267.6554 7205099 335.0990 002.8997 02.09722235 43500
FO-20
1 20480U 90013C 94046.42832899 -.00000014 00000-0 49346-4 0 6594
2 20480 99.0216 221.3367 0539917 255.4010 98.6634 12.83223845188515
AO-21
1 21087U 91006 A 94053.96716387 .00000046 00000-0 48472-4 0 4323
2 21087 082.9410 227.2228 0036055 043.1176 317.3312 13.74533568153891
RS-12/13
1 21089U 91007A 94044.66379265 .00000043 00000-0 29527-4 0 6625
2 21089 82.9220 103.0678 0030946 91.8517 268.6203 13.74034946151682
ARSENE
1 22654U 93031B 93338.80803910 -.00000087 00000-0 00000 0 0 2437
2 22654 1.4104 113.5274 2936576 161.9838 210.8642 1.42202044 2990
UO-14
1 20437U 90005B 94046.18347456 .00000060 00000-0 40471-4 0 9649
2 20437 98.5953 132.5942 0010599 186.2827 173.8225 14.29823413212157
AO-16
1 20439U 90005D 94045.75388848 .00000076 00000-0 46533-4 0 7643
2 20439 98.6038 133.2765 0010934 188.0238 172.0765 14.29879034212109
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DO-17
1 20440U 90005E 94045.23034447 .00000070 00000-0 44132-4 0 7637
2 20440 98.6058 133.0443 0010965 189.4352 170.6623 14.30017107212047
WO-18
1 20441U 90005F 94045.76328214 .00000059 00000-0 39826-4 0 7657
2 20441 98.6054 133.5798 0011505 188.3662 171.7330 14.29993172212124
LO-19
1 20442U 90005G 94045.74960276 .00000064 00000-0 41740-4 0 7638
2 20442 98.6048 133.7927 0011921 187.6862 172.4137 14.30087334212130
UO-22
1 21575U 91050B 94046.13690949 .00000113 00000-0 52716-4 0 4657
2 21575 98.4466 123.0432 0007219 301.1937 58.8542 14.36890610135556
KO-23
1 22077U 92052B 94046.40390865 -.00000037 00000-0 10000-3 0 3601
2 22077 66.0810 174.9628 0009874 317.5713 42.4539 12.86284764 71129
AO-27
1 22825U 93061C 94046.21545311 .00000058 00000-0 41460-4 0 2617
2 22825 98.6626 123.1936 0008062 202.2052 157.8775 14.27607193 20284
IO-26
1 22826U 93061D 94042.21058899 .00000053 00000-0 39268-4 0 2612
2 22826 98.6649 119.2441 0008529 216.1988 143.8612 14.27708814 19710
KO-25
1 22830U 93061H 94045.75293537 .00000053 00000-0 38624-4 0 2647
2 22830 98.5674 121.3071 0011406 172.0390 188.0975 14.28033386 20227
NOAA-9
1 15427U 84123 A 94054.00302709 .00000096 00000-0 50913-4 0 7232
2 15427 099.0635 103.0735 0015048 181.2398 178.9245 14.13590789474213
NOAA-10
1 16969U 86073 A 94054.04773810 .00000220 00000-0 94334-4 0 6210
2 16969 098.5080 066.5227 0013117 304.7185 055.3324 14.24867071386359
MET-2/17
1 18820U 88005A 94046.33979358 .00000030 00000-0 12997-4 0 2628
2 18820 82.5401 5.5070 0016642 157.5160 202.6730 13.84706663305497
MET-3/2
1 19336U 88064A 94039.99790931 .00000051 00000-0 10000-3 0 2623
2 19336 82.5380 54.3969 0015730 222.0779 137.9138 13.16964807266383
NOAA-11
1 19531U 88089 A 94053.99344407 .00000310 00000-0 16669-3 0 5286
2 19531 099.1598 040.1607 0012083 093.0795 267.2327 14.12962203279093
MET-2/18
1 19851U 89018 A 94053.01405594 -.00000008 00000-0 00000 0 0 2631
2 19851 082.5171 235.7306 0014002 188.3029 171.8434 13.84356715251755
MET-3/3
1 20305U 89086 A 94052.02689974 .00000000 00000-0 99999-4 0 9894
2 20305 082.5516 350.2887 0006980 212.2401 147.8826 13.04401818207754
MET-2/19
1 20670U 90057A 94040.79306496 .00000024 00000-0 79036-5 0 7621
2 20670 82.5504 309.6649 0016176 139.0978 221.1403 13.84188455182995
FY-1/2
1 20788U 90081 A 94054.01861085 .00000000 00000-0 00000 0 0 9005
```

```
2 20788 098.8401 077.7921 0014098 329.5916 030.4941 14.01320674177719
MET-2/20
1 20826U 90086 A 94054.04864341 .00000069 00000-0 63290-4 0 7709
2 20826 082.5221 236.7821 0013725 010.4814 349.7177 13.83573158171972
MET-3/4
1 21232U 91030A 94044.59202931 .00000051 00000-0 10000-3 0 6701
2 21232 82.5391 256.9674 0013673 130.9218 229.3059 13.16460015135098
NOAA-12
1 21263U 91032 A 94054.09638815 .00000195 00000-0 87715-4 0 9336
2 21263 098.6271 084.3280 0012752 206.9837 153.1243 14.22371048144310
MET-3/5
1 21655U 91056 A 94053.93518236 -.00000448 00000-0 99999-4 0 6755
2 21655 082.5545 197.4162 0014020 122.7542 237.5449 13.16822729121425
MET-2/21
1 22782U 93055 A 94054.05930183 .00000038 00000-0 34746-4 0 2705
2 22782 082.5499 296.8811 0022218 184.0206 176.1276 13.83000854024313
POSAT
1 22829U 93061G 94045.75585944 .00000072 00000-0 46760-4 0 2541
2 22829 98.6608 122.7699 0009759 191.0097 169.0872 14.28003980 20229
MIR
1 16609U 86017 A 94054.03980340 .00022745 00000-0 27089-3 0 1466
2 16609 051.6181 038.8441 0004691 353.6232 006.5389 15.60416322458242
HUBBLE
1 20580U 90037 B 94053.98888941 .00001784 00000-0 17844-3 0 4453
2 20580 028.4687 249.4717 0005902 337.3920 022.6910 14.90490673012331
GRO
1 21225U 91027B 94045.19676059 .00004645 00000-0 10629-3 0 661
2 21225 28.4619 5.5021 0003857 262.4247 97.5914 15.40075712 37958
UARS
1 21701U 91063 B 94050.07315151 .00003162 00000-0 27654-3 0 4793
2 21701 056.9834 272.3681 0002165 100.1172 260.0857 14.96377326133253
/EX
```

2110. Software for DOS-PC for decoding Morse

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 13:52:58 UTC
From: tt1h@dv.st.dlr.de
Message-ID: <CLs98C.I9A@dnsserv.go.dlr.de>
Source record: 270456

I am no radio amateur but enjoy listening to world radio. I am looking for software to decode Morse with (DOS). Who can help?

2111. On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 13:57:51 UTC
From: marcbg@netcom.com
Message-ID: <marcbgCLs9GF.GK9@netcom.com>
Source record: 270559
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Yes, the information in the repeater directory is public information, but the ARRL compiles the information, and puts it into the format that you buy at the stores.

The call-book information is compiled independently by each distributor of the call-book - whether it's in CD format or in hardcopy format - each dirstibuotr either compiles their own from FCC tapes, or buys the rights to the information from another supplier.

I believe that if someone has the ambition to write each repeater coordination group, and independently compile a directory for release to on-line format, then not only would they stnad to possibly profit a little from the sales, but they could also decide for themselves if they want to make this information available on-line.

The key here is that this information, unlike the callboopk info, isnot simply available from any other source outside the ARRL, unless you want to compile the listings yourself.

SO .... it's not like the ARRL is protecting something very sacred, it's just that they have alot of man-hours involved in the repeater directory project, and if there's anyone that can't understand why they don't want to give the information away, well, then, I guess you just don't understand business.

--
==========
Marc B. Grant Voice Mail: 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com
==========

2112. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 14:30:04 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.762186369@hpuerca>
Source record: 270439

In <CLMqI7.Bvn@murdoch.acc.Virginia.EDU> clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) writes:

>I've got some bad interference on 80 through 10
>meter bands from an electric fence about 500
>feet away. The effect is very sharp clicks
>about 3-4 per second. Analog noise blanker
>works some but not 100%.

>Anyone have any cures?

Try a 100 watt carbon resister between the positive and
negative terminals of the battery powering the fence. A
large resister, preferably with lot's of cooling fins.

Failing that, judiciously applied diagonal cutters work.

Er.. it _is_ YOUR fence isn't it? :-)

Cheers & 73 Ed Humphries N5RCK
Hewlett Packard Atlanta GA

2113. Re: Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 14:31:25 UTC
From: andy@clark.net
Message-ID: <2kl23t$bts@clarknet.clark.net>
Source record: 270560

Julian Macassey (julian@bongo.tele.com) wrote:

: I belong to a group with higher purposes. We would never
: transmit naked. Furthermore, we would never send QSL cards depicting
: members in the buff.

We who are members of the Formal Amateur Radio Ham Team (FARHT) know about your group, Julian, and we do not consider you well dressed at all. Here at FARHT, we wear tuxes while operating; during contests we add top hats, tails and gloves. (The top hats add the capacitance necessary to work the really big ones; the tails make a great counterpoise.

2114. Re: Hams on Usenet

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 14:33:21 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.762186644@hpuerca>
Source record: 270442

In <2kjb2o$s6h@geraldo.cc.utexas.edu> oo7@astro.as.utexas.edu (Derek Wills) writes:

>>I have need to contact a number of hams, many whom may be
>>USENET members. At one point we used to see a 4 (or more)
>>part index of Hams on Usenet. Is that listing still published
>>and available somewhere?

>Uh-oh, your name isn't Dave Rhodes, is it?

>Derek "pass it on" Wills (AA5BT, G3NMX)

No, Derek, his name is not Dave; but he does know a little boy
in England who is trying to set a Guiness record and wants
your QSL card!

Ed "mine's already in the mail" Humphries
N5RCK Hewlett Packard Atlanta GA

2115. Re: online rpt idea

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 14:40:32 UTC
From: ab5sm@netcom.com
Message-ID: <ab5smCLsBFK.E0n@netcom.com>
Source record: 270454

Conway Yee (yee@mipg.upenn.edu) wrote:
: Tom Servo writes:
: #What about a different approach, one worthy of usenet? If there were
: #a newgroup called say, rec.radio.amateur.repeater dedicated to
: #providing assistance and information about repeaters, people would
: #provide info, ask questions, and somewhere, an archive site would
: #accumulate repeater listings. The whole process happens naturally
: #by itself, with no monitary interests involved (and no "leader"
: #to lynch :-).

: Not a bad idea at all except for one slight problem. The ftp site
: would be a point of vulnerability.

I think it is a grand idea also .. information collected this way would be in the public domain and acessible by anyone .. how information collected at the site is used by others is left to individual creativity.

I have an on-line scanner database on my land-line bbs .. the object is scanner buffs can call in and add new listings .. other callers can either earch for specific listings, by state, frequency, city, organization, etc or download a companion program and the database information to use as they see fit on a stand-a-lone pc. No one owns the information placed there and it is for all to share and use. I have had this running for a couple of years now .. There is no reason this would not work for repeater frequencies too.

lee - ab5sm ab5sm@txnp.uscourts.gov

--
ab5sm@netcom.com

2116. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 14:44:47 UTC
From: jfh@netcom.com
Message-ID: <jfhCLsBMn.7nJ@netcom.com>
Source record: 270440
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

marcbg@netcom.com (Marc B. Grant) wrote:

>SO .... it's not like the ARRL is protecting something very sacred, it's
>just that they have alot of man-hours involved in the repeater directory
>project, and if there's anyone that can't understand why they don't want
>to give the information away, well, then, I guess you just don't
>understand business.

The ARRL isn't a for-profit organization, and its purpose isn't to make money. They provide many free services, such as the reciprocal operating information, the file server, etc. They also distribute the net directory in electronic form. There may be good reasons for keeping the repeater directory under their control, but "we have to make money off of it" isn't one of them.

Perhaps they're working on their own electronic version?

--

Jack Hamilton Postal: POB 281107 SF CA 94128 USA
jfh@netcom.com Packet: kd6ttl@w6pw.#nocal.ca.us.na

2117. Nude Hamfests

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 14:52:20 UTC
From: gdavis@griffin.uvm.edu
Message-ID: <gdavis.762187940@griffin>
Source record: 270561

You all know that I support nude hamfests.
Now who can answer this one?

" Who is the most popular guy at a nude hamfest?"

Answer: (groan
Well... he's the one that can balance two HTs and five roles of number
14 wire.

Gary

--
******** Gary E. Davis***** WQ1F *****
The most common of all follies is to believe passionately in the
palpably not true. It is the chief occupation of mankind.-H.L.Mencken

2118. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 14:55:36 UTC
From: benjy@benjy.cc.vt.edu
Message-ID: <2kl3h8$6dh@solaris.cc.vt.edu>
Source record: 270438

In <CLMqI7.Bvn@murdoch.acc.Virginia.EDU> clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) writes:

>I've got some bad interference on 80 through 10
>meter bands from an electric fence about 500
>feet away. The effect is very sharp clicks
>about 3-4 per second. Analog noise blanker
>works some but not 100%.

>Anyone have any cures?

I've had the same problem with a fence I installed. The noise blanker on my old OMNI C cuts out the noise. I also found that the fence is arcing when I hear the clicks. Sometimes it's a bad insulator or just wet grass on the wire. I walk my fence at night when I can hear the clicks and see the arcing.

Good luck!
Benjy

--
Benjy Cline, AC4XO
Virginia Tech Computing Center
benjy@benjy.cc.vt.edu

2119. ARLD011 DX news

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 14:56:51 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arld011.1994@ampr.org>
Source record: 270562
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ARL $ARLD011
ARLD011 DX news

ZCZC AE09
QST de W1AW
DX Bulletin 11 ARLD011
From ARRL Headquarters
Newington CT February 24, 1994
To all radio amateurs

SB DX ARL ARLD011
ARLD011 DX news

Items in this week's bulletin are courtesy of Chod, VP2ML; The DX Bulletin; Bob, W5KNE; QRZ DX; the Ohio/Penn DX Bulletin, the Yankee Clipper Contest Club PacketCluster network and Contest Corral in QST. Thanks.

PENGUIN ISLANDS AND WALVIS BAY. ZS0X is now active by Baldur, DJ6SI; Henry, DJ6JC; and V51BI. The most recent PacketCluster spots show much activity between 7004 and 7010 kHz from 0300 to 0500z. There have been some reports that the crew will stay on after the 28th using V5JC, V5SI and V5BI for call signs. QSL CW and SSB operations via DJ6SI. RTTY and OSCAR QSOs, QSL via DJ6JC. ZS9A was worked recently on 14226 kHz at 2015z. Both ZS9 and ZS0 will become territories of Namibia on March 1.

AMERICAN SAMOA. Check 3522 kHz between 1130 and 1200z for KH8/AA6LB. East coast stations running exciter power to average antennas have been able to work this one.

TONGA. Bob, W7TSQ, will be active for about two more weeks as A35SQ. He has been operating free-style around 14225 kHz between 1500 and 1530z. QSL to W7TSQ.

FRENCH POLYNESIA. Dave, WD5N, is operating FO0HAR and will try to operate from the Southern Cook Islands at journey's end. QSL via WD5N.

REVILLA GIGEDO ISLANDS. Hector, XE1BEF, and company are active as XF4C from Clarion Island. This all band, CW/SSB/RTTY effort should run until March 4. Check 3795 kHz at 0415z, 7013 between 0600 and 0730, 14170 at 0200 and 14260 at 0315. QSL via XE1BEF.

GUANTANAMO BAY. Jim, KG4DX; Dave, WQ5Y; and Nellie, XE1CI, are active as KG4CB. Check 14226 kHz around 0215 and 0330z.

CRYSTAL BALL. The following are some operations planned for the not-too-distant future.

BANABA ISLAND. Nils, SM6CAS, and Mats, SM7PKK, will sign T33CS and T33KK from March 27 to April 5.

BENIN. Ken, WA4OBO, expects to be on as TY8OBO for two weeks starting March 1. QSL his home call.

COCOS ISLANDS. OKDXA and Young Gunners DX Foundation members are wrapping up plans for their May DXpedition from Mayos Island. Transportation has been obtained, and landing and operating permission have been granted. This full-scale, multi-national, 12 operator effort will include seven stations, including dedicated satellite and RTTY positions. QSL via OKDXA, Box 88, Wellston OK 74881.

THAILAND. Samui Island, IOTA AS-101, may be activated by a group of Thailand amateurs sometime in March. This island is located off the Malay Peninsula North East group and has not been active for about two years.

THIS WEEKEND ON THE RADIO. Indoor radio-sporting activities for this weekend include these events.

The phone weekend of the CQ World Wide 160-Meter DX Contest runs from 2200z February 25 to 1600z February 27. Exchange signal report and either state, province or DX prefix/country abbreviation. Check page 129 and 130 of December QST for more info.

IARU sister society RSGB's 7 MHz Contest is from 1500z February 26 to 0900z February 27 on CW only between 7000 and 7030 kHz. Exchange RST and serial number. UK stations will also exchange a three letter country code. Details appear on page 128 of January QST.

The French IARU member society sponsors the REF French Contest, phone, running from 0600z February 26 to 1800z February 27. Work French stations, including overseas territories and DA1 and 2 French military stations, on 80 through 10 meters. Exchange signal report and serial number. Page 130 of December QST has more particulars on this event.

The CW weekend of the YL OM Contest runs from 1400z February 26 to 0200z February 28. YLs work OMs and OMs work YLs for a maximum of 24 hours exchanging QSO number, signal report and either state, province or DXCC country. More info can be found on page 127 of January QST.
NNNN
/EX

2120. Daily Summary of Solar Geophysical Activity for 24 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 14:59:49 UTC
From: oler@rho.uleth.ca
Message-ID: <9402251459.AA09253@rho.uleth.ca>
Source record: 270563
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

24 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 055, 02/24/94
10.7 FLUX=105.0 90-AVG=107 SSN=058 BKI=1012 2122 BAI=004
BGND-XRAY=B1.9 FLU1=5.2E+06 FLU10=1.8E+04 PKI=1112 2121 PAI=005
BOU-DEV=000,004,009,015,010,007,010,017 DEV-AVG=009 NT SWF=00:000
XRAY-MAX= C2.9 @ 1833UT XRAY-MIN= B1.2 @ 0729UT XRAY-AVG= B3.2
NEUTN-MAX= +002% @ 1730UT NEUTN-MIN= -003% @ 1915UT NEUTN-AVG= -0.7%
PCA-MAX= +0.2DB @ 2310UT PCA-MIN= -0.3DB @ 0405UT PCA-AVG= +0.0DB
BOUTF-MAX=55348NT @ 1453UT BOUTF-MIN=55322NT @ 1852UT BOUTF-AVG=55341NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+079,+000,+000
GOES6-MAX=P:+123NT@ 1940UT GOES6-MIN=N:-059NT@ 0612UT G6-AVG=+100,+038,-031
FLUXFCST=STD:100,100,100;SESC:100,100,100 BAI/PAI-FCST=010,010,010/002,001,001
KFCST=1112 2111 1113 3111 27DAY-AP=016,008 27DAY-KP=4335 3221 1233 3212
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 23 FEB 94 was 38.5.
The Full Kp Indices for 23 FEB 94 are: 2+ 3+ 3- 3o 2+ 2+ 3- 2-
The 3-Hr Ap Indices for 23 FEB 94 are: 9 19 13 15 10 10 12 6
Greater than 2 MeV Electron Fluence for 24 FEB 94 is: 9.1E+08

SYNOPSIS OF ACT

Solar activity was low. Only one C-class flare was
observed during the period. The source was uncertain because
only weak H-alpha emissions in the vicinity of Region 7671
(N10W72) were time coincident with the x-rays. A new H-type
group rotated into view near S15E77 and was assigned SESC
Region number 7678.

Solar activity forecast: solar activity is expected to
be low.

The geomagnetic field was quiet to unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled for the next three days.

Flare event probabilities 25 feb-27 feb

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

HF propagation conditions finally returned to normal over
all regions today. Near-normal conditions are expected to
persist over the next 72 hours, through 27 February inclusive.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7671 N10W68 191 0200 DAO 06 008 BET
7675 S11E17 106 0030 CAO 05 007 BET
7676 N08E27 096 0010 BXO 04 002 BET
7678 S14E74 049 0070 HSX 02 001 ALPHA
7669 N08W86 209 PLAGE
7670 N09W76 199 PLAGE
7674 S14W43 166 PLAGE
7677 N20W38 161 PLAGE
REGIONS DUE TO RET
NMBR LAT
7665 N03 029

LISTING OF SOLAR ENERGETIC EVENTS FOR 24 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP SWF
NO EVENTS OBSERVED

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 24 FEBRUARY, 1994

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
63 S28W45 S30W48 S15W68 S08W55 186 ISO POS 006 10830A
64 N60W13 N15W52 N17W58 N60W28 166 EXT
65 S30E30 S32E27 S15E07 S09E10 114 ISO POS 004 10830A
66 N10W53 S05W58 N12W58 N12W58 187 ISO POS 002 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
23 Feb: 0137 0146 0154 C1.0

0250 0255 0300 B4.0
0324 0332 0337 B4.4
1433 1437 1441 B3.9
1520 1525 1537 C1.1
1746 1753 1811 B7.0
1924 1928 1930 B6.4
2043 2051 2104 C1.4

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 3 0 0 0 0 0 0 0 008 (100.0)

Total Events: 008 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2121. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 15:13:08 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb25.151308.2730@ke4zv.atl.ga.us>
Source record: 270455

In article <CLn0M7.7E1@srgenprp.sr.hp.com> glenne@sad.hp.com (Glenn Elmore) writes:
>Severe basenote drift acknowledged. (:>)

Note that I'm adding some material here that I'm sure Glenn knows, but
may be interesting to other readers.

> The term "pathloss" can be misleading since in freespace signal isn't
>lost. Radio waves are divergant. The illuminated area increases as the
>square of the distance. Focus the power better and you get more in the
>receiving "bucket". With constant antenna aperture (physical size once
>you get beyond dipoles) this is more effectively done at shorter
>wavelengths/higher frequencies.
>
> Signals appear to drop because the aperture of the antenna "catching"
>it is getting smaller compared to the total illuminated area at 1/D^2.
>This is exactly why shorter paths and shorter wavelengths are better.

Free space loss is, as you noted, due to the geometry of the situation,
and is not a dissipative loss. The following equations can be used.

Lfs = 32.45 + 20*log(d) + 20*log(f)

for d in kilometers and f in MHz. Or

Lfs = 37 + 20*log(d) + 20*log(f)

for d in miles and f still in MHz.

Both equations assume isotropic radiators. Antenna gains must be
included in total path budget calculations.

There are other losses. Loss from atmospheric gases is figured by

Lo = Ko*d

where d is in kilometers and Ko varies with frequency. It's negligble
below 10 GHz, but peaks at nearly 20 db per km by 47 GHz. There are
charts of Ko versus frequency in most microwave handbooks. This is
a true dissipative loss, but is of little serious concern to most
amateurs.

There is also loss due to water vapor in the air. This is also of
importance mainly above 10 GHz, but has a peak in our 24 GHz band.
The equation is

Lw = H*Kw*d

Where H is abolute humidity in g/m^3, d is distance in km, and Kw is
from a table of attenuation values. At 24 GHz, Kw is .24 db/km. This

is a true dissipative loss. Rain and fog losses are similar to water
vapor losses, only much greater, and effective starting at lower
frequencies. At 10 GHz, loss in a 1 inch per hour rainstorm will be
1 db per km, at 24 GHz, the loss would be 3 db per km.

Lr = Kr*d

So for LOS paths, total propagation losses are

Lt = Lfs + Lo + Lw + Lr

>> I think that my point here is that LOS paths aren't practical for most
>> amateur data links. The ability to get LOS paths is very terrain specific,
>> and very $$$ specific. They either require fortuitous high sites, or
>> very expensive microwave towers.
>
>> Power is cheap. Sites are few and expensive. We have to be able to use
>> the sites *we can get* to build the network. Unlike a public utility,
>> we can't just go out and condemn ideal sites where we need them for
>> our microwave links. All of our path engineering has to revolve around
>> what we can do with the sites we can get.
>
>I agree that sites are of great value. I suppose a geostationary sites
>would be extremely valuable to amateurs but I don't agree that power is
>cheap nor really all that effective at making high information volume
>systems. Once one leaves quality paths, the cost of maintaining quality
>data flow is tremendous. Not only can't we generate enough power to
>overcome the additional losses and path variabilities cheaply but the
>excess power (that which doesn't get wasted in heating up the
>countryside) goes into removing the channel from reuse by other links
>(QRM). We need to be finding ways to use *less* power, not more, and
>not just because of the FCC mandate either.

Well lets look at the equations again. For troposcatter the loss
equation is

Ls = 21 + 10*As + 10*log(f) + Lc

As is the scattering angle in degrees, f is frequency in MHz, and
Lc is aperture to medium coupling loss in db. As can be calculated
by

As = 0.005*d + (A1 + A2)

Where d is km and A1 and A2 are the elevation angles of the two antennas.
As can be seen, the lowest elevation where a common volume of air is
visible to the two stations gives the lowest loss.

Lc can be calculated by

Lc = 2 + 2*As/sqrt(a1 + a2)

Where As is as above, and a1 and a2 are the 3 db beamwidths of the two
stations. That can be calculated as

a = sqrt(1/(10^G/10)

where G is the antenna gain in dbi. From these two it becomes obvious
that scattering losses decline with wider beamwidths that encompass
a larger common volume of air. Note the tradeoff, however, in that a
wider beamwidth implies a lower antenna gain. This has to be balanced
in the total link budget. Note also that scattering losses don't inrease
as rapidly with increasing frequency as do free space losses. Scattering
is particularly valuable where power is easy to generate and moderate gain
antennas are used.

Another common technique for dealing with non-LOS paths is to make
use of knife edge diffraction over an intervening obstacle. Knife
edge losses can be calculated by

Lk = 20*log(h*sqrt(f/d1) - 38.8

where h is the elevation in meters relative to a free space path of
the knife edge obstruction, f is frequency in MHz, and d1 is the
distance from the near station to the obstacle. Note from inspection
that lower frequencies work best here.

There are more effects. Fresnel zone losses are a concern with paths
near the surface, and thermal inversions can royally screw microwave
paths by bending the path away from the intended receiver. There's also
near field absorption by trees, buildings, etc. This rapidly becomes
a major factor above 450 MHz, with losses climbing to 2 db per *meter*
of foliage at 10 GHz.

Put this all together and it spells mother******, at microwave. :-)
At 430 MHz, it all becomes much easier. Forward scatter and knife
edge diffraction are both common methods of extending range beyond
LOS at 430 MHz. It's much more costly at 10 GHz.

> I guess I'm changing my mind about what "build it and they will come"
> means in AR. I'm afraid it means:
>
> build it all, everything in place to provide highspeed user access worldwide,
> user access h/w, s/w and a host of free services and applications.
>
> offer it for "less than you can imagine" (certainly less than the XYL
> pain-threshold of $500 or so), available by charge card from all the
> mail order suppliers
>
> make it totatally turnkey, there must be no way for the user to mess it up
>
> and they will come. They will complain that it was done wrong, doesn't
> work well enough, is a ripoff and they could have done it better. *but*
> they will come and use it.

That about sums it up. :-(

Gary
--

Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2122. Re: Getting Coax Seal OFF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 15:27:02 UTC
From: gtaylor@taex003n.tamu.edu
Message-ID: <gtaylor.326.0@taex003n.tamu.edu>
Source record: 270564
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

> When using co-ax seal or other goopy sealers, it pays to wrap
>the connectors with PVC tape first, then apply the goop. Then when you
>remove the goop, you take off the tape and everything is clean.

Now they tell me....
Greg Taylor, KD4HZ // g-taylor4@tamu.edu // 409-845-4445 // Fax-847-8744

2123. Re: Help - Need ARES Packet Software.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 15:31:27 UTC
From: peterson@physc1.byu.edu
Message-ID: <1994Feb25.083127.1419@physc1.byu.edu>
Source record: 270565

In article <2kgbm8$t15@ornews.intel.com>, bmiller@landesk.intel.com (Brett Miller - Support Engineer) writes:
> I have an old posting saying it the ARES packet program is available
> at byugate.cs.byu.edu in the ARES directory. The program is called
> ARESPACK (v3.0)
> The posting was made by Keith keithm@wicat.com
>
> Hope this helps
>
>
> --
> Brett Miller N7OLQ E-mail: brett_miller@ccm.hf.intel.com
> Intel Corp.
> American Fork, UT
>

Currently byugate.cs.byu.edu is not reachable (due to a little conflict with our local network security people). However, I will temporarily put this file on physc1.byu.edu in directory hamradio for anonymous ftp. Hope this helps (we hope to have byugate back in normal operation soon but still have some problems to solve to keep the security people happy).

Bryan Peterson, ki7td
ki7td@byu.edu

2124. Re: Money grabbing SOB's at STD.COM (was Re: ftp for files)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 15:34:57 UTC
From: eckman@eos1.larc.nasa.gov
Message-ID: <2kl5r1$d9t@reznor.larc.nasa.gov>
Source record: 270566

In article <2kl5bf$egl@news.udel.edu> walt@diusys.cms.udel.edu (Walt Dabell) writes:
>Scott Ehrlich (wy1z@netcom.com) wrote:
>
>: You are more than welcome to venture through the mod archives on World:
>: anonymously ftp into: ftp.std.com:/pub/hamradio/mods
>
>[...]
>
>: Please let me know what you think.
>
>I think it's a goddamn shame those cheap sons-a-bitches at std.com now
>want to charge us internetters for accessing their system! Anybody got
>any info on a system where there aren't a bunch of money-grabbing .com
>types running it?
>--
> ____
> Walt Dabell KD3GS (302)645-4225 walt@diusys.cms.udel.edu
>
What are you talking about? ftp.std.com works fine for me.
Their logon message is related to charges for accounts directly on
their system. Their anonymous ftp access still appears to be open
and free.

Richard Eckman KO4MR
NASA Langley
eckman@eos1.larc.nasa.gov

2125. Re: FT530 dtmf decoding

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 15:40:49 UTC
From: levine@mc.com
Message-ID: <2kl661$hde@jericho.mc.com>
Source record: 270567

In article nvm@news.iastate.edu, jdwhite@iastate.edu (Jason White) writes:
-->In article <2ke7j9$d6u@news.iastate.edu>,
-->Steven M. Knapp <sknapp@iastate.edu> wrote:
-->>David Willmore <willmore@iastate.edu> wrote:
-->>>>DTMF Decoding
-->
-->.... 8< snip! ...
-->
-->>>Sorry, but it's in the manual. :) IMHO, the manual is very poor, but,
-->>>from the Icom manuals I have seen, well above par for the course.
-->>
-->>The manual says something about the last 3 DTMF digits being displayed
-->>in memory 7, but did not mention the fact that it scrolls! :)
-->>
-->>My old Icom manuals had more pictures and charts than my FT-530 book
-->>does. I liked that. The FT-530's manual is also incorrect in a few
-->>places, REALLY annoying. Oh well...still a good radio...

It is in the FT530 Manual on page 42 in the section labelled
"DTMF Monitoring"

How much clearer could it possibly be!

The FT530 manual is by far the nicest manual I have ever received
with an HT.

|| // ||\\ //|| //\\ //\\
|| // || \\ // || // //
||// || \\ || // //
||\\ || || || \\ === \\ ===
|| \\ || // || \\ // \\ //
|| \\ || // || \\// \\//
--FTAC
Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599

2126. Re: Money grabbing SOB's at STD.COM (was Re: ftp for files)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 15:44:55 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.94Feb25104455@prince.cs.columbia.edu>
Source record: 270568

walt@diusys.cms.udel.edu (Walt Dabell) writes:

> I think it's a goddamn shame those cheap sons-a-bitches at std.com now
> want to charge us internetters for accessing their system! Anybody got
> any info on a system where there aren't a bunch of money-grabbing .com
> types running it?

Waitaminnit, I didn't see anything in Mr. Ehrlich's message about
"charg[ing] us internetters for accessing their system!" Did you read
a different message than the one I saw? It looked to me like he was
telling you about an anonymous FTP site on the Internet, namely
ftp.std.com. He was nice enough to tell you the exact pathname to
some ham files of interest. And for this, you bite his head off in a
netnews post? I didn't see anything about charging anyone money, as
if that were feasible through anonymous FTP. You really must have
seen a different message than the one I saw, or else you know
something that I don't know from reading the posts here.
-Steve, WB3I

2127. Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 15:46:57 UTC
From: jangus@skyld.grendel.com
Message-ID: <762191217snx@skyld.grendel.com>
Source record: 270569

In article <1994Feb25.074115.14979@bongo.tele.com> julian@bongo.tele.com writes:

> The Conservative radio amateurs always make sure they are
> properly attired before engaging in QSOs. I always make sure I have on
> a cute bra and matching pair of clean panties when I pick up the mike.

"I'm a luberjack and I'm ok, I work all night and I sleep all day."

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2128. ICOM 2SRA mod filename?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 15:55:16 UTC
From: hlb@li.loral.com
Message-ID: <hlb.762191716@loral>
Source record: 270570

Does anyone know the filename for the ICOM 2SRA mod on ftp.std.com?
AS I do not have direct ftp access I can only go thru a mail server.
However, trying to get a list (ls) of the ICOM directory yielded an
out of memory error. Looks like I need the exact filename.

Thanks,
hlb@li.loral.com

--
hlb@li.loral.com

2129. Re: Money grabbing SOB's at STD.COM (was Re: ftp for files)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 16:03:25 UTC
From: walt@diusys.cms.udel.edu
Message-ID: <2kl7gd$f7u@news.udel.edu>
Source record: 270571

Steve Popovich (popovich@prince.cs.columbia.edu) wrote:

: ftp.std.com. He was nice enough to tell you the exact pathname to
: some ham files of interest. And for this, you bite his head off in a
: netnews post? I didn't see anything about charging anyone money, as
: if that were feasible through anonymous FTP. You really must have
: seen a different message than the one I saw, or else you know
: something that I don't know from reading the posts here.
: -Steve, WB3I

OK, to be fair, I have a bad cold and am in a bad mood. This is what
I saw when I accessed ftp.std.com this morning. They may have a
problem with their system. I apologize _IF_ I jumped to the wrong
conclusion.
-----------included message-----------

diusys% ftp ftp.std.com
Connected to ftp.std.com.
220 ftp FTP server (Version wu-2.1c(1) Sun Feb 13 14:46:20 EST 1994) ready.
Name (ftp.std.com:walt): anonymous
331 Guest login ok, send your complete e-mail address as password.
Password:
230-
230-Hello!
230-
230-This is the anonymous FTP area for world.std.com, a public access Unix
230-system. Accounts directly on the system are available via telnet or
230-direct-dial (617-739-9753, 8N1, V.32bis (14.4K), V.32 (9600), 2400, etc.),
230-login as new (no password) to create an account. Accounts are charged
230-at $5/mo+$2/hr or $20/20hrs/month, your choice. Grab the details in
230-the world-info directory here if interested.
230-
230-
421 Service not available, remote server has closed connection
Login failed.
ftp> bye

--------end included message---------------
I read this to read if I wanted to use their system, I had to pay.
Maybe I R wrong. Won't be the first time.
--

Walt Dabell KD3GS (302)645-4225 walt@diusys.cms.udel.edu

2130. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 16:08:10 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLsFHn.D5H@ucdavis.edu>
Source record: 270572

My first question regarding this mess is:
Did you try to reconcile these problems with the league directly before
taking it to a public forum? If not I consider starting a derogatory
thread regarding the way the league has "handled" this very poor
etiquette. Imagine how everyone would have jumped all over those posting
to the recent Ramsey thread if they had not tried to contact and resolve
the problem with JOhn personally.

Tom Bruhns (tomb@lsid.hp.com) wrote:
: I'd be willing to post my submission to Conway, with all the info that
: hasn't been independently verified deleted. Any interest?
Since it has been generally agreed that if you are taking the information
directly out of the directory without permission and re-publishing it it
is a copyright infringement and you are stating that you have not
verified some of the data you submitted to Conway can we assume you gathered
these data from the ARRL directory?

Dan "I hope we get an on-line directory" Todd
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2131. Re: online rpt idea

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 16:18:43 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLsFz8.DLF@ucdavis.edu>
Source record: 270573

Conway Yee (yee@mipg.upenn.edu) wrote:
: Tom Servo writes:
: #What about a different approach, one worthy of usenet? If there were
: #a newgroup called say, rec.radio.amateur.repeater dedicated to
: #providing assistance and information about repeaters, people would
: #provide info, ask questions, and somewhere, an archive site would
: #accumulate repeater listings. The whole process happens naturally
: #by itself, with no monitary interests involved (and no "leader"
: #to lynch :-).

: Not a bad idea at all except for one slight problem. The ftp site
: would be a point of vulnerability.
I don't see how the FTP site would be vulnerable unless it was suggested somewhere that people just transcribe a piece of copyrighted material.
I will be happy to begin the posts with the local machines I use.
I don't know if there is really a need to start a new newsgroup. We could just use a subject line begining with REPEATERS: or something. One suggestion would be to break up the inforamtion in a different geographic format. I really don't like trying to find a UHF repeater in So. Cal. with the ARRL directory. This project could be much more accurate than the ARRL directory because they only publish what they are given. If a repeater owner wants to see his name in the book they can publish incorrect PL's and increase the difficulty in accessing the machine. The database could also be updated. Perhaps even a comment area for bringing up public autopatches etc.

Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2132. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 16:25:41 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLsGAu.Dx3@ucdavis.edu>
Source record: 270574
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Jack Hamilton (jfh@netcom.com) wrote:
: The ARRL isn't a for-profit organization, and its purpose isn't to make
: money. They provide many free services, such as the reciprocal operating
: information, the file server, etc. They also distribute the net directory
: in electronic form. There may be good reasons for keeping the repeater
: directory under their control, but "we have to make money off of it" isn't
: one of them.
At $30 my dues don't pay all the $$ for the free services you are talking
about there. Where do you suppose it comes from? It comes from those
areas of the business that do make money for the league. There are some
things the league that cost them money, there are some things the league
does that they make money on. These things balance out, hopefully. You
can't expect each transaction the league makes to be a wash

: Perhaps they're working on their own electronic version?
I hope so! But I'll bet if we get together and pout our own out it would
be atleast as good, probably better.

Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
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* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2133. Re: Money grabbing SOB's at STD.COM (was Re: ftp for files)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 16:29:01 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.94Feb25112901@prince.cs.columbia.edu>
Source record: 270575

walt@diusys.cms.udel.edu (Walt Dabell) writes:

> OK, to be fair, I have a bad cold and am in a bad mood. This is what
> I saw when I accessed ftp.std.com this morning. They may have a
> problem with their system. I apologize _IF_ I jumped to the wrong
> conclusion.
> -----------included message----------
>
> [Shows an anonymous FTP login apparently succeeding, but then being closed
> by the remote server before he can do anything]
>
> --------end included message---------------
> I read this to read if I wanted to use their system, I had to pay.
> Maybe I R wrong. Won't be the first time.

Looks like a bug, all right. You should probably report this to their system maintainers. I don't know what login name they use for catching their system-related mail; in the absence of further information, something like postmaster@world.std.com would probably be the best bet.

Take another look at a couple of lines in the login message:

> 230-at $5/mo+$2/hr or $20/20hrs/month, your choice. Grab the details in
> 230-the world-info directory here if interested.

If anonymous FTP doesn't work without paying, then how are you supposed to grab the details if you think you might want to get an account? It would be counter-productive for them to turn off anonymous FTP. Oh, and isn't ftp.std.com also the FTP site for the ARRL's ham info files?
-Steve, WB3I

2134. Re: Super Morse version 4.04 question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 16:33:37 UTC
From: "Judson L. Ahern" <ahern@alliant.uoknor.edu>
Message-ID: <21775.ahern@alliant.uoknor.edu>
Source record: 270441

On 24 Feb 1994 17:08:49 GMT, Robert H Wiley wrote:

>I have been using Super Morse version 4.04 for a while now, and have
>encountered a problem while attempting to use it in Windows v. 3.1. When I
>attempt to have it send code, it groups letters together. For example, if I
>had it send the word 'AT', it comes out with a letter W. This, however, does
>not happen if I shut down windows, and load it from DOS. I don't really
>believe my system would be in question (486 SX-25 w/4 megs of RAM), since it's
>a fairly normal setup. Any suggestions?

I had the same problem with an earlier version of SM. I suspect it
happens because Windows is "time slicing," and that screws up SM's
timing. Did you try making SM operate "exclusively," i.e., where all
other programs are stopped? To do this, you would modify the PIF you are
using for SM. I can't remember if I tried this or not. [I used SM
to help pass my Extra a year ago, so I haven't needed it in a
while :-)].

Jud

+---+
| Jud Ahern KC5RI Internet: jahern@geohub.gcn.uoknor.edu |
| Geology & Geophysics Bitnet: jahern@uokgcn.bitnet |
| University of Oklahoma "Opinions expressed here reflect the entire|
| Norman, OK 73019 University, in one convenient location." |
+---+

2135. My List of Mail Order Electronics Companies

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 16:44:07 UTC
From: jfw@ksr.com
Message-ID: <2kl9sn$opl@hopscotch.ksr.com>
Source record: 270448
Cross-posted to: sci.electronics,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.info

A real prompt update for once; check the end for the changes (as usual).

[$Revision: 2.16 $; last updated Feb 25, 1994]

Here is my list of companies which will sell electronic components in
small quantities. Most of these places I have bought from, a couple
I haven't. Being a ham radio operator, I am most interested in
RF components, and in particular, air variable capacitors, which tend to be
scarce (and tend to be used or surplus even if I've otherwise labelled the
seller as "NEW"). I apologize in advance for disparaging remarks about
what happens when parts suppliers start selling computers, but anyone who
has watched Jameco over the years will know just what I mean (though
their latest catalog hints at possibly returning to selling parts).

Categories are:
NEW COMPONENTS Distributors and sellers of new components, or "new and some
used" in a couple of cases.
SURPLUS ELECTRONICS Usually overstocks, occasionally used equipment.
Ideal for stocking the junkbox, usually have dependable stock lines
of resistors, capacitors, and some semiconductors, but won't have
those LCD modules forever... An invaluable resource, don't shy away
from them.
SPECIALTY COMPONENTS In particular, crystals and toroidal cores.
KITS Ham radio kits, random electronic kits, whatever they have.
LITTLE GUYS Separated out because of some twisted sentimentality,
I suppose. Intended to honor one or two ham spare-bedroom
operations. Note that sending $1 along with catalog requests
is a big help for these folks.
PUBLICATIONS Two publications which are essentially all want-ads, plus
the address for SAMS PHOTOFACTS because everyone always asks about
it on sci.electronics.

Note on shipping costs: I don't always update these frequently enough, and
they're generally for continental US unless otherwise mentioned.

NEW COMPONENTS:

Ocean State Electronics
P.O. Box 1458
Westerly RI 02891
+1-800-866-6626 (orders)
+1-401-596-3080
+1-401-596-3590 (FAX)
Minimum $5, S&H $4, free catalog. Wide array of RF parts, especially
air variables and B&W coils.

Radiokit (store is located at:)
P.O.Box 973 169 Jeremy Hill Rd.
Pelham NH 03076 Pelham NH 03076
+1-603-635-2235
+1-603-635-2943 (FAX)
No minimum ($3 service charge if under $20), many kits, lots of J. W. Miller chokes & coils, B&W coils, RF switches, Millen variable capacitors, lots of parts in general. As of 24-Feb-94, they are again STILL out of catalogs, and just barely might have one by Dayton this year. They do accept mail orders, but you'll have to call for prices and availability. A classified ad in 3/94 QST says "Call/SASE", I guess they may have fliers.

Circuit Specialists Inc
P. O. Box 3047
Scottsdale AZ 85271-3047
+1-800-528-1417
No minimum with check or money order, $15 otherwise. $3 S&H.
New electronics, good RF assortment, increasing infestation of computers.

Mouser Electronics Mouser Electronics Mouser Electronics
11433 Woodside Ave. 2401 Highway 287 North 12 Emery Ave.
Santee CA 92071 Mansfield TX 76063 Randolf NJ 07869
Mouser Electronics
370 Tomkins Court
Gilroy CA 95020
Catalog Subscriptions: (800) 992-9943 (Continental US only)
Sales & Service: (800) 34-MOUSER (800-346-6873) (US, Puerto R., Canada)
Very complete catalog of brand-new components (though no air variables). Usually quick service, $20 "minimum" ($5 charge under $20). When ordering, you may want to be sure to ask about availability and shipping locations; they have several warehouses, and frequently orders will get sent from several warehouses (which drives up the shipping costs). Export orders have a $100 minimum, except for Canada and Mexico.

Digi-Key
701 Brooks Ave. South
P.O.Box 677
Thief River Falls, MN 56701-0677
+1-800-DIGI-KEY (334-4539)
+1-218-681-3380 (FAX)
No minimum, $5 handling under $25, free and very complete catalog, very nice indeed. Prices aren't always the best, but rarely excessive. Weak on RF specialty parts (though they now have the ever-popular NE602N), but they do have blue LEDs.

Active Electronics
11 Cummings Park 237 Hymus Blvd
Woburn MA 01801 Pointe Claire, Quebec, H9R 5C7
+1-800-677-8899 (Main number for US and Canada)
+1-514-630-7410 (International)
+1-514-697-8112 (FAX)
$25 minimum, $5 S&H UPS, catalog has a "$10 Suggested retail price" but they

sent mine for free. They have 8 stores in the US (Santa Clara CA; Chicago IL; Baltimore MD; Woburn MA; Detroit MI; Mt. Laurel NJ; Long Island NY; Seattle WA) and 10 stores in Canada (Quebec City; Montreal (2); Ottawa; Mississuaga; Winnipeg; Calgary; Toronto; Edmonton; Vancouver BC). Each store has its own 800 number and FAX number, call the main number(s). International orders are to be mailed to the Canadian address, but they want payment in US funds! Lots of stuff, oriented more toward supplying last-minute requirements of companies than hobbyists, but perfectly happy to take your money in small doses (stores have no minimum order). The $25 minimum for certain items is no longer explicit, but they note that some items will "ship in factory minimum package quantities", which might be worse.

Maplin Electronics Ltd.,
P.O. Box 3,
Rayleigh,
Essex,
SS6 8LR
U.K.
Phone numbers: your international code +44 702 554161 for sales
+44 702 553935 Fax
+44 702 556001 Tech enquiries(2-4pmGMT)
"Over here [in the United Kingdom] the main hobbyist electronics supplier is Maplin Electronics who stock a wide variety of equipment. They have a catalogue which can be shipped for 10.65 pounds sterling by air or 5.50 pounds sterling by surface mail. They accept Mastercard, American Express and International Reply Coupons. They have at least one type of air-filled variable capacitor!" (Thanks to Kev White at Cambridge University).

Newark Electronics
Send catalog requests to:
Newark Electronics
ATTENTION CATALOG DEPARTMENT
4801 N. Ravenswood Ave.
Chicago IL 60640-4496
+1-312-784-5100
They don't have a single mail address or phone; instead, one is supposed to call the closest of three pages worth of branch offices. I don't feel like typing in the entire list (it's copyrighted, anyway :-), so send email for your "local" distributor, or call their administrative offices at the number above. They have a $25 minimum order; they are a Real Distributor, but accept small orders (over the minimum, of course). Their catalog currently 1248 pages; they are very complete (except, of course, for my favorite scarce item, the air-variable capacitor). Note that the catalog prices tend not to match reality all that often, so order by phone rather than by mail; prices tend to be higher than other places, but they have a lot of things that are hard to find from other outlets. Also note that they have six Canadian offices, and one UK office, and will take international orders at 500 N. Pulaski St., Chicago IL 60624-1019, +1-312-784-5100
(FAX +1-312-638-7652, TLX 6718690 NEWARK U).

Arrow Electronics, Inc. Catalog requests to:
Catalog Division Catalog Division
1860 Smithtown Ave. 25 Hub Drive
Ronkonkoma NY 11779 Melville NY 11747-9828
+1-800-93-ARROW
Minimum $25; they no longer have a catalog. They are a Real Distributor, but also didn't mind my placing a personal order (a couple of years ago).

MCM Electronics
650 Congress Park Drive
Centerville OH 45459-4072
+1-800-543-4330
+1-800-824-TECH (product questions)
+1-513-434-6959 (FAX)
Minimum $20 ($25 for charge cards, and they don't take personal checks), handling $1.95 + shipping. Oriented toward repair technicians, really heavy on VCR parts and somewhat overpriced doodads, lots of useful stuff not easily found elsewhere.

Fordham Radio Supply
260 Motor Parkway
Hauppauge NY 11788-5134
+1-800-695-4848
Tools for technicians. One or two items are not outrageously overpriced.

Jameco
1355 Shoreway Road
Belmost CA 94002
+1-800-831-4242
+1-800-237-6948 (FAX)
+1-415-592-8097
$30 minimum order (was $50), >$5 shipping & handling. Their most recent catalog may have reversed a long trend of abandoning parts in favor of PC compatibles, or it may not; one can always hope.

JDR Microdevices
2233 Samaritan Drive
San Jose CA 95124
Orders: +1-800-538-5000
+1-408-559-1200
FAX: +1-800-538-5005
+1-408-559-0250
Cust. Service: +1-800-538-5001
Tech Support: +1-800-538-5002
BBS: +1-408-559-0253

No minimum, $5+ shipping. Mostly computers now, but they haven't yet decided to abandon components; indeed, they recently dropped their minimum order requirement entirely.

Johnson Shop Products
P.O.Box 160113
Cupertino CA 95016

+1-408-257-8614
+1-408-253-6288 (FAX)
Catalog $1. No minimum. Shipping charge is based on UPS; very small orders that can be sensibly shipped in a first-class letter, include money for first-class postage. New and some used electronic parts.

DC Electronics
P. O. Box 3203
Scottsdale AZ 85271-3203
+1-800-423-0070 (orders)
+1-602-945-7736 (stock/price checks)
+1-602-994-1707 (FAX)
$15 minimum charge order, no minimum for checks, $3 min. shipping&handling. Wide array of ICs, good assortment of electronic components.

EasyTech Inc *** out of business? ***
2917 Bayview Drive
Fremont CA 94538-9932
11 May 93: "EasyTech no longer has an 800 number, and has dropped several lines. The last time I called them (2 months ago), I got the impression they were slowly going down the tubes..." - dts@banyan.com "Both of their 800 number and the customer services numbers are disconnected, and no new numbers are given." - lau@gandalf.rutgers.edu

International Components Corporation
1803 NW Lincoln Way
Toledo OR 97391-1014
+1-800-325-0101 (US & Canada)
+1-503-336-4400 (FAX)
Cabinets&Enclosures; Capacitors; Diodes; ICs; Potentiometers; Resistors; Sockets; Transistors; Books. No minimum order, $2 handling under $25.

Kelvin Electronics
7 Fairchild Ave.
Plainview NY 11803
+1-800-645-9212
+1-516-349-7620
+1-516-349-7830 (FAX)
Minimum order $20; S&H 5% of order ($5 minimum, extra for large stuff, overnight, export (like to Hawaii :-), and etchant; based on UPS charges). Lots of electronic parts & tools, some robotics supplies, model rockets.

H & R Company (Herbach and Rademan)
18 Canal Street, P.O.Box 122
Bristol PA 19007-0122
+1-800-848-8001 (Orders)
+1-215-788-5583
+1-215-788-9577 (FAX)
Minimum order $25 ($5 processing charge under $25), shipping $4.75 under $30; Most items are new overstocks, much regularly stocked stuff as well. Tools, electrical supplies, motors, mechanical components, robotic components.

SURPLUS ELECTRONICS:

All Electronics Corp.
P. O. Box 567
Van Nuys CA 91408-0567
+1-800-826-5432
+1-818-904-0524
+1-828-781-2653 (FAX)
$10 minimum, $4.00 S&H. New and surplus electronics.

Alltronics
2300 Zanker Road
San Jose CA 95131
+1-408-943-9773
+1-408-943-9776 FAX
Surplus electronics. $12 minimum, shipping per UPS.

American Science and Surplus (formerly JerryCo)
P.O. Box 48838
Niles IL 60714-0838 ### New address.
+1-708-475-8440
+1-708-864-1589 FAX
Surplus. *The* surplus place. Lots and lots of surplus. WWII gun cameras,
velcro, laser disk chassis, 6 volt VW wipers motors, LEDs, rubber brains,
you name it, they've had it. Catalogs are a really good time.
$12.50 minimum order (which includes the $4 shipping charge).

BCD Electro ### Out of the mail order business!
P. O. Box 450207
Garland TX 75045-0207
+1-214-343-1770
According to Barrie Britton (24 Feb 94), BCD has gone out of the mail order
business.

Fair Radio Sales
P. O. Box 1105
1016 E Eureka St.
Lima OH 45802
+1-419-227-6573
Surplus electronics. Heavy on parts for old Collins gear.

Hosfelt Electronics
2700 Sunset Blvd.
Steubenville OH 43952
+1-800-524-6464
+1-614-264-5414 (FAX)
No minimum, $3.75 S&H. Surplus electronics.

HSC Electronic Supply (Halted Specialties Co.)
3500 Ryder Street
Santa Clara, CA 95051
+1-800-4-HALTED Orders only
+1-408-732-1573 inside California and outside US

Surplus (new) electronics; new and used test equipment. Minimum order $10
($2 handling charge under $20), plus UPS shipping cost. Has three stores,
of which 3500 Ryder Street is one.

Marlin P. Jones & Assoc.
P.O. Box 12685
Lake Park FL 33403-0685
+1-407-848-8236
+1-407-844-8764 (FAX)
No minimum ($1 fee for under $10), shipping per UPS. Surplus electronics.

R&D Electronics
1224 Prospect Ave.
Cleveland OH 44115
orders: +1-800-642-1123 (tues - fri 9am-4pm sat. 9am-3pm EST)
info: +1-216-621-1121
fax: +1-216-621-8628
$10 minimum. Surplus electronics.
"Also known to stock many components, but this is not discussed in the catalog.
Local store, a cleveland institution, is called Electronic Surplus, Inc., and
has been there since '48. Third generation now runs it." -- wb8foz

Surplus Sales of Nebraska
1502 Jones Street
Omaha, Nebraska 68102
+1-402-346-4750
+1-402-346-2939 (FAX)
New and surplus radio electronics. Wide selection: air variables.
Catalog $3 (free with order, refundable with $25 catalog purchase).

Tucker Surplus Store
1717 Reserve St.
Garland TX 75042
+1-800-527-4642 extension 135
Surplus electronic gear; oscilloscopes and signal generators from the days
when dinosaurs with vacuum tubes roamed the earth (some solid state gear, but
all well used). Prices seem relatively high, and you'll be shocked to learn
how much it costs to ship a 75 pound oscilloscope by motor freight...
[Steve Brown, N8HFI:
In defense of Tucker, the have a broad selection, repair facilities, and
they certify the used equipment to meet the original specification and
warranty it for 90 days. Not every source does this:]

Davilyn Corp.
13406 Saticoy St.
North Hollywood, CA 91605-3475
+1-800-235-6222 (Ex. CA)
+1-818-787-3334 (CA)
+1-818-787-4732 (FAX)
Surplus electronic gear.
[has much better prices [than Tucker], but sells used equipment as-is. -N8HFI]

SPECIALTY COMPONENTS:

JAN Crystals
2341 Crystal Drive
P.O. Box 06017
Fort Myers FL 33906-6017
+1-800-JAN-XTAL (Monday through Thursday)
+1-813-936-3750 (FAX)
+1-813-936-2397 (plant)
They make crystals. Minimum order is $10, which might be one crystal, or might be two.

Crystek Corporation
2351/2371 Crystal Drive
P.O. Box 06135
Fort Myers FL 33906-6135
+1-800-237-3061 (M-F) (US and Canada but not Alaska and Hawaii)
+1-813-936-2109
+1-813-939-4226 (FAX)
They make crystals too. They were the cheapest last time I ordered, but I don't have an up-to-date price list. It took about 4 weeks, and they had said it would take 6.

ICM (International Crystal Manufacturing Co., Inc.)
701 W. Sheridan
PO Box 26330
Oklahoma City OK 73126-0330
+1-800-426-9825
More crystals. They were more expensive, but they have lots of pre-made crystals for various rigs, so they would probably be faster.

Amidon Associates
2216 East Gladwick Street
Dominiguez Hills, CA 90220
+1-213-763-5770
+1-213-763-2250 (FAX)
Toroid cores and related things. Very fast service. Now takes MC/Visa and phone orders.

Palomar Engineers
Box 455
Escondido CA 92033
+1-619-747-3343
Toroid cores and shielding beads.

RF PARTS
435 South Pacific Street
San Marcos CA 92069
+1-800-RF-PARTS (Orders only)
+1-619-744-0700 (main order line & delivery info)
+1-619-744-0750 (customer service, warranty, tech & applications, 10AM-4PM)
+1-619-744-1943 (FAX)
Tubes and transistors. $2 handling below $20 for US orders; $5.50 minimum

handling for Canada orders; they take foreign orders (but no handling info was given in the QST ad).

K2AW's Silicon Alley
175 Friends Lane
Westbury NY 11590
+1-516-334-7024
Free catalog, $10 minimum order. Semiconductors, in particular high-voltage diodes.

Small Parts, Inc. [New address and phone, 23 Dec 91]
13980 NW 58th Court
P.O. Box 4650
Miami Lakes, FL 33014-0650
+1-305-557-8222 Order department
+1-305-557-7955 Customer Service (ask for Mirta)
+1-305-558-1255 Catalog (ask for Elizabeth)
+1-305-557-8004 Custom-made Parts (ask for Ziggy)
+1-305-557-8005 Non-standard Sizes
of catalog parts (ask for Eric)
+1-800-423-9009 Toll free FAX line
$12 minimum. Mechanical parts, metal stock, Teflon(R) sheets, tools, wire-size drill bits (as in #61 size for PC board holes).

KITS:
(The terse "Note:" descriptions are from the ARRL Kit List courteously supplied by Ed Hare and Mike Gruber at the ARRL. For a much more complete list of kit suppliers, use the ARRL email server; send the following as the text of a mail message:

help
index
quit

to the address info@arrl.org)

624 Kits
171 Springlake Drive
Spartanburg SC 29302
QRP kits (including some designs from W1FB's books) and some parts.

A&A Engineering
2521 W. LaPalma, Unit K
Anaheim CA 92801
+1-714-952-2114
Kits, some components, some books. S&H $4.50, catalog is free with SASE (2 oz postage).

Antique Electronic Supply
6221 S. Maple Ave.
Tempe, AZ 85283
+1-602-820-5411
Note: Broadcast receiver kits

C.M. Howes Communications
Eydon, Daventry,
Northants NN11 6PT
England
Phone: +44 327 60178
QRP, transmitters, receivers, misc. "The Heathkit of England", though with assembly manuals not as detailed, also without the intricate mechanicals of Heathkits.
[Carried by Townsend Electronics (at least) in the US]

Communications Concepts Inc.
508 Millstone Drive
Beaver Creek, OH 45434
+1-513-426-8600
+1-513-429-3811 (FAX)
kits for Motorola Applications Notes (amplifiers and the like), small assortment of components (chip capacitors, transistors). $4 Shipping&Handling.

Down East Microwave
Box 2310, RR#1
Troy, ME 04987
+1-207-948-3741
+1-207-948-5157 (FAX)
(Bill Olson, W3HQT) Microwave antennas and equipment, including kits for transverters and amplifiers. Free catalog available.

FAR Circuits
18N640 Field Court
Dundee IL 60118
Printed circuit boards for articles in the usual ham magazines. SASE for list. $1.50 shipping and handling per four boards.

Hamtronics, Inc.
65 Moul Road
Hilton, NY 14468-9535
+1-716-392-9430
Note: Amateur, general interest

Kanga Products # See also Kanga US below
Seaview House, Crete Road East
Folkestone CT18 7EG UNITED KINGDOM
Tel/Fax 0303-891106
QRP Kits, components. SAE (6"x9") for catalog.

John Langner WB2OSZ
115 Stedman St.
Chelmsford, MA 01824-1823
+1-508-256 6907
Slow Scan Television for IBM PC.

Lake Electronics
7 Middleton Close
Nuthall

Nottingham NG16 1BX
England
Note: Amateur

Mercury Systems
15 Lakeside Dr.
Marlton, NJ 08053
+1-609-596-3304
Note: the ARRL Kit list didn't say what they carry; I don't (yet) know
either.

Penntek Electronics
14 Peace Dr.
Lewistown, PA 17044
+1-717-248-2507
Note: The Neophyte Receiver, QST

Ramsey Electronics
793 Canning Parkway
Victor NY 14564
+1-716-924-4560
Amateur radio and hobby kits. The ham kits are all pretty simple and
pretty inexpensive, and you get about what you pay for. Their new
VHF transceiver kits (144, 220, 440) look pretty interesting. Many have
complained about the quality of their kits, though.

Tejas RF Technology
P.O.Box 720331
Houston TX 77272-0331
+1-713-879-9300
+1-713-879-9494 (FAX)
Tejas Backpacker-II QRP kit and other things.

Townsend Electronics, Inc.
Box 415
133 N. 1st Street
Pierceton IN 46562
+1-800-944-3661 (US only)
+1-219-594-3661
+1-219-594-5580 (FAX)
C. M. Howes Communications kits. Radio mounts. RSGB and ARRL publications.
$1 for catalog. $4 shipping & handling.

{See also RadioKit, Oak Hills Research}

LITTLE GUYS:

Oak Hills Research
20879 Madison St.
Big Rapids, MI 49307
+1-800-842-3748
+1-616-796-0920
+1-616-796-6633 (FAX)

Send $1 for a flyer. Some parts, QST article kits, transceiver kits,
QRP stuff in general (they inherited the stock from Small Parts Center
when they closed).

Dan's Small Parts And Kits (Formerly KA7QJY Components)
1935 S. 3rd W. #1
Missoula MT 59801
+1-406-543-2872
Send a business-size SASE for a current list of parts. RF parts, including
vernier drives and air variables; now also offers kits. $3.75 shipping,
no minimum. Fast service, lots of satisfied customers.

Kanga US
Bill Kelsey
3521 Spring Lake Dr.
Findlay, OH 45840
+1-419-423-5643
call between 7 - 11 pm eastern time please. stamp for a catalog.
"I import kits from Kanga in the UK - most of them come from
SPRAT - the journal of the G-QRP Club. I also have the Super Tee Antenna
Tuner, and a range of kits from Elktronics that are based on the DDS
articles in 73 Magazine."

R&R Associates
3106 Glendon Avenue
Los Angeles, CA 90034
+1-213-474-1315 (res)
[Richard Rathburn, KB6NQ] "I mainly sell pc boards from QST, Radio
Electronics, etc., and a few of in-house design. I also sell IC's, etc."
Send a SASE every now and then for his most recent flyer. He also has boards
for some Motorola Application Notes. (Jan 94 -- a member of the QRP mailing
list reports some dissatisfaction with R&R.)

CW Technology
7328 Timbercreek Court
Reynoldsburg, OH 43068-1181
COD Orders at 800-547-7479
"I have a small (just me) mail order company through which I sell kits.
My starter products were kits for computer<->transceiver interfaces to go
along with my 2/93 QST article. Since, I have added a programmer kit for
the MC68HC705K1 microcontroller and an optoisolated stepper motor controller
kit. I also sell the PCBs and difficult parts for these projects."
- Wally Blackburn AA8DX

MANUALS:
Eico Electronic Instruments Co., Inc.
363 Merrick Rd
Lynbrook NY 11563
Note: No current kits, EICO manuals and schematics only

PUBLICATIONS:

NUTS & VOLTS MAGAZINE
430 Princeland Court
Corona CA 91719-9938
+1-800-783-4624 (subscriptions)
+1-714-371-3052 (subscribe by FAX)
All advertisements magazine (though they've just publishing small projects). Issues are $2.00 (at least, that's the price on the cover), subscriptions are (third class mail, USA:) $17/1 year, $31/2 years, (first class mail USA) $34/1 year, (Canada/Mexico) US$35, (other foreign, air mail) US$70, (other foreign, surface) US$39. A subscription also entitles you to one free classified ad of 40 words.

Ham Trader Yellow Sheets
PO Box 15142
Seattle WA 98115
"SUBSCRIPTIONS: U.S.: 24 Issues(1 yr) $16.50 50 Issues(2 yrs + 2 issues) $32. 75(3 Yrs + 3) $48. CANADA & MEXICO: 24/$20. 50/$39. 75/$58. FOREIGN: $38 a year sent Airmail. Published 2 ISSUES A MONTH sent 1st Class Mail... NO LONG WAIT FOR AD CIRCULATE! NOTE: A $4/4 issue MINI-SUBSCRIPTION may be ordered by potential subscribers, or WITH AN AD to qualify for the Special Subscriber Ad Rates given below:" Non-subscriber ads $1/{word,number,group} per insertion; subscribers: businesses or other for-profit sales $0.75 per word; ads involving items solely from or for your own use $0.35 a word; hamfest ads $0.35. Ads and ads with subscriptions should be sent to POB 10253 Sarasota FL 34278 during the winter; spring through fall they go to POBox 2057, Glen Ellyn IL 60138.

Howard W. Sams & Company
P.O. Box 7092
Indianapolis, IN 26207-7092
+1-800-428-SAMS
Publishers of SAMS PHOTOFACTS and many other electronics books. There is an Annual Index of SAMS PHOTOFACTS whose cost I have forgotten. In-print Photofacts run between $14.95 to $39.95 (for computer Photofacts); they will photocopy out-of-print Photofacts for $11.95 + $2.50S&H for one page, plus $.55 per page thereafter.

RF Design Magazine
P O Box 1077
Skokie IL 60076-9931
+1-312-762-2193
A magazine for professional RF designers. Subscriptions are $38 per year in the US, $48 in Mexico and Canada, $51 elsewhere, unless you appear to be a "qualified subscriber" (i.e. are in serious danger of convincing your company to buy a $12,000 spectum analyzer based on an ad) in which case it's free. Heavy on theory, and even the advertisement articles are educational.

Electronics Now (formerly Radio Electronics)
Subscription Service
P.O. Box 51866
Boulder CO 80321-1866
+1-800-999-7139

A magazine for thumb-fingered electronics hobbyists. Subscription rate on the bingo card in the November issue (the latest I was able to dig up) was $19.97 per year.

Popular Electronics
Subscription Department
P.O.Box 338
Mt. Morris, IL 61054-9935
+1-800-827-0383
Like Electronics Now. $18.95 according to the latest bingo card I see.

The Computer Applications Journal (Circuit Cellar INK)
P. O. Box 3050
Southeastern, PA 19398-9932
+1-203-872-2204 (FAX)
This magazine is what Steve Ciarcia wanted BYTE to be when it grew up. It focuses on microcontroller applications and other digital projects.
$21.95 per year (12 issues, now) (Canada, Mexico: add $10 surface mail, $20 air mail; other countries: add $28.)

The Radio Craftsman
P.O. Box 3682
Lawrence, KS 66046-0682
Bi-monthly newsletter for homebrewers of amateur radio gear.
Information about electronics construction techniques, components, book reviews, beginning electronics theory, and the occasional construction project. Oriented toward the beginner/intermediate level. Price, $10/year (six issues), $15 outside the U.S. Published by Doug Heacock, AA0MS. Send large SASE for free sample issue.
[Info supplied by Doug Heacock.]

NOTES:

This file, and many others, are available for anonymous ftp from ftp.cs.buffalo.edu. It is also available from another anonymous ftp site, toxicwaste.mit.edu:/pub/archive/sci.electronics/Mail_Order_Companies. (Contact warlord@athena.mit.edu to offer things to the latter)

CHANGES FOR $Revision: 2.16 $

Add Kanga US, Kanga UK, RF Parts.
BCD Electro out of the mail order business.
Add CW Technology.

2136. On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 16:50:26 UTC
From: jangus@skyld.grendel.com
Message-ID: <762195026snx@skyld.grendel.com>
Source record: 270576

In article <jfhCLsBMn.7nJ@netcom.com> jfh@netcom.com writes:

> The ARRL isn't a for-profit organization, and its purpose isn't to make
> money. They provide many free services, such as the reciprocal operating
> information, the file server, etc. They also distribute the net directory
> in electronic form. There may be good reasons for keeping the repeater
> directory under their control, but "we have to make money off of it" isn't
> one of them.

Huh? Excuse me, just because a group is listed as non-profit that doesn't
mean that they have to operate at a loss on everything. The non-profit
aspect only applies to how they are taxed.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2137. Re: INTERNET -- PACKET gateway!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 17:00:38 UTC
From: dadams@cray.com
Message-ID: <1994Feb25.110038.17260@hemlock.cray.com>
Source record: 270577

In article CH1@netcom.com, wa2ise@netcom.com (Robert Casey) writes:

> This probably should be in an FAQ file.
>
> There shouldn't be any real problem with mail from Packet TO internet,
> but the problem lies with the internet TO packet direction. Problem
> is to do with FCC rules. No dirty words are allowed on packet, and
> many forms of commercial or business related messages are not allowed
> eighter. Not sure if you can order a pizza by packet, though. :-)
>
> Basically, this means that someone has to be a moderator and read all
> the mail going to packet. I doubt anyone's got that much time with
> nothing better to do. You could have a computer reject or remove all
> dirty words, but business/commercial related mail would need a human.

Well if computers can check grammar these days, they could probably do
a pretty good job of picking out posts that are business oriented. The
problem here probably is that they would reject many posts that were
not really business oriented in the process due to similarity of language
constructs. However this does not seem to be too high of a price to pay.
^^^^^^^^^^^^^^^^^^^^^^
(Oops! This message probably wouldn't make it
through. ;^)

Identifying obscene material might be a little more difficult than
simply filtering bad language.

Perhaps a newsgroup that was monitored could be linked to a packet
repeater? The group monitor could be the control operator for the
first repeater for that matter?

Sourdough and Ham AA0PV

--David C. Adams internet: dadams@cray.com
Statistician uunet: uunet!cray!dadams
Cray Research Inc. packet: kg0io@tcman.#msp.mn.usa.noam

"The significant problems we face cannot be solved
at the same level of thinking we were at when we
created them." -- Albert Einstein.

2138. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 17:14:30 UTC
From: mikef@pacifier.rain.com
Message-ID: <CLsIK8.FC2@pacifier.rain.com>
Source record: 270478

In article <CLL8pn.LAM@cscsun.rmc.edu> dtiller@cscsun.rmc.edu (David Tiller) writes:
>
>I agree in principle, but wouldn't that be a little loud and distracting
>for the others? A pc keyboard is loud enough! How about cheating? What
>would stop a dishonest person from peering at the keyboard as the characters
>were typed?? Inquiring minds, and all that....
>
What??? Don't all VE sessions have an old-maid schoolteacher
whose sole function is to stand behind those victims - er -
examinees using keyboards/mills and bang them on the knuckles if
they look at their keyboards (touch-typing and all that!)?
She could, perhaps, be persuaded to bang upon the knuckles of
those looking at the keyboards of others, too! :-) :-) :-)

--
Mike Freeman, < K 7 U I J > Internet: mikef@pacifier.rain.com
... We have an equal opportunity Calculus class; it's fully integrated!

2139. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 17:41:55 UTC
From: whs70@dancer.cc.bellcore.com
Message-ID: <2kld93$ovk@dancer.cc.bellcore.com>
Source record: 270479
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <marcbgCLs9GF.GK9@netcom.com>,
Marc B. Grant <marcbg@netcom.com> wrote:
>Yes, the information in the repeater directory is public information, but
>the ARRL compiles the information, and puts it into the format that you
>buy at the stores.
>
>The key here is that this information, unlike the callboopk info, isnot
>simply available from any other source outside the ARRL, unless you want
>to compile the listings yourself.
>
>SO .... it's not like the ARRL is protecting something very sacred, it's
>just that they have alot of man-hours involved in the repeater directory
>project, and if there's anyone that can't understand why they don't want
>to give the information away, well, then, I guess you just don't
>understand business.

But the recent Supreme Court decision (telephone white pages) specifically
rejected the notion that time, money, effort constituted a valid reason
to be protected by copyright (for factual data that is). The court
said that the overall presentation of the data had to constitute a
"creative" presentation. Even if the ARRL directory has a valid
copyright protection, that copyright would (IMHO) only protect the
overall presentation of the data as it appears in the directory today...
that is it being arranged bu band, state, area. The copyright would
not (again IMHO) protect any individual details (the factual aspects
of a repeater...callsign, frequency in/out, location, etc.)

I agree with others that have said ARRL should not be opposed to an
online version, regardless of where the source data comes from. I
feel that way because I see little threat to ARRL Directory sales
from an online capability because the ARRL Directory is targeted
towards mobile use (store in the glovebox) as opposed to an online
directory which can provide sorted outputs to help coordination,
etc. I sure wouldn't want a bunch of 8.5x11 paper sheets of
repeater listings in my car's glovebox....would you?

Again, as an ARRL member, I strongly support the league's overall
goals, but I disagree with them on this issue. ARRL should be
encouraging such on-line capability, indeed the online capability
would be even better if I could send a packet request for info
and then have an autoreply sent back with the data I requested.
That'd be a great way to expand interest in packet.

Cheers,

Standard Disclaimer- Any opinions, etc. are mine and NOT my employer's.

Bill Sohl (K2UNK) BELLCORE (Bell Communications Research, Inc.)
Morristown, NJ email via UUCP bcr!cc!whs70
201-829-2879 Weekdays email via Internet whs70@cc.bellcore.com

2140. MODS REQUEST: IC-2330

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 17:53:03 UTC
From: jangus@skyld.grendel.com
Message-ID: <762198783snx@skyld.grendel.com>
Source record: 270480

In article <2kl5lp$egl@news.udel.edu> walt@diusys.cms.udel.edu writes:

> Dont bother telling me to look at ftp.std.com... Those money-grabbing
> sons-a-bitches want to charge people for accessing their anonymous
> ftp account! I'll gladly look in another site that doesn't have a
> bunch of low-life .com folks running it though.
> --
> ____
> Walt Dabell KD3GS (302)645-4225 walt@diusys.cms.udel.edu
> Computer Specialist - U. of Delaware, College of Marine Studies
> 700 Pilottown Rd., Lewes, DE 19958

Here you have it folks. the Usenet "Clueless Asshole of the Week" winner.

What happened Walt, sit down on the old nutsack this morning?

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2141. Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 18:03:11 UTC
From: grady@netcom.com
Message-ID: <gradyCLsKtB.I3r@netcom.com>
Source record: 270481
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

The FBI just announced their new wiretap bill for 1994.

Among its many provisions, monitoring cordless phone
will be criminalized, just like cellular is now.

Presumably the FCC will have to act to ban all scanners
that can tune the 46.xx range... I might suggest you buy those
continuous range scanners NOW before while they still are
permitted to US Citizens.

My third Pro2006 just arrived, as did my fourth ICOM W2A HT.

For more details of the Draft Bill and analysis by Attorney Mike
Godwin of the Electronic Frontier Foundation, check into
comp.org.eff.news and comp.org.eff.talk or send e-mail to
mech@eff.org.

The EFF will be fighting this bill as hard as it can; you
too can join the battle with us...

KN6JR

--
Grady Ward | compiler of Moby lexicons: | finger grady@netcom.com
+1 707 826 7715 | Words, Hyphenator, Part-of-Speech | for more information
(voice/24hr FAX) | Pronunciator, Thesaurus | 15 E2 AD D3 D1 C6 F3 FC
grady@netcom.com | and Language; all royalty-free | 58 AC F7 3D 4F 01 1E 2F

2142. Re: A transmission line loss question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 18:51:25 UTC
From: tomb@lsid.hp.com
Message-ID: <CLsn1p.B7v@hpcvsnz.cv.hp.com>
Source record: 270482

About a week ago, I posted:

: I have a perverse question about feeding an antenna with a coaxial
: transmission line. This is intended as food for thought. (You've
: been warned ;-)

: Assume you have a 50 ohm antenna you want to use on a single
: frequency in the two meter band. You will be feeding it with
: about 100 feet of coax, which will be cut to an exact integer
: multiple number of half-wavelengths on the operating frequency.
: Which of the following two transmission lines will you choose
: to give lower loss?

: A. 50 ohm air-insulated copper line with 1" OD

: B. 75 ohm air-insulated copper line with 1" OD -- in other
: words, same line as in (A), but a smaller center conductor.

OK, I guess it's time for me to post my solution. First the direct answer, then some explanation.

The 75 ohm line is actually slightly lower loss. This came as a surprise to me when I worked through the calcs, which of course is why I posted the question.

Some practical thoughts:

Though the line is said to be an integral number of half-waves, the feedpoint impedance will not be exactly 50 ohms, because of loss in the line; we should make sure the feedpoint SWR isn't too high. Calcs below show this is probably OK.

Will environmental considerations make this idea impractical? Well, three things I can think of are temperature, humidity and atmospheric pressure. A change in any of these can cause a change in the electrical length of the line and change the SWR seen by the source as a result. My calcs (below) indicate none of these is a problem. Ideally, you would control the humidity in the line, but temperature and pressure probably wouldn't be controlled in a ham application.

Is there a better way? Yes, likely you can get lower loss if you can tolerate the space you need to leave around an open-wire line. A 200 ohm line with 1:4 baluns at each end could work quite well; it would operate at a 1:1 SWR and could be quite low loss if built from, say, 12 gauge or larger wire. 450 ohm line and 9:1 baluns could be an even bigger win. I'll leave the calcs on this to others; they should be straightforward since the SWR would be nominally 1:1.

However, coax is usually easier to install, and the 75 ohm stuff may
be available quite cheap from a cable TV company.

Calcs:

Assumed inner diameter of outer conductor: .875"
Zo=60ln(D/d) where D is outer diameter, d is inner diameter...
so for 50 ohm line, inner conductor is .3802"
For 75 ohm line, inner conductor is .2507"
dB atten for 100 feet of copper coax, perfect surface conditions,
is
A100=.434*(1/d+1/D)*sqrt(f)/Zo
where
d, D are inner and outer diameters in inches
f is freq in MHz
Zo is line impedance
Matched line loss at 146MHz for 100 feet of line is:

50 ohm line: .396dB
75 ohm line: .359dB

(These losses are about 0.1dB lower than the "book" values I
have; but the calcs assume perfect condutor surfaces and no loss
at all caused by dielectrics (supports).)

From a nomograph for additional loss for mismatched load, 1.5:1 SWR:
with .36dB matched loss, around .02dB -- nomograph becomes hard to
read for this case!

Result is that the 75 ohm line is very slightly less loss.

Alternate calc:
nmax = 10^(-Ao/10)

n = nmax * (1 - rho^2)/(1 - rho^2*nmax^2)

where
n = line efficiency (as a simple ratio to 1)
nmax = matched line efficiency
Ao = matched line loss
rho = magnitude of reflection coefficient (.2 for this case)

For the 75 ohm line feeding 50 ohm load, this leads to
nmax = .9207
n = .91767
A = .3732dB = loss in 75 ohm line feeding 50 ohm load

so the loss in the 1.5:1 SWR 75 ohm line is less than the loss in
the matched 50 ohm line.

Yet another alternate calc: see Al Bloom's posting. An
approximate expression for the current along the line is, as

Al notes, 5/6+1/6*cos(x) where x is a measure of distance
along the line. With uniform resistance of the conductors,
this leads to an average loss: find the square root of the
squared current averaged along the length of the line.
The result is sqrt(average(25/36 + 10/36*cos(x) + 1/36*(1/2+1/2*sin(2x))))
for the assumed 1 amp load current. This calcs out to sqrt(51/72)
or .8416 amps, not the .951 amps Al got (simple math error??),
which works out to .963 times the loss in the matched 50 ohm line.
This compares favorably with .944 times, as figured from the
373dB vs .396dB losses calculated above. Both methods have
some errors built in. (BTW, I really liked Al's approach to this
"quiz question": it was very general and shows that the result is
nearly independent of the diameter of the coax.)

Feedpoint impedance calcs (there are other equivalent ways to
look at this, of course):
rhodB at input = rhodB at load + 2*Ao
rhodB = mag of reflection coefficient, expressed in dB
= 20 log (1/rho)
SWR = (1+rho)/(1-rho)
which lead to SWR at input of about 1.45:1 _relative_to_75_ohms_.
This translates to 51.67 ohms or about 1.034:1 SWR. This should
be acceptable, but could be fine-tuned if needed with a simple
matching network.

Environmental considerations:

Pressure and temperature changes in dielectric constant: these
are in the vicinity of 1ppm/C and 1ppm/millibar; this is small
compared with the line length change with temperature and
therefore won't be considered further.

Dielectric constant change with humidity: didn't find any good
info on this; if it is significant, keep the gas in the line
dry...

Line length change with temperature: Linear coefficient of
expansion of copper = .0000171/C. Assume 25C nominal, -15C
minimum and +65C max. This +/-40C range should cover most
applications. It corresponds to about -2F to 149F. The line
can be put in a sheltered spot to keep it out of direct exposure
to the sun, likely a good idea anyway if it has a plastic jacket.
So the nominal 1200 inch length will change by about +/-.82
inches over the +/-40C temperature change. The wavelength at
146MHz is just over 2 meters, so .82 inches corresponds to .010
wavelengths. Using a Smith chart normalized to 75 ohms, we can
see this corresponds to 75*(.689 +/-j .04), or 51.67 +/- j3 ohms.
The SWR could reach about 1.07:1. I think most folk would be

happy with this SWR, but the reactive part could be tuned out trivially with a small variable cap with a knob calibrated in temperature.

73, K7ITM

2143. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 18:55:09 UTC
From: tomb@lsid.hp.com
Message-ID: <CLsn7y.BB1@hpcvsnz.cv.hp.com>
Source record: 270483

Tom Randolph (randolph@est.enet.dec.com) wrote:

: Ok, here's one... 147.345 repeater located in Webster, Mass. has been listed as
: being in "Princeton" since day 1, sometime back in the 70s. The repeater
: apparently was on Mt.Wachusett in Princeton for a short time on a test basis,
: but has been located in Webster since then. No one has noticed this in the past
: 15-20 years?

Similarly, there's a Seattle-area repeater listed for Montlake Terrace which
has been in Lynnwood for quite some time. I caught that one while practicing
for a bunny hunt. It did make the practice more realistic ;-)

73, K7ITM

2144. * SpaceNews 28-Feb-94 *

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 19:04:20 UTC
From: kd2bd@ka2qhd.DE.COM
Message-ID: <9402251904.AA03062@ka2qhd.de.com>
Source record: 270484

```
SB NEWS @ AMSAT $SPC0228
* SpaceNews 28-Feb-94 *

BID: $SPC0228

=========
SpaceNews
=========

MONDAY FEBRUARY 28, 1994

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is
published every week and is made available for unlimited distribution.

* 137 MHz WXSAT NEWS *
======================
NOAA POLAR ORBITING SATELLITES FREQUENCY

[X] NOAA-09 Transmitting normal APT VIS/IR 137.620 MHz
[X] NOAA-10 Transmitting normal APT VIS/IR 137.500 MHz
[X] NOAA-11 Transmitting normal APT VIS/IR 137.620 MHz
[X] NOAA-12 Transmitting normal APT VIS/IR 137.500 MHz
[ ] NOAA-13 Inactive 137.620 MHz
Note: The NOAA Command Center has lost control of this satellite, and
the recovery attempts have been suspended.

METEOR SERIES SPACECRAFT FREQUENCY

[ ] METEOR 2-16 Inactive 137.850 MHz
[ ] METEOR 2-17 Inactive 137.850 MHz
[ ] METEOR 2-18 Inactive 137.850 MHz
[ ] METEOR 2-19 Inactive 137.850 MHz
[ ] METEOR 2-20 inactive 137.850 MHz
[X] METEOR 2-21 Transmitting Normal APT VIS 137.850 MHz
Note: Satellite not heard during night passes.

[ ] METEOR 3-2 Inactive 137.300 MHz
[X] METEOR 3-3 Transmitting Normal APT VIS 137.300 MHz
Note: Satellite not heard during night passes.

[ ] METEOR 3-4 Inactive 137.300 MHz
[X] METEOR 3-5 Transmitting Normal APT VIS 137.300 MHz
Note: Satellite not heard during night passes.

[Info via HP2DFA]

* HF PBBS UPDATE *
==================
```

The WT0N-3 HF Packet Radio BBS in St. Paul, MN on 10.127 MHz now also supports PACTOR communications under the callsign of WT0N. The BBS is available for packet operations Monday through Saturday from 1600 UTC until 2300 UTC. PACTOR operations are currently scheduled during the hours of 23:30 UTC and 04:00 UTC. The system carries all AMSAT bulletins and Keplerian data for OSCAR satellites. It also carries other satellite related items such as "SpaceNews".

The BBS is currently set up as an experiment. Comments and suggestions should be directed to the sysop, BJ Arts at any one of the following addresses:

Packet: WT0N@WB0GDB.#STP.MN.USA.NOAM
Internet: BJARTS@STTHOMAS.EDU
HF PACKET: WT0N-3 (ON 30 METERS)
HF PACTOR: WT0N

[Info via WT0N]

* RS-15 NEWS *
==========
According to reliable sources close to the project, a launch date for RS-15 has still not been firmed up, and the official presentation before the Russian Space Agency has been delayed until 20-Mar-94.

The following is some data pertaining to the transponder carried on RS-15 and its orbital charateristics:

uplink: 145.857 - 145.897 MHz
downlink: 29.351 - 29.397 MHz
beacon 29.398 MHz.....P = 0.4/1.2 W
beacon 29.353 MHz.....P = 0.4/1.2 W
antenna.....1/4 wavelength
height.....2,300 km
inclination.....67 degrees

[Info via Gustavo, LW2DTZ]

* OSCAR TALK AT BERKELEY *
==========
On Thursday, March 3rd, at 7:30 PM, Professor Robert Twiggs of Stanford's newly formed small satellite department will be giving a talk about their amateur radio based satellite program. Professor Twiggs's extensive background in amateur satellites at Weber State University included OSCAR WO-18 and NUSAT I. His positive experience with including OSCAR activities in the education curriculum has led him to establish a program at Stanford. He hopes to get faculty, staff, students and local volunteer engineers to work together in a similar manner as was done at WSU to design, build, launch and operate microsatellites at Stanford. Professor Twiggs will be discussing possible payloads for Stanford's amateur satellites and science payloads for the larger buses that they would like to build.

The talk will be held in downtown Berkeley, CA at UCB's Center for EUV Astrophysics, 2150 Kittredge Street. The CEA is between Shattuck and Oxford Streets, diagonally across from the California Cinema.

A tour of the CEA, including the Science Operations Center for NASA's Extreme Ultraviolet Explorer satellite (EUVE), will be available for those arriving at 7:00 PM.

Will Marchant Center for Extreme Ultraviolet Astrophysics
marchant@cea.berkeley.edu University of California
KC6ROL@N0ARY 2150 Kittredge St., Berkeley, CA 94720 USA

* FO-20 SCHEDULE *
==========
The FO-20 command station announced that a slight malfunction in the onboard command system had been detected. As a result, analog mode operation arranged from 09-Feb-94 will be performed on schedule, but there is a possibility of interruption due to satellite ground station control.

The present schedule is as announced before:

Analog mode:
09-Feb-94 07:15 -to- 16-Feb-94 07:40 UTC
23-Feb-94 08:05 -to- 02-Mar-94 06:40 UTC
09-Mar-94 07:05 -to- 16-Mar-94 07:30 UTC
23-Mar-94 07:52 -to- 30-Mar-94 08:15 UTC

Digital mode: Unless otherwise noted above.

[Info via Kazu Sakamoto, JJ1WTK]

* SpaceNews VIA SATELLITE *
==========
SpaceNews distribution via the Amateur Packet Radio Network has been improved recently with the help of high-speed "Pacsat" satellites. These polar orbiting satellites now make SpaceNews available to every inch of the planet several times daily at 9600 bps. My sincere thanks to W3QNS for uploading copies of SpaceNews to the KITSAT OSCAR-23 satellite and making them available for all KO-23 satellite users.

* CONGRATULATIONS! *
==========
Congratulations to Jeff Ward, G0/K8KA, who recently earned his Doctorate degree. Jeff has been instrumental in the design of not only OSCAR satellite hardware, but also the ground station software that is used for Pacsat communications. His work has had a great impact on emerging microsatellite and digital communications technology, and we all look forward to working with him in future satellite projects and in expanding the communications resources available to Amateur Radio operators worldwide.

* THANKS! *
==========
Thanks to all those who sent QSL cards, letters, and messages of appreciation regarding SpaceNews, especially:

N2HZK KB5ROV EI6EH G8INE

* FEEDBACK/INPUT WELCOMED *
==========
Mail to SpaceNews should be directed to the editor (John, KD2BD) via any
of the following paths:

FAX : 1-908-747-7107
PACKET : KD2BD @ N2KZH.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College
Lincroft, New Jersey 07738
U.S.A.

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
John A. Magliacane, KD2BD * /\/\ * Voice : 1-908-224-2948
Advanced Technology Center |/\/\/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
Brookdale Community College |\/\/\/| Internet: kd2bd@ka2qhd.ocpt.ccur.com
Lincroft, NJ 07738 * \/\/ * Morse : -.- -.. ..--- -... -..

2145. Re: Money grabbing SOB's at STD.COM (was Re: ftp for files)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 19:24:13 UTC
From: steve@hi.com
Message-ID: <steve-250294142231@brainiac.hi.com>
Source record: 270459

In article <2kl5bf$egl@news.udel.edu>, walt@diusys.cms.udel.edu (Walt Dabell) wrote:
> I think it's a goddamn shame those cheap sons-a-bitches at std.com now
> want to charge us internetters for accessing their system! Anybody got
> any info on a system where there aren't a bunch of money-grabbing .com
> types running it?
> --
anonymous ftp still works; it appears that the ftp site on world has changed from world.std.com to ftp.std.com.

```
Connected to world.std.com.
220 world FTP server (Version 6.19 Wed Nov 24 18:28:15 EST 1993) ready.
Name (world.std.com:steve): anonymous
530-
530- Sorry, there are currently too many FTP sessions connected to
530-"world.std.com".
530-
530- The FTP archive is being moved to "ftp.std.com". Unlimited
530-connections are allowed there, so please use it instead.
530-
530 User anonymous access denied.
Login failed.
ftp> close
221 Goodbye.
ftp> open ftp.std.com
Connected to ftp.std.com.
220 ftp FTP server (Version wu-2.1c(1) Sun Feb 13 14:46:20 EST 1994) ready.
Name (ftp.std.com:steve): anonymous
331 Guest login ok, send your complete e-mail address as password.
Password:
230-
230-Hello!
230-
230-This is the anonymous FTP area for world.std.com, a public access Unix
230-system. Accounts directly on the system are available via telnet or
230-direct-dial (617-739-9753, 8N1, V.32bis (14.4K), V.32 (9600), 2400,
etc.),
230-login as new (no password) to create an account. Accounts are charged
230-at $5/mo+$2/hr or $20/20hrs/month, your choice. Grab the details in
230-the world-info directory here if interested.
230-
230-
230-Please read the file README
230- it was last modified on Wed Apr 21 16:46:51 1993 - 310 days ago
```

```
230 Guest login ok, access restrictions apply.
ftp>
```

Steve Byan internet: steve@hicomb.hi.com
Hitachi Computer Products (America), Inc.
1601 Trapelo Road phone: (617) 890-0444
Waltham, MA 02154 FAX: (617) 890-4998

2146. Re: online rpt idea

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 19:32:16 UTC
From: whs70@dancer.cc.bellcore.com
Message-ID: <2kljo0$39c@dancer.cc.bellcore.com>
Source record: 270485

In article <CLsFz8.DLF@ucdavis.edu>,
Daniel D. Todd <ez006683@chip.ucdavis.edu> wrote:
>I will be happy to begin the posts with the local machines I use.
>I don't know if there is really a need to start a new newsgroup. We could
>just use a subject line begining with REPEATERS: or something. One
>suggestion would be to break up the inforamtion in a different geographic
>format. I really don't like trying to find a UHF repeater in So. Cal.
>with the ARRL directory. This project could be much more accurate than
>the ARRL directory because they only publish what they are given. If a
>repeater owner wants to see his name in the book they can publish
>incorrect PL's and increase the difficulty in accessing the machine. The
>database could also be updated. Perhaps even a comment area for bringing
>up public autopatches etc.

How about providing the grid square location as a locator. That would sure
make things easier to look up for a given route one might be planning
on driving through.

Since most repeaters (at least the 2m nes) cover areas in excess of
the grid square they are located in, using a grid square location
would, I think, offer an interesting and useful approach.

As a concluding note, I again offer the information that no one can
copyright specific facts. The FACT that the K2GDD repeater on
146.895 is located in Morristown, NJ and is an open repeater is
purely factual data that is not protected by any copyright. As such,
gathering such data (IMHO) from any source to populate a software
database that is not printed out in any format resembling an existing
printed directory, would not (again, by my layman interpretation)
be a copyright violation. Think about it...if it was, then once
a directory was created by anyone, then no on else would be able
to create another database using the same information. That's
just not the case. Almanacs contain lots of information as
reference sources. A chronological list of US president with the
dates they served is not anything protectable by copyright.

Just my .02.

An online repeater data base...I hope so.

Standard Disclaimer- Any opinions, etc. are mine and NOT my employer's.

Bill Sohl (K2UNK) BELLCORE (Bell Communications Research, Inc.)
Morristown, NJ email via UUCP bcr!cc!whs70
201-829-2879 Weekdays email via Internet whs70@cc.bellcore.com

2147. TR-9000

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 19:35:50 UTC
From: batchler@pica.army.mil
Message-ID: <9402251435.aa15885@FSAC3.PICA.ARMY.MIL>
Source record: 270486

Tnx Dave for your reply
Yes the rig works okdoki in both FM & CW 10w out
But only the xmit led lights in ssb no power out when i scream into the mike
If you have a book I would gladly pay for copy adr in C.B.
agn tnx 73 KB3TS

2148. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 20:20:52 UTC
From: tomb@lsid.hp.com
Message-ID: <CLsr6t.CM3@hpcvsnz.cv.hp.com>
Source record: 270487
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Daniel D. Todd (ez006683@chip.ucdavis.edu) wrote:
: I hope so! But I'll bet if we get together and pout our own out it would
^^^^

Oh, dear, I do hope we
don't have to start pouting
about all this.

;-) K7ITM

2149. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 20:26:29 UTC
From: levine@mc.com
Message-ID: <2klmtl$hde@jericho.mc.com>
Source record: 270488

```
In article GK9@netcom.com, marcbg@netcom.com (Marc B. Grant) writes:
-->Yes, the information in the repeater directory is public information, but
-->the ARRL compiles the information, and puts it into the format that you
-->buy at the stores.
.........-->
-->SO .... it's not like the ARRL is protecting something very sacred, it's
-->just that they have alot of man-hours involved in the repeater directory
-->project, and if there's anyone that can't understand why they don't want
-->to give the information away, well, then, I guess you just don't
-->understand business.
-->
-->
-->--
-->================================================
--> Marc B. Grant Voice Mail: 214-246-1150
--> marcbg@netcom.com Amateur Radio N5MEI
--> marcbg@esy.com
-->================================================

Well put Mark. Anyway, it is pretty inconvenient to log
into an FTP site while you're doing 55 ;-) to find the
local repeater frequency.

BFD to shell out $6 per year?

---
------------------------------------------------------------
|| // ||\\ //|| //\\ //\\
|| // || \\ // || // //
||// || \\ || // //
||\\ || || || \\ === \\ ===
|| \\ || // || \\ // \\ //
|| \\ || // || \\// \\//
------------------------------------------------------------FTAC
Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599
------------------------------------------------------------
```

2150. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 20:29:27 UTC
From: t1terryb@cascade.ens.tek.com
Message-ID: <2kln37$hh8@cascade.ens.tek.com>
Source record: 270489

In article <2kl3h8$6dh@solaris.cc.vt.edu> benjy@benjy.cc.vt.edu (Ben E. Cline) writes:
>
>In <CLMqI7.Bvn@murdoch.acc.Virginia.EDU> clh6w@faraday.clas.Virginia.EDU
>(Carole L. Hamilton) writes:
>
>>I've got some bad interference on 80 through 10
>>meter bands from an electric fence about 500
>>feet away. The effect is very sharp clicks
>>about 3-4 per second. Analog noise blanker
>>works some but not 100%.
>
>>Anyone have any cures?
>

I have the same problem. But my noise blanker in the FT-980 takes it out,
even on the lowest setting. If you want something to build, you might pick
up some op amps and start with the standard noise blanker circuits found in
the ARRL books and op am cook books. I believe it would be fairly easy to
make a blanker to take out the tic-tic-tic of an electric fence. All you should
need is a quick enough time constant I believe.

Terry Burge
KI7M

2151. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 20:35:58 UTC
From: engberg@edfue0.ctis.af.mil
Message-ID: <2klnfe$t18@iris.mbvlab.wpafb.af.mil>
Source record: 270490

In article <CLMqI7.Bvn@murdoch.acc.Virginia.EDU>, clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) writes:
|> I've got some bad interference on 80 through 10
|> meter bands from an electric fence about 500
|> feet away. The effect is very sharp clicks
|> about 3-4 per second. Analog noise blanker
|> works some but not 100%.
|>
|> Anyone have any cures?
|>
|> Tnx,
|> Ned Hamilton, AB6FI

Throw a small chain across the fence being certain it touches the ground.

--

Bob Engberg
phone: 907-552-7172
e-mail: engberg@ctis.af.mil
packet: K0MVL@KL7AA

2152. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 20:42:00 UTC
From: bennett@erich.triumf.ca
Message-ID: <25FEB199412421258@erich.triumf.ca>
Source record: 270491

In article <CLsn7y.BB1@hpcvsnz.cv.hp.com>, tomb@lsid.hp.com (Tom Bruhns) writes...
>Tom Randolph (randolph@est.enet.dec.com) wrote:
>
>: Ok, here's one... 147.345 repeater located in Webster, Mass. has been listed as
>: being in "Princeton" since day 1, sometime back in the 70s. The repeater
>: apparently was on Mt.Wachusett in Princeton for a short time on a test basis,
>: but has been located in Webster since then. No one has noticed this in the past
>: 15-20 years?
>
>Similarly, there's a Seattle-area repeater listed for Montlake Terrace which
>has been in Lynnwood for quite some time. I caught that one while practicing
>for a bunny hunt. It did make the practice more realistic ;-)

The ARRL repeater directory can only be as accurate as the information provided by the various co-ordination groups. That in turn is only as accurate as the information reported to the co-ordinators by the repeater owners.

I recently found out that a repeater listed at the Whistler ski resort has not been active for 12 years or so, the alledged trustee knows nothing about it, and the DOC shows the call as inactive. I guess the trustee didn't bother to tell the co-ordinators when he took it down.

Peter Bennett VE7CEI | Vessels shall be deemed to be in sight
Internet: bennett@erich.triumf.ca | of one another only when one can be
Bitnet: bennett@triumfer | observed visually from the other
TRIUMF, Vancouver, B.C., Canada | ColRegs 3(k)

2153. Daily Summary of Solar Geophysical Activity for 23 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 20:48:38 UTC
From: oler@rho.uleth.ca
Message-ID: <9402252048.AA12960@rho.uleth.ca>
Source record: 270492
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

23 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 054, 02/23/94
10.7 FLUX=107.4 90-AVG=107 SSN=047 BKI=2333 2001 BAI=007
BGND-XRAY=B2.0 FLU1=7.3E+06 FLU10=2.3E+04 PKI=2333 2232 PAI=011
BOU-DEV=013,038,025,027,011,004,004,005 DEV-AVG=015 NT SWF=00:000
XRAY-MAX= C1.4 @ 2051UT XRAY-MIN= A7.7 @ 0734UT XRAY-AVG= B2.9
NEUTN-MAX= +001% @ 2320UT NEUTN-MIN= -005% @ 1015UT NEUTN-AVG= -1.5%
PCA-MAX= +0.1DB @ 2140UT PCA-MIN= -0.3DB @ 1045UT PCA-AVG= +0.0DB
BOUTF-MAX=55348NT @ 0336UT BOUTF-MIN=55314NT @ 1847UT BOUTF-AVG=55337NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+075,+000,+000
GOES6-MAX=P:+123NT@ 1802UT GOES6-MIN=N:-067NT@ 0355UT G6-AVG=+096,+040,-034
FLUXFCST=STD:105,100,100;SESC:105,100,100 BAI/PAI-FCST=010,010,005/018,015,010
KFCST=2344 4321 2334 4321 27DAY-AP=016,016 27DAY-KP=2343 3433 4335 3221
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 22 FEB 94 was 26.0.
The Full Kp Indices for 22 FEB 94 are: 7o 6o 4o 5+ 4+ 3o 3- 3o
The 3-Hr Ap Indices for 22 FEB 94 are: 140 80 27 54 34 16 11 15
Greater than 2 MeV Electron Fluence for 23 FEB 94 is: 7.9E+08

SYNOPSIS OF ACT

Solar activity was low. A C1 x-ray event occurred at
23/0146Z and another at 23/2051Z both were optically
uncorrelated. The three spot groups visible have been stable.

Solar activity forecast: solar activity is expected to be
low.

The geomagnetic field has been at quiet to unsettled
levels for the past 24 hours. Brief periods of minor to
major storm levels occurred at high-latitudes.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled throughout the period.
Intervals of nighttime substorms are possible during the
next 24 hours.

Event probabilities 24 feb-26 feb

Class M 05/05/05
Class X 01/01/01
Proton 05/05/05
PCAF Yellow

Geomagnetic activity probabilities 24 feb-26 feb

A. Middle Latitudes
Active 25/25/15
Minor Storm 15/15/10
Major-Severe Storm 05/05/01

B. High Latitudes
Active 25/25/20
Minor Storm 20/15/15
Major-Severe Storm 10/05/05

HF propagation conditions continue to gradually improve.
Middle and low latitudes are observing predominantly normal
conditions, while high and polar latitudes are still seeing
periods of minor signal degradation and below-normal
propagation due to residual night-sector substorm activity.
Conditions should return to near-normal over the higher
latitudes over the next 24 to 36 hours and should then remain
normal for at least the next 48 to 72 hours.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7671 N11W55 191 0290 CSO 07 009 BET
7675 S12E28 108 0070 CSO 05 006 BET
7676 N08E40 096 0010 BXO 07 002 BET
7669 N08W73 209 PLAGE
7670 N09W63 199 PLAGE
7674 S14W30 166 PLAGE
7677 N20W25 161 PLAGE
REGIONS DUE TO RET
NMBR LAT
7664 S13 036
7665 N03 029

LISTING OF SOLAR ENERGETIC EVENTS FOR 23 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP SWF

NO EVENTS OBSERVED

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 23 FEBRUARY, 1994

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
63 S20W30 S28W34 S14W54 S10W49 184 ISO POS 006 10830A
64 N85E86 N18W42 N85W90 N85W90 155 EXT
65 S26E40 S28E36 S16E21 S14E24 113 ISO POS 002 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
22 Feb: 0224 0237 0251 C1.2
0448 0453 0459 B5.8

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 1 0 0 0 0 0 0 0 002 (100.0)

Total Events: 002 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2154. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 20:54:52 UTC
From: lakeith@robins.af.mil
Message-ID: <2klois$sll@wrdis02.robins.af.mil>
Source record: 270437

Has anyone thought of asking the ARRL to make the data available via
the ARRL infoserver?

Larry, KQ4BY

2155. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 20:58:31 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-250294135425@waters.corp.mot.com.corp.mot.com>
Source record: 270493

In article <jfhCLsBMn.7nJ@netcom.com>, jfh@netcom.com (Jack Hamilton)
wrote:

> marcbg@netcom.com (Marc B. Grant) wrote:
>
> >SO .... it's not like the ARRL is protecting something very sacred, it's
> >just that they have alot of man-hours involved in the repeater directory
> >project, and if there's anyone that can't understand why they don't want
> >to give the information away, well, then, I guess you just don't
> >understand business.
>
> The ARRL isn't a for-profit organization, and its purpose isn't to make
> money. They provide many free services, such as the reciprocal operating
> information, the file server, etc. They also distribute the net directory
> in electronic form. There may be good reasons for keeping the repeater
> directory under their control, but "we have to make money off of it" isn't
> one of them.

It seems you don't understand the contradiction in the above paragraph.

"not for profit" does not mean "doesn't handle money"!

ARRL has various sources of income, dues (from those of you that aren't
life members :-), sale of publications etc. One of those sources is the
repeater directory.

Every one of those income sources must go to services or support of some
kind or theu show a profit, but on the other hand the money for those
services and support has to come from somewhere!

In other words "we have to make money off it" is a perfectly valid reason,
especially considering the man-years of effort that went into creating the
publication in the first place!

2156. Re: Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 21:00:35 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-250294140024@waters.corp.mot.com.corp.mot.com>
Source record: 270494

In article <2kl23t$bts@clarknet.clark.net>, andy@clark.net (Andrew M. Cohn) wrote:

> Julian Macassey (julian@bongo.tele.com) wrote:
>
>
> : I belong to a group with higher purposes. We would never
> : transmit naked. Furthermore, we would never send QSL cards depicting
> : members in the buff.
>
> We who are members of the Formal Amateur Radio Ham Team (FARHT) know
> about your group, Julian, and we do not consider you well dressed at all.
> Here at FARHT, we wear tuxes while operating; during contests we add top
> hats, tails and gloves. (The top hats add the capacitance necessary to
> work the really big ones; the tails make a great counterpoise.

As a result the tales get to be very tall and the B***S*** gets very deep
:-)

2157. [Q] COLLINS KWM-380 Yaesu ST7000

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 21:06:18 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199402252114.NAA02013@ucsd.edu>
Source record: 270443

> The problem is that he does not have the computer interface
>information for his Collins transceiver for either the hardware connection
>and the software commands.

i don't think the KWM-380 has any kind serial data bus on it. if i remember correctly the inputs are a switch matrix that lets you set the frequency. i don't recall much else being adjustable from remote control (it is a late 70's design radio...15 years ago or so??)

should have been in the manual for the equipment.

bill wb9ivr

2158. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 21:44:15 UTC
From: ham@wam.umd.edu
Message-ID: <2klrff$c01@cville-srv.wam.umd.edu>
Source record: 270495
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Just because there's an online repeater directory out there doesn't mean that there's no market for the ARRL Repeater Directory. As stated previously, who really wants to carry around a bunch of 8-1/2 x 11 inch sheets of paper, anyway?

All of you people out there - have you seen that incredibly neat repeater MAP book out there? It shows up at hamfests all the time, and MANY times have I considered getting a copy, because it's a lot easier to look at a map, compare it to your road map, and SEE what repeaters may be within range. The ARRL seems to not be too worried about that one, and it probably isn't cutting into the league's profits too much.

So why worried about this one?

I am in the process of becoming a life member, and I'm proud of what the ARRL does for its members, but,

Hey, ARRL, this guy's trying to do something useful. Get off his case. Howzabout he SHARES the project with you? Then you get to keep the ever-so-precious data, AND people can still utilize the online DB!

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 125 QSLed on dipoles __________| Dipoles! Antenna!

2159. WANTED: 8K RAM expander for VIC-20

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 21:48:09 UTC
From: rmelick@indiana.edu
Message-ID: <rmelick.55.2D6E7219@indiana.edu>
Source record: 270450

Please E-Mail me with price and terms.

Thank You,
Rick
rmelick@indiana.edu

2160. Re: Hams on Usenet

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 21:48:43 UTC
From: estey@skyler.mavd.honeywell.com
Message-ID: <1994Feb25.154843.1@skyler.mavd.honeywell.com>
Source record: 270496

In article <2kjb2o$s6h@geraldo.cc.utexas.edu>, oo7@astro.as.utexas.edu (Derek Wills) writes:
> estey@skyler.mavd.honeywell.com asks:
>
>>>I have need to contact a number of hams, many whom may be
>>>USENET members. At one point we used to see a 4 (or more)
>>>part index of Hams on Usenet. Is that listing still published
>>>and available somewhere?
>
> Uh-oh, your name isn't Dave Rhodes, is it?
I fail to see the "inside" joke. The simple question stands. Where is the Hams on Usenet list?

Carl

Carl Estey | Home Mail Address: 276 Walnut Lane
Amateur Callsign: WA0CQG | Apple Valley, MN 55124
| Business Address: Honeywell Inc.
Phone: Work (612) 954-7630 | Flight Systems & Test Operations M/S MN15-2370
FAX (612) 954-7495 | 1625 Zarthan Ave. S., St. Louis Park, MN 55416
Home (612) 432-0699 | Packet: WA0CQG @ WA0CQG.#MSP.MN.USA.NA
The nonsense here is of my own making - no one else would want credit!

2161. 2nd CFV: sci.geo.satellite-nav

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 21:53:34 UTC
From: rdippold@qualcomm.com
Message-ID: <sci.geo.satellite-nav-CFV2@uunet.uu.net>
Source record: 270497
Cross-posted to: news.announce.newgroups,news.groups,rec.autos.tech,rec.backcountry,rec.boats,rec.radio.amateur.misc,sci.aeronautics,sci.engr.civil,sci.space.tech,rec.aviation.products,rec.aviation.piloting,sci.geo.geology

LAST CALL FOR VOTES (of 2)
unmoderated group sci.geo.satellite-nav

Newsgroups line:
sci.geo.satellite-nav Satellite navigation systems, especially GPS.

Votes must be received by 23:59:59 UTC, 8 March 1994.

After this CFV appears on news.announce.newgroups, it will be posted
to the GPS Digest <gps-request@tws4.si.com>.

This vote is being conducted by a neutral third party. For voting
questions only contact rdippold@qualcomm.com. For questions about the
proposed group contact Andy Arkusinski <arkusinski_andy@si.com>.

CHARTER

This will be an unmoderated newsgroup.

SCI.GEO.SATELLITE-NAV was chosen because the focus of this group is on
navigation. The SCI.SPACE hierarchy deals with various aspects of
space exploration and use, but this newsgroup deals mostly with
terrestrial applications. The fact that the space segment is in space
is almost incidental to the focus of the newsgroup.

SCI.GEO.SATELLITE-NAV will allow a centralized location for discussion
of global navigation satellite systems (GNSS). The charter
specifically includes the US Global Positioning System (GPS) and
Russian GLONASS, but is also open to discussion of other existing and
future satellite positioning systems.

Some topics that fall under this newsgroup charter are:
* Technical aspects of GNSS operation.
* User experiences in the use of GNSS.
* Information regarding GNSS products.
* Discussion of GNSS policy (such as GPS
selective availability).
* Extensions to basic GNSS technology, such as
differential GPS and pseudolites.
* Navigational uses of satellite systems whose primary
purpose is not navigation, such as a communication
satellite net.

Examples of topics that would not fall under the group charter are:
* Other satellite systems such as communications and

intelligence gathering, except for navigational uses of
such systems.
* Discussion of space policy in general.
* Discussion of areas that may use GNSS, such as
surveying, sailing, or aeronautics, except as they
directly relate to use of GNSS.

GPS, in particular, has turned out to be a technology with a great deal of synergism with many fields. GPS is used, not only for military positioning which was the original purpose, but in applications as diverse as entomology and film making. A major intent of this newsgroup is to share the uses to which GNSS technology is being put, thus inspiring even more innovative uses.

While part of the SCI.GEO hierarchy, this newsgroup does not exclude non-terrestrial uses of satellite navigation. Use of GPS to determine space vehicle position is within the charter.

This group is also intended to function as a resource for newcomers, who can post their questions and receive help from others who have passed that way before.

Rationale: There is no single newsgroup where information on GPS and other satellite navigation systems can be found. Questions are often posted in newsgroups such as sci.electronics, rec.aviation, and sci.aeronautics. To address this lack, the mailing list GPS Digest was started about a year ago, and now has over 400 subscribers.

Recently we attempted to convert GPS Digest from a moderated weekly newsletter to an unmoderated reflector. Submissions, which had been running at 2-3 per week, immediately picked up to 15 the first day. Our resources were overloaded, and the Digest is back to the original format. Many readers indicated the real-time response was helpful and suggested the formation of a newsgroup.

The RFD and CFV will be posted to the GPS Digest mailing list as well as Usenet newsgroups. Only those readers with access to Usenet should cast votes (for or against) formation of the newsgroup.

HOW TO VOTE

Send MAIL to: voting@qualcomm.com
Just Replying should work if you are not reading this on a mailing list.

Your mail message should contain one of the following statements:
I vote YES on sci.geo.satellite-nav
I vote NO on sci.geo.satellite-nav

You may also ABSTAIN in place of YES/NO - this will not affect the outcome. Anything else may be rejected by the automatic vote counting program. The votetaker will respond to your received ballots with a personal acknowledgement by mail - if you do not receive one within several days, try again. It's your responsibility to make sure your vote is registered correctly.

Only one vote per person and per account will be counted. Addresses and
votes of all voters will be published in the final voting results list.

unmoderated group sci.geo.satellite-nav Bounce Ack List -No need to revote
---
berta@dsi.unimi.it
Dave.Begier@vault.tsd.itg.ti.com
PERNILLA@finabo.abo.fi
schmittec@MT2.LAAFB.AF.MIL
schmoelz@eapv38.tuwien.ac.at
wingo%7977.span@Fedex.Msfc.Nasa.Gov
wtm@l14ha-1.jsc.nasa.gov

2162. Weekly Solar Terrestrial Forecast & Review for 25 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 22:00:37 UTC
From: oler@rho.uleth.ca
Message-ID: <9402252200.AA14306@rho.uleth.ca>
Source record: 270498
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

```
--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
February 25 to March 06, 1994

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

---------

ANNOUNCEMENT: The Solar Terrestrial Dispatch is pleased to announce the
release of a major HF and refractive-VHF propagation software package known
as SKYCOM. It is a MUST-HAVE for anyone involved in ionospheric radio
communications. This significant software package will analyze almost every
ionospheric parameter relavent to radio communications and will analyze the
behavior and characteristics of signals that pass between any two points on
the Earth and under almost any type of geophysical condition (geomagnetic
storming, solar flares, polar cap absorption, etc). Graphically ray trace
signals through a real model of the ionosphere, generate extensive global
ionospheric "weather" maps, produce broadcast coverage maps, and MUCH more.
The list of available functions is far too large to list here. For more
information, contact "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".
Pricing information can be obtained from the e-mail address above, by writing
to us through postal mail, or by calling the recorded message at:
403-756-2386 (approx. 3 min). A special offer applies until 31 March 1994.

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SOLAR AND GEOPHYSICAL ACT
-------------------------------------------------

|10.7 cm|HF Propagation +/- CON|SID AU.BKSR DX| Mag| Aurora |
|SolrFlx|LO MI HI PO SWF %MUF %|ENH LO MI HI LO MI HI %|K Ap|LO MI HI|
--|-------|----------------------|-------------------------|----|--------|
25| 098 |VG G F F 15 -10 75| 15 NA NA NA 00 05 15 35|2 10|NV NV LO|
26| 093 |VG G F F 15 -10 75| 15 NA NA NA 00 05 15 35|2 08|NV NV LO|
27| 090 |VG G F F 15 -05 75| 15 NA NA NA 00 05 15 35|2 08|NV NV LO|
28| 090 |VG G F F 15 -05 75| 15 NA NA NA 00 05 15 35|2 08|NV NV LO|
01| 090 |VG G F F 15 00 70| 15 NA NA NA 01 10 15 35|3 12|NV NV LO|
02| 090 |VG G F F 15 00 70| 15 NA NA NA 01 10 15 35|2 10|NV NV LO|
03| 090 |VG G F F 15 00 70| 15 NA NA NA 01 10 20 35|3 12|NV NV LO|
04| 090 |VG F P P 15 -05 65| 15 NA NA NA 02 20 30 30|4 20|NV LO MO|
05| 090 | G P VP VP 15 -20 65| 15 NA NA NA 05 40 50 25|6 35|NV MO HI|
06| 090 | G P VP VP 15 -35 65| 15 NA NA NA 05 40 50 20|6 40|NV MO HI|
```

PEAK PLANETARY 10-DAY GEOMAGNETIC ACT

```
_____________________________________________________________________________
| EXT
| VERY SEVERE STORM | | | | | | | | | HIGH |
| SEVERE STORM | | | | | | | | | MODERATE |
| MAJOR STORM | | | | | | | | * |** | LOW - MOD. |
| MINOR STORM | | | | | | | |***|***| LOW |
| VERY ACT
| ACT
| UNSETTLED |** |** |** |** |***|***|***|***|***|***| NONE |
| QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
| VERY QUIET |***|***|***|***|***|***|***|***|***|***| NONE |
|-------------------|---|---|---|---|---|---|---|---|---|---|------------|
| Geomagnetic Field |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| Anomaly |
| Conditions | Given in 8-hour UT intervals | Intensity |
|_____________________________________________________________________________|
```

CONFIDENCE LEVEL: 65%

NOTES:
Predicted geomagnetic activity is based heavily on recurrent phenomena. Transient energetic solar events cannot be predicted reliably over periods in excess of several days. Hence, there may be some deviations from the predictions due to the unpredictable transient solar component.

60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACT

```
_____________________________________________________________
60 | J |
57 | J JJ |
54 | JJJ JJ |
51 | JJJ JJ |
48 | JJJ JJ |
45 | JJJ JJ |
42 | JJJ JJ |
39 | JJJ M JJ |
36 | JJJ MM JJ |
33 | JJJM MM JJ |
30 | JJJMMMM JJ |
27 | JJJMMMMAA JJ |
24 | AJJJMMMMAA JJ |
21 | A A AA AJJJMMMMAA JJ |
18 | AAA AAA AAA AA AJJJMMMMAAA JJ |
15 | AAAA AAAAA AAA AAA U AJJJMMMMAAAU A JJ |
12 | AAAA AAAAAUAAAU AAA U AJJJMMMMAAAU AUJJ |
9 | AAAAU U AAAAAUAAAU AAA U UU AJJJMMMMAAAU AUJJU |
6 | AAAAUQ UQU AAAAAUAAAUUU AAAUUUQUUUAJJJMMMMAAAUUUAUJJU |
3 |QQQAAAAUQQUQUQQAAAAAUAAAUUUQQQAAAUUUQUUUAJJJMMMMAAAUUUAUJJUQ|
0 |QQQAAAAUQQUQUQQAAAAAUAAAUUUQQQAAAUUUQUUUAJJJMMMMAAAUUUAUJJUQ|
-------------------------------------------------------------
Chart Start Date: Day #362
```

NOTES:
This graph is determined by plotting the greater of either the planetary
A-index or the Boulder A-index. Graph lines are labelled according
to the severity of the activity which occurred on each day. The left-
hand column represents the associated A-Index for that day.
Q = Quiet, U = Unsettled, A = Active, M = Minor Storm,
J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

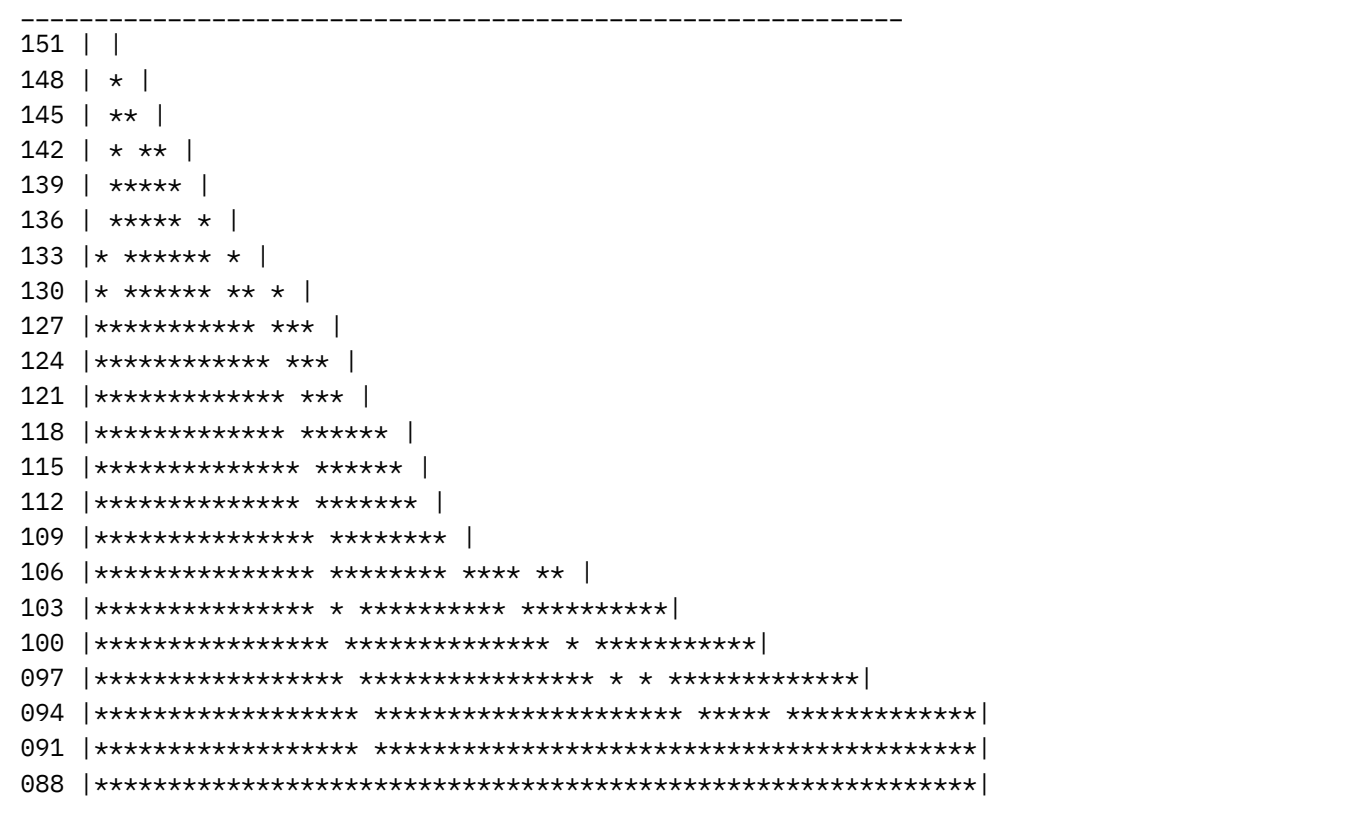


Chart Start: Day #362

GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX

```
------------------------------------------------------------
Chart Start: Day #362

NOTES:
The 10.7 cm solar radio flux is plotted from data reported
by the Penticton Radio Observatory (formerly the ARO from
Ottawa). High solar flux levels denote higher levels of
activity and a greater number of sunspot groups on the Sun.
The 90-day mean solar flux graph is charted from the 90-day
mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS
-----------------------------------------

------------------------------------------------------------
161 | |
154 | * |
147 | * |
140 | ** |
133 | ** * *** |
126 | *** ***** |
119 | *** ****** |
112 | * *** ****** * |
105 |****** ****** *** |
098 |****** ******* **** |
091 |************** **** |
084 |************** ***** * * |
077 |************** ****** *** * * |
070 |*************** ****** *** ***** * * * |
063 |*************** * ******* *** ****** * *** * |
056 |****************** *********** ******* ****** * *|
049 |****************** * ******************************** * *|
042 |********************** * ******************************** ***|
035 |********************** ******************************** ***|
028 |************************************************************ ***|
021 |************************************************************ ***|
014 |************************************************************|
------------------------------------------------------------
Chart Start: Day #362

NOTES:
The graphical chart of sunspot numbers is created from the
daily sunspot number counts as reported by the SESC.

HF RADIO SIGNAL PROPAGATION PREDICTIONS (25 FEB - 06 MAR)

High Latitude Paths

------------------------------------------------------------
| EXT
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD | | | | | | | | | |
LEVEL | FAIR |***|***|***|***|***|***| **| * | | |
```

```
------- | POOR | | | | | |* |* *| * | |
65% | VERY POOR | | | | | | | |* *| **|
| EXT
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------

Middle Latitude Paths

_____________________________________________________
| EXT
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD |***|***|***|***|***|***|***|** | | |
LEVEL | FAIR | | | | | | | *|** | * |
------- | POOR | | | | | | | | *| *|
65% | VERY POOR | | | | | | | | |* |
| EXT
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------

Low Latitude Paths

_____________________________________________________
| EXT
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD |***|***|***|***|***|***|***|***| **| **|
LEVEL | FAIR | | | | | | | |* |* |
------- | POOR | | | | | | | | | | |
70% | VERY POOR | | | | | | | | | | |
| EXT
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------
NOTES:
NORTHERN HEMISPHERE SOUTHERN HEMISPHERE
High latitudes >= 55 deg. N. | High latitudes >= 55 deg. S.
Middle latitudes >= 40 < 55 deg. N. | Middle latitudes >= 30 < 55 deg. S.
Low latitudes < 40 deg. N. | Low latitudes < 30 deg. S.

POTENTIAL VHF DX PROPAGATION PREDICTIONS (25 FEB - 06 MAR)
INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

HIGH LAT

_____________________________________________________ ____________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
```

```
| 40% |***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% | * | * | * | * | * | * | * | | | | 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===| |-------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | | | | | | 60%| | | | | | | |*|*|
| 40% | | * | * | * | * | * | * |* *|* *|* *| 40%| | | | | | | |*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | |*|*|*|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|

MIDDLE LAT

_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%|*|*|*|*|*|*|*|*|*|*|
| 60% |***|***|***|***|***|***|***|***| | | 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===| |-------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | | | | | | 60%| | | | | | | | | |
| 40% |***|***|***|***|***|***|***|***|* *|* *| 40%| | | | | | | |*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | |*|*|*|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|

LOW LAT

_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%|*|*|*|*|*|*|*|*|*|*|
| 60% |***|***|***|***|***|***|***|***|***|***| 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===| |-------------------|
```

```
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | * | * | * | * | * | * | * | * | | | 60%| | | | | | | | | |
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | |*|*|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

NOTES:
These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACT

High Latitude Locations

```
_____________________________________________________
| EXT
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | * | * |** |
------- | MODERATE | | | | | | * |***|***|***|
65% | LOW | * | * | * | * | * |** |***|***|***|***|
| NOT
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INT
-----------------------------------------------------
```

Middle Latitude Locations

```
_____________________________________________________
| EXT
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | * |***|***|
65% | LOW | | | | | | * |***|***|***|
| NOT
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INT
-----------------------------------------------------
```

Low Latitude Locations

```
_____________________________________________________
| EXT
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | |
```

```
70% | LOW | | | | | | | * | * | * |
| NOT
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INT
-------------------------------------------------------
```

NOTE:
Version 2.00b of our Professional Dynamic Auroral Oval Simulation Software Package is now available. This professional software is particularly valuable to radio communicators, aurora photographers, educators, and astronomers. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "COler@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

** End of Report **

2163. New technical e-mail list created

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 22:41:08 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLsxoM.41M@netcom.com>
Source record: 270502
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,alt.radio.scanner,rec.radio.shortwave

```
To subscribe to the list, send a message to: majordomo@world.std.com
In the body of the message, type: subscribe ham-tech

What you will receive if you subscribe to the list:

Welcome to the HAM-TECH e-mail list.

This list was designed for people with technical ham related questions
(antennae, radios, digital communications, etc) to share information with
each other.

If you do not have Usenet access, or don't have time to read news, or you
need information faster than Usenet can provide, or your question doesn't
fall into the catagories Usenet provides, or you simply want more mail,
please feel free to ask your technical questions, offer answers, or
whatever else you have to share.

Feel free to get as technical as you like.

This list is open to all.

To submit your message to the list, e-mail: ham-tech@world.std.com

If you wish to speak with the list's owner, please send e-mail to:
ham-tech-approval@world.std.com

73 to all,
Scott Ehrlich, WY1Z

--
==============================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|----------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
==============================================================================
```

2164. Transformer Failure Modes?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 23:11:42 UTC
From: mebly@eng.umd.edu
Message-ID: <2km0je$jgh@mojo.eng.umd.edu>
Source record: 270460

The proverbial friend of mine has two transformers. They are 110/220 VAC input, 50 VAC output and rated at 15 amps.

He needs 25 volts, not 50. The obvious solution is to feed 110 into the 220 input windings.

Question: Do we have to de-rate the output current to 7.5 amps?

Speculation:

I doubt the I**2 * R heating of the windings is an issue here. What about saturation of the core? Or saturation of the core? Eddy current heating?

My first inclination is to de-rate the output current using the transformer. Any advice? We can't be the first people to do this. :-)

73.

--
Mark Bailey KD4D Motto: Life's too short to drink cheap beer.
mebly@glue.umd.edu Disclaimer: I didn't really say this.

2165. Re: Help - Need ARES Packet Software.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 23:12:59 UTC
From: Gregm@raynet.demon.co.uk
Message-ID: <762217979snz@raynet.demon.co.uk>
Source record: 270449

Bryan,
my thanks to you for moving this program to a more accessible area & to
everyone else on the net who has assisted me in my search. I've downloaded it,
unzipped it, now all we have got to do is make it work :-) !

Thanks & 73,
--
+-------------------------------------+---------------------------------------+
| Greg Mossop G0DUB | 'Even logic must give way to physics' |
| Internet: Gregm@raynet.demon.co.uk | - Spock - Star Trek VI |
+--------------------PGP 2.3a key available at key servers--------------------+

2166. Looking for QSL routes

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 23:14:03 UTC
From: n1ist@netcom.com
Message-ID: <n1istCLsz7G.C2q@netcom.com>
Source record: 270446

I am trying to catch up on my QSLing, and was wondering if anyone has any
QSL info for any of the following. Thanks in advance.
/mike

9Z4PC
C51A
CQ3H
CR3M
EA8AH
GI0SAP
HI8OMA
IU4U
LY5A
OH3PM
OT3K
PA3FNE
PI4TUE
PR4B
UW2F
V26B
V44NK
VP2EJ
VP2EJ
VP2VFP
VY9QR
--
\|/ Michael L. Ardai N1IST Teradyne ATG Boston
--- --
/|\ ardai@maven.dnet.teradyne.com n1ist@netcom.com

2167. IPS Daily Report 25 02 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 23:19:06 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Feb25.231906.13614@ips.oz.au>
Source record: 270499
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 25 February 1994
Summary for 25 February and Forecast up to 28 February
No IPS Warning is current.

1A. SOLAR SU02ARY
Activity: low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 097/044

1B. SOLAR FORECAST
26 February 27 February 28 February
Activity Low Low Low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 095/041

1C. SOLAR CO02ENT
None.

2A. MAGNETIC SU02ARY
Geomagnetic field at Learmonth : quiet to unsettled

Estimated Indices : A K Observed A Index 24 February
Learmonth 10 2233 2322
Fredericksburg 12 03
Planetary 12 05

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
26 Feb 10 Quiet to unsettled.
27 Feb 10 Quiet to unsettled.
28 Feb 10 Quiet to unsettled.

2C. MAGNETIC CO02ENT
None.

3A. GLOBAL HF PROPAGATION SU02ARY
LATITUDE BAND
DATE LOW MI25LE HIGH
25 Feb normal normal fair-normal
PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MI25LE HIGH
26 Feb normal normal fair
27 Feb normal normal fair
28 Feb normal normal fair
3C. GLOBAL HF PROPAGATION CO02ENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SU02ARY
MUFs at Sydney were 10 to 20% above predicted monthly values

T index: 71

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
26 Feb 60 About 15% above predicted monthly values.
27 Feb 60 About 15% above predicted monthly values.
28 Feb 60 About 15% above predicted monthly values.

Predicted Monthly T Index for February is 30.

4C. AUSTRALIAN REGION CO02ENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2168. ARLX010 Kepler film on tv

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-25 23:33:54 UTC
From: marcbg@netcom.com
Message-ID: <$arlx010.1994@ampr.org>
Source record: 270453
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,sbay.hams

```
SB SPCL @ ARL $ARLX010
ARLX010 Kepler film on tv

ZCZC AX42
QST de W1AW
Special Bulletin 10 ARLX010
>From ARRL Headquarters
Newington CT February 24, 1994
To all radio amateurs

SB SPCL ARL ARLX010
ARLX010 Kepler film on tv

Kepler film on TV

NASA Select television will show a 35-minute film on Johannes Kepler
and his formulas for computing orbits on Friday, February 25, at 1
PM Eastern Time.

The film, ''Spaceflight-The Application of Orbital Dynamics,'' also
answers questions about launch locations and their limitations,
according to AMSAT.

NASA Select TV is available on some cable television systems. It is
available direct on Spacenet 2, Channel 9 (3880 MHz, horizontal).
NNNN
/EX

--
================================================
Marc B. Grant Voice Mail: 214-246-1150
marcbg@netcom.com Amateur Radio N5MEI
marcbg@esy.com
================================================
```

2169. Ramsey uC-based Controller

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 00:18:35 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940225161835_65@ccm.hf.intel.com>
Source record: 270457

Text item: Text_1

>Subject: Need info on RAMSEY FX remote tuner
>Does anyone know sources of information on an external digital tuner
>(not using a PC or anything non-portable) to randomly tune throughout
>the FX's entire frequency range? Lee Devlin N3IWP

Lee, I hesitated in this posting... but my good friend Don, KE6AJH, of TechnoLogic Concepts is supposed to be coming out with an 80C51 based controller for the Ramsey FX series of transceivers. Please send me an e-mail (not to this group) and in the meantime, I'll find out how he's coming along.

73, KG7BK, CECILMOORE@DELPHI.COM
(I do not speak for Intel on Internet)

2170. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 00:19:54 UTC
From: peterson@physc1.byu.edu
Message-ID: <1994Feb25.171954.1422@physc1.byu.edu>
Source record: 270500
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <jfhCLsBMn.7nJ@netcom.com>, jfh@netcom.com (Jack Hamilton) writes:
>
> The ARRL isn't a for-profit organization, and its purpose isn't to make
> money. They provide many free services, such as the reciprocal operating
> information, the file server, etc. They also distribute the net directory
> in electronic form. There may be good reasons for keeping the repeater
> directory under their control, but "we have to make money off of it" isn't
> one of them.
>
> Perhaps they're working on their own electronic version?
>
> --
>
> --
> Jack Hamilton Postal: POB 281107 SF CA 94128 USA
> jfh@netcom.com Packet: kd6ttl@w6pw.#nocal.ca.us.na

It would be great if they were. That would make life much easier. The online repeater directory was started, if you remember, after a discussion of how one was very desirable but not available. If this exercise pushes the ARRL into providing us with an electronic version of the directory then, in my opinion, the project has achieved its goal. If they don't do it then somebody else needs to - and if it requires writing a letter to each of the coordinating bodies and trying to get them to provide a copy of their list so we can enter the data and provide the data then so be it. I would just like to see somebody provide it in electronic format so that I can use the nice sorting/searching tools to find what I want without having to wander through pages and pages of fine print that is not organized in exactly the way I would like to see it.

Bryan Peterson, ki7td
ki7td@byu.edu

2171. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 00:22:26 UTC
From: tomb@lsid.hp.com
Message-ID: <CLt2DE.M78@hpcvsnz.cv.hp.com>
Source record: 270501

Bob Levine (levine@mc.com) wrote:
: Anyway, it is pretty inconvenient to log into an FTP site
: while you're doing 55 ;-) to find the local repeater frequency.

But I'd use the database to print out a list in the format
I wanted. Often I want it for a medium-sized area listed by
frequency, not by arbitrary town. I find the ARRL directory to
be very inconsistent in this regard.

: BFD to shell out $6 per year?

For me it's not the $, it the lack of usefulness, ultimately.

2172. Re: cannot access cs.buffalo.edu ftp

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 01:14:45 UTC
From: twright@freenet3.scri.fsu.edu
Message-ID: <2km7q5$dt4@freenet3.scri.fsu.edu>
Source record: 270503

jbloom@arrl.org (Jon Bloom (KE3Z)) writes:
> Jerry Sy (ah301@yfn.ysu.edu) wrote:
> : has cs.buffalo.edu anonymous ftp site stopped accepting anonymous
> : logins ? It does not accept anonymous or ftp as user names
> : anymore.
>
> Try ftp.cs.buffalo.edu, since that's where all the goodies are.
> --
> Jon Bloom KE3Z jbloom@arrl.org

Have you tried it using its port number?

cs.buffalo.edu 2000

Works for me.

Tim KD4OVM
g
--
Tim Wright KD4OVM | T.Wright@msuacad.morehead.edu | Morehead State University
| TWright@freenet.fsu.edu | Tallahassie Freenet Service
| AR098@yfn.ysu.edu | Youngstown Ohio Freenet Service
| KD4OVM@WSU.N8FOW.AMPR.ORG | Try one, I'll get it.

2173. Re: Dayton parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 01:32:33 UTC
From: jmaynard@nyx10.cs.du.edu
Message-ID: <1994Feb26.013233.27156@mnemosyne.cs.du.edu>
Source record: 270504

In article <1994Feb23.221648.9890@picker.com>,
ALAN CUNNINGHAM <CUNNINGHAM_A@whqvax.picker.com> wrote:
>I among other DXers (actually my DXCC count is very close to my weight
>as I approach Honor Roll) could lose a few pounds.

[..]

>You do get some dirty looks with a Johnson Viking II straddled
>on your lap, though.

Things that make you go hmmmmm......

(Then again, who am I to complain? My DXCC count is nowhere near my weight...)
--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"The difference between baseball and politics is that, in baseball, if you
get caught stealing, you're out!" -- Ed Shanks

2174. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 01:34:43 UTC
From: jmaynard@nyx10.cs.du.edu
Message-ID: <1994Feb26.013443.27485@mnemosyne.cs.du.edu>
Source record: 270505

In article <gregCLqFq0.5w8@netcom.com>, Greg Bullough <greg@netcom.com> wrote:
> 2. There is one hell of a conflict-of-interest if the
> ARRL wants to, at once, act as the official frequency
> coordination authority, and then be proprietary with
> the information which it collects. As a matter of
> fact, it would seem that there is an unfair competitive
> advantage.

Uh, Greg...hate to burst your bubble, but the ARRL _isn't_ the official frequency coordination authority. It has explicitly avoided accepting that role.

As much as I would like to see that change, it's not doing it now.

As for the bit about "unfair competitive advantage", wasn't Conway rekeying the data straight from the repeater directory to disk? If so, that _is_ a copyright violation. They can't copyright the facts, but they can copyright the collection of facts into a whole. Just ask Compuserve.
--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"The difference between baseball and politics is that, in baseball, if you get caught stealing, you're out!" -- Ed Shanks

2175. STD.COM Good guys after all. was Re: Money grabbing SOB's...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 01:57:59 UTC
From: walt@diusys.cms.udel.edu
Message-ID: <2kmab7$pmq@news.udel.edu>
Source record: 270506

I apologize to the folks at STD.COM for calling them names. As I said in another post, I was not feeling good this morning and misinterpreted the messages their anonymous ftp site sent me before I got kicked off. I assume they were either having problems, or doing backups, and I jumped to the wrong conclusion.

They do have a very nicely organized section in their anonymous ftp site (ftp.std.com) with amateur radio specific topics. Which is why I was trying to get to them in the first place.:-)
--
Walt Dabell "clueless asshole of the week" (and proud of it!)

2176. Re: ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 02:02:17 UTC
From: rfm@urth.eng.sun.com
Message-ID: <RFM.94Feb25180217@urth.eng.sun.com>
Source record: 270507

In article <2kij3j$h2e@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:

>Consider the following scenario. Assume that there is no method of enforcing
>copyright on lists of facts. Also assume that it costs money to get a list
>together. In absence of copyright, no one will be willing to compile the
>list as they will surely lose money. This is because the moment they get
>the list together, others will rip them off. The end result will be no
>handy-dandy list for us to use. We will be worse off for sure.

This is a reasonable-sounding theory, but it doesn't match the facts as we have them.

We *already* had someone willing to do the work of compiling the online directory for no money. So it's clearly not true that we'd have no list if the ARRL couldn't charge monopoly rents for it (which, at $6, they aren't doing anyway!)

We also have plenty of evidence that people will still buy the ARRL Repeater Directory, since they don't usually have a good Internet feed, or a laptop with CDROM drive, in the car.

Sure, somebody could typeset the online one, have it printed up, and try to distribute it--but the ARRL has the volume to get economy of scale, the distribution network in place to get it out, brand name recognition, and a captive advertising audience in QST. How on earth is a competitor going to match that?

Rich

--
Rich McAllister (rfm@eng.sun.com)

2177. Re: Looking for QSL routes

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 02:08:05 UTC
From: slay@netcom.com
Message-ID: <slayCLt79H.MB6@netcom.com>
Source record: 270508

```
: 9Z4PC VE3FOI
: C51A W3HNK
: CQ3H
: CR3M CS3MAD
: EA8AH
: GI0SAP GI0KOW
: HI8OMA
: IU4U
: LY5A
: OH3PM
: OT3K ON6CK
: PA3FNE
: PI4TUE
: PR4B
: UW2F DK4VW
: V26B WT3Q
: V44NK
: VP2EJ
: VP2EJ N6ZJM
: VP2VFP AB4JI
: VY9QR VE5SF
```

2178. Re: INTERNET -- PACKET gateway!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 02:33:51 UTC
From: jdelancy@tecnet1.jcte.jcs.mil
Message-ID: <9402260233.AA10048@tecnet1.jcte.jcs.mil>
Source record: 270509

>
>Please forgive me, if my question is stupid but I wanted to know!
>
>Thanks.
>
>Yvan Dupont, (VE2YDU)
>

Someone once said (maybe it was my dad) "the only stupid question
is the one that isn't asked".

jd

2179. ARRL Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 03:58:46 UTC
From: jangus@skyld.grendel.com
Message-ID: <762235126snx@skyld.grendel.com>
Source record: 270510

In article <RFM.94Feb25180217@urth.eng.sun.com> rfm@urth.eng.sun.com writes:

[point and counter point on the ARRL repeater directory deleted]

> Sure, somebody could typeset the online one, have it printed up, and try to
> distribute it--but the ARRL has the volume to get economy of scale, the
> distribution network in place to get it out, brand name recognition, and a
> captive advertising audience in QST. How on earth is a competitor going to
> match that?

Simple. "Buy this directory, not a single dime goes toward the ARRL."
Considering how many hmas out there constantly bitch and moan about the
ARRL, that ad line should net millions.

Clever emoticon purposely left off. "Emoticons are the wheelchair ramps
for the humor impaired" Geoff Miller

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2180. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 04:26:49 UTC
From: jfh@netcom.com
Message-ID: <jfhCLtDoq.Bp2@netcom.com>
Source record: 270511

jangus@skyld.grendel.com (Jeffrey D. Angus) wrote:
>
>In article <jfhCLsBMn.7nJ@netcom.com> jfh@netcom.com writes:
>
> > The ARRL isn't a for-profit organization, and its purpose isn't to make
> > money. They provide many free services, such as the reciprocal operating
> > information, the file server, etc. They also distribute the net directory
> > in electronic form. There may be good reasons for keeping the repeater
> > directory under their control, but "we have to make money off of it" isn't
> > one of them.
>
> Huh? Excuse me, just because a group is listed as non-profit that doesn't
> mean that they have to operate at a loss on everything.

It doesn't mean that they have to make a profit on everything, either. I
don't think that a computer-based directory and the printed directory would
be in competition anyway. I'd get both. I have a printed callbook AND a
CD-ROM callbook. They have different purposes.

> The non-profit
> aspect only applies to how they are taxed.

That is a terminological inexactitude. Non-profits have to justify their
tax status. Non-profit status has an effect on how organizations are run
and what they can do.

--

Jack Hamilton Postal: POB 281107 SF CA 94128 USA
jfh@netcom.com Packet: kd6ttl@w6pw.#nocal.ca.us.na

2181. Re: Super Morse version 4.04 question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 04:51:16 UTC
From: root@jackatak.raider.net
Message-ID: <6N9Bic6w165w@jackatak.raider.net>
Source record: 270512

rwiley@magnus.acs.ohio-state.edu (Robert H Wiley) writes:
> I have been using Super Morse version 4.04 for a while now, and have
> encountered a problem while attempting to use it in Windows v. 3.1.
Oooops! The problem you are having has to do with all the things
Windows thinks it needs to be involved in, even though you are totally
unaware of all the activity... after all, it is Bill, and it is M/S
under neath all that...

When you select a DOS prompt from Windows, all the garbage gets hauled
around with you and the machine is kept VERY busy with its own
housekeeping... and doesn't care that YOU want to play with
SuperMorse.
The same is true of many other TIME dependent programs that simply will
NOT work under windows and require the *full* "attention" of the
machine...like SuperMorse.

It is a problem with WINDOWS and NOT with SuperMorse. When you want to
do code practice, just quit windows and go for it... if that is too
much trouble, get one of those wimpy plug and play not problem to use
with built in graphics interface (Mac) and enjoy life as a user... ;^)
73,
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

2182. Fcc Regulations.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 05:08:06 UTC
From: hmwaljee@athena.mit.edu
Message-ID: <2kmlfm$e2b@senator-bedfellow.MIT.EDU>
Source record: 270452

Hello. I am not sure if this is 100% relevant for this channel, but I figure that the people that would know anything about the area of my question are subscribed to this channel.

I am a student here at MIT that is implementing a project to "track" the MIT shuttles, so that students logged into the network will be able to find out where it is and when to wait. In order to do this, I was probably going to use a numerical code, transmitted using touch-tone (DTMF) encoders and decoders,

In order to do this, however, I would have to use a frequency on which to transmit. Thus, this project then finds itself at the hands of the FCC. I was wondering if anyone out there knows about the regulations concerning broadcasting "beeps" over the range of a few square miles in a major city. This will probably be a signal in the range of 10^1 kW. Which regulations apply? How do I find out about them? What radio bands would/could I use? Any idea as to the efficiency of such transmission?

Anyway, thanks for listening, and I hope someone out there has both the answers and the time to write back.

Replies to: hmwaljee@mit.edu

Thanks again,

2183. Re: Need info on RAMSEY FX remote tuner

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 05:58:50 UTC
From: kg7bk@indirect.com
Message-ID: <CLtHy3.396@news.direct.net>
Source record: 270513

Lee Devlin (devlin@lf.hp.com) wrote:

: Does anyone know sources of information on an external digital tuner
: (not using a PC or anything non-portable) to randomly tune throughout
: the FX's entire frequency range?
: Lee Devlin N3IWP | HP Little Falls Site | phone: (302) 633-8697

Don, KE7AJH, of TechnoLogic Concepts is working on one. I'll see him in about a week and will ask about it and send you an e-mail.

73, Cecil, kg7bk@indirect.com

2184. 486/33 to trade for 2m

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 06:06:22 UTC
From: mcobb@netcom.com
Message-ID: <mcobbCLtIAo.Lu5@netcom.com>
Source record: 270444

I have a 486/33 PC w/8 meg ram, dual 220 hard disks, 3com ethernet controller, mouse, VGA monitor with DOS 6.0, Workgroup for windows 3.1, powerpoint, word, excel, aldus persuasion, etc etc etc this puppy is loaded with code. I would like to trade for a 2m/440 packet rig. send mail to mcobb@netcom.com or call 408-255-3228 anytime.
M

2185. Re: MFJ speaker/mics for Yaesu FT530

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 06:36:31 UTC
From: John Kent <jokent@delphi.com>
Message-ID: <RIzpuP3.jokent@delphi.com>
Source record: 270514

Scott Ehrlich <wy1z@netcom.com> writes:

>I am considering getting an MFJ speaker/mic for my FT530 mainly due to
>the price.

I would advise strongly against the MFJ. I bought one once and was very dissatisfied with the quality, both of the sound and the workmanship. Receive audio became distorted at only moderate volume...in order for it to be clear, you would have to have the volume so low that you would have to hold it against your ear to hear it over road noise. Also, the wires began to break within a few weeks. I bought a Yaesu and have had years of good service from it.

73 & GL de AA2DY/John Kent/jokent@delphi.com

2186. Daily Summary of Solar Geophysical Activity for 25 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 06:58:08 UTC
From: oler@rho.uleth.ca
Message-ID: <9402260658.AA17150@rho.uleth.ca>
Source record: 270515
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

25 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 056, 02/25/94
10.7 FLUX=096.7 90-AVG=107 SSN=053 BKI=2243 2322 BAI=011
BGND-XRAY=B2.1 FLU1=4.0E+06 FLU10=1.9E+04 PKI=1254 2232 PAI=014
BOU-DEV=016,014,065,028,010,023,014,019 DEV-AVG=023 NT SWF=00:000
XRAY-MAX= C1.4 @ 0418UT XRAY-MIN= B1.6 @ 2328UT XRAY-AVG= B3.8
NEUTN-MAX= +002% @ 2100UT NEUTN-MIN= -004% @ 0325UT NEUTN-AVG= -0.3%
PCA-MAX= +0.3DB @ 1110UT PCA-MIN= -0.2DB @ 0955UT PCA-AVG= +0.1DB
BOUTF-MAX=55352NT @ 0642UT BOUTF-MIN=55314NT @ 1914UT BOUTF-AVG=55335NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+067,+000,+000
GOES6-MAX=P:+118NT@ 1848UT GOES6-MIN=N:-091NT@ 0815UT G6-AVG=+090,+038,-032
FLUXFCST=STD:095,095,095;SESC:095,095,095 BAI/PAI-FCST=010,008,008/010,008,008
KFCST=3223 4222 2223 4322 27DAY-AP=008,009 27DAY-KP=1233 3212 3123 3332
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 24 FEB 94 was 38.5.
The Full Kp Indices for 24 FEB 94 are: 1o 1+ 1o 2- 2+ 1+ 2- 1-
The 3-Hr Ap Indices for 24 FEB 94 are: 4 5 4 6 10 5 7 3
Greater than 2 MeV Electron Fluence for 25 FEB is: 2.2E+08

SYNOPSIS OF ACT

Solar activity was low. Only one C-class flare occurred
during the period which was not correlated optically with any
region. A 5 degree filament near S30E42 disappeared between
25/0027Z and 25/1421Z and an 11 degree filament disappeared
between 25/0810Z and 25/0824Z near N11W71. A new region was
assigned today as Region 7679 (N02E25).

STD: Moderate Ca XV emissions were observed on the northwest
limb from the same area which had extremely intense emissions

two weeks ago. A full-disk Yohkoh x-ray image has been appended to this report showing the location of the enhanced west-limb x-ray emissions and the associated location of the Ca XV emissions.

Solar activity forecast: solar activity is expected to be low.

The geomagnetic field has been at quiet to unsettled levels for the past 24 hours. An isolated period of active levels occurred during the nighttime sectors at mid-latitudes with minor to major storm levels at high-latitudes.

Geophysical activity forecast: the geomagnetic field is expected to be quiet to unsettled through the period.

Event probabilities 26 feb-28 feb

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 26 feb-28 feb

A. Middle Latitudes
Active 15/15/15
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 20/20/20
Minor Storm 10/10/10
Major-Severe Storm 05/05/05

HF propagation conditions were near-normal over all regions. A brief period of enhanced activity between 06:00 and 12:00 UTC resulted in minor signal degradation for affected high-latitude paths, although conditions improved to normal thereafter. Normal propagation conditions will persist throughout the next 72 hours, through 28 February inclusive.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7671 N11W82 191 0190 DAO 05 004 BET
7675 S11E03 106 0030 CSO 05 003 BET
7678 S15E62 047 0100 HSX 02 001 ALPHA
7679 N02E25 084 0010 BXO 03 005 BET
7674 S14W56 165 PLAGE
7676 N08E14 095 PLAGE

7677 N20W51 160 PLAGE
REGIONS DUE TO RET
NMBR LAT
7666 N18 350

LISTING OF SOLAR ENERGETIC EVENTS FOR 25 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0216 0217 0217 140

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 25 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
25/A0027 B1421 S30E42 DSF
25/0140 0424 0526 LDE C1.4 226
25/0810 0824 N11W71 DSF
25/1133 1201 1243 LDE B8.1 70

INFERRED CORONAL HOLES: LOCATIONS VALID AT 25/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
63 S26W56 S32W62 S08W76 S08W76 184 ISO POS 007 10830A
64 N60W22 N20W90 N24W90 N60W22 168 EXT
65 S34E16 S34E16 S08W12 S08W12 115 ISO POS 000 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
24 Feb: 0311 0315 0323 B4.6
0756 0836 0903 B2.9
1757 1833 1900 C2.9
2111 2117 2121 SF 7670 N12W66

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7670: 0 0 0 1 0 0 0 0 001 (25.0)
Uncorrellated: 1 0 0 0 0 0 0 0 003 (75.0)

Total Events: 004 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

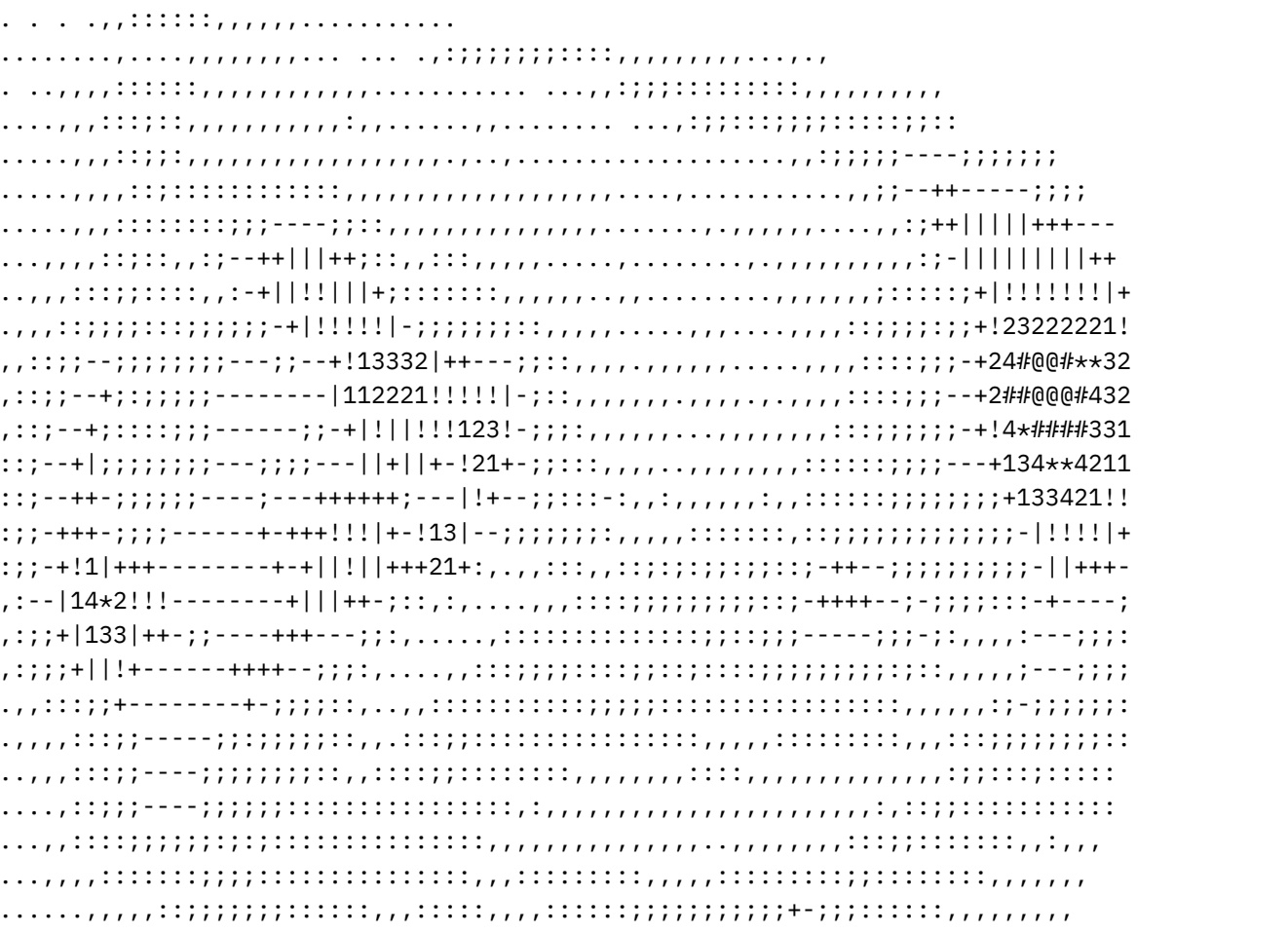
Acronyms used to identify sweeps and optical phenomena include:

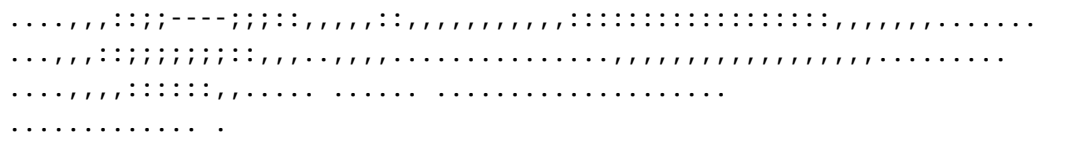
II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

SPECIAL INSERT: CURRENT X-RAY EMISSIONS FROM THE JAPANESE YOHKOH SPACECRAFT
==

25 February 1994, 03:30 UTC

North





South

KEY: East and west limbs are to the left and right respectively. Emission strength, from minimum to maximum are coded in the following way:

[space] . , : ; - + | ! 1 2 3 4 * # @

Units used are arbitrary, for illustrative purposes. Get "showasc.zip" from "pub/solar/Software" at the anonymous FTP site: ftp.uleth.ca (IP # 142.66.3.29) to view these images on VGA screens. Remove all but the image data before typing "showasc filename".

** End of Daily Report **

2187. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 07:03:34 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLtKxy.9q1@news.Hawaii.Edu>
Source record: 270516

In article <rcrw90-240294091440@129.188.192.6> rcrw90@email.mot.com (Mike Waters) writes:
>In article <762082813snx@skyld.grendel.com>, jangus@skyld.grendel.com
>(Jeffrey D. Angus) wrote:
>
>>
>> In article <CLnz3x.I7B@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes: >
>> > That's old news. BUT the HF maritime CW bands are still jumping with
>> > activity and the C.G. is still monitoring them, so CW on the high seas
>> > frequencies is still very much in use.
>>
>> And what frequencies might those be? How about posting them so we can
>> practice our CW listening to *real manly men* pounding brass. (Unless
>> of course you're afraid that some anal rententive might accuse you of
>> promoting the jamming of HF maritime CW ops...)
>
>
>They are usually easy to spot, they are the loud CW signals that are
>calling CQ for hours at a time between the ham bands. Usually next to a
>SITOR or FAX signal. Sounds like electronic keyers (or computers :-) to me
>though - no one sends that regularly by hand for hours at a time.
>
>I listen to them occasionally and rarely hear any actual traffic passed -
>but then I guess Jeff would say I am listening to the wrong HF band or
>something.
>
>The traffic numbers seem to increment by 2-3 a day for the stations I
>monitor. I did hear a "traffic list" (waiting for transmission) that had
>10 messages in it once though. They do keep *very* busy I guess :-)
>
>I will post frequencies if I remember to write them down tonight.
>
>Mike AA4MW

Foolish. The ships don't xmt on the shore station's frequencies - they
work QSK - full breakin - using seperate frequencies.

Listen during the weather observer reports (OBS) every 6 hours starting
at 0000Z.

You're hearing the CQ tape. I'll list the 4, 6, 8, 12, 16, and 22 MHz
shore calling frequencies, the ship's calling bands, the ship's low-
traffic working bands, and the ship's high-traffic working bands when
I get some time.

Jeff NH6IL

2188. Learning Code on the PC

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 07:41:00 UTC
From: kelling_chr@csusys.ctstateu.edu
Message-ID: <1994Feb26.024100.1@csusys.ctstateu.edu>
Source record: 270458

Is there an FTP site that I could pick up a program to learn code....seems to be the only thing keeping me from getting my license (no desire to take the no-code tech).

-Cj

2189. Cow Angus (was: RFD: rec.radio.pendantic)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 07:51:59 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLtn6o.AEu@news.Hawaii.Edu>
Source record: 270517

Reading ahead several articles I see the Angus is starting to get nasty.
I can see this will be a long drawn out thread; since we share the
same name I'll refer to him by his schooldays' nickname, Cow, so no one
gets confused.

In article <CLpKv4.4qs@ucdavis.edu> ez006683@chip.ucdavis.edu (Daniel D. Todd) writes:
>Jeff Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote (in regard to a remark
>made by Cow Angus):
>
>: I don't get it - what's a wannabe basket-weave belt?
>
>wannabe implies one who wishes or acts in a way more consistent with a
>group of individuals of which they are not a member. It is usually

Yes, yes. I know that wannabe = want(s) to be.

>used in a derogatory fashion. For example some people call no-codes
>wannabe hams. If one were to speak with an artificial French accent they
>may be called a wannbe french(wo)man. And if one acts like it is their
>responsibility to enforce laws when it is not they are often called
>wannabe cops (can you say security officer?).
>Most police uniforms include a leather belt (and often wallet) imprinted
>with a basket-weave design.
>ergo. You were called a wannabe cop.

Why is Cow so facinated with the type of belt a cop wears? As a fireman
back in Southern California (Orange County) I worked with cops daily
and never took notice of the type of belt they wore. Kind of weird...
One wonders what other parts of their clothing he has a fixation on.

Jeff NH6IL

2190. Re: MODS REQUEST: IC-2330

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 09:45:30 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLtsFu.BwK@news.Hawaii.Edu>
Source record: 270518

In article <762198783snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>
> Here you have it folks. the Usenet "Clueless Asshole of the Week" winner.
>
> What happened Walt, sit down on the old nutsack this morning?

Were you abused during childhood? You seem to have a fixation
on certain body parts (in addition to cops' belts :).

Jeff NH6IL

2191. YAESU FT-470

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 11:44:38 UTC
From: demetre@phaethon.intranet.gr
Message-ID: <2kncn6$rrp@helios.intranet.gr>
Source record: 270519

CQ Netters,

While browsing through some modification files for the FT-470
I spotted a hardware modification that clames that the set is
able to be converted to cover 1.25 m and 23 cm bands in place
of the original 2 m and 70 cm bands !!!
Has anyone tried such a modification ? has it worked ? if yes
at what expence (receiver censitivity) ??
Please reply via e-mail to: demetre@intranet.gr

73's

2192. CQ - magazine.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 12:41:15 UTC
From: kenneth@Lise.Unit.NO
Message-ID: <2kng1c$k43@ugle.unit.no>
Source record: 270520

Can anyone E-mail me the adress to the CQ-magazine ??

I want to subscribe, now !

thanks a lot !

kenneth.

2193. Saterday 2/26 10m station on air in Mall

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 12:47:14 UTC
From: jrl2@crux1.cit.cornell.edu
Message-ID: <jrl2.762266834@crux1.cit.cornell.edu>
Source record: 270521

Hello All,
The Cornell Amateur Radio Club will be operating
from the local Mall on Saterday Feb 26th from 10am
to 6pm on 10 meters. This is for Engineeering Day
at the Mall, a local 'get kids interested in sciecne'
day. We will be on 28.365Mhz/28.465Mhz depending on
other traffic. If both those freqs are busy, well
you'll have to find us. Operators will include..
Jeff N2TIQ
George N2XNE
Jon KB2MTI

among others. WE'll basicly be showing people what
ham radio is about, and would like to talk to some
hams from around the country (most likely CA though
the way things have been on 10m for me laterly, buttt....
Hope to see you there,
Thanks,
-Jeff Luszcz N2TIQ

2194. MODS REQUEST: IC-2330

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 12:51:20 UTC
From: jangus@skyld.grendel.com
Message-ID: <762267080snx@skyld.grendel.com>
Source record: 270522

In article <CLtsFu.BwK@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:

[quotes my reference to Walt and the world.std.com thing]
>
> Were you abused during childhood? You seem to have a fixation
> on certain body parts (in addition to cops' belts :).
>
> Jeff NH6IL

Thank you for playing "Usenet Roadkill" Jeff. Jay, tell him what he's won;
Well, Jeff's the lucky winner of just under a thousand rounds of 9mm ammo.
A real bargain at only 7 cents a round. (see relevant thread in gun news)

Nice try loser. You're the one with the fixation. Post after post about
the "problem" at the university. How come you're the only one complaining?
Surely you're not the only heterosexual left on campus.

By the way, I'm glad to see that the phrase "wannabe" has gotten to you.
Perhaps if you stop playing net.cop people will stop calling you that.

Handy usenet flame tip: wrap the keybaord in Saran Wrap(tm) prior to
responding to personal attacks. It makes it easier to keep the spittle
off the keys while frothing over the posting you're quoting.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2195. Re: Buying Yupiteru MVT-7100 (from ACE Communications?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 13:24:09 UTC
From: schuster@panix.com
Message-ID: <2knihp$akq@panix2.panix.com>
Source record: 270523
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

In article <2kk7p0$t5d@zone4.ocunix.on.ca>,
Andrew Cornwall <andrew@zone4.ocunix.on.ca> wrote:
>I saw an ad in one of the "Buyer's Guide" type magazines that came out
>last December, in which ACE Communications advertised the MVT-7100 for
>US $399. I asked them for information a couple of times (by phone and
>fax) with no reply. Then I asked for info from rec.radio.amateur.misc;
>the person who commented about ACE Communications detailed return
>hassles and said, "I won't do business with ACE."

ACE submitted a reprogrammed MVT-7100 to the FCC for certification last
year. The FCC turned down the application because they had not excluded
enough of the cellular frequencies, and the unit emitted too much RFI
(this radio is poorly shielded). ACE cannot legally sell this radio in the
US.

The MVT-7100 is a $600 radio. Are you sure the $399 price you was wasn't
for the MVT-7000?

>Unfortunately, the only other place I've heard of the MVT-7100 being
>available is Javation, who's charging UK L385, which is way out of my
>league.

See above.

>Can anyone solve my dilemma? Either saying, "I've ordered the
>MVT-7100 from ACE and it not only came in two days, but cured my
>recurring dreams about space aliens" or, "Order from XYZ Corp.,
>instead---they're selling it for $19.95 with the steak knives."
>would help me make up my incredibly indecisive mind...

Sorry, can't help.
I wouldn't deal with ACE, period.

--
Mike Schuster | schuster@panix.com | 70346.1745@CompuServe.COM
------------------- | schuster@shell.portal.com | GEnie: MSCHUSTER

2196. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 14:00:19 UTC
From: whs70@dancer.cc.bellcore.com
Message-ID: <2knklj$d4m@dancer.cc.bellcore.com>
Source record: 270524
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <2klrff$c01@cville-srv.wam.umd.edu>,
Scott Richard Rosenfeld <ham@wam.umd.edu> wrote:
>Just because there's an online repeater directory out there doesn't mean
>that there's no market for the ARRL Repeater Directory. As stated prev-
>iously, who really wants to carry around a bunch of 8-1/2 x 11 inch
>sheets of paper, anyway?
>
>All of you people out there - have you seen that incredibly neat repeater
>MAP book out there? It shows up at hamfests all the time, and MANY times
>have I considered getting a copy, because it's a lot easier to look at
>a map, compare it to your road map, and SEE what repeaters may be within
>range. The ARRL seems to not be too worried about that one, and it
>probably isn't cutting into the league's profits too much.

That "MAP Directory" is also advertised in the March Issue of CG magazine
on page 70. The Map directory is advertised as being 175 pages,
it includes location, highways, plus other helpful info.

Standard Disclaimer- Any opinions, etc. are mine and NOT my employer's.

Bill Sohl (K2UNK) BELLCORE (Bell Communications Research, Inc.)
Morristown, NJ email via UUCP bcr!cc!whs70
201-829-2879 Weekdays email via Internet whs70@cc.bellcore.com

2197. [rec.radio.amateur.misc] Re: online rpt idea

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 14:53:07 UTC
From: pschleck@cwis.unomaha.edu
Message-ID: <pschleck.762274387@cwis>
Source record: 270525
Cross-posted to: rec.radio.amateur.misc,news.groups

In <CLr3yv.K29@avalon.chinalake.navy.mil> erik@peewee.chinalake.navy.mil (Tom Servo) writes:

>What about a different approach, one worthy of usenet? If there were
>a newgroup called say, rec.radio.amateur.repeater dedicated to
>providing assistance and information about repeaters, people would
>provide info, ask questions, and somewhere, an archive site would
>accumulate repeater listings. The whole process happens naturally
>by itself, with no monitary interests involved (and no "leader"
>to lynch :-).

Except that most likely the newsgroup would turn into about 99.9% questions (and arguments), and maybe 0.1% useful information. You could make the newsgroup moderated, of course, but that would require a committed volunteer moderator (and that would introduce a "leader" to lynch, which you wanted to avoid). It would seem that as a practical matter, ultimately you need someone to take responsibility because order and organization on the net will *NOT* happen "naturally by itself."

Such a newsgroup was discussed at the last major reorganization about 8 months ago, and was put aside because most opinions were that it would collapse into flamage over repeater coordinating bodies and how information is gathered for existing directory projects (more worthy of *.policy). However, since that time there may be renewed sincere interest in running a proper newsgroup on the subject.

If you want such a newsgroup proposal to be successful (both in passing a vote, and in having worthwhile content after it is created), you should probably round up your volunteers up front. Find yourself at least a half-dozen committed contributors and an FTP site. A good first place to turn would be the rra-wg (rec.radio.amateur Working Group) mailing list. They could advise you regarding volunteers, finding an FTP site, and will at least try to convince you that rec.radio.info is what you wanted all along :-). They can also offer you guidance regarding the RFD/CFV process. To subscribe, send E-mail to rra-wg-request@amdahl.com.

73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

2198. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 15:33:07 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb26.153307.8030@ke4zv.atl.ga.us>
Source record: 270526

In article <1994Feb24.201333.9607@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: >: M/Acom 10mw gunnplexer transceivers are available for on the order of
>: >: $350 from SI, or raw gunnplexers can be found for $30-$70 on the surplus
>: >: market. But you have to design an AFC system, and the high speed digital
>: >: modulator/demodulators for them. Find dishes for them, and find line of
>: >: sight paths for the links. Costs could be similar, around $1000 per
>: >: link, but site selection would be much more restricted, and likely
>: >: range as well (only a couple of miles for reasonable sized dishes
>: >: and average terrain). Ten watts and 4 foot dishes can give 50+ mile
>: >: paths at video bandwidths under good conditions, but that's serious money.
>: >: It could be worth it for the higher throughput in some cases.
>
>New Alpha Gunnplexers are $48.00 from SHF Parts 7102 W. 500 S. La Porte,
>IN 46350. The used (checked out) ones are $25.00 each. These should
>be fine for 1 MB/s links. For more bandwidth, you can get new ones with
>varactor diodes (voltage tuning) for $66 each.

Yeah, I have a couple, but these are just raw gunnplexer components.
Kitting up a competent data transceiver runs the price up a bunch.
Note for a nationwide network you need a *lot* of these transceivers,
and not everyone will be a microwave guru who can whip up something
out of available surplus. We're going to need standard kits, and
assurance of continuing spares to maintain the network.

>Dish antennas aren't as cheap as they used to be, almost doubling in
>price. But at around $130 (including shipping) for a pair of new 2 ft
>dishes, I'd say the costs are similar to that for VHF yagis.

And surplus is currently even cheaper. I've been buying dishes for much
less as a lot of the terrestrial customer networks convert to fiber optic.
Georgia Power took a bunch of 4 footers out of service and sold them
cheap. Unfortunately some of them have a lot of bullet holes in them,
but there were servicable ones in the group, and some up to 8 foot.
(Don't bother to write, they're all gone now. Just keep your eyes open
for opportunities in your local area.)

>Why not 10 watts? I've noticed 6 GHz 5W and 10 watt bricks showing
>up on the surplus market. They have around 30 dB to 40 dB of
>gain. I just got some PHEMT MMICs that sell for $8 each--one sample
>showed a 2.5 dB NF with 15 dB of gain at 5.8 GHz.

If we weren't in danger of losing much of our 2 GHz allocation, there
are a lot of 10 watt amps showing up on the surplus market that could
be used there. 10 GHz, however, is another matter. Finding 10 watts there
is tougher unless you fall into a large cache of klystrons or TWTs.

>: Note that over a perfectly smooth Earth, LOS is only 38.72 miles
>: for a dish 1,000 feet HAAT. For the typical van mast, or ham tower,
>: of 40 feet, LOS is only 7.745 miles. (Double those numbers for a
>: grazing path to another site of the same HAAT.) When we add in real
>: obstacles like 40-1000 foot buildings, 100 foot trees, etc, it gets much
>: worse. And to avoid the first Fresnel zone, we need to clear an obstacle
>: at the mid-point of the path by 30.96 feet. That's not going to happen
>: even over smooth Earth at a distance greater than 3.87 miles with
>: a 40 foot mast. So pure LOS is pretty much a mountaintop to mountaintop
>: affair for longer distances.
>
>I don't get this. Why not use buildings man made mountaintops?
>Sure, often takes a bit of politics or $$$ to get them, but once
>you manage that, I'd say that a nice rooftop is better than a
>mountaintop of similar elevation. Usually, power and access are
>much better.

Because they are rarely where you need them. You use them when
they're in the right place, and you can get site access, but
tall buildings are mainly clustered in metro downtowns. That
doesn't help much when you need to cross farm country to get
from one metroplex to the next. Plus those building clusters
really cause a lot of multipath problems, and those downtowns
are generally also very high RF environments. Staying away from
them is generally a win.

At least in the Southern Appalachians, most mountaintop sites
have reasonable service roads going right to the door of the
site shack. That's often easier than trying to negotiate a
bunch of tools and test equipment to a rooftop site downtown
with its poor parking, security checkpoints, and tied up freight
elevators. I've spent 2 hours just *getting* to the roof of the
Bell Center. I can drive up Sweat Mtn, fix the problem, and be
back down in 2 hours.

Note the main point, however. Even with 1000 foot HAATs, LOS
range is still modest compared to the distances we have to
span in connecting the metroplexes, never mind the distances
involved in connecting hamlets and individual rural amateurs.

>Another source of man made mountaintops are amateur
>towers, particularly those of DX and contest types. Sometimes,
>hams will let you put stuff on a tower, particularly if it doesn't
>cause interference. Here, microwave gear can have its advantages.
>(forget trying to put 20 meter stuff on an HF DXer's tower for
>your digital link). As hams get older, they seem to be more
>willing to let others climb their tower. Even some youngsters
>will let you do their tower work :-).

Some DXer's towers are a little better than the 40 foot masts I figured
above, but finding 120+ foot towers along your path in the necessary
places is still a chancy business. Not *that* many DXers have killer
towers, or live in the rural areas your links have to cross.

>: To summarize, if we could depend on having LOS paths, a 10 GHz system
>: would be ideal, but in the real world we probably can't afford the
>: number of hops that would require (except in special terrain cases
>: like the California coast with it's mountains overlooking the population
>: areas), and 219 MHz calculations seem to show it will suffice using
>: troposcatter over the much longer paths we are likely to need in our
>: rolling terrain.
>
>Why do everything on one band? Consider a simple system
>with two inputs and two outputs over very long paths.
>If you had to do this on 219 MHz, I doubt you could
>make both links full duplex at low cost. But, if you used
>two bands, it becomes a much easier task. True, there are
>economy of scale considerations. But, this usually doesn't
>take into account factors like surplus parts, where small
>numbers of goods are cheaper (till you buy enough to make
>them scarce again). Thus, I can see hams buying surplus $20
>to $50 microwave amps to build long distance links, while such
>amps would be impossible to have mass produced at
>low cost, even if every USA amateur were to buy one.

Well we are taking the crossband approach with our 56 kb net. We use alternating 222 MHz and 430 MHz links now. If the 219 MHz segment opens up, we can use that along with 430 MHz instead and give back our wideband chunks on 222 MHz to the voice repeater boys. That band's filling up fast.

Here's the situation as I see it. We need a nationwide network with better thruput than 1200 baud simplex digis. Everybody recognizes that. (Well unfortunately not *everybody*, we still have those who say 1200 is faster than they can type. They don't understand that a digital network is for far more than keyboard QSOs and BBS DXing. That mentality of low thruput and random individual contacts, fostered by our history with CW and DXing, is rather prevalent among a certain group of hams.)

To get that higher speed network, we need a lot of sites, fewer if we can do longer range hops, many more if we're restricted to LOS. And those sites will have to be erected primarily by digital networking folks whose RF expertise is often marginal at best. And those links will have to be *maintained* indefinitely if the network is to survive. This argues against ad hoc surplus lashups and poor link margins. Of course each site is going to be somewhat unique due to it's specific terrain problems, and those of it's neighboring sites. However, we need to establish some baseline network link standards that can be applied to most sites and paths. These can serve as guides to both the equipment developers, and to the site installers and maintainers. This is similar to old Bell System Standards and Practices documents.

We really need to do a hierarchy of RF link standards from 9600 baud VHF through 56kb UHF and on up to high performance microwave systems at the megabaud+ level. It's obvious that not all areas are going to be able to be served with megabaud+ trunks. Either because of terrain or remote location or lack of local activity, some branches of the network are going to have to be at lower speed levels for some time yet. There are vast stretches of the country where the amateur population is so low that there will be no one nearby to erect or maintain network sites of even moderate complexity. Even given that, however, I'd still argue that even a low speed amateur link is better than using a telco bypass gateway. That rather defeats the purpose of an independent amateur *radio* network.

We need standards for reliability, such as path fade margin standards, frequency stability standards, life cycle maintainence requirements, etc. We need interoperability standards. And we need a load shedding and reroute methodology. We need pre-engineered plans for short, medium, and long path hops, with the appropriate baud limits for each of those types of paths. We need BER standards such that we can say X path needs to be of Y kind to meet network BER requirements, or we need to use FEC or some other method of assuring prompt error recovery on that path. Etc, etc, etc. I hope that some of the participants here will toss out some trial balloons on these points so we can get to work developing a coherent national plan.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2199. Info on Phase 3D + AMSAT?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 15:55:19 UTC
From: bruces@mpd.tandem.com
Message-ID: <1994Feb26.155519.15556@integrity.uucp>
Source record: 270527

I'm looking for any information that may be available via ftp on
AMSAT (specifically the new Phase 3D info, like frequecies,
capabilites, etc). Can some one tell me if this is available?

Thanks
--
| Bruce Sawtelle AX.25 : W3NJ @ N5LJF.TX.USA.NA |
| Tandem Computers, Inc. Internet : bruces @ mpd.tandem.com |
| 14231 Tandem Blvd. USENET : halley!bruces |
| Austin, Tx 78728 TCP/IP : 44.76.1.42 (w3nj.ampr.org) |

2200. Re: Travelling to Egypt

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 16:16:13 UTC
From: magued@cco.caltech.edu
Message-ID: <2knskd$s8u@gap.cco.caltech.edu>
Source record: 270428
Cross-posted to: rec.radio.amateur.misc,rec.travel

>turini@gdls.com (Bill Turini) writes:
>
>I will be travelling to Cairo in the near future. I have been told to forget about
>bringing any amateur radio equipment as there is no possibility of getting an
>operating license there.
>

>But I was also told by the ARRL to not even bring a short wave receiver/alarm
>clock/AM/FM Radio as they were very strict on any type of radio equipment.
>

I agree with Khaled, this total BS. I have never heard of an opertaing
lisence for a radio, unless if it can pick up police bands, in which case
you will not be alowed to use it period, lisence or not.

magued

2201. Re: Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 16:48:45 UTC
From: emd@ham.almanac.bc.ca
Message-ID: <yV6cic5w165w@ham.almanac.bc.ca>
Source record: 270429

julian@bongo.tele.com (Julian Macassey) writes:

> I find the whole concept of nude radio amateurs somewhat
> offensive. The very thought of all those geezers, Morris key in hand,
> sitting there, testicles swinging in time to their fists. Even if they
> are wearing their callsign baseball caps, it is a pretty disgusting
> thing to do.

Actually, Julian, the really hard part.....oops better change that...
the difficult part is finding a place to pin on your callsign tag ... and
trying to find a place to painlessly hook the speaker mike on the
handheld.....

73, Bob.

Robert Smits There is *no* idiotproof filter.
VE7EMD Idiots are proof against anything!
Ladysmith B.C. - Richard Chycoski, VE7CVS
e-mail: emd@ham.almanac.bc.ca

2202. Re: Buying Yupiteru MVT-7100 (from ACE Communications?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 16:48:57 UTC
From: Gabriel Evans <gevans@panix.com>
Message-ID: <2knuhp$jjf@panix.com>
Source record: 270430
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

In <2kk7p0$t5d@zone4.ocunix.on.ca> andrew@zone4.ocunix.on.ca (Andrew Cornwall) writes:

>I saw an ad in one of the "Buyer's Guide" type magazines that came out
>last December, in which ACE Communications advertised the MVT-7100 for
>US $399. I asked them for information a couple of times (by phone and
>fax) with no reply. Then I asked for info from rec.radio.amateur.misc;
>the person who commented about ACE Communications detailed return
>hassles and said, "I won't do business with ACE."

I've never dealt with ACE, but I believe I have the buyer's guide you
are talking about - 'CQ Amateur Radio 1994 Equipment Buyer's Guide',
right? The ad in question is one page 63? If so, check again, it's
listed at $599.

From my recent inquiries here (thanks again to all who responded - you
know who you are:) a comparable radio in your price range is the AOR
AR1500 ($450ish)

I'm about to take the plunge and cough up for the MVT7100 from the UK
Not that I can afford it but, errm, well, er I'm English and I'll be
helping the economy, yeah that's the ticket!

Wondering if my girlfriend will buy such a feeble lie,

--
Gabe Evans
Transplanted Mancunian
gevans@panix.com

2203. Re: XE1BEF (XF0C/XF4C) address?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 16:52:09 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.94Feb26115209@gdstech.GRUMMAN.COM>
Source record: 270431

```
XE1BEF is Hector Miguel Espinosa Flores,
Martinez de Chicago No 982 Col Infonavit
Colima, Col
Mexico
--
*------------------------------------------------------------*
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *
```

2204. Re: Software for DOS-PC for decoding Mor

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 17:21:34 UTC
From: pschou@delphi.com
Message-ID: <9402261220591.pschou.DLITE@delphi.com>
Source record: 270432

HamComm is a good program that will do RTTY as well as Morse. If you
can't find it from a local source you can ftp it from ftp.std.com .
Here is a desciption from the doc file.

HamComm
Version 2.0
October 10th 1991
W. F. Schroeder
DL5YEC

HamComm is a program for ham radio communications. It supports
reception and transmission of amateur radio teletype and Morse code
signals. A converter or modem chip is not required. The audio output
of the receiver is connected to the serial port of any PC/XT/AT
compatible computer thru a very simple and low-cost circuit. Only one
IC is needed (Op-Amp LM741 or similar) and a few diodes, capacitors and
resistors. The supply current is drawn from the serial port. For
transmission the speaker output is connected to the microphone input of
the transmitter thru a passive r/c filter. Audio frequency decoding,
serial/parallel conversion and all other signal processing is done by
the program.

Good luck with your license.

Internet: pschou@delphi.com Packet Radio: KE6ET@KA3RFE.MD.USA.NOAM
Paul B. Schou 501 Tayman Drive Annapolis, MD 21403

2205. Re: CQ - magazine.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 17:46:39 UTC
From: slay@netcom.com
Message-ID: <slayCLuEpr.AM1@netcom.com>
Source record: 270433

Kenneth Opskar (kenneth@Lise.Unit.NO) wrote:
: Can anyone E-mail me the adress to the CQ-magazine ??
: I want to subscribe, now !

CQ Communications, Inc.
76 North Broadway
Hicksville, NY 11801-2953
USA

Subscriptions for overseas:
1 year - $ 29.00
2 years - $ 55.00
3 years - $ 81.00

To overseas by AIRMAIL:
1 year - $ 82.00
2 years - $161.00
3 years - $240.00

73 de Sandy
WA6BXH/7J1ABV

2206. sm410.zip - Super Morse: Morse code tutorial and practice

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 19:16:38 UTC
From: bob@mtdcr.att.com
Message-ID: <9402261916.kp29385@SimTel.Coast.NET>
Source record: 270434
Cross-posted to: comp.archives.msdos.announce,rec.radio.info,rec.radio.amateur.misc

I have uploaded to the SimTel Software Repository (available by anonymous
ftp from the primary mirror site OAK.Oakland.Edu and its mirrors):

pub/msdos/hamradio/
sm410.zip Super Morse: Morse code tutorial and practice

Super Morse v4.10 by M. Lee Murrah (71016.1355@CompuServe.COM) is a
Morse code tutorial and practice program. It can be used with the PC's
speaker or a Sound Blaster or compatible card.

Requirements:

Memory: 384K
Drive : Floppy disk or hard drive
Mouse : Microsoft
Serial Ports: 3 for full use of Super Morse features.
Video : Monochrome or color

Changes:
* Increased variability of text in internally generated QSOs.
* Compensated for speed change that occurs when code weighting changes.
* Character review that is available when an error is made in the Learn
quizzes is now selectable.
* Display of character choices in Learn prompts is now selectable.

Uploaded by:

Bob Schreibmaier | UUCP: att!mtdcr!bob
AT&T Bell Laboratories | INTERNET: bob@mtdcr.att.com
200 Laurel Avenue | Telephone: 908-957-2591
Middletown, NJ 07747 | FAX: 908-957-7105

2207. ped410i.zip - Hams: CW pileup trainer v4.10i by JE3MAS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 19:17:44 UTC
From: bob@mtdcr.att.com
Message-ID: <9402261917.kp29447@SimTel.Coast.NET>
Source record: 270435
Cross-posted to: comp.archives.msdos.announce,rec.radio.info,rec.radio.amateur.misc

I have uploaded to the SimTel Software Repository (available by anonymous ftp from the primary mirror site OAK.Oakland.Edu and its mirrors):

pub/msdos/hamradio/
ped410i.zip Hams: CW pileup trainer v4.10i by JE3MAS

CW pileup trainer Ver 4.10i by MasIII H.Kozu JE3MAS is a pileup trainer for IBM PC and Sound Blaster users. You can run a 9 station pileup as long as you like. 18 stations when using Sound Blaster PRO or Pro Audio Spectrum 16. 1 station with beep sound for users without sound card.

Bug reports, questions or comments should be sent to Takao Kumagai, je1cka@asuka.aerospace-lab.go.jp, who will relay them to the author.

This program is FreeWare.

- -
Bob Schreibmaier | UUCP: att!mtdcr!bob
AT&T Bell Laboratories | INTERNET: bob@mtdcr.att.com
200 Laurel Avenue | Telephone: 908-957-2591
Middletown, NJ 07747 | FAX: 908-957-7105

2208. JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 19:23:14 UTC
From: ez014553@othello.ucdavis.edu
Message-ID: <CLuJ6q.EwE@ucdavis.edu>
Source record: 270436

I need a little help with an English paper I am writing. The topic I am writing about is jargon used by amateur radio operators. I am already using ham, lids and an abbreviation. What I need is one more word that has an interesting etymology.

Does any have any good suggestions? I am stuck and would like another term. Please send me Email

Thanks
Sue

--
==
/ Sue Gundersen / 1993 UC Davis Softball /
/ sngundersen@ucdavis.edu / DII West Coast Champions /
/ KD6UPI / NCAA Final Four /
==

2209. Travel to Mexico

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 19:31:25 UTC
From: dep@scr.siemens.com
Message-ID: <CLuJKD.LwH@scr.siemens.com>
Source record: 270461

Hi

I will be traveling to Mexico and I was wondering if anyone could
tell me what repeaters are on the Pacific cost from LA to Alcapolco?

Also is my US license good in Mexico or do I have to get permission
from Mexico (license) to operate there? If I need a Mexican license
how do I get one?

Thanks for the help. Please email me directly or post to the
net.

Thanks

Dave Post
WA2QIK
dep@scr.siemens.com

2210. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 20:27:09 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <762355464.F00002@ocitor.fidonet>
Source record: 270383

```
The following files were processed Saturday 2-26-94:

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
ARLB020.ZIP ( 690 bytes) ARRL Bulletin 02/22/94 - SM
election results
ARLK007.ZIP ( 2010 bytes) Keplerian Bulletin 02/19/94
ARLX008.ZIP ( 817 bytes) Special Bulletin 02/17/94 -
Invitation to Cuba
GM4AUP.ZIP ( 4937 bytes) RSGB President GM4AUP speech
02/20/94 to Sandown Park VHF
Convention
IRTS0220.ZIP ( 2609 bytes) IRTS News Bulletin 02/20/94
OPDX148.ZIP ( 4258 bytes) Oh / Pa DX Bulletin 02/21/94
RSGB0227.ZIP ( 8063 bytes) RSGB Bulletin 02/27/94
RTDX0218.ZIP ( 1922 bytes) RTTY DX Bulletin 02/18/94
WICEN44.ZIP ( 2544 bytes) WICEN Bulletin 02/20/94

---------------------------------------------------------------------
27850 bytes in 9 file(s)

HAMPACK [ HAM: Packet Communications programs ]
---------------------------------------------------------------------
SELCAL13.ZIP ( 21268 bytes) Marine SITOR SECAL translator

---------------------------------------------------------------------
21268 bytes in 1 file(s)

HAMSAT [ HAM: Satellite tracking and finding programs ]
---------------------------------------------------------------------
OBS056.ZIP ( 5225 bytes) Amsat Orbital Elements #056
02/25/94
PCTRK30A.ZIP ( 282757 bytes) 3D Satellite orbit visualization
1/2
PCTRK30B.ZIP ( 323898 bytes) 3D Satellite orbit visualization
2/2
SPC0228.ZIP ( 3277 bytes) Space Bulletin 02/28/94
TRAK300A.ZIP ( 214116 bytes) TrakSat v3.00 Satelite Tracking Pgm
TRAK300B.ZIP ( 189047 bytes) TrakSat v3.00 Satelite Tracking Pgm

---------------------------------------------------------------------
1018320 bytes in 6 file(s)

HAMSWL [ Shortwave Schedules and programs ]
---------------------------------------------------------------------
CSM.ZIP ( 1601 bytes) Christian Science Monitor SWBC Sked
```

update - 03/08/94 to 09/28/94
SWRADIO.ZIP (42834 bytes) SW Radio Construction on a budget

44435 bytes in 2 file(s)

Total of 1111873 bytes in 18 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

2211. Re: RFD: rec.radio.pendantic

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 20:50:47 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLun8o.Jwx@news.Hawaii.Edu>
Source record: 270462

In article <762077357snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>
> Your right, he *is* pretty touchy about that. Perhaps something happened to
> him in the Coast Guard that he's not telling us about.

Ironic how we suspect each other's past: your hang up with cops' belts - leather whips and chains, too?

Not much happened in the Coast Guard other than getting paid to play with radios and the satisfaction of helping to save some lives; firefighting back in So. Calif. was more exciting, though.

You're in Compton, Cow? Growing with with your scanner, if you listened to the Orange County fire channels, you probably heard me on the air from time to time (46.16 MHz).

Jeff NH6IL

2212. Re: CQ - magazine.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 21:00:11 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLunoB.K2D@news.Hawaii.Edu>
Source record: 270463

In article <2kng1c$k43@ugle.unit.no> kenneth@Lise.Unit.NO (Kenneth Opskar) writes:
> Can anyone E-mail me the adress to the CQ-magazine ??
>
> I want to subscribe, now !
>
>
>
> thanks a lot !
>
>kenneth.

Kenneth: Many university (and public) libraries here in the U.S. consider QST and CQ technical journals and as a result they subscribe one or both; have you checked N.I.T.'s library thoroughly? (save some money that way!)

73,
Jeff NH6IL

2213. Online Reptr DB

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 21:22:12 UTC
From: GEITGEY%UKANVM.BITNET@vm42.CSo.uiuc.EDU
Message-ID: <199402262141.NAA23787@ucsd.edu>
Source record: 270464

Hi All,

If the ARRL is making a loud noise about the Online Repeater Project, how much of EXPLOSION did they make when the Online Callbook came out? IMHO there is no difference between the ARRL callbook and the Callbook, except ease of use. Both Callbooks were targeted for different individuals. For those with internet access, the on-line callbook is perfect, for those without internet access, use the printed version! Both versions supply the same information!

The on-line repeater project will, in addition to listing freqs, city, state, trustee,etc will also give geographical coordinates and other information that will be of help to the traveler (assuming that routes are planned in advance).

Once again, these two repeater sources will be targeted at different people.

I agree, that the printed version is great for the glove compartment, and handy to have, if you wander off the beaten path while on vacation, but the ARRL should not prevent another source of this information from being withheld from the public.

Copyrights are somewhat like patents: You change the format, even a little, and you have and you have something different. If you add more information, you have changed the whole thing.

Can you imagine what size the ARRL repeater guide would have to be to have the same information that the on-line guide will have (my glove compartment is not big enough ;-)).

Personally, I'm all in favor of the on-line version. I say go ahead with it!

My .02 worth.

Lynn Geitgey KB0LRB

2214. Re: Travel to Mexico

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 21:38:23 UTC
From: julian@bongo.tele.com
Message-ID: <1994Feb26.213823.16655@bongo.tele.com>
Source record: 270465

In article <CLuJKD.LwH@scr.siemens.com> dep@scr.siemens.com (David Post) writes:
>I will be traveling to Mexico and I was wondering if anyone could
>tell me what repeaters are on the Pacific cost from LA to Alcapolco?

For about $6.00 you can buy the ARRL Repeater Directory. The
same directory that is currently being whined about. In it you will
find reapeters for the whole U.S.. Also every band is covered
separatly. Plus the European (Region 1) VHF/UHF band plans are in
there.

You can pick up this directory in any ham store, or buy it
direct from the evil ARRL.
--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

2215. Re: Super Morse version 4.04 question

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 21:43:49 UTC
From: pschou@delphi.com
Message-ID: <9402261642591.pschou.DLITE@delphi.com>
Source record: 270466

I'm using version 4.10. It seems to work fb.

Internet: pschou@delphi.com Packet Radio: KE6ET@KA3RFE.MD.USA.NOAM
Paul B. Schou 501 Tayman Drive Annapolis, MD 21403

2216. Re: MODS REQUEST: IC-2330

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 21:46:51 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLupu3.KoI@news.Hawaii.Edu>
Source record: 270467

In article <762267080snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
> Thank you for playing "Usenet Roadkill" Jeff. Jay, tell him what he's won;
> Well, Jeff's the lucky winner of just under a thousand rounds of 9mm ammo.
> A real bargain at only 7 cents a round. (see relevant thread in gun news)
>
> Nice try loser.

Loser? In what way? I'm sure I've done a lot more with my life than you have.

> You're the one with the fixation.

Tell us more about cops' uniforms.

>Post after post about
> the "problem" at the university. How come you're the only one complaining?
> Surely you're not the only heterosexual left on campus.

You (or someone else) brought up the `gerbils'; there was no mention of gays (since last year) until that point.

You must be new to this newsgroup. Go back and read last year's stuff I wrote about what the campus administration is doing about the problem. The complaints came from several high-level positions, not me.

> By the way, I'm glad to see that the phrase "wannabe" has gotten to you.

Gotten to me? Nope. Not in the slightest. I'm amused that there are folks like you who ridicule others who try to do some good.

> Perhaps if you stop playing net.cop people will stop calling you that.

No no no. Hamster cop, not net.cop.

> Handy usenet flame tip: wrap the keybaord in Saran Wrap(tm) prior to
> responding to personal attacks. It makes it easier to keep the spittle
> off the keys while frothing over the posting you're quoting.

Frothing? Nope. Having fun seeing you get so agitated. I'm surprised you didn't use any four-letter words this time, though. There are better ways to express yourself, you know.

As long as you keep posting mean-spirited articles about me I'll respond (in case everyone else is asking `How long is this going to go on?'). Remember, YOU initiated this - I apparently never paid any attention to anything you wrote prior to your flaming me last week. Didn't really

know you even existed.

Oh, I'll be glad to take this to email so as to spare the net anymore
of these non-r.r.a.misc postings (you probably want an audience, though).

73 to you Jeffrey D. Angus,
Jeffrey D. Herman, NH6IL

2217. Re: Buying Yupiteru MVT-7100 (from ACE Communications?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 22:10:23 UTC
From: dseitel@crl.com
Message-ID: <2kohcf$9gr@crl.crl.com>
Source record: 270468
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

Andrew,

I tried to order a Yupiteru MVT7100 based on the ACE Commun-
ications ad on page 11 of the November Popular Communications, shown
at $599. "Debbie" at ACE told me that they weren't in stock because
a whole container load had "disappeared in transit". After mulling
this over for a few days and becoming increasingly uneasy, I called
and cancelled the order. I have since learned that they cannot sell
that scanner legally in the US. I got mine from Javiation. In the
same issue on page 80 is another ACE ad showing both the Yupiteru
MVT8000 and MVT7000 for $399 each.

David Eitelbach
--
"The whole aim of practical politics is to keep the populace alarmed
(and hence clamorous to be led to safety) by menacing it with an
endless series of hobgoblins, all of them imaginary."
-- H. L. Mencken

2218. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 22:23:51 UTC
From: kd1hz@anomaly.sbs.com
Message-ID: <2koi5n$eb6@paperboy.ids.net>
Source record: 270469
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

jfh@netcom.com (Jack Hamilton) writes:

> The ARRL isn't a for-profit organization, and its purpose isn't to make
> money. They provide many free services, such as the reciprocal operating
> information, the file server, etc. They also distribute the net directory
> in electronic form. There may be good reasons for keeping the repeater
> directory under their control, but "we have to make money off of it" isn't
> one of them.

I don't know where you've been, but I hate to break it to you - the
League is a business, interested in one thing - making money. Maybe not
for the "League" as a whole, but take a look at the people who actually
WORK for the League - examine your QSTs over the years and look at the
names of the people who have made a career "working" for the League.

However, the League *IS* a business, whether you like it or not. Over
the past decade, the league has taken positions on issues in Amateur
Radio which suit the financial interests of the League, not the position
which the members want (yes, there are examples where each has the
same position.)

Anyone who doesn't think the League is a business ought to
open their QSTs to the monthly 6+ page advertisement which contains a
list of League publications, and the ARRL Video Classes, Tapes, etc.,
to remove all doubt.

MD
--
-- Michael P. Deignan, KD1HZ -
-- Internet: kd1hz@anomaly.sbs.com - I never tell the truth, because I
-- UUCP: ...!uunet!anomaly!kd1hz - I don't believe that there is such
-- AT&TNet: 401-273-4669 - a thing...

2219. Re: MODS REQUEST: IC-2330

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 22:29:54 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLurtu.Ltp@ucdavis.edu>
Source record: 270470

Jeff Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:

: As long as you keep posting mean-spirited articles about me I'll respond
: (in case everyone else is asking `How long is this going to go on?').
: Remember, YOU initiated this - I apparently never paid any attention
: to anything you wrote prior to your flaming me last week. Didn't really
: know you even existed.

I know I'll be sorry that I rose to the bait but... Whatever you think about Jeff's flame of the person bitching about the std.com site it was clearly *not* directed toward you yet you are the one who responded to it and flamed him regarding body part fixation. So while it true that you have clearly been thrashed by Jeff A. in other posts he is not the person who started the attacks in this thread as you implied in the paragraph above.

: Oh, I'll be glad to take this to email so as to spare the net anymore
: of these non-r.r.a.misc postings (you probably want an audience, though).
Thank you!

Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2220. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 22:31:30 UTC
From: steve@wattres.SJ.CA.US
Message-ID: <1994Feb26.223130.28926@wattres.SJ.CA.US>
Source record: 270471

In article <tcjCLpvwz.M5C@netcom.com> tcj@netcom.com (Todd Jonz) writes:
>Conway Yee (yee@mipg.upenn.edu) writes:
>
> > Recently, I received a polite letter from the ARRL lawyers
> > threatening legal action if I continue on this project.
> > Specifically, they state that the ARRL owns the FACTS present in the
> > repeater directory and that the format of the database infringes
> > upon the ARRL copyright.

Umm... I'll quietly not comment on this line; nobody owns the individual
pieces of data.

>John E. Taylor III (rohvm1.mah48d@rohmhaas.com) replies:
>
> > I'm an ARRL member, and considering ARRL put a fair amount of effort
> > into compiling the Repeater Directory, I'd feel they weren't using
> > my money wisely if they did _not_ enforce their copyright to the
> > Directory.

>I'm an ARRL member, too, but I couldn't disagree more with John's opinion on
>this issue.

I'm afraid I have to agree with John on this one. That's why I specifically
asked that people *NOT* type in the repeater directory when I was trying this
same project several years ago.

The thing that is most noticably missing from the paper form of the Repeater
Directory is location information and HAAT that is useful to someone who
is not familiar with the geography of the area. For instance, it's non-
obvious (to someone who hasn't been there) that a repeater in Cambridge, MA.,
will easily cover "Boston" (whatever that means unto itself; is it the city,
the metro area?), Sommerville, and all manner of little towns outside the
195 (I think it is) loop. I only figured this out after quite a bit
of experimentation, and looking at a topo map didn't help a whole bunch,
because I didn't know HAAT or location.

I'll admit that this example is somewhat contrived; it's much worse out
here in the west where there are hills (if not actual mountains) between
you and the repeater. For instance, there is a repeater less than 10
miles from my home QTH which I have *no* hope of hitting; there's the
side of a hill in the way.

This is why I was trying to get Latitude / Longitude / HAAT information
when I was building an online database. However, after more than a year
of data gathering (almost completely by asking people on the 'net to
submit their favorite repeater), I had 50 repeaters nationwide. I will

readily admit that I didn't "market" the database aggressively, because
I didn't have time to. However, I did check the coverage one several
of the entries by looking at a topo map of the area, finding the repeater,
and looking at what the coverage should look like. It seemed to match
my expectations.

On another note, it seems that there are a great many repeater owners who
are unwilling to let the exact site of the repeater be known; I have to
admit a large amount of confusion on this point, since RDF techniques are
so simple as to make finding a repeater trivial.

Oh, by the way Todd, I buy *4* copies of the paper directory; home, work,
car, and the emergency bag. ;)

73 de KD6GGD
--
Steve Watt KD6GGD Packet: KD6GGD @ N0ARY.#NOCAL.CA.USA.NA
ICBM: 121W 56' 53.1" / 37N 20' 16.7" Internet: Home: steve@wattres.SJ.CA.US
"I am always ready to learn, although I Work: swatt@lynx.com
don't always like being taught." -- Winston Churchill

2221. Re: STD.COM Good guys after all. was Re: Money grabbing SOB's...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 22:35:35 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLus3B.M2H@ucdavis.edu>
Source record: 270472

Walt Dabell (walt@diusys.cms.udel.edu) wrote:
[groveling deleted]
: --
: Walt Dabell "clueless asshole of the week" (and proud of it!)
Not anymore, you have ONE! Keep collecting them, they will eventually
come in handy. If for nothing else they will save the bandwidth of the
flames generated.

73 es enjoy the 'net
Dan
--
---
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
---
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *

2222. Re: cannot access cs.buffalo.edu ftp

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 22:43:49 UTC
From: cchris@charlie.usd.edu
Message-ID: <CLusH3.I8G@sunfish.usd.edu>
Source record: 270473

In article <ah301-230294142023@sy_j.pgh.wec.com>, ah301@yfn.ysu.edu (Jerry Sy) writes:
>has cs.buffalo.edu anonymous ftp site stopped accepting anonymous
>logins ? It does not accept anonymous or ftp as user names
>anymore.
>
>jerry
>n3rkd

Login to ftp.cs.buffalo.edu is via "user" -- then at the foreign username
prompt use "anonymous" and use your full mail ID as the password when asked.
GL es 73,
Chris, AC0M

2223. Re: Online Reptr DB

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 22:46:46 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLusLz.MJq@ucdavis.edu>
Source record: 270474

Lynn Geitgey (GEITGEY%UKANVM.BITNET@vm42.CSo.uiuc.EDU) wrote:
: If the ARRL is making a loud noise about the Online Repeater Project, how
: much of EXPLOSION did they make when the Online Callbook came out? IMHO
: there is no difference between the ARRL callbook and the Callbook, except
: ease of use. Both Callbooks were targeted for different individuals. For
: those with internet access, the on-line callbook is perfect, for those without
: internet access, use the printed version! Both versions supply the same
: information!
Hi Lynn,
The league probably didn't scream when the on-line callbooks were
published because they don't publish a printed callbook. The other
reasin they don't complain is that the source of the call book is the FCC
who doesn't have a copyright on the info. once you pay the $600 for it
you can publish it in what ever form at whatever cost you like. They are
complaining because they feel that copying the info out of their
directory and making it available to the public is a violation of their
copyright.

cheers,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2224. IPS Daily Report 26 02 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-26 23:05:34 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Feb26.230534.15281@ips.oz.au>
Source record: 270475
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 26 February 1994
Summary for 26 February and Forecast up to 1 March
No warning is current.

1A. SOLAR SU02ARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 094/040

1B. SOLAR FORECAST
27 February 28 February 01 March
Activity Low Low Low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR CO02ENT
None.

2A. MAGNETIC SU02ARY
Geomagnetic field at Learmonth : quiet to unsettled

Estimated Indices : A K Observed A Index 25 February
Learmonth 06 3111 3211
Fredericksburg 06 12
Planetary 08 14

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
27 Feb 07 Quiet to unsettled.
28 Feb 07 Quiet to unsettled.
01 Mar 07 Quiet to unsettled.

2C. MAGNETIC CO02ENT
None.

3A. GLOBAL HF PROPAGATION SU02ARY
LATITUDE BAND
DATE LOW MI26LE HIGH
26 Feb normal normal normal
PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MI26LE HIGH
27 Feb normal normal normal
28 Feb normal normal normal
01 Mar normal normal normal
3C. GLOBAL HF PROPAGATION CO02ENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SU02ARY
MUFs at Sydney were near predicted monthly values

T index: 27

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
27 Feb 40 Near predicted monthly values.
28 Feb 30 Near predicted monthly values.
01 Mar 30 Near predicted monthly values.

Predicted Monthly T Index for February is 30.

4C. AUSTRALIAN REGION CO02ENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2225. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 00:39:08 UTC
From: phantom@pro-haven.cts.com
Message-ID: <1994Feb26.183908.15322@pro-haven.cts.com>
Source record: 270476

Howdy...

Regarding ham jargon...here's a good one you might be able to use...it's XYL and it stands for ex young lady....(which I take great offense to as a deragatory remark (I am not an "XYL" because I am only 22 years old! :-)) The term is used to refer to one's wife...(because most hams are of male gender and all...) I think I might start refering to OMs (old men) as XYM and see if they like that...:-)
Anyway, hope this helps.....Drop a note if ya have any more questions, ok?

Later es 73!

Tiffany -- kj5gu

Internet: phantom@pro-haven.cts.com
UUCP: crash!pro-haven!phantom

2226. MODS REQUEST: IC-2330

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 00:46:22 UTC
From: jangus@skyld.grendel.com
Message-ID: <762309982snx@skyld.grendel.com>
Source record: 270477

In article <CLupu3.KoI@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:

[snip]
>

Yup, you're starting to go tit-for-tat and grasping at straws. Also, I
note that your reply verbiage ratio has gone up. I'd say your agitated.

Thank you for playing. For another flame, please insert 25 cents.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2227. Software for DOS-PC for decoding Mor

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 00:52:50 UTC
From: jangus@skyld.grendel.com
Message-ID: <762310370snx@skyld.grendel.com>
Source record: 270378

In article <9402261220591.pschou.DLITE@delphi.com> pschou@delphi.com writes:

>
> HamComm is a good program that will do RTTY as well as Morse. If you
> can't find it from a local source you can ftp it from ftp.std.com .
> Here is a desciption from the doc file.
>
> HamComm
> Version 2.0
> October 10th 1991
> W. F. Schroeder
> DL5YEC
>

Not the least of which is that it comes with a nice black and white .gif of
the author.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2228. For Sale: Kenwood 820

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 01:15:37 UTC
From: draper@ftp.jsc.nasa.gov
Message-ID: <1994Feb27.011537.23963@aio.jsc.nasa.gov>
Source record: 270379

I have a Kenwood 820 I would like to sell. I bought it about 5 years ago from the original owner. It is in excellent condition. Anyone interested please E-mail. I will work with the best offer.

Wayne in Houston

2229. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 01:21:17 UTC
From: zlau@arrl.org
Message-ID: <1994Feb27.012117.11788@arrl.org>
Source record: 270380

: >
: >New Alpha Gunnplexers are $48.00 from SHF Parts 7102 W. 500 S. La Porte,
: >IN 46350. The used (checked out) ones are $25.00 each. These should
: >be fine for 1 MB/s links. For more bandwidth, you can get new ones with
: >varactor diodes (voltage tuning) for $66 each.

: Yeah, I have a couple, but these are just raw gunnplexer components.
: Kitting up a competent data transceiver runs the price up a bunch.
: Note for a nationwide network you need a *lot* of these transceivers,
: and not everyone will be a microwave guru who can whip up something
: out of available surplus. We're going to need standard kits, and
: assurance of continuing spares to maintain the network.

Why is a microwave guru needed for gunnplexers? The only microwave
part is attaching the antenna, and I've not heard of anyone who
couldn't manage that. Granted, you probably want to mark which end
goes up, but this is a mistake more often made by experienced amateurs,
rather than ignorant newcomers :-).

: Because they are rarely where you need them. You use them when
: they're in the right place, and you can get site access, but
: tall buildings are mainly clustered in metro downtowns. That
: doesn't help much when you need to cross farm country to get
: from one metroplex to the next. Plus those building clusters
: really cause a lot of multipath problems, and those downtowns
: are generally also very high RF environments. Staying away from
: them is generally a win.

I've been told that the 10 GHz equipment at 4U1UN worked quite
well, unlike the VHF gear that got clobbered by the RF. Are
there really that many sites worse than the top of the United
Nations Building in New York City in terms of RFI?

One of the tricks to making microwave gear resistant to
interference is to use horn antennas or waveguide in your
input circuit. They make a very low loss high pass filter.
The waveguide below cutoff effect is quite effective in
reducing low frequency interference.

Perhaps the best cure for multipath is to go to higher frequencies
and use sharper antennas. Dish antennas normally have quite
clean patterns. You can also improve the pattern by under-
illuminating a dish, although this often isn't necessary.

--
Zack Lau KH6CP/1 2 way QRP WAS

8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

2230. Re: Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 02:04:02 UTC
From: macy@telemax.com
Message-ID: <CLv1qr.79I@telemax.com>
Source record: 270381

In article <yV6cic5w165w@ham.almanac.bc.ca> emd@ham.almanac.bc.ca writes:
>the difficult part is finding a place to pin on your callsign tag ... and
>trying to find a place to painlessly hook the speaker mike on the
>handheld.....

Velcro and chest hair works fine. Just don't be in _too_ much of
a hurry to grab that speaker mic when you hear someone call you...

--
Macy M. Hallock, Jr. N8OBG +1.216.723.3030 macy@telemax.com macy@fms.com
Telemax, Inc. - F M Systems, Inc. 152 Highland Drive Medina, OH 44256 USA

2231. Yaesu 2400H recs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 03:10:07 UTC
From: cuti@jumbo.Read.TASC.COM
Message-ID: <9402270310.AA21723@jumbo.Read.TASC.COM>
Source record: 270382

Hi,

I've been using a HT as my all around 2M rig, but
have been itching to get a mobile rig. I've been
eyeing the Yaesu 2400H and now that it is $50 off
($299.95) it seems like it may be time to scratch
that itch.

I would appreciate feedback from those who have
the 2400 as to what they like or dislike about the
rig. I'm also open to any other suggestions on the
choice of a 2M mobile rig. Thanks.

-- Rich N1QVT
--
+---+
| Richard A. Cuti Voice: 617-942-2000 x3309 |
| TASC Internet: racuti@tasc.com |
| 55 Walkers Brook Drive Compu$erve: 76170,420 |
| Reading, MA 01867 Amateur Radio: N1QVT |
| |
| (Opinions are strictly those of me, myself and I) |
+---+

2232. MAC/WEFAX????????

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 05:06:20 UTC
From: fsrla@aurora.alaska.edu
Message-ID: <1994Feb26.200620.1@aurora.alaska.edu>
Source record: 270384

Could someone please send me info
on how to set my Mac up for WEFAX.
What do I need (programs, hardware,
radio-stuff)? Where would I go
about getting these things?

Thanks!!!!!

FSRLA@AURORA.ALASKA.EDU
Roger Asbury WL7NT

2233. Re: HAMBLASTER INCORRECT STATEMENTS

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 06:28:29 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLvDzI.55q@news.Hawaii.Edu>
Source record: 270385

As I've said, I'll be GLAD to take this to email to spare everyone else
this bickering... Why don't _I_ stop then? Got to defend myself: If Jeffy
is going to slam me in public then I'll defend myself in public.

In article <762082524snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus)
writes:
>
>In article <CLpIK1.n0u@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
>
> > My goodness, Jeff; are you my shadow? Just because we share the same name
> > doesn't mean you have to follow me around like a pesty little brother.
>
> Trust me, I am NOT your little brother. You're the one acting like someone
> whos (sic) testicles haven't descended yet.
> ^^^^^^^^^

More reference to body parts.

> Have you considered getting professional counseling for your persecution
> complex? Most major universities have excellent out patient services.

Hey, shouldn't I be saying that to you?

> Perhaps after several sessions you should be able to walk around without
> being convinced that everyone is staring at your crotch and laughing.

I believe you're the only one staring at it (see the above); you were
also concerned with Walt's...

Let's QSY to email PLEASE. jherman@hawaii.edu

73 to you Jeff(1.1),

Jeff(1.2) (new and improved version) NH6IL

2234. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 10:27:12 UTC
From: dave@llondel.demon.co.uk
Message-ID: <762370032snx@llondel.demon.co.uk>
Source record: 270386

In article <1994Feb26.183908.15322@pro-haven.cts.com> phantom@pro-haven.cts.com (Tiffany Keller) writes:
>Howdy...
>
> Regarding ham jargon...here's a good one you might be able to
>use...it's XYL and it stands for ex young lady....(which I take great
>offense to as a deragatory remark (I am not an "XYL" because I am only 22
>years old! :-)) The term is used to refer to one's wife...(because most
>hams are of male gender and all...) I think I might start refering to OMs
>(old men) as XYM and see if they like that...:-)
>
How about abolishing XYL and using OG (Old Girl) instead? Just think, the British Young Ladies Amateur Radio Association (BYLARA) could become BOGARA instead :-)

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

2235. Re: CRYPTO: DoJ's new rules for access to Clipper keys

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 13:12:55 UTC
From: wb8foz@netcom.com
Message-ID: <wb8fozCLvwpJ.9HD@netcom.com>
Source record: 270387
Cross-posted to: alt.privacy,alt.privacy.clipper,alt.security.pgp,comp.org.eff.talk,talk.politics.crypto,rec.radio.amateur.misc

(UnProfessor Sternlight) writes:

> I remember when World War II started one of the first things the U.S.
> Government did was seize all the transmitter coils of all the ham radio
> operators.

Hmm,
I'd like someone who was licensed at the time to comment. But I once
borrowed & read a slew of WWII _QST_ mags, and I thought the ?Dept. of
Communications? came around with a little seal for the power switch.
This was AFTER the interim war emergency radio service was shut down.
THAT was quite a while after war was declared.
--
A host is a host from coast to coast.................wb8foz@nrk.com
& no one will talk to a host that's close...........(v)301 56 LINUX
Unless the host (that isn't close)....kibo# 777.....pob 1433
is busy, hung or dead..............vr...................20915-1433

2236. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 13:38:07 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb27.133807.12203@ke4zv.atl.ga.us>
Source record: 270388
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <rcrw90-250294135425@waters.corp.mot.com.corp.mot.com> rcrw90@email.mot.com (Mike Waters) writes:
>
>In other words "we have to make money off it" is a perfectly valid reason,
>especially considering the man-years of effort that went into creating the
>publication in the first place!

While I don't have a problem with the League trying to make a buck off their publications, the "man-years" of effort that went into gathering the information was done by various coordinating bodies like SERA. The League doesn't pay a dime for the computer lists SERA furnishes to them.

Let me quote what SERA says about their database in the SERA Journal.

"The SERA repeater index may be published or reproduced in any form by any publication or electronic means to be distributed without charge. Appropriate credit must be given to the SERA Repeater Journal."

SERA lists 10 southeastern states in the Journal, Georgia, Tennessee, Kentucky, Mississippi, North Carolina, South Carolina, Virginia, West Virginia, and including the T-MARC coordinated repeaters in Maryland, Delaware, and DC. *This* is where the ARRL gets their listings for these states. They don't pay a dime for them, or for the man-years of effort that went into the coordinations and database. They don't even have the courtsey to give SERA credit for the information.

Now like I said, I don't mind the League trying to turn a buck, but they've sure got a lot of gall making lawyer noises to Yee claiming he's ripping them off when *they* are ripping off the efforts of the coordinating bodies.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2237. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 14:09:58 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb27.140958.12495@ke4zv.atl.ga.us>
Source record: 270389

In article <1994Feb27.012117.11788@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
>: >
>: >New Alpha Gunnplexers are $48.00 from SHF Parts 7102 W. 500 S. La Porte,
>: >IN 46350. The used (checked out) ones are $25.00 each. These should
>: >be fine for 1 MB/s links. For more bandwidth, you can get new ones with
>: >varactor diodes (voltage tuning) for $66 each.
>
>: Yeah, I have a couple, but these are just raw gunnplexer components.
>: Kitting up a competent data transceiver runs the price up a bunch.
>: Note for a nationwide network you need a *lot* of these transceivers,
>: and not everyone will be a microwave guru who can whip up something
>: out of available surplus. We're going to need standard kits, and
>: assurance of continuing spares to maintain the network.
>
>Why is a microwave guru needed for gunnplexers? The only microwave
>part is attaching the antenna, and I've not heard of anyone who
>couldn't manage that. Granted, you probably want to mark which end
>goes up, but this is a mistake more often made by experienced amateurs,
>rather than ignorant newcomers :-).

Ha, Ha. The problem doesn't come with mounting the gunnplexer, or
even aiming them, the problem is making sure they're on frequency
and making rated power, and that the detector diodes haven't gone
south. Most hams don't have the appropriate test equipment, or the
skills to fabricate cheap alterative test equipment. Yeah, yeah,
a radar detector can serve as a minimal activity checker, but that's
not good enough to set up and maintain a legal and efficient link.

>: Because they are rarely where you need them. You use them when
>: they're in the right place, and you can get site access, but
>: tall buildings are mainly clustered in metro downtowns. That
>: doesn't help much when you need to cross farm country to get
>: from one metroplex to the next. Plus those building clusters
>: really cause a lot of multipath problems, and those downtowns
>: are generally also very high RF environments. Staying away from
>: them is generally a win.
>
>I've been told that the 10 GHz equipment at 4U1UN worked quite
>well, unlike the VHF gear that got clobbered by the RF. Are
>there really that many sites worse than the top of the United
>Nations Building in New York City in terms of RFI?

Probably. The Peachtree Plaza in Atlanta, and the Sears Tower
in Chicago are two for sure. Their roofs are OSHA forbidden
zones because the RF is so intense there that it'll fry you

like an egg if you go out without disabling the transmitters. And there are microwave links at 57 Ivy that you can use to cook hotdogs. Even our parking deck at 1611 W Peachtree has 1000 watts of 24 GHz power feeding an 8 meter dish. Don't get in it's way. I've read that the transmitters on the top of the Empire State building are serious emitters too, but they aren't normally accessable due to the structure of the roof.

>One of the tricks to making microwave gear resistant to
>interference is to use horn antennas or waveguide in your
>input circuit. They make a very low loss high pass filter.
>The waveguide below cutoff effect is quite effective in
>reducing low frequency interference.

Sure, that helps, especially if you use *enough* waveguide. You need at least a 1/4 wave depth at the frequency of the *interference* to get meaningful attenuation. That is often in the 100 MHz region because of colocated FM broadcast transmitters. Remember you've got a simple diode detector in there that will respond to *any* RF of sufficient magnitude, and one of it's terminals is exposed on the outside of the gunnplexer. When the interference is at 10 GHz or higher, the waveguide doesn't act as a filter, of course, and there are thousands of 10 GHz emitters in LOS of a typical downtown rooftop from security systems and speed cops. Usually, the magnitude of that interference is low enough due to the narrow beam of your dish that you can avoid most of it, but if you're near an uplink site running serious power at Ku, then you're going to pick that up.

>Perhaps the best cure for multipath is to go to higher frequencies
>and use sharper antennas. Dish antennas normally have quite
>clean patterns. You can also improve the pattern by under-
>illuminating a dish, although this often isn't necessary.

Yes, under-illuminating a larger dish can help, but you have to be sure your feed has low sidelobes, dipoles with reflectors don't hack it, and pyramidal horns aren't all that clean either. What you want is a circular feed horn that's precisely matched to your dish. Adding a "fence" to the edge of the dish can help too. We've got a 2 foot high fence on an 8 foot dish we use for a link. Without it, we get so much spill from other emitters that the picture is trashed.

Multipath is always a concern with video because it's so visible as ghosting. Data is more resistant up to the point where the "eye" is corrupted too much for reliable slicing. Even a 0.5 degree beam diverges. In metroplexes, we often only have a clear window of 100 meters or less to pass the signal. Figure out how far back you can get and still not illuminate those buildings. It's not very far, so your link can't be very long.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2238. Re: Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 14:59:13 UTC
From: <>
Message-ID: <mlf.762361153@wyvern.wyvern.com>
Source record: 270390

macy@telemax.com (Macy Hallock) writes:

>In article <yV6cic5w165w@ham.almanac.bc.ca> emd@ham.almanac.bc.ca writes:
>>the difficult part is finding a place to pin on your callsign tag ... and
>>trying to find a place to painlessly hook the speaker mike on the
>>handheld.....

>Velcro and chest hair works fine. Just don't be in _too_ much of
>a hurry to grab that speaker mic when you hear someone call you...

ok, but some men don't have much chest hair - use armpit hair instead?
and what about women?

73, de mark, KD4GGP
--
"Ad Astra, Per Aspera"

2239. Daily Summary of Solar Geophysical Activity for 26 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 16:23:28 UTC
From: oler@rho.uleth.ca
Message-ID: <9402271623.AA22593@rho.uleth.ca>
Source record: 270391
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

26 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 057, 02/26/94
10.7 FLUX=094 90-AVG=107 SSN=063 BKI=2111 1101 BAI=003
BGND-XRAY=B1.4 FLU1=8.9E+05 FLU10=1.7E+04 PKI=2122 2111 PAI=005
BOU-DEV=018,009,008,005,005,006,004,007 DEV-AVG=007 NT SWF=00:000
XRAY-MAX= B9.6 @ 0516UT XRAY-MIN= A9.0 @ 0723UT XRAY-AVG= B2.0
NEUTN-MAX= +003% @ 1555UT NEUTN-MIN= -003% @ 0900UT NEUTN-AVG= +0.1%
PCA-MAX= +0.1DB @ 2205UT PCA-MIN= -0.7DB @ 0720UT PCA-AVG= -0.0DB
BOUTF-MAX=55344NT @ 0719UT BOUTF-MIN=55311NT @ 1919UT BOUTF-AVG=55334NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+071,+000,+000
GOES6-MAX=P:+115NT@ 1900UT GOES6-MIN=N:-057NT@ 0602UT G6-AVG=+092,+037,-030
FLUXFCST=STD:090,090,090;SESC:090,090,090 BAI/PAI-FCST=008,008,010/008,008,015
KFCST=2222 3321 2223 3221 27DAY-AP=009,007 27DAY-KP=3123 3332 2132 2223
WARNINGS=
ALERTS=**SWEEP:II=2@2332-2348UTC
!!END-DATA!!

NOTE: The Effective Sunspot Number for 25 FEB 94 was 37.0.
The Full Kp Indices for 25 FEB 94 are: 1+ 2o 5- 4o 2+ 2+ 3- 2-
The 3-Hr Ap Indices for 25 FEB 94 are: 5 7 37 30 10 10 11 7
Greater than 2 MeV Electron Fluence for 26 FEB is: 9.6E+07

SYNOPSIS OF ACT

Solar activity was very low. All the regions on the disk
have been quiet and stable. A new region was assigned today as
Region 7680 (S13E75).

Solar activity forecast: solar activity is expected to be
very low through the period.

The geomagnetic field has been at quiet levels for
the past 24 hours. High-latitudes experienced brief periods
of unsettled to active levels during nighttime sectors.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled through the period.

Event probabilities 27 feb-01 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 27 feb-01 mar

A. Middle Latitudes
Active 10/10/20
Minor Storm 05/05/10
Major-Severe Storm 01/01/01

B. High Latitudes
Active 15/15/25
Minor Storm 10/10/15
Major-Severe Storm 05/05/05

HF propagation conditions were normal over all regions.
No changes are expected over the low and middle latitudes
during the next three days, through 01 March inclusive. High
latitudes may experience mild signal degradation on 01 March.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7675 S11W13 109 0010 HRX 01 002 ALPHA
7678 S14E48 048 0040 HSX 02 002 ALPHA
7679 N03E10 086 0040 DAO 04 006 BET
7680 S13E75 021 0000 AXX 00 001 ALPHA
7681 S14W05 101 0000 AXX 00 002 ALPHA
7671 N11W95 191 PLAGE
7674 S14W69 165 PLAGE
7676 N08E01 095 PLAGE
7677 N20W64 160 PLAGE
REGIONS DUE TO RET
NMBR LAT
7666 N18 350

LISTING OF SOLAR ENERGETIC EVENTS FOR 26 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
2324 2336 2349 7675 S12W10 B5.5 SF II

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 26 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV

26/2332 2348 S12W10 RSP B5.5 25 2

INFERRED CORONAL HOLES: LOCATIONS VALID AT 26/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
63 S30W68 S30W68 S25W83 S18W73 181 ISO POS 003 10830A
64 S59W33 S59W43 S24W90 S24W90 165 EXT
65 S37E07 S37E07 S15W18 S10W13 109 ISO POS 004 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
25 Feb: 0010 0012 0017 SF 7670 N14W68
0140 0424 0526 C1.4
1133 1201 1243 B8.1

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7670: 0 0 0 1 0 0 0 0 001 (33.3)
Uncorrellated: 1 0 0 0 0 0 0 0 002 (66.7)

Total Events: 003 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,

EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2240. Re: Yaesu 2400H recs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 16:39:20 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9402271133591.gilbaronw0mn.DLITE@delphi.com>
Source record: 270392

>Hi,
>
> I've been using a HT as my all around 2M rig, but
> have been itching to get a mobile rig. I've been
> eyeing the Yaesu 2400H and now that it is $50 off
> ($299.95) it seems like it may be time to scratch
> that itch.
>
> I would appreciate feedback from those who have
> the 2400 as to what they like or dislike about the
> rig. I'm also open to any other suggestions on the
> choice of a 2M mobile rig. Thanks.
>
> -- Rich N1QVT
>--
>+---+
>| Richard A. Cuti Voice: 617-942-2000 x3309 |
>| TASC Internet: racuti@tasc.com |
>| 55 Walkers Brook Drive Compu$erve: 76170,420 |
>| Reading, MA 01867 Amateur Radio: N1QVT |
>| |
>| (Opinions are strictly those of me, myself and I) |
>+---+
>
>
I have had the 2400 (it was ripped off) and it was a very good radio. It
has a very good front end and it has a lot of features. The negative side
is that the controls are hard to learn and to remember becasue a lot of
things are done with few buttons. It is also not very good for packet
because you don't have any eay way to control it. If you use the microphone
plug the speaker is on. You could plug the audio form the back and the
controlform the microphone and then you have two places. I would recommend
this radio very highly and especially if you are in an area with a lot of
strong signals. It has an extremely good front end and it is a very rugged
radio.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

2241. LOOKING FOR HAMS ON USENE

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 17:33:00 UTC
From: david.gibson@bgbbs.com
Message-ID: <67.10499.3772.0N471C76@bgbbs.com>
Source record: 270393

I have need to contact a number of hams, many whom may be USENET members. At
one point we used to see a 4 (or more) part index of Hams on Usenet. Is

```
I send a message to reqnet@ve6mgs.ampr.ab.ca to do a search of the
list. In the body of your message, enter:

return xxx@xxx.xxx (your return address)
lookup smith w9xyz

David

* 1st 1.11 #1864 *
```

2242. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 19:05:53 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9402271401591.gilbaronw0mn.DLITE@delphi.com>
Source record: 270394

>I've got some bad interference on 80 through 10
>meter bands from an electric fence about 500
>feet away. The effect is very sharp clicks
>about 3-4 per second. Analog noise blanker
>works some but not 100%.
>
>Anyone have any cures?
>
>Tnx,
>Ned Hamilton, AB6FI
>

Well, if you ground the fence, case closed.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

2243. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 19:46:22 UTC
From: mahjmac@news.delphi.com
Message-ID: <2kqtae$cg5@news.delphi.com>
Source record: 270395

It would seem to me that being alowed to use a keyboard doesn't conform to the whole reason CW is required. It is used on an international scale, and if you are ever in any type of emergency or spontaneous situation where you need to receive code with no keyboard, then you would be worthless.

Mike

2244. Ohio/Penn DX Bulletin #149

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 19:57:54 UTC
From: kb8nw@barf80.nshore.org
Message-ID: <$opdx.149.1994@ampr.org>
Source record: 270396
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ALLBBS $OPDX.149
Ohio/Penn DX Bulletin No. 149

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 149
BID: $OPDX.149
February 28, 1994
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio
Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, DL7VEE & DXNL, DF4RD, OH2BH, N3II, K3ZO, K4CEF & Southeastern Cluster Group, KJ4VH, WA4MCZ, WB4IUX, PI4KGL and IK5AAX for the following DX information.

3Y0PI, PETER I ISLAND (UPDATE). Last week OPDX forgot to list one of the 3Y0PI operators; Luis, XE1L, should have been included in the list. Thanks to Bill, WA4MCZ, for bringing it to our attention. As this bulletin was being prepared, information from Tony, WA4JQS, by telephone to Ada (Tony's mom), indicated that the 3Y team is now on South Shetland. The team, as of February 25th, are unable to fly out of South Shetlands at the moment due to fog and blizzard. (ed. GEEEE! How much can these guys endure?)

ACTIVITY ON THE SATELLITE (AO13). Look for the following stations on AO13: 5T5JC - 145.919/2100z, 8P6SM - 145.900/2242z, 9K2WA - 145.891/1602z 9Y4DG - 145.908/2339z, PY5BYE - 145.915/2310z, UN7CY - 145.937/1527z, VK4ABW - 145.889/0840z, VU2TS - 145.855/1708z and Z21HJ - 145.833/1445Z.

BV9P, PRATAS ISLAND. Word from Martti, OH2BH, is that preparations are proceeding just fine with no problems so far for the upcoming DXpedition. The targeted date is March 16 for 10-days. There are 14 operators scheduled to go, and the group may include limited foreign participation as well. Some detailed information may be released after Martti's visit to Taipei during this coming week.

MORE ON THE VOA STORY ABOUT "BY" OPS. Fred, K3ZO, who has just recently returned from Thailand where he operated as HS0ZAR, had doubts about the Voice of America (VOA) report that all BY hams have been rounded up and sent to labor camps. Fred stated he heard and worked plenty of BAs, BYs and BZs while in Thailand, so he decided to investigated the Voice of America broadcast and found the following information:

Here is the exact VOA text, which was based on a news item that was on the REUTERS news wire on February 16th: "Police in China have cracked down on the country's largest group of amateur radio operators, and have sent three of the group's leaders to labor camps.

The "Official China Business Times Today" (Wed. Fed. 16th) Identified the group as "Radio-Air-Salon", based in Henan Province (BY6). It said police have caught 61 members of the group -- which had effectively taken over some 27 radio channels.

The report said Radio-Air-Salon members often interrupted regular broadcasts with their own conversations and illegally listened in on restricted frequencies. It said the use of technical equipment to create chaos in the airwaves is a new type of illegal activity.......

Fred comments he has tried to work as many different Chinese stations as possible while he was in Thailand, but he never heard BY6. The ARRL reports that their information shows only one licensed amateur radio station in PRC, club station BY6SRA, licensed to the Shanxi Branch of the China Radio Sports Association (CRSA). CRSA is the IARU member society for China. Fred points out that the VOA broadcast only mentions that three members of one club were sent to "re-education camps", this is a far cry from "ALL BY's". This is a prime example of how RUMORS can spread like wildfires and blow things out of proportion Also, the press has often referred to all manners of radio hobbyists as "AMATEUR RADIO OPERATORS." The group of hobbyists mentioned in the broadcast may be engaging in SWL and CB type activities rather than actual amateur operations. Fred states such activities are widespread in Asia and has experienced pirate "CB" operations on the 40 meter band while operating from HS-land. So in summary, amateur radio is alive and well in PRC. Reports of activity this week by BY1QH on both 40 and 80 meters is proof. Also, Martti, OH2BH, was in Beijing recently and visited the operators and station of BY1PK. Martti stated things were just fine and no one is rounded up in the labor camps. As matter of fact, foreign operators may be licensed in PRC soon. (TNX to K3ZO, N8II and OH2BH)

P5, NORTH KOREA. During Martti's (OH2BH) recent visit to Beijing, where he was involved in some tennis tournament, he was able to communicate with some high level individuals not only from PRC administration but also from P5-land. "We are getting there, sooner or later," states Martti. (Keep Your Fingers Crossed!)

PACIFIC DXPEDITION (KC6/KH2/V63). JR6IQI and JK6UER are spending their honeymoon at various places in the Pacific, and will operate all bands both CW and SSB. Their itinerary is as follows: Belau - March 13-16 as KC6KT and KC6UA; Micronesia (V63) - March 16-18, call unknown; Guam (KH2) - March 18-20, KH2/JK6UER.

SU, EGYPT. The operation by SU2MT in the ARRL CW DX contest was by a West Coast DXer who is presently working in Egypt. More operations are planned for both CW and on the lower bands in order to make Zone 34 more accessible. Activity is also being planned for the ARRL SSB DX Contest on an all band operation for March 5-6.

TM50DAY CANCELLED. Willem, PA3BIZ, informs OPDX that the special event station in Normandy, France to commemorate the 50th anniversary of D-DAY as been cancelled. The two Dutch groups who have been planning the operation for more than a year were to be active from June 6-9, 1995. The group was issued the special call sign in July 1993. But since then the French license authorities have withdrawn the call sign stating they made a mistake by giving the group a two digit prefix. Meanwhile, there is word that the French operators might be organizing a special event station.

FAX YOUR DX INFORMATION NOW! Faxing is available Monday/Wednesday/Friday from 0430 to 2330z only. The number is 216-237-8208 and the FAX card is sharing the same phone line as BARF-80 BBS using a data/fax/phone switch.

Excerpts and distribution of The OPDX Bulletin are granted as long as OPDX/BARF80 receive credit. To contribute DX info, call BARF-80 BBS online at 216-237-8208 14400/9600/2400/1200/300 and leave a message with the Sysop or send InterNet Mail to: aq474@cleveland.freenet.edu or send BitNet Mail to: aq474%cleveland.freenet@cunyvm or send PRODIGY Mail to: DFJH48A or send a message via packet to KB8NW @ WA8BXN.OH.USA.NA

/EXIT

Tedd Mirgliotta KB8NW
InterNet: kb8nw@barf80.nshore.org
Basic Amateur Radio Frequency BBS (BARF-80) +1 216/237-8208
"Totally devoted to Amateur Radio" - 24 Hrs a day 8/N/1 14.4k-300 baud

2245. New IonCAP Package

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 20:27:53 UTC
From: jamestab@news.delphi.com
Message-ID: <2kqvo9$e24@news.delphi.com>
Source record: 270397

Skywave Analysis Package

CAPMAN -- Computer Assisted Prediction Manager

At last, a professional-quality IONCAP package that allows anyone to use the most advanced propagation routine interfacing with the ELNEC and MININEC antenna analysis gain patterns.

CAPMAN is the versatile menu/mouse driven IONCAP propagation package developed by Kangaroo Tabor Software and the prime author of IONCAP. CAPMAN delivers IONCAP input file construction and management, two integrated execute functions, the ability to view and manipulate huge output files and display of multicolor output graphs. The package allows you to customize it for your own station -- painlessly. A full-featured location database, indexed on both country name and call prefix, provides access to over 490 prefixes. Each database entry establishes associated information such as prefix, continent, country, city, geographic coordinates, CQ zone, ITU zone, a 900 character note pad, forward and reverse azimuths and distances, and the current local sunrise and sunset times. CAPMAN provides management of "input records" through the use of libraries. Input records may be created, revised, renamed, copied, deleted and combined into "input files" for performing custom predictions. An extensive on-line help system is provided and includes documentation from the IONCAP user's manual. Sunset and sunrise times, for any day, are accessible through the use of a calendar that also displays the current Local Mean, Local Civil and Greenwich Mean times.

The predicted Smoothed Sunspot Number may be configured and automatically set for the coming 12 months, providing quick one-step predictions. Many more features are provided in a "friendly" yet powerful "HF Analysis" package.

CAPMAN is completely fool-proof for the most advanced or beginning user. Your contacts and friends may be added to the library and run any time with a few keystrokes. A wide choice of antenna routines is available, to be configured for your station, or use the antenna analysis computed using ELNEC or MININEC. Numerous output methods, including a "Long distance" model for the DXer, are easily accessible.

The choices of output include MUF, FOT, S/N, Reliability, Service Probability, angles of take-off and arrival at receiver, S-meter units, field strength and modes of

propagation -- many more -- using the Es, E, F1 and F2-layers for the HF bands. Graphs of the predicted vertical ionogram, MUF, FOT and LUF are available.

This menu driven package features the newest "updated" full commercial version (LU9402) of IONCAP used by over 450 government agencies and commercial communications departments in the USA and more than 100 other countries.

This CAPMAN package is a 32 bit version and requires an IBM compatible 80386 or above.

For more information on the CAPMAN package contact:
LUCAS Radio / Kangaroo Tabor Software
2900 Valmont Road, Suite "H"
Boulder, CO 80301
Phone 303-494-4647 / Fax 303-494-0937

2246. New IonCAP Package supports MiniNec/Elnec output

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 20:42:37 UTC
From: jamestab@news.delphi.com
Message-ID: <2kr0jt$elr@news.delphi.com>
Source record: 270398

Skywave Analysis Package

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LUCAS Radio / Kangaroo Tabor Software
2900 Valmont Road, Suite "H"
Boulder, CO 80301
Phone 303-494-4647 / Fax 303-494-0937

2247. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 20:54:35 UTC
From: zlau@arrl.org
Message-ID: <1994Feb27.205435.7993@arrl.org>
Source record: 270399

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <1994Feb27.012117.11788@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:

: Ha, Ha. The problem doesn't come with mounting the gunnplexer, or
: even aiming them, the problem is making sure they're on frequency
: and making rated power, and that the detector diodes haven't gone
: south. Most hams don't have the appropriate test equipment, or the
: skills to fabricate cheap alterative test equipment. Yeah, yeah,
: a radar detector can serve as a minimal activity checker, but that's
: not good enough to set up and maintain a legal and efficient link.

You could be right about that, Gary. Maybe you can no longer
expect people to fabricate blocks of wood to act as attenuators
to see which gunnplexers work the best. I have to admit I cheat
on this--if I stick a gunnplexer inside our screen room and close
the door, the attenuation to one of the lab benches is just right
for weak signal testing. Incidentally, if you are serious about
getting on 10 GHz, the March 10 GHz contest results in QST list
a number of stations on the band.

: >One of the tricks to making microwave gear resistant to
: >interference is to use horn antennas or waveguide in your
: >input circuit. They make a very low loss high pass filter.
: >The waveguide below cutoff effect is quite effective in
: >reducing low frequency interference.

: Sure, that helps, especially if you use *enough* waveguide. You
: need at least a 1/4 wave depth at the frequency of the *interference*

Where did you get this idea? I tried coupling two 10 GHz antennas,
a scalar dish feed with 9 dB of gain, and a 17 dBi horn, and didn't
see it on the spectrum analyzer (at least 70 dB of isolation below
110 MHz). I'd love to see a 1 x 1 x 2 inch 2 meter antenna that had
no meaningful attenuation (size of the feed without the scalar rings).

: to get meaningful attenuation. That is often in the 100 MHz region
: because of colocated FM broadcast transmitters. Remember you've got
: a simple diode detector in there that will respond to *any* RF of
: sufficient magnitude, and one of it's terminals is exposed on the
: outside of the gunnplexer. When the interference is at 10 GHz or
: higher, the waveguide doesn't act as a filter, of course, and there
: are thousands of 10 GHz emitters in LOS of a typical downtown rooftop

The exposed terminal problems is easily fixed--you shield it, just like
any other piece of electronic equipment you want to work next to an
antenna radiating more than a kW. Unfortunately, even the IF circuitry

of microwave gear has to be shielded, but this goes with the territory. But, shielding is trivial compared to trying to filter out a signal of nearly the same frequency. Thus, I don't expect people to have much luck using 219 MHz for receive on the same tower as a channel 13 broadcast station. As I said before, it doesn't make sense to try and do everything on one band--especially since we do have a selection to choose from.

--

Zack Lau KH6CP/1 2 way QRP WAS

8 States on 10 GHz

Internet: zlau@arrl.org 10 grids on 2304 MHz

2248. Re: Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 21:26:46 UTC
From: ap164@FreeNet.Carleton.CA
Message-ID: <CLwJKn.2E4@freenet.carleton.ca>
Source record: 270400

I dunno--I got my special events QSL card last year from hams of
the American Sunbathers Association when they operated during
National Nude Weekend, and I thought it was a very tasteful card,
as nude QSL cards go. Soft focus, geometric diffusion--certainly
a MUCH more tasteful f
card than (sorry about the typo, my editor is off)
some of the ones I've received bearing buxom cartoon or real
babes.

In the almost 18 years I've been a ham, I have to confess that
no one has ever asked me what I was or wasn't wearing--
actually, they might have been shocked--which is CERTAINLY
more than I can say for the users of telephones! :) (hi hi)

Cheers...

Maria L. Evans, KT5Y "I would never belong to a club
Columbia, MO that would have me as a member."
mevans01@bigcat.missouri.edu --Groucho Marx

2249. Optoelectronics advertisments in QST ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 21:32:38 UTC
From: mohan@tulip
Message-ID: <CLwJuF.BtE@utnetw.utoledo.edu>
Source record: 270401

Hello:
In the recent issues of QST, a company called Optoelectronics is advertising
test equipment for radios. One of the product is described as radio interceptor

What is this device used for ? I am asking this because, the advertisment says
it has applications in surveillance, and the equipment is supposed to be some
kinf of test equipment.

Hope someone here can explain the use of the equipment to me. Thanks.
//Mohan
--
~ Mohan Pakkurti < < ~
~ Dept. of Electrical Engineering __o < > ~
~ The University of Toledo `\< o/ > > ~
~ e-mail: mohan@tulip.es.utoledo.edu ()/ () /| ~
~ Amateur Radio: KB8PIP // ~
~~~~~~
~~~~~~

2250. jargon

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 21:41:47 UTC
From: GEORGE@golflima.demon.co.uk
Message-ID: <762385307snz@golflima.demon.co.uk>
Source record: 270402

How about PUNK? Long before the word was in general use it was used by
hams to mean *bad* or *rotten*.
--
Russell Lee

2251. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 22:18:41 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLwLz6.7GE@ucdavis.edu>
Source record: 270403
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: "The SERA repeater index may be published or reproduced in any form
: by any publication or electronic means to be distributed without
: charge. Appropriate credit must be given to the SERA Repeater Journal."

: SERA lists 10 southeastern states in the Journal, Georgia, Tennessee,
: Kentucky, Mississippi, North Carolina, South Carolina, Virginia, West
: Virginia, and including the T-MARC coordinated repeaters in Maryland,
: Delaware, and DC. *This* is where the ARRL gets their listings for these
: states. They don't pay a dime for them, or for the man-years of effort
: that went into the coordinations and database. They don't even have the
: courtsey to give SERA credit for the information.

Hey Gary,
That sounds great, can you get a copy of that in an electronic format for
the net? If so, that would be 20% of the states needed for Conway's
project from a non-ARRL source.

cheers,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2252. IC-765 Replacement?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 23:04:52 UTC
From: schken@nova
Message-ID: <2kr8uk$r5v@oak.oakland.edu>
Source record: 270404

[No readable article body recovered]

2253. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-27 23:51:53 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <CLwqAH.LHE@odin.corp.sgi.com>
Source record: 270405

In article <14@ted.win.net>, mjsilva@ted.win.net (Michael Silva) writes:
|>
|>
|> >BTW, how do some of the people key
|> >so darned fast CW? Its like 30-40 wpm on my computer. Can they really decode
|> >this by ear or do they use computers for decoding too?
|> >
|> >
|> Can only tell you that the world record for receiving CW (via ear,
|> to manual typewriter), is 77.5 wpm, c. 1939. Sends a shudder up
|> your spine, no?
|>
|> Mike Silva, KK6GM
|>
|>

World Record is 75.2 WPM. It will not stand for much longer.

dit dit
--
Chuck Adams K5FO CP-60
adams@sgi.com

2254. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 00:16:43 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <CLwrFv.M1o@odin.corp.sgi.com>
Source record: 270406

Good on going discussion guys/girls.

1. Many complain about their penmanship. Looks like to me you can kill two birds with one stone. Get a book on penmanship (they still write those don't they?). Find the best style to copy and work on penmanship at the same time.

2. Start with cursive, don't DON'T print.

3. Practice not dotting i's and j's and don't cross the t's. This will come in handy later at higher speeds.

4. Use only half the horizontal width of the page.

5. Write small, remember t=d/v, where t is the time to write a critter, d is the distance pen/pencil must move, and v is the velocity at which you can move the pen/pencil over the writing surface. Use ballpoint, not pencil. Pencil drags too much. I hate ballpoint, as i am OF and prefer fountain pen, but I use ballpoint for copying code up to 40 or 45 wpm, if i must write it down.

I leave it as an exercise for the student to determine why each of the above is logical.

P.S. Someone complained that writing required you needed to know the next critter. If I remember correctly, it really doesn't matter. Maybe that's why you should copy behind. :-)

dit dit

--
Chuck Adams K5FO CP-60
adams@sgi.com

2255. Subscribe

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 01:05:02 UTC
From: SKINDOC@delphi.COM
Message-ID: <01H9E52IJZBG9D56D8@delphi.com>
Source record: 270407

Sub info-ham Ralph Grover

2256. Wanted: DAK MR-101s SW "radio"

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 02:47:24 UTC
From: eb795@cleveland.Freenet.Edu
Message-ID: <2krlvs$7ro@usenet.INS.CWRU.Edu>
Source record: 270408

Hello.

I am looking for a Dak MR101s radio to tinker with.
The 101s is the newer model with FM stereo.This is the one I wan
t, not the original 101.

If you would like to be rid of yours, please send me e-mail.

Thank you.
--
Eric Matthews
eb795@cleveland.freenet.edu

2257. FT-530 vs TH-78A

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 04:08:32 UTC
From: sandersm@yvax.byu.edu
Message-ID: <1994Feb27.210832.5738@yvax.byu.edu>
Source record: 270409

I am debating on wether to buy a Yaesu FT-530 or a Kenwood Th-78A. I would like to hear experiences from owners of both radios. I am new to this hobby and would appreciate any info. 73's TNX Chad

2258. SM406

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 05:07:54 UTC
From: Troyce@bio.tamu.edu
Message-ID: <Troyce-280294110754@idmb-secretary.tamu.edu>
Source record: 270410

I recently got a copy of SM406 and have a problem. It won't access the data files in the subdirectory, only if they are in the drive root directory. I.e., if I call up a file to be transmitted to be in practice, I have to enter the entire directory name along with the file name.

I've solved this temporarily by placing it all on a floppy, but would prefer to keep it on the HD. Has anyone else had this problem? Any suggestions? My older copy worked just fine.

Troyce
KC5CBI

2259. Current mods on World (ftp.std.com)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 05:16:26 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLx5BF.JvB@netcom.com>
Source record: 270411

```
The mods below are available via anonymous FTP to: ftp.std.com
The directories are shown below.

total 28
drwxrwxr-x 2 wy1z 512 Feb 27 23:14 aea
drwxrwxr-x 2 wy1z 1024 Feb 25 20:44 alinco
drwxrwxr-x 2 wy1z 512 Feb 27 23:10 aor
drwxrwxr-x 2 wy1z 512 Feb 27 23:11 argosy
drwxrwxr-x 2 wy1z 512 Feb 11 17:50 ge
drwxrwxr-x 2 wy1z 512 Feb 27 23:41 grundig
drwxrwxr-x 2 wy1z 512 Feb 27 23:16 heathkit
drwxrwxr-x 2 wy1z 2048 Feb 27 23:25 icom
drwxrwxr-x 2 wy1z 512 Feb 27 23:25 kantronics
drwxrwxr-x 2 wy1z 2048 Feb 27 22:32 kenwood
drwxrwxr-x 2 wy1z 512 Feb 27 23:22 mfj
drwxrwxr-x 2 wy1z 1024 Feb 27 23:48 misc
drwxrwxr-x 2 wy1z 512 Feb 27 22:48 motorola
drwxrwxr-x 2 wy1z 512 Feb 27 23:23 paccomm
drwxrwxr-x 2 wy1z 512 Feb 27 22:33 ramsey
drwxrwxr-x 2 wy1z 512 Feb 11 17:50 ranger
drwxrwxr-x 2 wy1z 512 Feb 27 23:40 sangean
drwxrwxr-x 2 wy1z 512 Feb 27 23:03 sony
drwxrwxr-x 2 wy1z 512 Feb 27 23:44 standard
drwxrwxr-x 2 wy1z 1536 Feb 27 23:56 tandy
drwxrwxr-x 2 wy1z 512 Feb 11 17:19 tapr
drwxrwxr-x 5 wy1z 512 Feb 27 23:59 uniden
drwxrwxr-x 2 wy1z 2560 Feb 27 22:40 yaesu

/pub/hamradio/mods/aea:
total 19
-rw-rw-r-- 1 wy1z 2702 Feb 27 23:14 hamlink
-rw-rw-r-- 1 wy1z 1807 Feb 27 23:02 pk232
-rw-rw-r-- 1 wy1z 4930 Feb 27 23:02 pk232.reg
-rw-rw-r-- 1 wy1z 1278 Feb 27 23:02 pk232bat
-rw-rw-r-- 1 wy1z 1820 Feb 27 23:02 pk232lok.mod
-rw-rw-r-- 1 wy1z 3826 Feb 27 23:02 pk232pwr
-rw-rw-r-- 1 wy1z 914 Feb 27 23:02 pk88fix

/pub/hamradio/mods/alinco:
total 117
-rw-rw-r-- 1 wy1z 2726 Feb 25 20:44 alinco
-rw-rw-r-- 1 wy1z 1602 Feb 25 20:44 alinco.9k6
-rw-rw-r-- 1 wy1z 3416 Feb 25 20:44 alinco.lit
-rw-rw-r-- 1 wy1z 2219 Feb 25 20:44 alr22t
-rw-rw-r-- 1 wy1z 2090 Jan 15 23:49 alr22t.mod
```

```
-rw-rw-r-- 1 wy1z 786 Feb 25 20:37 dj120
-rw-rw-r-- 1 wy1z 1090 Jan 14 19:09 dj120.mod
-rw-rw-r-- 1 wy1z 3004 Feb 25 20:37 dj160
-rw-rw-r-- 1 wy1z 1581 Feb 25 20:37 dj160dtm
-rw-rw-r-- 1 wy1z 566 Feb 25 20:37 dj160pik
-rw-rw-r-- 1 wy1z 6123 Feb 25 20:39 dj160tx
-rw-rw-r-- 1 wy1z 1593 Jan 14 19:09 dj162.mod
-rw-rw-r-- 1 wy1z 2807 Jan 14 19:09 dj500.mod
-rw-rw-r-- 1 wy1z 3501 Jan 14 19:09 dj560-1.mod
-rw-rw-r-- 1 wy1z 1213 Jan 14 19:09 dj560.mod
-rw-rw-r-- 1 wy1z 2068 Feb 25 20:39 dj560t
-rw-rw-r-- 1 wy1z 1950 Jan 14 19:09 dj580.mod
-rw-rw-r-- 1 wy1z 1350 Feb 25 20:39 dj580.ud
-rw-rw-r-- 1 wy1z 2466 Feb 25 20:39 dj580mod
-rw-rw-r-- 1 wy1z 3951 Jan 14 19:09 dj580rep.inf
-rw-rw-r-- 1 wy1z 6951 Feb 25 20:39 dj580rev
-rw-rw-r-- 1 wy1z 838 Feb 25 20:39 dj580rx
-rw-rw-r-- 1 wy1z 2621 Feb 25 20:39 dj580t
-rw-rw-r-- 1 wy1z 1550 Feb 25 20:40 dj590xbf
-rw-rw-r-- 1 wy1z 2859 Feb 25 20:40 djf1t
-rw-rw-r-- 1 wy1z 1220 Feb 25 20:40 djf1t.mod
-rw-rw-r-- 1 wy1z 1117 Feb 25 20:40 dr110
-rw-rw-r-- 1 wy1z 1181 Feb 25 20:40 dr110_11
-rw-rw-r-- 1 wy1z 2274 Feb 25 20:40 dr110cel
-rw-rw-r-- 1 wy1z 1145 Feb 25 20:40 dr1200
-rw-rw-r-- 1 wy1z 2232 Jan 14 19:09 dr1200-1.mod
-rw-rw-r-- 1 wy1z 845 Feb 25 20:40 dr1200.960
-rw-rw-r-- 1 wy1z 1873 Feb 25 20:40 dr1200.im
-rw-rw-r-- 1 wy1z 1334 Jan 14 19:09 dr1200.mod
-rw-rw-r-- 1 wy1z 2144 Jan 14 19:09 dr1200t.mod
-rw-rw-r-- 1 wy1z 1157 Feb 25 20:40 dr130
-rw-rw-r-- 1 wy1z 1272 Jan 14 19:09 dr130.mod
-rw-rw-r-- 1 wy1z 4077 Jan 14 19:09 dr510.mod
-rw-rw-r-- 1 wy1z 886 Jan 14 19:09 dr570.mod
-rw-rw-r-- 1 wy1z 2006 Feb 25 20:40 dr599t
-rw-rw-r-- 1 wy1z 2147 Jan 14 19:09 dr599t-1.mod
-rw-rw-r-- 1 wy1z 1876 Jan 14 19:09 dr599t.mod
-rw-rw-r-- 1 wy1z 1735 Feb 25 20:40 dr600
-rw-rw-r-- 1 wy1z 6003 Jan 14 19:09 dr600.mod

/pub/hamradio/mods/aor:
total 8
-rw-rw-r-- 1 wy1z 7726 Feb 27 23:10 ar1000

/pub/hamradio/mods/argosy:
total 1
-rw-rw-r-- 1 wy1z 697 Feb 27 23:11 argosy2

/pub/hamradio/mods/ge:
total 18
-rw-rw-r-- 1 wy1z 11676 Jan 15 23:49 ge_mvp.mod
```

```
-rw-rw-r-- 1 wy1z 5908 Jan 15 23:49 ge_mvpex.mod

/pub/hamradio/mods/grundig:
total 10
-rw-rw-r-- 1 wy1z 4023 Feb 27 23:41 sat500
-rw-rw-r-- 1 wy1z 5482 Jan 19 15:59 satellit500.mod

/pub/hamradio/mods/heathkit:
total 7
-rw-rw-r-- 1 wy1z 3558 Jan 15 23:50 hw-24-t.mod
-rw-rw-r-- 1 wy1z 980 Jan 15 23:50 hw-24.mod
-rw-rw-r-- 1 wy1z 684 Feb 27 23:16 hw24
-rw-rw-r-- 1 wy1z 825 Feb 27 23:16 hw2m

/pub/hamradio/mods/icom:
total 324
-rw-rw-r-- 1 wy1z 0 Feb 27 22:23 757contr
-rw-rw-r-- 1 wy1z 3020 Feb 27 22:18 i290
-rw-rw-r-- 1 wy1z 2006 Jan 14 19:08 ic-24.mod
-rw-rw-r-- 1 wy1z 1158 Jan 14 19:08 ic-mu2.mod
-rw-rw-r-- 1 wy1z 1143 Jan 14 19:08 ic-p2at.mod
-rw-rw-r-- 1 wy1z 1199 Jan 14 19:08 ic02-2.mod
-rw-rw-r-- 1 wy1z 837 Jan 14 19:08 ic02-3.mod
-rw-rw-r-- 1 wy1z 2031 Jan 14 19:08 ic02.mod
-rw-rw-r-- 1 wy1z 4057 Feb 27 22:17 ic02mod
-rw-rw-r-- 1 wy1z 1845 Jan 14 19:08 ic04.mod
-rw-rw-r-- 1 wy1z 8507 Feb 27 22:17 ic229
-rw-rw-r-- 1 wy1z 2933 Feb 27 22:17 ic229mod
-rw-rw-r-- 1 wy1z 2210 Feb 27 22:17 ic22s
-rw-rw-r-- 1 wy1z 936 Jan 14 19:08 ic24-2.mod
-rw-rw-r-- 1 wy1z 5159 Jan 14 19:08 ic24-3.mod
-rw-rw-r-- 1 wy1z 4425 Feb 27 22:17 ic2410
-rw-rw-r-- 1 wy1z 6541 Jan 14 19:08 ic2410.mod
-rw-rw-r-- 1 wy1z 592 Feb 27 22:17 ic2410tx
-rw-rw-r-- 1 wy1z 2157 Feb 27 22:17 ic24atke
-rw-rw-r-- 1 wy1z 2074 Feb 27 22:17 ic24atke.1
-rw-rw-r-- 1 wy1z 2324 Feb 27 22:17 ic24atmo
-rw-rw-r-- 1 wy1z 1199 Feb 27 22:17 ic24atne
-rw-rw-r-- 1 wy1z 2051 Feb 27 22:17 ic24atte
-rw-rw-r-- 1 wy1z 1229 Feb 27 22:17 ic28
-rw-rw-r-- 1 wy1z 465 Jan 14 19:08 ic28.mod
-rw-rw-r-- 1 wy1z 1927 Feb 27 22:17 ic2at
-rw-rw-r-- 1 wy1z 2327 Feb 27 22:17 ic2at.1
-rw-rw-r-- 1 wy1z 2636 Jan 14 19:08 ic2at.mod
-rw-rw-r-- 1 wy1z 2369 Feb 27 22:17 ic2gatmo
-rw-rw-r-- 1 wy1z 1537 Feb 27 22:17 ic2ia.mic
-rw-rw-r-- 1 wy1z 4413 Feb 27 22:17 ic2sat
-rw-rw-r-- 1 wy1z 7967 Jan 14 19:08 ic2sat-2.mod
-rw-rw-r-- 1 wy1z 4894 Jan 14 19:08 ic2sat.mod
-rw-rw-r-- 1 wy1z 1607 Feb 27 22:17 ic2satrx
-rw-rw-r-- 1 wy1z 545 Feb 27 22:17 ic2satrx.1
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-rw-rw-r-- 1 wy1z 8722 Feb 27 22:17 ic2sra
-rw-rw-r-- 1 wy1z 7555 Feb 27 22:17 ic2sra.1
-rw-rw-r-- 1 wy1z 8413 Jan 14 19:08 ic2sra.mod
-rw-rw-r-- 1 wy1z 2622 Jan 14 19:08 ic32-2.mod
-rw-rw-r-- 1 wy1z 2439 Jan 14 19:08 ic32.mod
-rw-rw-r-- 1 wy1z 996 Feb 27 22:17 ic3200a
-rw-rw-r-- 1 wy1z 440 Jan 14 19:08 ic3200a.mod
-rw-rw-r-- 1 wy1z 2240 Feb 27 22:17 ic32at
-rw-rw-r-- 1 wy1z 2995 Feb 27 22:17 ic32atmo
-rw-rw-r-- 1 wy1z 3556 Feb 27 22:17 ic32mod
-rw-rw-r-- 1 wy1z 3190 Feb 27 22:17 ic37
-rw-rw-r-- 1 wy1z 3822 Jan 14 19:08 ic37.mod
-rw-rw-r-- 1 wy1z 2224 Feb 27 22:17 ic720
-rw-rw-r-- 1 wy1z 2363 Jan 16 21:35 ic720a.mod
-rw-rw-r-- 1 wy1z 597 Feb 27 22:17 ic728
-rw-rw-r-- 1 wy1z 6031 Feb 27 22:17 ic731rs2
-rw-rw-r-- 1 wy1z 570 Feb 27 22:17 ic735
-rw-rw-r-- 1 wy1z 3614 Jan 16 00:56 ic735-1.mod
-rw-rw-r-- 1 wy1z 1380 Jan 16 00:56 ic735-2.mod
-rw-rw-r-- 1 wy1z 1373 Jan 14 19:08 ic735ibm.mod
-rw-rw-r-- 1 wy1z 7758 Jan 14 19:08 ic751.mod
-rw-rw-r-- 1 wy1z 4968 Feb 27 22:17 ic751ext
-rw-rw-r-- 1 wy1z 3002 Feb 27 22:17 ic751spl
-rw-rw-r-- 1 wy1z 3316 Feb 27 22:17 ic751sw
-rw-rw-r-- 1 wy1z 2866 Feb 27 22:17 ic900.mod
-rw-rw-r-- 1 wy1z 4226 Feb 27 22:17 ic901
-rw-rw-r-- 1 wy1z 2705 Feb 27 22:17 ic901.p
-rw-rw-r-- 1 wy1z 4063 Jan 14 19:08 ic901a.mod
-rw-rw-r-- 1 wy1z 2214 Jan 14 19:08 icom-ram.mod
-rw-rw-r-- 1 wy1z 3325 Feb 27 22:17 icom2
-rw-rw-r-- 1 wy1z 3331 Feb 27 22:17 icom32
-rw-rw-r-- 1 wy1z 1897 Jan 14 19:08 icom32at.mod
-rw-rw-r-- 1 wy1z 4367 Feb 27 22:17 icom_r71
-rw-rw-r-- 1 wy1z 4519 Feb 27 22:17 icombnc
-rw-rw-r-- 1 wy1z 1378 Feb 27 22:17 icp2at
-rw-rw-r-- 1 wy1z 1311 Feb 27 22:17 icp2at_
-rw-rw-r-- 1 wy1z 3502 Feb 27 22:17 icw.sm7
-rw-rw-r-- 1 wy1z 6488 Feb 27 22:17 icw2.sum
-rw-rw-r-- 1 wy1z 4346 Jan 14 19:08 icw21at.mod
-rw-rw-r-- 1 wy1z 1447 Feb 27 22:17 icw21atr
-rw-rw-r-- 1 wy1z 1043 Feb 27 22:17 icw21atr.pac
-rw-rw-r-- 1 wy1z 4725 Feb 27 22:17 icw2a
-rw-rw-r-- 1 wy1z 2590 Jan 14 19:08 icw2a-1.mod
-rw-rw-r-- 1 wy1z 6673 Jan 14 19:08 icw2a.mod
-rw-rw-r-- 1 wy1z 1440 Feb 27 22:17 icw2arx
-rw-rw-r-- 1 wy1z 589 Feb 27 22:17 icw2arx.1
-rw-rw-r-- 1 wy1z 750 Feb 27 22:17 icw2e
-rw-rw-r-- 1 wy1z 1634 Feb 27 22:17 icw2tune
-rw-rw-r-- 1 wy1z 1902 Feb 27 22:17 icxx71
-rw-rw-r-- 1 wy1z 4713 Feb 27 23:25 r1ant
```

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-rw-rw-r-- 1 wy1z 26176 Jan 14 19:13 r7000-2.mod
-rw-rw-r-- 1 wy1z 3309 Feb 27 22:18 r7000.mod
-rw-rw-r-- 1 wy1z 3101 Jan 14 19:23 u2at.mod

/pub/hamradio/mods/kantronics:
total 8
-rw-rw-r-- 1 wy1z 1129 Jan 15 23:50 kamdcd.mod
-rw-rw-r-- 1 wy1z 1358 Feb 27 23:04 kantroni
-rw-rw-r-- 1 wy1z 584 Feb 27 23:04 kpc2dcdm
-rw-rw-r-- 1 wy1z 2403 Feb 27 23:25 pacmod

/pub/hamradio/mods/kenwood:
total 369
-rw-rw-r-- 1 wy1z 3410 Feb 27 22:25 757contr
-rw-rw-r-- 1 wy1z 2084 Feb 27 22:32 9k6tm721
-rw-rw-r-- 1 wy1z 3868 Feb 27 22:26 kenwdmic
-rw-rw-r-- 1 wy1z 1324 Feb 27 22:26 kptr2600
-rw-rw-r-- 1 wy1z 0 Feb 27 22:26 ps50
-rw-rw-r-- 1 wy1z 1753 Jan 15 23:51 ps50.fix
-rw-rw-r-- 1 wy1z 814 Feb 27 22:29 r1000mut
-rw-rw-r-- 1 wy1z 785 Feb 27 22:29 r5000
-rw-rw-r-- 1 wy1z 1155 Jan 14 19:13 r5000.mod
-rw-rw-r-- 1 wy1z 3309 Feb 27 22:29 r7000.mod
-rw-rw-r-- 1 wy1z 4771 Jan 14 19:13 radio.mod
-rw-rw-r-- 1 wy1z 2175 Jan 14 19:11 th215.mod
-rw-rw-r-- 1 wy1z 2932 Jan 16 00:57 th225.mod
-rw-rw-r-- 1 wy1z 7624 Jan 14 19:11 th25.mod
-rw-rw-r-- 1 wy1z 862 Jan 14 19:11 th27a.mod
-rw-rw-r-- 1 wy1z 6003 Jan 14 19:11 th28a.mod
-rw-rw-r-- 1 wy1z 1333 Jan 14 19:11 th75.mod
-rw-rw-r-- 1 wy1z 25211 Jan 14 19:11 th77a.mod
-rw-rw-r-- 1 wy1z 8702 Jan 14 19:11 th78a-0.mod
-rw-rw-r-- 1 wy1z 4445 Jan 14 19:11 th78a-1.mod
-rw-rw-r-- 1 wy1z 7471 Jan 14 19:11 th78a-2.mod
-rw-rw-r-- 1 wy1z 21400 Jan 14 19:11 th78a-complete.mod
-rw-rw-r-- 1 wy1z 3435 Jan 14 19:11 th78a-new.mod
-rw-rw-r-- 1 wy1z 890 Jan 14 19:11 th78a-warn.mod
-rw-rw-r-- 1 wy1z 2441 Jan 14 19:11 tm-96kb.mod
-rw-rw-r-- 1 wy1z 1340 Jan 14 19:11 tm221.fix
-rw-rw-r-- 1 wy1z 758 Jan 14 19:11 tm2570a.mod
-rw-rw-r-- 1 wy1z 937 Jan 14 19:11 tm321a-2.mod
-rw-rw-r-- 1 wy1z 1384 Jan 14 19:11 tm321a-3.mod
-rw-rw-r-- 1 wy1z 583 Jan 14 19:11 tm321a.mod
-rw-rw-r-- 1 wy1z 1702 Jan 14 19:11 tm421.mod
-rw-rw-r-- 1 wy1z 1836 Jan 16 00:57 tm421a.mod
-rw-rw-r-- 1 wy1z 2900 Jan 14 19:11 tm701.mod
-rw-rw-r-- 1 wy1z 271 Jan 14 19:11 tm701a.mod
-rw-rw-r-- 1 wy1z 2718 Jan 14 19:11 tm721-2.mod
-rw-rw-r-- 1 wy1z 5940 Jan 14 19:11 tm721-3.mod
-rw-rw-r-- 1 wy1z 4143 Jan 14 19:11 tm721.mod
-rw-rw-r-- 1 wy1z 1575 Jan 14 19:11 tm731.mod
```

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-rw-rw-r-- 1 wy1z 1083 Jan 14 19:11 tm732a-1.mod
-rw-rw-r-- 1 wy1z 5697 Jan 14 19:11 tm732a-2.mod
-rw-rw-r-- 1 wy1z 4401 Jan 14 19:11 tm741-1.mod
-rw-rw-r-- 1 wy1z 2701 Jan 14 19:11 tm741-2.mod
-rw-rw-r-- 1 wy1z 17234 Jan 14 19:11 tm741.mod
-rw-rw-r-- 1 wy1z 4637 Jan 14 19:11 tm741732.mod
-rw-rw-r-- 1 wy1z 3048 Jan 14 19:11 tm742.mod
-rw-rw-r-- 1 wy1z 2723 Jan 16 00:57 tm941a-2.mod
-rw-rw-r-- 1 wy1z 4490 Jan 14 19:11 tm941a.mod
-rw-rw-r-- 1 wy1z 1191 Jan 15 23:54 tr7625.fix
-rw-rw-r-- 1 wy1z 1588 Jan 14 19:11 ts140.fix
-rw-rw-r-- 1 wy1z 547 Jan 14 19:11 ts140.mod
-rw-rw-r-- 1 wy1z 9607 Jan 14 19:11 ts180.fix
-rw-rw-r-- 1 wy1z 3439 Jan 14 19:11 ts2400.fix
-rw-rw-r-- 1 wy1z 2969 Jan 14 19:11 ts25-45at.mod
-rw-rw-r-- 1 wy1z 827 Jan 14 19:11 ts430-2.mod
-rw-rw-r-- 1 wy1z 796 Jan 14 19:11 ts430.mod
-rw-rw-r-- 1 wy1z 6155 Jan 14 19:11 ts430s.fix
-rw-rw-r-- 1 wy1z 1355 Jan 14 19:11 ts440-1.mod
-rw-rw-r-- 1 wy1z 954 Jan 14 19:11 ts440-at.mod
-rw-rw-r-- 1 wy1z 2101 Jan 14 19:11 ts440.fix
-rw-rw-r-- 1 wy1z 1543 Jan 14 19:11 ts440.mod
-rw-rw-r-- 1 wy1z 4149 Jan 14 19:11 ts450-690.mod
-rw-rw-r-- 1 wy1z 4689 Jan 16 00:57 ts450s.mod
-rw-rw-r-- 1 wy1z 4268 Jan 14 19:11 ts50.mod
-rw-rw-r-- 1 wy1z 6731 Jan 14 19:11 ts520.fix
-rw-rw-r-- 1 wy1z 1428 Jan 14 19:11 ts530.mod
-rw-rw-r-- 1 wy1z 2848 Jan 14 19:11 ts680-2.mod
-rw-rw-r-- 1 wy1z 500 Jan 14 19:11 ts680.mod
-rw-rw-r-- 1 wy1z 4689 Jan 16 00:57 ts690s.mod
-rw-rw-r-- 1 wy1z 120 Jan 14 19:11 ts711.mod
-rw-rw-r-- 1 wy1z 4923 Jan 14 19:11 ts790a.mod
-rw-rw-r-- 1 wy1z 7811 Jan 14 19:11 ts820.fix
-rw-rw-r-- 1 wy1z 5451 Jan 14 19:11 ts820.mod
-rw-rw-r-- 1 wy1z 3308 Jan 14 19:11 ts830.fix
-rw-rw-r-- 1 wy1z 12088 Jan 16 00:57 ts850-1.mod
-rw-rw-r-- 1 wy1z 9086 Jan 16 00:57 ts850-2.mod
-rw-rw-r-- 1 wy1z 20923 Jan 14 19:11 ts850s.mod
-rw-rw-r-- 1 wy1z 8064 Jan 14 19:11 ts930.fix
-rw-rw-r-- 1 wy1z 6778 Jan 14 19:11 ts930.mod
-rw-rw-r-- 1 wy1z 3658 Jan 14 19:11 ts940.fix
-rw-rw-r-- 1 wy1z 2396 Jan 14 19:11 ts940ibm.mod
-rw-rw-r-- 1 wy1z 1060 Jan 15 23:54 tw-4000.mod

/pub/hamradio/mods/mfj:
total 10
-rw-rw-r-- 1 wy1z 5537 Feb 27 23:22 mfj1278
-rw-rw-r-- 1 wy1z 3265 Jan 15 23:53 tnc2a.mod

/pub/hamradio/mods/misc:
total 442
```

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-rw-rw-r-- 1 wy1z 1636 Feb 27 23:45 2mloop
-rw-rw-r-- 1 wy1z 1061 Jan 15 23:47 56kbfix.mod
-rw-rw-r-- 1 wy1z 2487 Feb 27 23:45 ab2xsw
-rw-rw-r-- 1 wy1z 4241 Feb 27 23:45 akai
-rw-rw-r-- 1 wy1z 2777 Jan 15 23:48 allband.mod
-rw-rw-r-- 1 wy1z 2693 Feb 27 23:45 am1700
-rw-rw-r-- 1 wy1z 1123 Feb 27 23:45 attpc
-rw-rw-r-- 1 wy1z 2021 Feb 27 23:45 basiccar
-rw-rw-r-- 1 wy1z 1566 Feb 27 23:45 chradio1
-rw-rw-r-- 1 wy1z 3795 Feb 27 23:45 coax
-rw-rw-r-- 1 wy1z 2826 Feb 27 23:46 dc777
-rw-rw-r-- 1 wy1z 1968 Feb 27 23:46 dc777.p
-rw-rw-r-- 1 wy1z 149 Feb 27 23:46 disclaim
-rw-rw-r-- 1 wy1z 5934 Feb 27 23:46 fisherpr
-rw-rw-r-- 1 wy1z 2139 Feb 27 23:46 fluke75m
-rw-rw-r-- 1 wy1z 717 Feb 27 23:46 ftp
-rw-rw-r-- 1 wy1z 6353 Feb 27 23:46 ftpmods
-rw-rw-r-- 1 wy1z 2787 Feb 27 23:46 g5rv
-rw-rw-r-- 1 wy1z 1168 Feb 27 23:46 g7
-rw-rw-r-- 1 wy1z 605 Feb 27 23:46 g7-ant
-rw-rw-r-- 1 wy1z 5610 Feb 27 23:46 geclrad
-rw-rw-r-- 1 wy1z 214731 Feb 27 23:46 ibmpcfaq
-rw-rw-r-- 1 wy1z 7523 Feb 27 23:46 jp0le
-rw-rw-r-- 1 wy1z 3315 Feb 27 23:46 jpipe
-rw-rw-r-- 1 wy1z 6422 Feb 27 23:46 jpole
-rw-rw-r-- 1 wy1z 2780 Feb 27 23:46 jpole.bas
-rw-rw-r-- 1 wy1z 3815 Feb 27 23:46 jpole222
-rw-rw-r-- 1 wy1z 2833 Feb 27 23:46 jpolefm
-rw-rw-r-- 1 wy1z 1886 Feb 27 23:46 jps
-rw-rw-r-- 1 wy1z 5691 Feb 27 23:46 kw732
-rw-rw-r-- 1 wy1z 5558 Feb 27 23:46 mobile
-rw-rw-r-- 1 wy1z 5032 Feb 27 23:46 mod
-rw-rw-r-- 1 wy1z 4710 Feb 27 23:46 modfiles
-rw-rw-r-- 1 wy1z 60937 Feb 27 23:46 mods
-rw-rw-r-- 1 wy1z 6353 Feb 27 23:46 modsftp
-rw-rw-r-- 1 wy1z 1516 Feb 27 23:46 procomm
-rw-rw-r-- 1 wy1z 4771 Jan 15 23:51 radio.mod
-rw-rw-r-- 1 wy1z 6542 Feb 27 23:46 radiomod
-rw-rw-r-- 1 wy1z 4888 Feb 27 23:46 rci2950
-rw-rw-r-- 1 wy1z 584 Feb 27 23:46 scanfreq
-rw-rw-r-- 1 wy1z 4202 Feb 27 23:46 scart
-rw-rw-r-- 1 wy1z 6020 Feb 27 23:46 sjant
-rw-rw-r-- 1 wy1z 0 Feb 27 23:46 stereopw
-rw-rw-r-- 1 wy1z 1551 Jan 15 23:53 tc2duplx.mod
-rw-rw-r-- 1 wy1z 1558 Jan 15 23:53 tnc2.mod

/pub/hamradio/mods/motorola:
total 58
-rw-rw-r-- 1 wy1z 2536 Feb 27 22:47 ht220mod
-rw-rw-r-- 1 wy1z 5585 Jan 15 23:50 maxtrac.mod
```

```
-rw-rw-r-- 1 wy1z 2475 Feb 27 22:47 maxtrac9
-rw-rw-r-- 1 wy1z 1874 Feb 27 22:48 maxtrac9.p
-rw-rw-r-- 1 wy1z 1633 Feb 27 22:47 micor
-rw-rw-r-- 1 wy1z 6138 Feb 27 22:47 micor9k6
-rw-rw-r-- 1 wy1z 8877 Jan 16 01:17 micordup.mod
-rw-rw-r-- 1 wy1z 11843 Jan 16 01:17 micoruhf.mod
-rw-rw-r-- 1 wy1z 8258 Jan 16 01:17 micorvhf.mod
-rw-rw-r-- 1 wy1z 6060 Jan 15 23:51 mitrek.mod

/pub/hamradio/mods/paccomm:
total 6
-rw-rw-r-- 1 wy1z 3260 Feb 27 23:23 nb9600mo
-rw-rw-r-- 1 wy1z 1397 Jan 15 23:53 tiny2tnc.mod

/pub/hamradio/mods/ramsey:
total 78
-rw-rw-r-- 1 wy1z 2819 Feb 27 22:33 fm10
-rw-rw-r-- 1 wy1z 28984 Feb 27 22:33 fm10.faq
-rw-rw-r-- 1 wy1z 23110 Feb 27 22:33 fm10.mod
-rw-rw-r-- 1 wy1z 3017 Feb 27 22:33 fx146-22
-rw-rw-r-- 1 wy1z 1069 Jan 15 23:49 fx146.mod
-rw-rw-r-- 1 wy1z 323 Jan 15 23:51 pa20.mod
-rw-rw-r-- 1 wy1z 1207 Feb 27 22:33 prosca
-rw-rw-r-- 1 wy1z 1376 Jan 15 23:52 ramsey.mod
-rw-rw-r-- 1 wy1z 770 Feb 27 22:33 ramsey14.pac
-rw-rw-r-- 1 wy1z 4474 Feb 27 22:33 ramsey2m
-rw-rw-r-- 1 wy1z 1410 Jan 15 23:52 ramseyfx.mod
-rw-rw-r-- 1 wy1z 3394 Feb 27 22:33 ramseypm
-rw-rw-r-- 1 wy1z 823 Feb 27 22:33 ramyfx.sql

/pub/hamradio/mods/ranger:
total 5
-rw-rw-r-- 1 wy1z 4386 Jan 15 23:52 rci-2950.mod

/pub/hamradio/mods/sangean:
total 6
-rw-rw-r-- 1 wy1z 3241 Feb 27 23:06 803a
-rw-rw-r-- 1 wy1z 1101 Feb 27 23:40 sangean

/pub/hamradio/mods/sony:
total 21
-rw-rw-r-- 1 wy1z 3831 Feb 27 23:03 sony2010
-rw-rw-r-- 1 wy1z 4347 Jan 19 15:58 sony2010-2.mod
-rw-rw-r-- 1 wy1z 3961 Feb 27 23:03 sony2010.1
-rw-rw-r-- 1 wy1z 4277 Jan 19 15:58 sony2010.mod
-rw-rw-r-- 1 wy1z 2246 Feb 27 23:03 sonysw

/pub/hamradio/mods/standard:
total 72
-rw-rw-r-- 1 wy1z 1600 Feb 27 22:36 c528
-rw-rw-r-- 1 wy1z 9899 Jan 14 19:12 c528.mod
-rw-rw-r-- 1 wy1z 1470 Feb 27 22:36 c528a
```

```
-rw-rw-r-- 1 wy1z 4124 Feb 27 22:36 c528batt
-rw-rw-r-- 1 wy1z 7463 Feb 27 22:36 c528mod
-rw-rw-r-- 1 wy1z 4437 Feb 27 22:36 c528mods
-rw-rw-r-- 1 wy1z 506 Feb 27 22:36 c528rx
-rw-rw-r-- 1 wy1z 3792 Feb 27 22:36 c558
-rw-rw-r-- 1 wy1z 4624 Jan 14 19:12 c558-1.mod
-rw-rw-r-- 1 wy1z 4132 Jan 14 19:12 c558.mod
-rw-rw-r-- 1 wy1z 3191 Feb 27 22:36 c558diag
-rw-rw-r-- 1 wy1z 252 Feb 27 22:36 c558u
-rw-rw-r-- 1 wy1z 938 Feb 27 22:36 c558word
-rw-rw-r-- 1 wy1z 5849 Feb 27 22:36 c5608
-rw-rw-r-- 1 wy1z 803 Feb 27 22:36 c5608da
-rw-rw-r-- 1 wy1z 9281 Jan 14 19:12 c5608da.mod
-rw-rw-r-- 1 wy1z 1819 Feb 27 23:44 st528
-rw-rw-r-- 1 wy1z 0 Feb 27 23:44 stereopw

/pub/hamradio/mods/tandy:
total 329
-rw-rw-r-- 1 wy1z 3444 Feb 27 23:05 49mhz
-rw-rw-r-- 1 wy1z 2182 Feb 27 22:42 dx380
-rw-rw-r-- 1 wy1z 3476 Feb 27 22:42 dx380lon
-rw-rw-r-- 1 wy1z 2830 Jan 15 23:11 dx390-1.mod
-rw-rw-r-- 1 wy1z 2218 Jan 16 21:31 dx390-2.mod
-rw-rw-r-- 1 wy1z 1211 Feb 27 22:42 dx440din
-rw-rw-r-- 1 wy1z 2575 Feb 27 22:42 dx440mod
-rw-rw-r-- 1 wy1z 2790 Feb 27 22:42 dx440mod.1
-rw-rw-r-- 1 wy1z 1596 Feb 27 22:42 dx440r26
-rw-rw-r-- 1 wy1z 1580 Feb 27 22:42 dx440scn
-rw-rw-r-- 1 wy1z 5918 Feb 27 22:42 dx440whi
-rw-rw-r-- 1 wy1z 4023 Feb 27 22:42 dx440wmo
-rw-rw-r-- 1 wy1z 8837 Feb 27 22:42 dx44odin
-rw-rw-r-- 1 wy1z 1055 Feb 27 22:45 frg7
-rw-rw-r-- 1 wy1z 6583 Feb 27 22:42 htx101
-rw-rw-r-- 1 wy1z 6871 Jan 15 23:49 htx101.mod
-rw-rw-r-- 1 wy1z 1229 Feb 27 22:42 htx202
-rw-rw-r-- 1 wy1z 1164 Feb 27 22:42 htx202.1
-rw-rw-r-- 1 wy1z 4988 Feb 27 22:42 htx202.j
-rw-rw-r-- 1 wy1z 1976 Feb 27 22:42 htx202.lit
-rw-rw-r-- 1 wy1z 3047 Feb 27 22:42 htx202.tsp
-rw-rw-r-- 1 wy1z 6443 Feb 27 22:42 htx202b
-rw-rw-r-- 1 wy1z 1896 Feb 27 22:42 htx202ba
-rw-rw-r-- 1 wy1z 849 Feb 27 22:42 htx202la
-rw-rw-r-- 1 wy1z 1410 Feb 27 22:42 htx202nm
-rw-rw-r-- 1 wy1z 1219 Feb 27 22:42 htx202tt
-rw-rw-r-- 1 wy1z 555 Feb 27 22:43 pro2002
-rw-rw-r-- 1 wy1z 31183 Feb 27 22:43 pro2004
-rw-rw-r-- 1 wy1z 5044 Jan 14 19:09 pro2004.mod
-rw-rw-r-- 1 wy1z 651 Feb 27 22:43 pro2005
-rw-rw-r-- 1 wy1z 2544 Jan 14 19:09 pro2005.mod
-rw-rw-r-- 1 wy1z 15216 Feb 27 22:43 pro2005r
```

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-rw-rw-r-- 1 wy1z 18483 Feb 27 22:43 pro2006
-rw-rw-r-- 1 wy1z 12553 Jan 27 13:53 pro2006.mod
-rw-rw-r-- 1 wy1z 586 Feb 27 22:44 pro2006.p
-rw-rw-r-- 1 wy1z 3711 Feb 27 22:44 pro2006.ssb
-rw-rw-r-- 1 wy1z 2999 Feb 27 22:44 pro2006a
-rw-rw-r-- 1 wy1z 3040 Feb 27 22:44 pro2006m
-rw-rw-r-- 1 wy1z 5338 Feb 27 22:44 pro2006p
-rw-rw-r-- 1 wy1z 4693 Feb 27 22:44 pro2020.mod
-rw-rw-r-- 1 wy1z 2678 Feb 27 22:44 pro2021
-rw-rw-r-- 1 wy1z 3335 Jan 14 19:09 pro2021.mod
-rw-rw-r-- 1 wy1z 2571 Feb 27 22:44 pro2022
-rw-rw-r-- 1 wy1z 2426 Jan 14 19:09 pro2022.mod
-rw-rw-r-- 1 wy1z 1395 Feb 27 22:44 pro2026
-rw-rw-r-- 1 wy1z 1602 Jan 14 19:09 pro2026.mod
-rw-rw-r-- 1 wy1z 1177 Feb 11 01:14 pro2030.mod
-rw-rw-r-- 1 wy1z 901 Feb 27 22:44 pro32nm
-rw-rw-r-- 1 wy1z 1690 Feb 27 22:44 pro34
-rw-rw-r-- 1 wy1z 1201 Jan 14 19:09 pro34.mod
-rw-rw-r-- 1 wy1z 13400 Feb 27 22:44 pro34a
-rw-rw-r-- 1 wy1z 2512 Feb 27 22:44 pro34bir
-rw-rw-r-- 1 wy1z 758 Feb 27 22:44 pro34mod
-rw-rw-r-- 1 wy1z 6511 Feb 27 22:44 pro37
-rw-rw-r-- 1 wy1z 10438 Feb 27 22:44 pro37-8
-rw-rw-r-- 1 wy1z 922 Feb 27 22:44 pro37.800
-rw-rw-r-- 1 wy1z 17902 Jan 14 19:09 pro37.mod
-rw-rw-r-- 1 wy1z 5295 Jan 14 19:09 pro38.mod
-rw-rw-r-- 1 wy1z 2677 Feb 27 22:44 pro39
-rw-rw-r-- 1 wy1z 3501 Feb 27 22:44 pro39.8oo
-rw-rw-r-- 1 wy1z 320 Feb 27 22:44 pro39.c
-rw-rw-r-- 1 wy1z 3297 Jan 14 19:09 pro39.mod
-rw-rw-r-- 1 wy1z 1062 Feb 27 22:44 pro39c
-rw-rw-r-- 1 wy1z 2392 Feb 27 22:44 pro43
-rw-rw-r-- 1 wy1z 2613 Jan 14 19:09 pro43-1.mod
-rw-rw-r-- 1 wy1z 2248 Jan 14 19:09 pro43-2.mod
-rw-rw-r-- 1 wy1z 2860 Feb 27 22:44 pro43.800
-rw-rw-r-- 1 wy1z 10480 Jan 27 13:53 pro43.mod
-rw-rw-r-- 1 wy1z 2684 Jan 15 23:52 rs-freq.mod
-rw-rw-r-- 1 wy1z 1330 Feb 27 23:40 rs2mht

/pub/hamradio/mods/tapr:
total 12
-rw-rw-r-- 1 wy1z 11615 Jan 15 23:52 tapr9600.mod

/pub/hamradio/mods/uniden:
total 3
drwxrwxr-x 2 wy1z 512 Feb 27 23:59 bearcat
drwxrwxr-x 2 wy1z 512 Feb 27 23:21 other
drwxrwxr-x 2 wy1z 512 Feb 27 22:59 regency

/pub/hamradio/mods/uniden/bearcat:
total 89
```

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-rw-rw-r-- 1 wy1z 479 Jan 15 23:48 760xlt.mod
-rw-rw-r-- 1 wy1z 2266 Feb 27 22:13 bc100
-rw-rw-r-- 1 wy1z 2438 Feb 27 22:13 bc100a
-rw-rw-r-- 1 wy1z 1004 Feb 27 22:13 bc140
-rw-rw-r-- 1 wy1z 1008 Jan 14 19:12 bc175xl.mod
-rw-rw-r-- 1 wy1z 19528 Jan 14 19:12 bc200.mod
-rw-rw-r-- 1 wy1z 4184 Feb 27 22:13 bc200mod
-rw-rw-r-- 1 wy1z 1113 Feb 27 22:13 bc200xlt
-rw-rw-r-- 1 wy1z 2390 Jan 14 19:12 bc200xlt.cpu
-rw-rw-r-- 1 wy1z 4125 Feb 27 22:13 bc205xlt.mod
-rw-rw-r-- 1 wy1z 1748 Feb 27 22:13 bc220
-rw-rw-r-- 1 wy1z 3294 Jan 14 19:12 bc2500.mod
-rw-rw-r-- 1 wy1z 5008 Feb 27 22:13 bc760
-rw-rw-r-- 1 wy1z 802 Feb 27 22:13 bc760.re
-rw-rw-r-- 1 wy1z 1229 Feb 27 22:13 bc760.sqm
-rw-rw-r-- 1 wy1z 8575 Feb 27 22:13 bc760rv
-rw-rw-r-- 1 wy1z 1379 Feb 27 22:13 bc760xlt
-rw-rw-r-- 1 wy1z 3560 Jan 14 19:12 bc855xlt.mod
-rw-rw-r-- 1 wy1z 8431 Feb 27 22:13 bcrepair
-rw-rw-r-- 1 wy1z 4193 Feb 27 22:13 bearcat3
-rw-rw-r-- 1 wy1z 1588 Jan 14 19:23 uni2510.mod

/pub/hamradio/mods/uniden/other:
total 4
-rw-rw-r-- 1 wy1z 3499 Feb 27 23:21 hr25exp

/pub/hamradio/mods/uniden/regency:
total 12
-rw-rw-r-- 1 wy1z 4969 Feb 27 22:59 mx4000mo
-rw-rw-r-- 1 wy1z 2571 Feb 27 22:59 mx5000
-rw-rw-r-- 1 wy1z 1412 Feb 27 22:59 mx7000e
-rw-rw-r-- 1 wy1z 503 Feb 27 22:59 mx7000m
-rw-rw-r-- 1 wy1z 531 Feb 27 22:59 mx7000z

/pub/hamradio/mods/yaesu:
total 513
-rw-rw-r-- 1 wy1z 1055 Feb 27 22:37 frg7
-rw-rw-r-- 1 wy1z 943 Feb 27 22:38 ft1000
-rw-rw-r-- 1 wy1z 1203 Jan 14 19:07 ft1000.mod
-rw-rw-r-- 1 wy1z 2581 Feb 27 22:38 ft101e.mod
-rw-rw-r-- 1 wy1z 1121 Feb 27 22:38 ft101ee
-rw-rw-r-- 1 wy1z 5614 Feb 27 22:38 ft11r
-rw-rw-r-- 1 wy1z 1007 Jan 14 19:07 ft209rh.mod
-rw-rw-r-- 1 wy1z 962 Feb 27 22:38 ft209rhm
-rw-rw-r-- 1 wy1z 4394 Feb 27 22:38 ft211
-rw-rw-r-- 1 wy1z 2674 Feb 27 22:38 ft212
-rw-rw-r-- 1 wy1z 288 Feb 27 22:38 ft212mod
-rw-rw-r-- 1 wy1z 1314 Jan 14 19:07 ft212rh.mod
-rw-rw-r-- 1 wy1z 2623 Jan 14 19:07 ft2200.mod
-rw-rw-r-- 1 wy1z 2938 Feb 27 22:38 ft2200am
-rw-rw-r-- 1 wy1z 5240 Jan 14 19:07 ft23-33-73.mod
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-rw-rw-r-- 1 wy1z 4711 Jan 14 19:07 ft23-73-211.mod
-rw-rw-r-- 1 wy1z 4940 Feb 27 22:39 ft233373
-rw-rw-r-- 1 wy1z 670 Feb 27 22:39 ft23pac
-rw-rw-r-- 1 wy1z 758 Feb 27 22:39 ft23r.mod
-rw-rw-r-- 1 wy1z 802 Feb 27 22:39 ft2400
-rw-rw-r-- 1 wy1z 1106 Jan 14 19:07 ft2400-1.mod
-rw-rw-r-- 1 wy1z 942 Jan 14 19:07 ft2400.mod
-rw-rw-r-- 1 wy1z 677 Feb 27 22:39 ft2400h
-rw-rw-r-- 1 wy1z 1219 Feb 27 22:39 ft26
-rw-rw-r-- 1 wy1z 2615 Jan 14 19:07 ft290.mod
-rw-rw-r-- 1 wy1z 6034 Jan 14 19:07 ft290r.mod
-rw-rw-r-- 1 wy1z 2547 Feb 27 22:39 ft301
-rw-rw-r-- 1 wy1z 2138 Feb 27 22:39 ft411
-rw-rw-r-- 1 wy1z 8103 Jan 14 19:07 ft411-1.mod
-rw-rw-r-- 1 wy1z 1026 Jan 16 00:56 ft411-2.mod
-rw-rw-r-- 1 wy1z 1210 Feb 27 22:39 ft411.key
-rw-rw-r-- 1 wy1z 4698 Jan 14 19:07 ft411.mod
-rw-rw-r-- 1 wy1z 1155 Feb 27 22:39 ft411mod
-rw-rw-r-- 1 wy1z 1023 Feb 27 22:39 ft411ptt
-rw-rw-r-- 1 wy1z 705 Feb 27 22:39 ft415
-rw-rw-r-- 1 wy1z 1641 Jan 14 19:07 ft415-815.mod
-rw-rw-r-- 1 wy1z 1331 Feb 27 22:39 ft415_81
-rw-rw-r-- 1 wy1z 6108 Feb 27 22:39 ft470
-rw-rw-r-- 1 wy1z 37144 Jan 14 19:07 ft470-1.mod
-rw-rw-r-- 1 wy1z 9942 Jan 16 00:56 ft470-2.mod
-rw-rw-r-- 1 wy1z 1951 Jan 16 00:56 ft470-3.mod
-rw-rw-r-- 1 wy1z 2093 Feb 27 22:39 ft470.1
-rw-rw-r-- 1 wy1z 36802 Feb 27 22:39 ft470.lis
-rw-rw-r-- 1 wy1z 27000 Jan 14 19:07 ft470.mod
-rw-rw-r-- 1 wy1z 1309 Feb 27 22:39 ft4700
-rw-rw-r-- 1 wy1z 1195 Jan 16 00:56 ft4700.mod
-rw-rw-r-- 1 wy1z 2191 Feb 27 22:39 ft470hyp
-rw-rw-r-- 1 wy1z 924 Feb 27 22:39 ft470mat
-rw-rw-r-- 1 wy1z 36453 Feb 27 22:39 ft470rd
-rw-rw-r-- 1 wy1z 2177 Feb 27 22:39 ft470rx
-rw-rw-r-- 1 wy1z 3949 Feb 27 22:39 ft470rx1
-rw-rw-r-- 1 wy1z 2181 Feb 27 22:39 ft470rxt
-rw-rw-r-- 1 wy1z 2574 Feb 27 22:39 ft470rxu
-rw-rw-r-- 1 wy1z 8979 Feb 27 22:39 ft470rxu.1
-rw-rw-r-- 1 wy1z 5606 Feb 27 22:39 ft470rxu.2
-rw-rw-r-- 1 wy1z 2487 Feb 27 22:39 ft470war
-rw-rw-r-- 1 wy1z 28137 Feb 27 22:39 ft51-520
-rw-rw-r-- 1 wy1z 1611 Jan 14 19:07 ft5100-1.mod
-rw-rw-r-- 1 wy1z 17382 Jan 14 19:07 ft5100-2.mod
-rw-rw-r-- 1 wy1z 2985 Jan 14 19:07 ft5100.int
-rw-rw-r-- 1 wy1z 2700 Jan 14 19:07 ft5100.mod
-rw-rw-r-- 1 wy1z 857 Feb 27 22:39 ft5100ti
-rw-rw-r-- 1 wy1z 26463 Feb 27 22:39 ft51_200.rd
-rw-rw-r-- 1 wy1z 2278 Feb 27 22:39 ft5200
-rw-rw-r-- 1 wy1z 2368 Feb 27 22:39 ft5200.m0d
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-rw-rw-r-- 1 wy1z 5079 Jan 14 19:07 ft5200.mod
-rw-rw-r-- 1 wy1z 856 Feb 27 22:39 ft5200w
-rw-rw-r-- 1 wy1z 2208 Feb 27 22:39 ft5200xb
-rw-rw-r-- 1 wy1z 2107 Feb 27 22:39 ft530
-rw-rw-r-- 1 wy1z 729 Feb 27 22:39 ft530-
-rw-rw-r-- 1 wy1z 2272 Jan 14 14:34 ft530.1
-rw-rw-r-- 1 wy1z 9645 Feb 27 22:40 ft530.193
-rw-rw-r-- 1 wy1z 1260 Jan 14 14:34 ft530.2
-rw-rw-r-- 1 wy1z 1441 Feb 27 22:40 ft530.293
-rw-rw-r-- 1 wy1z 2458 Jan 14 14:34 ft530.3
-rw-rw-r-- 1 wy1z 2435 Jan 14 14:34 ft530.4
-rw-rw-r-- 1 wy1z 1258 Feb 27 22:40 ft530.cor
-rw-rw-r-- 1 wy1z 10778 Jan 14 19:07 ft530.mod
-rw-rw-r-- 1 wy1z 2572 Feb 27 22:40 ft530.rtx
-rw-rw-r-- 1 wy1z 1660 Feb 27 22:40 ft530am
-rw-rw-r-- 1 wy1z 1068 Feb 27 22:40 ft530am1
-rw-rw-r-- 1 wy1z 2047 Feb 27 22:40 ft53o
-rw-rw-r-- 1 wy1z 999 Jan 14 19:07 ft650.mod
-rw-rw-r-- 1 wy1z 7027 Feb 27 22:40 ft70g
-rw-rw-r-- 1 wy1z 1131 Jan 14 19:07 ft726r.mod
-rw-rw-r-- 1 wy1z 2443 Feb 27 22:40 ft727cat.mod
-rw-rw-r-- 1 wy1z 1045 Jan 14 19:07 ft727r.mod
-rw-rw-r-- 1 wy1z 2172 Feb 27 22:40 ft727rca
-rw-rw-r-- 1 wy1z 11375 Feb 27 22:40 ft727rev
-rw-rw-r-- 1 wy1z 3075 Feb 27 22:40 ft727sof
-rw-rw-r-- 1 wy1z 1735 Jan 14 19:07 ft736r.mod
-rw-rw-r-- 1 wy1z 1083 Feb 27 22:40 ft747
-rw-rw-r-- 1 wy1z 1386 Jan 14 19:07 ft747.mod
-rw-rw-r-- 1 wy1z 1188 Jan 14 19:07 ft747gx.mod
-rw-rw-r-- 1 wy1z 781 Feb 27 22:40 ft757
-rw-rw-r-- 1 wy1z 1091 Jan 14 19:07 ft757.mod
-rw-rw-r-- 1 wy1z 1158 Jan 14 19:07 ft757gx.mod
-rw-rw-r-- 1 wy1z 2193 Feb 27 22:40 ft767
-rw-rw-r-- 1 wy1z 2328 Feb 27 22:40 ft767gx
-rw-rw-r-- 1 wy1z 1423 Jan 14 19:07 ft767gx.mod
-rw-rw-r-- 1 wy1z 1904 Feb 27 22:40 ft767gxm
-rw-rw-r-- 1 wy1z 1235 Feb 27 22:40 ft890
-rw-rw-r-- 1 wy1z 1710 Jan 14 19:07 ft890-1.mod
-rw-rw-r-- 1 wy1z 1537 Jan 14 19:07 ft890.mod
-rw-rw-r-- 1 wy1z 836 Feb 27 22:40 ft990
-rw-rw-r-- 1 wy1z 1188 Jan 14 19:07 ft990-1.mod
-rw-rw-r-- 1 wy1z 1203 Jan 14 19:07 ft990-2.mod
-rw-rw-r-- 1 wy1z 2616 Jan 14 19:07 ft990-3.mod
-rw-rw-r-- 1 wy1z 1138 Jan 14 19:07 ft990.mod

--
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|--------------------------------------------------------------------------|
```

```
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
================================================================================
```

2260. Help!!! Please :)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 05:49:10 UTC
From: erik@elvis.umd.umich.edu
Message-ID: <2ks0km$icq@elvis.umd.umich.edu>
Source record: 270412

i Recently purchased a Kenwood r-5000 general coverage receiver. This machine was used so I didn't get a manual....I've figured out everything except for probably the most obvious feature....I cannot figure out how to set the clock, go figure. If anyone could give me at least a clue, it would be appreciated.

Thanks and 73,

EriK N8QLS

2261. ANARTS RTTY NEWS797 20/02/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 05:57:32 UTC
From: dave@eram.esi.com.au
Message-ID: <5212@eram.esi.com.au>
Source record: 270413
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS NEWS BULLETIN 797 20/02/94

Sunday Broadcast Schedules (Note 80 metre change)

3.545 MHz 0930 UTC This relay is in
recess from end of
November until be-
ginning of April.
7.045 MHz -3 0030 UTC VK2CTD (Col)
14.070 MHz (amtor/fec) 0030 UTC VK2DPM (Alan)
14.091 MHz 0030 UTC VK2BQS (JIM)
146.675 MHz 0030/0930 UTC VK2JPA (PAT)
144.850 MHz (ax25 bbs) VK2JPA AT VK2RWI
146.675 MHz (rtty mmbbs/repeater) VK2RTY

Views expressed in this news bulletin are not necessarily
those of the Broadcast Officer, the Relay Officers, or of the
Society.

Special reminder

As next weekend is Central Coast Field Day at Wyong, please
note that the usual Sunday morning broadcast will go out at
the same time a day earlier on the Saturday...

Repeat, the morning broadcast will take place at 0030UT on
Saturday 26th February.

Of course, this is so ANARTS relay officers can go to the
Field Day along with the rest of the East Coast amateurs. Look
for us there, and say hello.

Back to normal the following Sunday ...

Change in 80m broadcast relay

Due to very poor propagation in this part of the cycle during
summer months, it has been decided to drop the 80m relay of
the cast from December to March inclusive. The relay will
resume on the first Sunday in April, which is the 3rd this
year.

This could be reviewed in future years, but should be in force until at least 1997, judging by the way the current solar cycle is progressing. The minimum for the cycle is estimated variously to come from late 1995 to around April 1996. This presumes that the cycle length will continue to shorten to under 10 years, the last cycle being 9.6 years in length. The decline of the present cycle is running three to eight months ahead of cycles 18, 19, and 21 (cycle 20 was of much lower amplitude).

Something good to remember -- the present cycle (cycle 22) reached its maximum in the record short interval of 2.8 years. Perhaps this next one will be similar.

Estimates courtesy of the IPS Radio and Space Services Solar-Geophysical Summary January 1994.

A reminder for the Gosford - Central Coast Field Day

Don't forget the Central Coast Field Day on 27th February, at the prestige venue of the Wyong Racecourse in Howarth St. Wyong.

There you will meet the committee of ANARTS -- Col VK2CTD, President, Jim VK2BQS, Vice-President, Alan VK2DPM, Treasurer, and Pat VK2JPA, Broadcast Officer, will be floating around somewhere with a video camera. (I am also a member of the Gladesville Amateur Radio Club Inc. specialising in ATV, and I have been told that I don't float! Pat)

Don't forget to enter the Morse contest ANARTS will be running again. It was such a success last year that it will be a feature of the stand again this year. Polish your sending and receiving skills and come along and participate in this most historic method of amateur digital transmission.

A late amendment to our previous announcement of a display of computer pictures. Murphy has struck again and the hard disk crashed rather permanently by the sounds of things, so we can't show the fractals and other images we had lined up for display. There's always next year.

See you there.

DARC HF RTTY Contest (cont.)

Date: February 19-20, 1994

Sponsored by Deutscher Amateur-Radio-Club e V.

Multipliers: Each DXCC/WAE country, and each USA state, and each call district in JA, VE, and VK, (NOT USA), regardless of band. (NO band multipliers). For USA stations, count only the FIRST QSO with a USA station as a DXCC/WAE country multiplier, regardless of band.

QSO points: Count 1 point for QSO with own country (States of USA are not counted as countries).

Count 2 points for QSO outside your own country, but within continent.

Count 3 points for QSO outside your own continent.

Final score: Total QSO points x total of multipliers.

Awards: To top stations in each class, country and district mentioned above.

Logs: Logs must contain: Date, Time UTC, Callsign, Message sent/received, name, US-state, first-time-mult prefix, and QSO points. Also required is a Summary sheet with a list of claimed multipliers. If entry is multi-op, please list names and callsigns of all ops. Comments are very much appreciated.

Deadlines; Part 1: May, 1994. Part 2: September 1, 1994.

Mail entry to:
Werner Ludwig, DF5BX
P.O. Box 12 70
D-49110 Georgsmarienhutte
Germany

IPS weekly report
---
11 - 17 February 1994

Issue no.: 07

Date of issue: 18 February 1994

Date 11 12 13 14 15 16 17
10cm 93 98 98 101 104 105 106
A 38 27 30 28 26 16 (12 estimated)
T 20 26 36 48 72 41 54

Summary of activity

Solar activity was mostly very low except for 13th and 17th February when activity was low.

The geomagnetic field at Learmonth (WA) from 11th to 15th was mostly unsettled to active with storm levels at periods on 11th, and minor storm levels at times on the 12th-15th.

Conditions on 16th were unsettled to active, and quiet to unsettled on 17th.

Ionospheric F2 critical frequencies at Sydney were near predicted levels 11th to partway through 13th when frequencies were firstly enhanced by up to 40 per cent, then depressed by up to 30 per cent after 1700UT. Frequencies on 14th to 15th ranged from near normal to up to 60 per cent enhanced, returning to near predicted values on 16th, then up to 15 per cent enhanced on 17th February. There was Sporadic E blanketing at 0800UT on 11th and some spread F during local night on 16th.

Forecast for the next week (18 - 24 February)

Solar : Low.

Geomagnetic: Active 20-23 February due to a coronal hole.

Ionospheric: Near predicted monthly values, MUFs are then expected to be depressed 15-20 per cent during the coronal hole activity.

Courtesy of IPS Radio and Space Services

VK2SG RTTY DX NOTES 11 FEB 94

VK2SG RTTY DX NOTES FOR WEEK ENDING 11 FEB 93 (BID RTDX0211)

OUR INFORMATION THIS WEEK CAME FROM 9X5LJ, I5AAX AND THE IK5PWJ PACKET CLUSTER, I5FLN, WB2CJL, AA5AU, W5KSI, ZS5S, AND THE NJ0M NODE OF THE TWIN CITIES DX PACKETCLUSTER NETWORK. THANKS TO ALL FOR YOUR HELP.

BANDPASS:
FRIDAY 4
0735-14084 FK8GS REV. 0939-14082 YL1ZE
1142-21083 UN8PFE 1302-14085 4S7RM
1320-14089 SO6AD/9 1340-14091 HK0DPA
1348-14088 9H1ET 1500-21085 TZ6FIC
1510-21089 XE1SRF 2350-14089 JA3DLE/1

SATURDAY 5
0245-14086 VQ9TV 0835-14082 6W6JX
1257-14087 YV5KAJ 1304-21085 TZ6FIC
1316-21082 TU4EV 1400-21088 ZD7DP
1435-21085 CU3EM 1525-14086 J88BS
1543-14081 4U1ITU 1707-14083 XU7VK
1817-14082 J28JJ 1918-14086 EA8AK
1922-14088 ZA1MH 2008-14092 FG5FI
2149-14085 FM5GN 2156-14087 LU4DXU

SUNDAY 6
0006-14085 S92ZM
0042-21076 3Y0PI FEC QSL KA6V SEE NOTE
0103-21076 3Y0PI ARQ 0620-14079 UA0ST
0624-14086 TR8MD QSL F6FNU 0648-14082 S53X
0756-14079 4U1ITU 0756 14079 4X/OK1FGV
0800-14080 T91ENS PACTOR 0826-14090 ER1PE
0830-14071 OD5ZZ PACTOR 0921-21086 EA6VS
0926-14083 UX0KC 0930-14085 6W6JX
0950-14090 UY7LT 0951-14090 RW8LZ
1035-14086 RV9CX 1050-14086 XU7VK QSL HA0HW
1053-14085 UN5PR 1053-14085 UH8WAD
1340-21085 ZS5J 1343-21083 SV9CAG
1400-14085 BV7WB 1400-21086 ZD7DP
1403-14087 4U1ITU 1405-14085 XU7VK
1415-14088 CU3EM 1431-14089 HP1XVI
1440-14091 YB3AQF 1441-28083 V50CM
1454-14086 TA5C 1506-21076 TU2BB PACTOR
1509-14091 UT2UZ 1533-14087 5B4VX
1538-21083 V50CM 1532-14080 VU2YK PACTOR
1705-14083 XU7VK 2226-14087 FM5GN
2322-14087 HP1XVI

MONDAY 7
1107-14085 XU7VK 1711-14089 CO2AW
1829-14083 C91AI QSL CT1DGZ 1900-14084 3Y0PI INVERTED
2007-14083 CX3ABE 2021-21085 ZD7SM
2148-14084 CO2AW 2206-14084 YN4JAR
2224-14084 HK0DPA 2239-14084 S92ZM
2340-14084 ZP6EM 2354-14086 KP4SQ

TUESDAY 8
0002-14088 PJ2MI 0026-14083 VP8CIL
0030-14083 FY5FG 0032-14085 ZP6EM
0039-14080 3Y0PI QSX UP 0119-14076 3Y0PI
0302-14081 3Y0PI 0048-14082 CE3NDN PACTOR
1721-14090 HK0DPA 1822-14086 CO2AW
1857-14083 CX3ABE 1904-14085 5Z4FO
1930-14083 YN5JAR 2153-14070 V31AR FEC/ARQ
2218-14084 9Y4VU 2230-14082 CO2AW
2235-14080 3Y0PI PACTOR QRM
2300-14082 3Y0PI QSY'D TO ESCAPE PACTOR QRM

WEDNESDAY 9
0102-14082 3Y0PI STILL GOING STRONG

THURSDAY 10
0100-14081 V31JU

NOTES OF INTEREST:
TNX TO TONY WA4JQS, AT 3Y0PI, FOR HIS VALIANT EFFORTS IN
SUCCESSFULLY REPAIRING THE RTTY GEAR UNDER THE MOST ADVERSE
CONDITIONS.

A35JJ, TONGA - LOOK FOR A35JJ BETWEEN 12 AND 20 FEBRUARY ON
ALL BANDS. QSL TO JR2KDN.

FOR NEXT WEEK'S BULLETIN, SEND YOUR BANDPASS AND
NOTES OF INTEREST TO LUCIANO, I5FLN AT ZS5S.ZAF.AF OR
AT 9X5LJ.#KGL.RWA.AF.

73 ES GOOD HUNTING DE JULES W2JGR AT W2TKU.#SRQFL.FL.USA.NA
(VIA HF PACTOR)

Coming events

1994

February 19th-20th DARC HF RTTY
Contest

27th CCARC Field Day
at Wyong

March 19th-20th BARTG WW RTTY
Contest

April 16th-17th SARTG WW AMTOR
Contest

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065
Australia, for such matters as membership and general
enquiries. Enquiries can also be made by packet to the
President (Col) VK2CTD, or the Secretary (Pat)VK2JPA @ VK2RWI

News items may be sent to Broadcast Officer PO Box 60
Blacktown 2148 Australia, or by packet to VK2JPA @ VK2RWI.

Email addresses for the Broadcast Officer are :

patl@extro.ucc.su.oz.au or VK2JPA @ VK2OP nsw.aus.oc

The Society welcomes news items on any digital subjects from
anywhere in the broadcast footprint. We are looking forward
to news from your areas to let other amateurs know what you
are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer
That concludes ANARTS NEWS797 20/02/94.

Inserted by VK2BQS Jim, Vice-President ANARTS.
--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

2262. Errors in TNC2 firmware???

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 06:25:08 UTC
From: byon@csulb.edu
Message-ID: <2ks2o4$6tc@tern.csulb.edu>
Source record: 270414
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

I have recently been experimenting with TNC2 clones and had run across two peculiar "bugs" in the firmware of an MFJ 1278, and a tiny TNC2.

The first problem relates to when the TNC2 sends to the computer the "Change incoming stream" command ("|B" to switch to stream B, for example). It seems that when in command mode, the TNC set the output stream to be equal to the input stream whenever it sends the "cmd:" prompt (if, of course. the output stream was set to something else previously). So it you are in command mode in stream A, and send a "|b" to set the input stream to B, and press Enter, the tnc will respond with "|Bcmd:" to tell that the output stream should now ALSO be set to stream B. The problem is this: The stream switch is sent JUST before sending the cmd: prompt. So if you are on stream A in command mode, and type "|bcst<CR>" to set the input to stream B and get the status of all streams, the tnc will send the results, THEN the |B, then the new cmd: prompt. SO, the output of the cst request made on stream B will be sent to stream A. In fact, the results will show that the input stream is B, while the output stream is A! Of course, if you type another "cst<CR>", the results will be sent to the proper stream, because it has already been corrected. Do all TNC2's exhibit this feature?

The second problem is more major. I seems that when I am connected on two streams, and send text out on the first stream, and then switch to the second and do nothing, all output from the tnc is halted. For example, if I am connected on stream A and B to two bbs's, and I am currently on stream A, and I send "l<CR>|B" to list all files on the first bbs and then switch my input to the second bbs, the tnc will halt all output back to me. The results of the list command will come back to the tnc, and the tnc will receive them all internally, but will not send them to the computer....UNTIL I sent something to the tnc first. (Usually I send "^ck<CR>" to enter and then leave command mode. This will then allow all buffered data to be sent to me. However, it you do not send anything to the tnc, it will send nothing to you.

I have found these problems by using paKet 5.1. PaKet creates a different window for each of the tnc's streams, and pressing a shifted arrow key allows you to switch between the streams. When you do this, paKet sends a "|" and the stream identifier. Therefore, it is very easy to switch to another stream to view incoming data, without wanting to send anything, thus causing the second problem. And having entering a command in one window and having the output

return in another window (the first problem) was also easily spotted. I have reproduced these problems using a simple terminal, so they are not errors with paKet.

One other note. I have also played with some Kantronics Tnc. They do not appear to have the lockup problem, but have an even worse version of the first bug. The incoming stream sent from the Kan TNC's is only changed when data comes in from over the air, not from commands. So if I am on stream A, and switch to stream B, SEND a <CR>, (this would fix the TNC2 problem), and start sending commands, the tnc never send me the stream switch command, so all the feedback from my commands always goes to stream A, (or whatever the last stream to receive over the air was). This is very frustrating when using paKet!

Anyone have any comments on any of this? Has anyone else experienced this? Any ideas for solutions?

--
Byon Garrabrant KD6BCH byon@csulb.edu

2263. Daily Summary of Solar Geophysical Activity for 27 February

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 06:45:54 UTC
From: oler@rho.uleth.ca
Message-ID: <9402280645.AA26197@rho.uleth.ca>
Source record: 270415
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

27 FEBRUARY, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 058, 02/27/94
10.7 FLUX=095 90-AVG=107 SSN=069 BKI=1224 2100 BAI=006
BGND-XRAY=B1.4 FLU1=2.2E+06 FLU10=2.9E+04 PKI=1233 2120 PAI=007
BOU-DEV=009,018,018,043,015,009,004,004 DEV-AVG=015 NT SWF=01:057
XRAY-MAX= M2.8 @ 0920UT XRAY-MIN= A9.8 @ 0721UT XRAY-AVG= C1.5
NEUTN-MAX= +002% @ 2310UT NEUTN-MIN= -002% @ 1415UT NEUTN-AVG= +0.0%
PCA-MAX= +0.1DB @ 2355UT PCA-MIN= -0.4DB @ 0905UT PCA-AVG= +0.0DB
BOUTF-MAX=55343NT @ 0204UT BOUTF-MIN=55319NT @ 2003UT BOUTF-AVG=55336NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+074,+000,+000
GOES6-MAX=P:+119NT@ 1616UT GOES6-MIN=N:-052NT@ 0823UT G6-AVG=+095,+037,-030
FLUXFCST=STD:095,095,090;SESC:095,095,090 BAI/PAI-FCST=008,010,010/010,010,010
KFCST=2234 2232 2233 4322 27DAY-AP=007,006 27DAY-KP=2132 2223 2123 2111
WARNINGS=
ALERTS=**MINFLR:M2.8@0920UTC;**TENFLR:120SFU@0903UTC,DUR=19MIN
!!END-DATA!!

NOTE: The Effective Sunspot Number for 26 FEB 94 was 39.2.
The Full Kp Indices for 26 FEB 94 are: 2+ 1- 2- 2- 2+ 1+ 1+ 1-
The 3-Hr Ap Indices for 26 FEB 94 are: 9 3 7 7 10 5 5 3
Greater than 2 MeV Electron Fluence for 27 FEB is: 1.6E+08

SYNOPSIS OF ACT

Solar activity was moderate. A M2 x-ray event occurred at
27/0920Z which was optically uncorrelated. A burst of 120 sfu
was observed on 2695 MHz at 27/0903Z. Region 7675 (S11W26) had
an associatted Type ii sweep between 26/2332Z and 26/2348Z. A
15 degree filament near S14E28 disappeared between 26/2350Z and
27/1540Z. A new region was assigned late yesterday as Region
7681 (S13W18).

Solar activity forecast: solar activity is expected to be
low through the period.

The geomagnetic field has been at quiet to unsettled
levels for the past 24 hours. A brief period of active levels
occurred during the nighttime sector at mid-latitudes while
active to major storms occurred at the high-latitudes.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled through the period.

Event probabilities 28 feb-02 mar

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 28 feb-02 mar

A. Middle Latitudes
Active 10/10/10
Minor Storm 05/05/05
Major-Severe Storm 01/01/01

B. High Latitudes
Active 15/15/15
Minor Storm 10/10/10
Major-Severe Storm 05/05/05

HF propagation conditions continued normal over all
regions. The M-class flare resulted in a moderate SWF over
sunlit paths. Affected areas may have included Africa, Europe,
Asia, and western Australia with maximum absorption centered
approximately near the south-eastern coast of Africa at about
S10 E40. All other areas experienced normal propagation.
Normal propagation is expected to persist over the next 72
hours, through 02 March inclusive.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7677 N11W73 156 0010 BXO 01 002 BET
7678 S14E35 048 0050 CSO 03 003 BET
7679 N03W03 086 0010 BXO 04 004 BET
7680 S12E66 017 0100 CRO 04 006 BET
7681 S13W18 101 0000 AXX 01 004 ALPHA
7674 S14W82 165 PLAGE
7675 S11W26 109 PLAGE
7676 N08W12 095 PLAGE
REGIONS DUE TO RET

NMBR LAT
7666 N18 350

LISTING OF SOLAR ENERGETIC EVENTS FOR 27 FEBRUARY, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
0825 0920 0951 M2.8 120

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 27 FEBRUARY, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
26/A2350 B1540 S14E28 DSF
27/ 0825 0920 0951 LDE M2.8 86

INFERRED CORONAL HOLES. LOCATIONS VALID AT 27/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
65 S27W08 S32W20 S15W34 S11W24 113 ISO POS 006 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
26 Feb: 0317 0335 0353 B5.5
0510 0515 0523 B9.6
1036 1042 1051 B3.6
2324 2336 2349 B5.5 SF 7675 S12W10

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7675: 0 0 0 1 0 0 0 0 001 (25.0)
Uncorrellated: 0 0 0 0 0 0 0 0 003 (75.0)

Total Events: 004 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
26 Feb: 2324 2336 2349 B5.5 SF 7675 S12W10 II,III,V

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2264. Maritime CW freqs (was: RAMSEY FX TRANSCEIVER)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 08:52:57 UTC
From: jherman@uhunix.uhcc.Hawaii.Edu
Message-ID: <CLxFCA.29D@news.Hawaii.Edu>
Source record: 270416

He just won't go away!

In article <762082813snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
> In article <CLnz3x.I7B@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes: >
> > That's old news. BUT the HF maritime CW bands are still jumping with
> > activity and the C.G. is still monitoring them, so CW on the high seas
> > frequencies is still very much in use.
>
> And what frequencies might those be? How about posting them so we can
> practice our CW listening to *real manly men* pounding brass. (Unless
^^^^^^^^^
In your last attack you talked about staring at crotches; now it's manly men...

> of course you're afraid that some anal rententive might accuse you of
^^^^
Hmmm, there's that fixation again with certain body areas.

> promoting the jamming of HF maritime CW ops...)

I shouldn't have to post these frequencies - the information is readily available at any library. But this `TV-generation' doesn't know how to `look it up' so if you REALLY want them for CW practice email me and I'll certainly give them to you. This offer goes for everyone who's interested - the list is only about half of a page.

73 Angus,
Jeff NH6IL

2265. Russian IOTA DX info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 11:26:16 UTC
From: Albert I Sushkov <rv3gw@lttsco.lipetsk.su>
Message-ID: <AAOJTSjGL5@lttsco.lipetsk.su>
Source record: 270417
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Good Day!
Very glad to send to you these info from Russia,if you wont i always will be
send for DX News interest info about Russian IOTA ,becouse in 94 "RRC" used
callsigns: 4K2RRC,4K3RRC,4K4RRC,4K5RRC,4K3GW,4K3WQ,4K4DV and some 4K3/h.c.

* RA2F,Zeleny island,Baltic Sea Coast Group(54,5N 19,5E)
Team "Russian Robinson Club" will be activate from here in late
April about a week.
It looks like this will be New One according to IOTA program.
The team: Pino/I8IYW, Igor/ER2CQ, Larry/RW3GU, Larry/RW3GW,
Serge/RZ1OM, Larry/RA6YR.
Activity will be on 40-10 meter on CW,SSB and may be RTTY,AMTOR.
Contact RRC please via Inter Net Mail to: rv3gw@lttsco.lipetsk.su
* New prefix in Russian territory.
M.V.I. (ex 4J1) new R1MVA-R1MVZ or h.c./MVI
F.J.L. (ex 4K2) new R1FJA-R1FJZ or h.c./FJL
ANT (ex 4K1) new R1ANA-R1ANZ or h.c./ANT

--
Albert (RV3GW)
< ***** Russian Robinzon Club / member #34 ***** >
phone: (074-2) 43-4378 (su)

2266. Callsign server info

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 12:27:27 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2ksnvf$l5e@bigfoot.wustl.edu>
Source record: 270418

Browsing through the callsign server, I came across the information blurb about how updated it is. cs.buffalo.edu is recent as QRZ!'s CDROM, April 1993. Canadian data is believed to be 1992, no information about club calls. The callsign server at pc.usl.edu 2000 is recent as of november 93, so a half-a-year more up-to-date. More information is available at either server; just type "info" at the prompt. BTW, the pc.usl.edu server was ported by N5KNX from KA2NRC's server source to the Pyramid OSx, so that explain's a previous post's revelation that the os's are similar.

2267. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 12:54:34 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-280294074553@136.141.220.39>
Source record: 270419

In article <9402271401591.gilbaronw0mn.DLITE@delphi.com>,
gilbaronw0mn@delphi.com (Gilbert Baron) wrote:

> >I've got some bad interference on 80 through 10
> >meter bands from an electric fence about 500
> >feet away. The effect is very sharp clicks
> >about 3-4 per second. Analog noise blanker
> >works some but not 100%.
> >
> >Anyone have any cures?
>
> Well, if you ground the fence, case closed.
>

Missed the original posting, but we've got electric fencing, and I offer these thoughts.
1. The fence in question appears to be using a battery-operated charger. See if you can convince the owner to move to an a-c line operated charger; the ones we use are basically pretty quiet.

2. With the a-c operated charger, the problems occur when the fence grounds itself through a bit of resistance, as through a bit of grass or honeysuckle, or worst of all, we used (briefly) a fencewire that was fine wire reinforced with plastic to give a "yellow ribbon" effect--the conductor broke at a couple of spots, and the plastic carbonized, giving a few inches of semiconductor carbon--fence wasn't obviously shorted, but the noise was terrible. Cure to all this: keep the fence absolutely clear of any paths to ground, and keep good, solid connections at splices (my wife insists on making single-point contacts with a pair of eye loops).

It'll work better to work _with_ the fence owner to keep the fence clear, than _against_ him by deliberately grounding it out. (Don't forget you've got some vulnerable coax.)

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

2268. Amateur Radio Newsline #863 25 Feb 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 12:57:05 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <XeUSjGG8y1wH057yn@dorsai.dorsai.org>
Source record: 270420
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

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Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #113 - POSTED 02/27/94

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Thank You
NEWSLINE

****

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[863]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not *
* for air over amateur radio. Repeat, not for broadcast. *
* This is just a reminder that the address for the Newsline *
* Support Fund is Newsline, in care of Dr. Norm Chalfin, *
* K6PGX, Post Office Box 463, Pasadena, CA 91102. Again, *
* and as always, we thank you. That ends the closed circuit *
* with Newsline report number 863 for release on Friday, *
* February 25th, 1994 to follow. *
* *
* *

The following is a QST

A new interpretation of an old FCC rule may force repeater licensees to evict unwanted users.

*****
FCC SAYS REPEATER TRUSTEES CAN BAN USERS!

The Federal Communications Commission has told the attorney for a southern California radio club that the license holder to its repeater can kick any ham off the system that he deems unfit to use the machine. In doing so, the FCC seems have set the stage for a total re-evaluation of the way every repeater in the

nation is operated.
The issue of what rights a repeater licensee has over the control of his repeater came into sharp focus on February the 1st. This, in a letter of interpretation of Section 97.205, subpart E of the FCC Amateur Service rules. Section 97.205 E says in part -- and we quote -- "Limiting the use of a repeater to only certain user stations is permissible." That language has been on the books for years. Some repeater licensees are probably not aware the rule exists, much less understand the power it gives them. Moreover, until now the FCC has given repeater licensees wide latitude in its interpretation.
But a far narrower reading has now come as the result of a request for clarification sought by Attorney Sidney Radus, N6OMS of Orange, California. Radus is the attorney representing the Claremont Amateur Repeater Association in its fight against some unwanted users of its repeaters.
In preparation of a civil complaint against one user, Radus wrote to the FCC's Private Radio Bureau to find out exactly where his client stood in regard to Part 97.205 E. His inquiry was answered by Personal Radio Branch Chief John B. Johnston W3BE. Johnston is well versed in Part 97 regulatory matters in that he was the guiding hand that crafted the latest version. After quoting section 97.205 E, Johnston added the rule applies whether a repeater is coordinated as an "open" or "closed" repeater. In fact, Johnston says -- and again we quote -- " Rule 97.205 E without qualification, permits the individual responsible for proper operation of a repeater to limit the use of a repeater to certain user stations." -- end quote.
As previously reported, the legal action taken was to obtain a restraining order against Tim W. Seawolf of Quail Valley, California. Its now been learned that the Johnston letter was accepted by the civil court as evidence in the case. We will be covering that part of the story in greater detail next week.
But looked at on a much broader scale, this new interpretation of Section 97.205 E is the really important story. This, because it holds the potential of impacting on the way that every ham who uses a repeater to make contacts operates on the air. The FCC now seems to be saying that in effect, there is really no difference between an open or closed repeater. Rather that all repeaters are essentially closed and that the ability of anyone of us to operate through one is at the will and the whim of the person that holds the license to a given machine. In fact, Johnston letter goes even further than that. It just about mandates that repeater licensees act to ban anyone who in any way may cause the repeaters operation to violate any FCC part 97 rule.
This is truly a precedent setting regulatory interpretation by the FCC. Its one that will forever change the way in which all repeaters are operated and the way in which a repeater licensee is required to police his systems and control his user base.

TEXT OF FCC LET

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON D.C. 20554

Feb. 1, 1994

In Reply Refer To: 7230-A/1700C1

Mr. Sidney L. Radus
Orange, CA 92669

Dear Mr. Radus,

This is in response to your fax dated January 14, 1994 in which you request further response to your previous correspondence. Specifically, you request whether Section 97.205(e) permits owners of "open" repeaters to limit the use of their repeaters to certain users.

Section 97.205(e) states: '... Limiting the use of a repeater to only certain user stations is permissible.' The rule section applies whether a repeater is coordinated as an "open" or "closed" repeater.
Further, the rule applies without regard as to whether a repeater is coordinated at all. Rule 97.205(e), without qualification, permits the individual responsible for proper operation of a repeater to limit the use of a repeater to certain user stations.

I trust this is responsive to your concerns.

Sincerely,

John B. Johnston
Chief, Personal Radio Branch

*****
SPREAD SPECTRUM

The Commission has responded cautiously to a proposal to ease restrictions on spread spectrum signals on amateur frequencies. At their January 21st meeting, the ARRL's Board of Directors voted to ask the Commission to relax the restrictions. Whether that will actually happen remains to be seen. Ralph Haller, N4RH, Chief of the FCC's Private Radio Bureau, indicates the idea will have to be reviewed carefully.

"I would like to allow all the technologies that we possibly can. There are some concerns, our Field Bureau is concerned about being able to monitor the transmissions as a part of their functions. And so once again we need to balance that, but as far as I am concerned we should be as unintrusive as possible in our restrictions on amateur communications." Ralph Haller, N4RH, Chief of the FCC Private Radio Bureau.

Spread spectrum signals cannot be monitored with conventional FM receivers, and that's what concerns the Commission. Spread spectrum is popular with military agencies, because the transmissions are virtually impossible to monitor. Certain types of spread spectrum signals are legal on amateur frequencies above 420 MHz.

*****
VEC FILING EXT

The FCC has granted a request by the ARRL VEC for an extension of time to provide financial information concerning reimbursement arrangements to volunteer examiners. Last fall, the commission asked all VEC's to provide this information for 1993 with the end of January as the submission deadline.
But in filing for the time extension, the league said that its auditing firm will not have a financial report available until sometime in March. The FCC agreed and on January 26th it extended the filing deadline until March the 31st. The league says that it assumes that the extension would apply to all other VEC's as well.

*****
NEW AMSAT VIDEO

The first copy of the new AMSAT promotional video titled "Phase III-D - The Satellite For All Radio Amateurs" has been presented to the shows special guest, Senator Barry M. Goldwater K7UGA. The informal presentation was made on Sunday February 13 by Newsline producer Bill Pasternak, WA6ITF and Len Winkler, KB7LPW who hosts the nationally syndicated radio program Ham Radio and More. Ham Radio and More originates at the studios of KFNN radio in Phoenix. Bill was in Phoenix to appear as a guest on the show.
"Phase III-D - The Satellite For All Radio Amateurs" was taped on-location at the Goldwater ranch last July and is hosted by Roy Neal, K6DUE. The video is an updated version of an earlier tape known as "The Phase III-D Story" and includes a first glimpse of the latest Phase III-D satellite design.
VHS loaner tapes for radio club showing are available free of charge from AMSAT North America, 850 Sligo Ave, Suite 600, Silver Spring, MD 20910.

*****
STS-67 CREW NAMED

Two hams will fly on space shuttle flight STS 67 in early 1995. NASA has named Steve Oswald, KB5TSR as the flights commander. He will be joined by veteran SAREX operator Ron Parise, WA4SIR. Ron will serve as Payload Specialist on the flight.

*****
RTT

The RTT
sold to the American Digital Radio Society. Writing in the
January 1994 edition of the Journal, editor Dale Sinner, W6IWO
says that he was approached by the digital society with an offer
for it to take over publication of the journal. Sinner says that
he has been a strong supporter of the group since its inception,
That he believes strongly in its goals and its offer to take over
the Journal was one that he found it hard to refuse.
The principal goals of the American Digital Radio Society are
to advance the state of the art in digital technology as it
applies to Amateur Radio while at the same time wisest use of
amateur spectrum for digital modes. Its president is Warren
Sinsheimer W2RNE of Scarsdale, New York. Jim Mortensen, N2HOS
is the new Publisher of The RTT
Sinner remaining on as Editor in Chief.
For more information on the American Digital Radio Society
write them at Post Office Box 2465, New York City, NY 10185.

*****
DIGITAL CONFERENCE

A call has been issued for papers to be presented at the 13th
annual ARRL Digital Communications Conference. This year the
conference will be held August 19th to the 21st in Bloomington,
Minnesota. The theme for 1994 is Digital Communications -
Amateur Radio of Today and the Future. The deadline for
submissions is June 20th. Send them to Maty Weinberg at ARRL
Headquarters, 225 Main Street, Newington, Connecticut 06111.

*****
HOGERTY

Tom Hogerty, KC1J has been named as Special Projects Manager
at Headquarters. Building on his success in the clearance of the
DXCC backlog last year during his tenure as DXCC Manager, Tom's
first project will be to investigate how services to members are
rendered and ways in which they can be improved.
The ARRL has also named Bill Kennamer, K5FUV to replace
Hogerty as DXCC Manager. Kennamer who conducts QST
column joined the leagues staff in June of 1992.

*****
RARA

The 60th annual Rochester Hamfest and Computer Show combined
with the Atlantic Division New York State ARRL Convention
returns to the Monroe County Fairgrounds May 20-22. The show
includes 150 indoor exhibitors with up to date radio and
communications equipment, computer equipment and supplies. A
1000 vendor outdoor flea market adjoins the indoor selling area.

For information write to the Rochester Hamfest, 300 White Spruce Blvd, Rochester N.Y. 14623.

*****
DX - PET

In DX, we have a wrap up on the recent Peter One Island operation. The DXpedition team landed on the island January 29th. According to ON4UN, the entire landing took only three hours. Within that time forty trips back and forth with two helicopters were made to and from the ship.
While the landing itself was perfect, conversations overheard between WA4JQS and KA6V noted that there was some equipment that was damaged in transit. In particular, a satellite receiver looked as if it had been dropped by a crane and a PK-900 was almost destroyed.
Never the less the group decided to immediately erect all antennas and get all stations on the air. The operations began in a big way with stations on many bands with some DXers able to work 3Y0PI on several bands in just a matter of hours.
As of Saturday, February 5th, the report was the teams had worked over 20,000 QSOs and their goal was to make 100,000 QSOs from Peter One. The group is now in transit home. An exact QSO count should be announced shortly.

*****
DOOB HELPERS CHALLENGE NYC

The hams supplying communications support for ham radio runner Fred Doob, AA8FQ in the upcoming Los Angeles Marathon are challenging their New York City counterparts. The competition is for the total contacts that Fred can make while running the streets of the City of Angeles as compared to the number he made in last fall's New York City Marathon.
Why the challenge? Mainly because each contact that Fred makes will add several dollars to the grand total that Icom America will donate to the Los Angeles Childrens Cancer Research Fund. In his New York City run, AA8FQ raised twenty-five hundred dollars for the Sloan Kettering Memorial Cancer Center. Ed Walker, WA6MDJ is with the Baldwin Hills Amateur Radio Club. He says that Angelino hams will do a lot better.

"We're here in Los Angeles. We have more hams in the area than we ever have. I feel we can do it and we will do it. I think we will if not do almost twice as much as New York did and do it very easily." Ed Walker, WA6MDJ, from the Baldwin Hills Amateur Radio Club.

The Baldwin Hills club has arranged for AA8FQ to use wide area repeaters on 145.220, 146.670, 146.925, 445.925 and 447.325 MHz. Fred Doob will also be looking for QSO's on the national calling channel of 146.520. Walker is using Newsline to issue

the challenge to New York City. It will be interesting to hear
if the hams of the Big Apple accept.

*****

For this week, that's all from the Amateur Radio Newsline.
91102.

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--

2269. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 13:24:59 UTC
From: jhobson@su19f.ess.harris.com
Message-ID: <jhobson.33.2D71F0A9@su19f.ess.harris.com>
Source record: 270421

In article <CLuJ6q.EwE@ucdavis.edu> ez014553@othello.ucdavis.edu (Sue Gundersen) writes:

>I need a little help with an English paper I am writing. The topic I am
>writing about is jargon used by amateur radio operators. I am already
>using ham, lids and an abbreviation. What I need is one more word that
>has an interesting etymology.

>Does any have any good suggestions? I am stuck and would like another term.
>Please send me Email

>Thanks
>Sue

CQ or "seek you". I guess this is where it came from. I had been a ham
for >20 years before I realized this.

73,
Harv

```
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
: Harv Hobson : Interests: Amateur Radio, : jhobson@su19f.ess.harris.com :
: WB4NPL : Barbershop Quarteting, : harris.jhobson@ic1d.harris.com :
: 407-727-6642 : Bible Study, Parenting : :
: Palm Bay FL : : :
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
```

2270. CW trainer for Sun workstation?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 13:35:49 UTC
From: br@cs.cmu.edu
Message-ID: <CLxsFq.76v.2@cs.cmu.edu>
Source record: 270422

Anybody know where I can find a morse training program which
will run on a sun?

Thanks!
Bill Ross
br@cs.cmu.edu

2271. FTP address for World

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 14:16:49 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCLxuC1.89G@netcom.com>
Source record: 270423
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,alt.radio.scanner

```
This is a reminder for everyone that World (world.std.com) has changed
their FTP address.

The new anonymous FTP address is: ftp.std.com (192.74.137.7)

This address is said to permit unlimited anonymous FTP connections.

Scott

--
==============================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
==============================================================================
```

2272. Jerk on 20 mtrs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 14:22:46 UTC
From: kenman@iastate.edu
Message-ID: <2ksunm$hmo@news.iastate.edu>
Source record: 270424

Hi All,

I upgraded from tech to advanced this last weekend and decided to listen in on 20 meters to get a feel for what goes on there. (I worked 15 mtrs since it was wide open to Europe!>.

There was some JERK that was running up and down the band causing all kinds of intentional interference: from belching and whistling to calling people sh*theads to keying on a frequency to disrupt a QSO.

He gave his call (obviously bogus) as W?OOQ. (don't remember what area he gave.)

Is this guy a fixture on 20 meters, or did I just get lucky?

73,
Ken

--
Ken Anderson N0ZEM Kenman@iastate.edu PH: 515.294.8996
126 Soil Tilth Bldg., Iowa State University, Ames, Iowa 50011

2273. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 14:26:40 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb28.142640.16550@ke4zv.atl.ga.us>
Source record: 270425

In article <2kqtae$cg5@news.delphi.com> mahjmac@news.delphi.com (MAHJMAC@DELPHI.COM) writes:
>It would seem to me that being alowed to use a keyboard doesn't conform
>to the whole reason CW is required. It is used on an international scale, and
>if you are ever in any type of emergency or spontaneous situation where you
>need to receive code with no keyboard, then you would be worthless.

Well the purpose of the Morse test is to have a pool of trained operators in case of National Emergency (IE draftee radio operators in case of war). Since the Army today only trains those radio operators in Morse who will be doing signals intercept work (IE intelligence gathering), and since the Army trains these operators to copy by keyboard, it seems to me that keyboard copying at test sessions would be the preferred mode.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2274. ARRL--->Online Repeater directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 14:33:53 UTC
From: sbaker@umassmed.UMMED.EDU
Message-ID: <9402281434.AA12050@umassmed.UMMED.EDU>
Source record: 270426

The league publishes the repeater directory which it currently enjoys monopoly status. This must be enormously profitable for them as they are the sole source for such a directory, (maps aside). I wonder if they have priviledged access to this information by virtue of some role they play in the frequency coordination process?

If this is the case, then there is a conflict of interest issue here, and they should not in the repeatern directory business and frequency coordination business simultaneously if they will harrass competition.

As a league member, I feel it is the role of the League to encourage such innovations as an online repeater directory and callbook and should be providing these services to it's membership at cost or free themselves! I question how responsive the league is to the needs of the membership and to innovation. The league should evaluate it's programs for relevance and cost effectiveness. Is the code practice program worth the tremendous cost? Could that money be better spent setting up 800 lines for their BBS where code practice software could be downloaded? What would an internet RISC server cost to set up a server for callbook lookups, FTP, online repeater directories, packet gateway's, cellular vhf coordination (see 3/94 QST) etc.

Ham radio has entered an age where these sorts of things are where experimentation is happening and as the central organized body in the hobby, the ARRL is the only group in a position to do some of these things. If they don't take a leadership role, some other group will eventually emerge to do this and they will have lost their chance to serve the hobby.

--

Stephen P. Baker phone: (508) 856-2625
Lecturer in Biostatistics (508) 856-3131 fax
Department of Academic Computing (413) 253-3923 home
University of Massachusetts Medical School e-mail: sbaker@umassmed.ummed.edu
55 Lake Avenue North -.- -.. .---- .--. ..-.
Worcester, MA 01655

2275. Re: CW trainer for Sun workstation?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 14:51:14 UTC
From: vaillan@ireq.hydro.qc.ca
Message-ID: <CLxvxF.Mx3@ireq.hydro.qc.ca>
Source record: 270427

In article 2@cs.cmu.edu, br@cs.cmu.edu (Bill Ross) writes:
>
> Anybody know where I can find a morse training program which
> will run on a sun?
>
> Thanks!
> Bill Ross
> br@cs.cmu.edu

Here is one program made by John S. Watson 4/29/87.
It works ok, but I prefer SuperMorse on a PC...
Regards,
Clem.
73

Clement Vaillancourt, | Institut de Recherche d'Hydro-Quebec
Analyste, | Varennes, P. Quebec, Canada, J3X 1S1
Informatique scientifique | Tel:+1 514 652 8238 Fax:+1 514 652 8309
vaillan@ireq.hydro.qc.ca | Radio-amateur: VE2HQJ@VE2CRL.PQ.CAN.NA

```
#include <curses.h>
/*
* Morse Code Program for Suns Version 1.0
*
* Here is a little program I wrote that converts standard input
* to morse code. The Sun's bell is used to beep the code.
* The speed of the generated beeps vary, depending on the model of Sun.
* Speed can be changed with the optional first argument on the command
* line:
*
* % morse 2 # is twice as fast
* % morse 4 # is 3 times a fast
* % morse -2 # is twice as slow
* % morse -3 # is 3 times a slow
*
* It can be used across a network with remote shell:
*
* % rsh remote_host morse
*
* Or with pipes:
*
* % fortune | morse
```

```
*
* I have not include all the character set. ( ?, !, -, etc. )
* New characters can be easily added to the big case statement in main.
*
* I don't have time to work with this anymore so don't send the bugs to me.
* Send me better versions though :^)
*
* Oh yeah, this works on Suns version 3.2 of the UNIX4.3bsd operating system.
* compile with:
* % cc morse.c -o morse -lcurses -ltermcap
*
*
* Have fun!
* John S. Watson 4/29/87
*/

#include <stdio.h>
#include <sys/types.h>
#include <sys/file.h>
#include <sundev/kbd.h>
#include <sundev/kbio.h>

int keyboard;
int scale = 10;
int factor = 1;
FILE *fildes;

unit_pause( number)
int number;
{
int i;

/*
for ( i = 0; i < number* (int) scale; i++);
*/
usleep(10000*scale*number);
}

dit()
{
int on = KBD_CMD_BELL;
int off = KBD_CMD_NOBELL;
int i;

ioctl(keyboard, KIOCCMD, &on);
unit_pause(1);
ioctl(keyboard, KIOCCMD, &off);
unit_pause(1);
}

da()
{
```

```
int on = KBD_CMD_BELL;
int off = KBD_CMD_NOBELL;
int i;

ioctl(keyboard, KIOCCMD, &on);
unit_pause( 3);
ioctl(keyboard, KIOCCMD, &off);
unit_pause( 1);
}

read_line( buffer)
char buffer[];
{
char character;
int i = 0;

do
{
character = fgetc(fildes);
if (character == EOF )
{
resetty();
exit(0);
}
buffer[i] = character;
++i;
}
while( character != '\n' );

buffer[ i - 1 ] = '\0';
}

init_keyboard()
{
keyboard = open("/dev/kbd", O_RDWR, 0666);
if (keyboard < 0) {
perror("/dev/kbd");
resetty();
exit(1);
}
return( keyboard);
}

main(argc, argv)
int argc;
char **argv;
{
int i;
char c;
char line[81];
if (argc < 2 || argc > 3)
{
```

```
fprintf(stderr,"Usage:%s fichier vitesse\n",argv[0]);
exit(1);
}
fildes=fopen(argv[1],"r");
factor = 0;
if (argc == 3)
factor = atoi( argv[2]);
scale -= factor;
/*
if ( factor > 0)
scale /= factor;
else
scale *= -factor;

if ( (int) scale == 0) {
fprintf(stderr, "can't go that fast\n");
exit(0);
}
*/
initscr();
crmode();
nonl();
noecho();

init_keyboard();

while ( 1) {
read_line( line);
for ( i = 0; i < strlen( line) ; i++) {
unit_pause( 4);
switch( line[i] )
{
case 'A' :
case 'a' : dit(); da();
break;
case 'B' :
case 'b' : da(); dit(); dit(); dit();
break;
case 'C' :
case 'c' : da(); dit(); da(); dit();
break;
case 'D' :
case 'd' : da(); dit(); dit();
break;
case 'E' :
case 'e' : dit();
break;
case 'F' :
case 'f' : dit(); dit(); da(); dit();
break;
case 'G' :
```

```
case 'g' : da(); da(); dit();
break;
case 'H' :
case 'h' : dit(); dit(); dit(); dit();
break;
case 'I' :
case 'i' : dit(); dit();
break;
case 'J' :
case 'j' : dit(); da(); da(); da();
break;
case 'K' :
case 'k' : da(); dit(); da();
break;
case 'L' :
case 'l' : dit(); da(); dit(); dit();
break;
case 'M' :
case 'm' : da(); da();
break;
case 'N' :
case 'n' : da(); dit();
break;
case 'O' :
case 'o' : da(); da(); da();
break;
case 'P' :
case 'p' : dit(); da(); da(); dit();
break;
case 'Q' :
case 'q' : da(); da(); dit(); da();
break;
case 'R' :
case 'r' : dit(); da(); dit();
break;
case 'S' :
case 's' : dit(); dit(); dit();
break;
case 'T' :
case 't' : da();
break;
case 'U' :
case 'u' : dit(); dit(); da();
break;
case 'V' :
case 'v' : dit(); dit(); dit(); da();
break;
case 'W' :
case 'w' : dit(); da(); da();
break;
```

```
case 'X' :
case 'x' : da(); dit(); dit(); da();
break;
case 'Y' :
case 'y' : da(); dit(); da(); da();
break;
case 'Z' :
case 'z' : da(); da(); dit(); dit();
break;

case '0' : da(); da(); da(); da(); da();
break;

case '1' : dit(); da(); da(); da(); da();
break;

case '2' : dit(); dit(); da(); da(); da();
break;

case '3' : dit(); dit(); dit(); da(); da();
break;

case '4' : dit(); dit(); dit(); dit(); da();
break;

case '5' : dit(); dit(); dit(); dit(); dit();
break;

case '6' : da(); dit(); dit(); dit(); dit();
break;

case '7' : da(); da(); dit(); dit(); dit();
break;

case '8' : da(); da(); da(); dit(); dit();
break;

case '9' : da(); da(); da(); da(); dit();
break;

case ',' : da(); da(); dit(); dit(); da(); da();
break;

case '.' : dit(); da(); dit(); da(); dit(); da();
break;

case '?' : dit(); dit(); da(); da(); dit(); dit();
break;

case '-' : da(); dit(); dit(); dit(); dit(); da();
break;

case '/' : da(); dit(); dit(); da(); dit();
break;
```

```
case '*' : dit(); dit(); dit(); da(); dit(); da();
break;

/*
* add new characters here!
*/
case ' ' :
default :
unit_pause(5);
putchar(' ');
fflush(stdout);
break;
}
if (line[i] != ' ')
{
if (!(c = getch()))
{
putchar('\r');
putchar('\n');
resetty();
exit(1);
}
if ( c != line[i])
i--;
else
{
putchar(c);
fflush(stdout);
unit_pause(2);
}
}
}
unit_pause(2);
putchar('\r');
putchar('\n');
fflush(stdout);
}
}
```

2276. HamWindows

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 14:57:45 UTC
From: cowart@convex.com
Message-ID: <cowart.762447465@neptune>
Source record: 270328

Since no one responded to my query about DX Desktop, I assume no one on the net has used it.

Now, does any have experience with HamWindows? I am interested in version 3.0

Any praises, complaints, recommendations?

thanks and 73,

Mike, WA5CMI

2277. Re: Buying Yupiteru MVT-7100 (from ACE Communications?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 15:12:33 UTC
From: thssno@iitmax.iit.edu
Message-ID: <1994Feb28.151233.4111@iitmax.iit.edu>
Source record: 270329
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

In article <2kk7p0$t5d@zone4.ocunix.on.ca> (posted to rec.radio.scanner,rec.radio.amateur.misc on 25 Feb 1994 02:01:52 -0500), andrew@zone4.ocunix.on.ca (Andrew Cornwall) writes:

= Unfortunately, the only other place I've heard of the MVT-7100 being
= available is Javation, who's charging UK L385, which is way out of my
= league.
=
= Can anyone solve my dilemma?

Since you are in Canada, you might want to check out Radio Lorenz in Montreal. I bought my Yupiteru MVT-7100 from them and I was pleased with their service. Price was CDN $739.00 plus shipping (December 1993). I've included some additional information below from a file I occasionally send to people who ask about sources for the MVT-7100.

===
=== Notes on buying the Yupiteru MVT-7100 in North America ===
===

According to stuff I read in rec.radio.scanner and related newsgroups, unblocked Yupiteru MVT-7100 radios are available from Radio Lorenz in Montreal and Javiation in the U.K (see addresses and phone numbers below).

I opted to buy from Radio Lorenz primarily because I thought that warranty service, if needed, would be faster and cheaper. Including shipping and other considerations, the price from both suppliers appeared to be about the same. (Note that I'm in the U.S.; prices compared in mid-December, 1993). But as far as I can tell, any warranty a North American customer may obtain on the radio is provided by the retailer, and requires that you return the radio to the retailer for service. Lorenz offered a one-year warranty--if the radio breaks, purchaser ships it to Lorenz, and Lorenz ships it to the Canadian distributor (located in London, ON) for repairs. I assume, but do not know, that Javiation's policy is similar. I decided that it would be cheaper and faster to return the unit to Montreal than to the U.K.

Another advantage of buying the MVT-7100 from Lorenz is that they provide an AC adapter designed for operation in North America. Two reviews which have been posted to the net complain that the MVT-7100s supplied by Javiation come with an AC adaptor designed

for use at 100 V and cause the radio to run warm.

Lorenz supplies the regular Yupiteru manual, plus a reprint of one written by Jonathan Clough of Javiation. I'm not sure whether the reprint is identical to what you would get if you buy the radio from Javiation. It looks like something which may have been posted to a BBS and then printed out. I had no trouble learning how to use the radio from reprint in combination with the Yupiteru manual. The Yupiteru manual itself it not great, but not terrible either; I've seen much worse.

I was pleased with the friendly and helpful service I received from Helmut Lorenz. I asked him to ship the radio in a manner different than he was accustomed, and he was very cooperative.

Jonathan Clough of Javiation was also helpful when responding to my emailed inquiries.

Mr. Helmut Lorenz
Radio Lorenz
482 St. Catherine St. West
Montreal, Quebec
Canada H3B 1A7
Phone: (514) 392-9200
Fax : (514) 392-4767

Mr. Jonathan Clough
Javiation
Carlton Works, Carlton Street
BRADFORD
West Yorkshire, BD7 1DA
United Kingdom
Phone 0274 732146 (From U.S. 011 44 274 732146)
Fax 0274 722627 (From U.S. 011 44 274 722627)
clough@javiaton.demon.co.uk

--neil ormos wd8bdp thssno@iitmax.acc.iit.edu

2278. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 15:13:33 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-280294100619@136.141.220.39>
Source record: 270330

In article <2kqtae$cg5@news.delphi.com>, mahjmac@news.delphi.com
(MAHJMAC@DELPHI.COM) wrote:

> It would seem to me that being alowed to use a keyboard doesn't conform
> to the whole reason CW is required. It is used on an international scale, and
> if you are ever in any type of emergency or spontaneous situation where you
> need to receive code with no keyboard, then you would be worthless.

C'mon...even an old CW-forever type like me knows that the "purpose" of
copying Morse at the exam is _to pass the exam_. Some people, once they're
on the air, develop proficiency in copying (and fewer in sending :-))
Morse. Others don't. But as a VE I'm supposed to assure that an applicant
can copy Morse at the required speed, by his answering seven of a set of
ten questions. Head copy, pencil, typewriter, computer, stone and
chisel...as long as _the applicant_ can understand enough Morse to answer
the questions (it's been a long time since we had somebody give us a minute
of solid copy), he meets the FCC requirement.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

2279. Re: ARRL--->Online Repeater directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 15:24:48 UTC
From: gcouger@olesun.okstate.edu
Message-ID: <1994Feb28.152448.9644@osuunx.ucc.okstate.edu>
Source record: 270331

In article <9402281434.AA12050@umassmed.ummed.edu>,
Stephen Baker <sbaker@umassmed.UMMED.EDU> wrote:
>The league publishes the repeater directory which it currently enjoys monopoly
>status. This must be enormously profitable for them as they are the sole source
>for such a directory, (maps aside). I wonder if they have priviledged access to
>this information by virtue of some role they play in the frequency coordination
>process?
>
>If this is the case, then there is a conflict of interest issue here, and they
>should not in the repeatern directory business and frequency coordination
>business simultaneously if they will harrass competition.
>
A if you read the editorial in this months QST you will find that the ARRL
is not in the coordnation business it only strongly supports coordination.
I really hate to take up for the ARRL but if they were in the coordinaton
business publishing a directory would be no more of a conflict of interest
than publishing the proceedings of a conference.
Gordon AB5DG

2280. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 15:28:30 UTC
From: grady@netcom.com
Message-ID: <gradyCLxxnI.IF0@netcom.com>
Source record: 270332

You may want to consult a Copyright Attorney.

Lists of facts, in general, are not copyrightable.

A particular method of organizing them or of selecting them
may be copyrightable, but can be easily overcome by
re-sorting or reformatting.

--
Grady Ward | compiler of Moby lexicons: | finger grady@netcom.com
+1 707 826 7715 | Words, Hyphenator, Part-of-Speech | for more information
(voice/24hr FAX) | Pronunciator, Thesaurus | 15 E2 AD D3 D1 C6 F3 FC
grady@netcom.com | and Language; all royalty-free | 58 AC F7 3D 4F 01 1E 2F

2281. Re: personal communication Australia <-> USA

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 15:30:21 UTC
From: grady@netcom.com
Message-ID: <gradyCLxxqM.IID@netcom.com>
Source record: 270333
Cross-posted to: aus.radio,rec.radio.amateur.misc

Mark Cheeseman (cheese@active.asstdc.com.au) wrote:

: If you're worried about people tapping into your more intimate thoughts, there's
: always PGP. (Using amateur radio would guarantee a wide audience :-) and encryption
: is not allowed for us amateurs)

But PGP key exchange by radio is perfectly OK.

--
Grady Ward | compiler of Moby lexicons: | finger grady@netcom.com
+1 707 826 7715 | Words, Hyphenator, Part-of-Speech | for more information
(voice/24hr FAX) | Pronunciator, Thesaurus | 15 E2 AD D3 D1 C6 F3 FC
grady@netcom.com | and Language; all royalty-free | 58 AC F7 3D 4F 01 1E 2F

2282. RB315 Semantics - Telecommunicators

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 15:38:19 UTC
From: enge@almaden.ibm.COM
Message-ID: <199402281540.HAA24283@ucsd.edu>
Source record: 270334

Bid: $RACESBUL.315

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.315 RELEASE DATE: February 28, 1994

Subject: MGT - Semantics - Telecommunicator (5 of 7 parts)

TELECOMMUNICATOR is a more professional title adopted an increasing number of jurisdictions for what they used to call DISPATCHERS. They operate the public safety communications centers public safety answering points for Nine-One-One. They should be made aware periodically of your jurisdiction's RACES program and how Amateur Radio phone patches work.

RACES: The Radio Amateur Civil Emergency Service. The RACES is a program established by any jurisdiction's civil defense official by appointing a radio officer, preparing a RACES Plan, and training and utilizing Amateur Radio operators. The latter are screened for loyalty and reliability prior to taking and signing an oath. The RACES is not a condition; it is a program and unit of local government providing public safety communications. Thus the RACES is not a club, association, or self-governing body.

(Series authored by Stanly E. Harter, originally titled "From My Lookout". Edited for digital transmission. Continued.)

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

2283. RB315 Semantics - Telecommunicators

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 15:38:19 UTC
From: Roy Engehausen <enge@almaden.ibm.com>
Message-ID: <$racesbul.315.1994@ampr.org>
Source record: 270335
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Bid: $RACESBUL.315

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.315 RELEASE DATE: February 28, 1994

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(Series authored by Stanly E. Harter, originally titled "From My Lookout". Edited for digital transmission. Continued.)

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

2284. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 15:40:40 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Feb28.154040.17074@ke4zv.atl.ga.us>
Source record: 270336

In article <1994Feb27.205435.7993@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: Ha, Ha. The problem doesn't come with mounting the gunnplexer, or
>: even aiming them, the problem is making sure they're on frequency
>: and making rated power, and that the detector diodes haven't gone
>: south. Most hams don't have the appropriate test equipment, or the
>: skills to fabricate cheap alterative test equipment. Yeah, yeah,
>: a radar detector can serve as a minimal activity checker, but that's
>: not good enough to set up and maintain a legal and efficient link.
>
>You could be right about that, Gary. Maybe you can no longer
>expect people to fabricate blocks of wood to act as attenuators
>to see which gunnplexers work the best. I have to admit I cheat
>on this--if I stick a gunnplexer inside our screen room and close
>the door, the attenuation to one of the lab benches is just right
>for weak signal testing. Incidentally, if you are serious about
>getting on 10 GHz, the March 10 GHz contest results in QST list
>a number of stations on the band.

Hickory or pine? :-)

I was thinking of more than some crude relative indications, though
that's often useful. But how many amateurs have frequency counters
or spectrum analyzers that cover 10 GHz, or even bolometer power meters?
I do, but I don't know many others who do. How many are setup to measure
sidelobe responses for optimum feed positioning? Even I'm not set up to
do that properly and have to depend on manufacturer antenna range data.
How about simple deviation measurements on megabaud+ signals at 10 GHz?
If we're going to build a reliable national network, we can't be cavalier
about what frequencies we're using, or the power and performance of our
systems.

Note, I'm not interested *at all* in DXing or contesting. I consider both
to be the antithesis to the cooperative model needed for effective networking.
While I respect the technical prowess some contesters have shown, I don't
think they have the proper mindset for designing reliable data links. By
their nature, DXing and contesting are based on freak conditions, that
once in a decade band opening, that unusual ducting condition, etc. They
are not concerned about 7x24 fade margins, or 99% link reliability. Their
goal is to *compete* with their compatriots for score rather than to
cooperate day in and day out to maintain stable links. I'd be happier
working with repeater owners whose concern for proper reliable coverage
zones and 7x24 reliable service to the user community are primary.

>: >One of the tricks to making microwave gear resistant to
>: >interference is to use horn antennas or waveguide in your
>: >input circuit. They make a very low loss high pass filter.
>: >The waveguide below cutoff effect is quite effective in
>: >reducing low frequency interference.
>
>: Sure, that helps, especially if you use *enough* waveguide. You
>: need at least a 1/4 wave depth at the frequency of the *interference*
>
>Where did you get this idea? I tried coupling two 10 GHz antennas,
>a scalar dish feed with 9 dB of gain, and a 17 dBi horn, and didn't
>see it on the spectrum analyzer (at least 70 dB of isolation below
>110 MHz). I'd love to see a 1 x 1 x 2 inch 2 meter antenna that had
>no meaningful attenuation (size of the feed without the scalar rings).

Ok, if you're co-located with a Class B or C FM station, you're going
to have to deal with +50 dbW ERP signals, that's +80 dbm. Even if you get
70 db isolation, the signal at the diode is still +10 dbm. You've got
to do a lot better than that. A waveguide beyond cutoff is most effective
as a filter if it's length is 1/4-wave or greater at the frequency of
the interfereing source. (Attenuation doesn't get much better once you
pass the 1/4-wave depth.)

>The exposed terminal problems is easily fixed--you shield it, just like
>any other piece of electronic equipment you want to work next to an
>antenna radiating more than a kW. Unfortunately, even the IF circuitry
>of microwave gear has to be shielded, but this goes with the territory.
>But, shielding is trivial compared to trying to filter out a signal of
>nearly the same frequency. Thus, I don't expect people to have much
>luck using 219 MHz for receive on the same tower as a channel 13
>broadcast station. As I said before, it doesn't make sense to try
>and do everything on one band--especially since we do have a selection
>to choose from.

Yeah, though actually the tough problem is going to be with TV channel 11.
That's the low side image frequency of 219 MHz. That's solvable with high
side injection or an IF above 10.7 MHz. Note I've never said that we should
do it all on one band. Here in GA we're using a mixture of 222 MHz band and
430 MHz band systems in a checkerboard arrangement. I've got a bunch of
ex-GA Power data repeaters for the 902 MHz band as well. We should use what
works in a particular situation. My only point here has been that LOS 10 GHz
is unlikely to work in a *lot* of situations for various reasons that I've
already detailed in previous postings. Where it *does* work, then it could
be used if the microwave expertise is available to install and maintain
it. Otherwise we're going to have to look to other bands for solutions.

Look, we're finding that maintaining a 56 kb link is beyond the capabilities
of a major number of digital enthusiasts. And that's pretty simple stuff
that can be setup with just an ordinary station monitor and a scope. A
national network isn't going to be maintained by people with more general
knowledge or tools than that of the folks who maintain current digis and
voice repeaters. Most of them are totally lost when it comes to medium or

wideband data. It's *not* that hard, but we've got a major educational job ahead of us to get these people up to speed on these techniques. And we've got to offer packaged solutions that require a minimum of external test equipment to get up, and to maintain.

The ideal piece of equipment will have indicators built in to indicate that it's operating correctly with a clean on-frequency signal, with proper modulation, and with undegraded receive sensitivity and selectivity. Having a built in CNR meter and discriminator center meter are probably mandatory, but that's not enough. You also need at minimum a reference marker source of known frequency and strength to check transceiver frequency, stability, and sensitivity. When you have two widely separated link ends, you must be able to determine if the end you're at is operating correctly or not, or if the problem is at the other end. You can't count on having service personnel at both ends of a link simultaneously.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2285. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 16:08:58 UTC
From: stevej@pillock.moron.vware.mn.org
Message-ID: <NDTgic4w164w@pillock.moron.vware.mn.org>
Source record: 270337

kurdzo@gdc.COM (Jim Kurdzo) writes:

> baxter@kuhub.cc.ukans.edu wrote:
> : This past month, Honda sent out a recall notice for their 90-91 Accords.
> : They were wanting to replace a part in the distributor which failed when
> : the car got high mileage.
>
> : I had this recall work done on my car a couple of weeks ago, and now have
> : terrible ignition noise on 2 meters and 440. Before this work had been
> : done, the ignition had been really quite quiet -- now it is nearly
> : unbearable.
>
> I am now going through the same thing. 2m is extremely noisy now.
> If you find a solution, please let me know.

I am not trying to be insulting but the solution to this problem is quite simple. There are a lot of that model of Honda's on the road and in the junk yards.

Find out what part they replaced, go to the junk yard and get 2 or 3 of the same part so you have the extra parts when they fail and replace the new part with the old part.

Steve KA0VYB

Microwavers do it with higher frequency

2286. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 16:12:28 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-280294091052@waters.corp.mot.com.corp.mot.com>
Source record: 270338

In article <2koi5n$eb6@paperboy.ids.net>, kd1hz@anomaly.sbs.com (Rev. Michael P. Deignan) wrote:

> I don't know where you've been, but I hate to break it to you - the
> League is a business, interested in one thing - making money. Maybe not
> for the "League" as a whole, but take a look at the people who actually
> WORK for the League - examine your QSTs over the years and look at the
> names of the people who have made a career "working" for the League.

Of course the League is a business - that is how an organization gets things done in this society.

> However, the League *IS* a business, whether you like it or not. Over
> the past decade, the league has taken positions on issues in Amateur
> Radio which suit the financial interests of the League, not the position
> which the members want (yes, there are examples where each has the
> same position.)

Rather than some vague intimations, how about some specifics for a change?

2287. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 16:18:20 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-280294091343@waters.corp.mot.com.corp.mot.com>
Source record: 270339

In article <1994Feb27.133807.12203@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> In article <rcrw90-250294135425@waters.corp.mot.com.corp.mot.com> rcrw90@email.mot.com (Mike Waters) writes:
> >
> >In other words "we have to make money off it" is a perfectly valid reason,
> >especially considering the man-years of effort that went into creating the
> >publication in the first place!

> Now like I said, I don't mind the League trying to turn a buck, but
> they've sure got a lot of gall making lawyer noises to Yee claiming
> he's ripping them off when *they* are ripping off the efforts of the
> coordinating bodies.

(1) I sure would like to see a copy of the original letter making "lawyer noises".

(2) I wonder how many quadrillions of dollars the Lagues *actually* makes of this particular publication?

(3) Gathering and supplying the data is certainly part ofthe effort, but by no means all the effort that goes into compiling such a list and getting it published.

(4) Did you ever stop to think that there may even be somew *other* reason for objecting to misues of copyright? Like if you let one person abuse your copyright then others will try and maybe get away with it on that basis? I can certainly think of some crazies who would gladly abuse ARRL publications fortheir own purposes, both to make money and to just make anuisance of themselves - we have a few examples who post to these newsgroups for example.

(I'm not a lawyer so this is not a legal opinion :-)

2288. Re: Dayton parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 16:39:20 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-280294093853@waters.corp.mot.com.corp.mot.com>
Source record: 270340

In article <1994Feb26.013233.27156@mnemosyne.cs.du.edu>,
jmaynard@nyx10.cs.du.edu (Jay Maynard) wrote:

> (Then again, who am I to complain? My DXCC count is nowhere near my weight...)

Gee, you mader my day! My DXCC count exceeds my weight by almost
20lb/countries :-)

Wonder if there is an award for that :-)

2289. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 16:53:18 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-280294094834@waters.corp.mot.com.corp.mot.com>
Source record: 270341

In article <CLtKxy.9q1@news.Hawaii.Edu>, jherman@uhunix3.uhcc.Hawaii.Edu
(Jeff Herman) wrote:

> In article <rcrw90-240294091440@129.188.192.6> rcrw90@email.mot.com (Mike Waters)
writes:
> >In article <762082813snx@skyld.grendel.com>, jangus@skyld.grendel.com
> >(Jeffrey D. Angus) wrote:
> >
> >>
> >> In article <CLnz3x.I7B@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes: >
> >> > That's old news. BUT the HF maritime CW bands are still jumping with
> >> > activity and the C.G. is still monitoring them, so CW on the high seas
> >> > frequencies is still very much in use.

> >They are usually easy to spot, they are the loud CW signals that are
> >calling CQ for hours at a time between the ham bands. Usually next to a
> >SITOR or FAX signal. Sounds like electronic keyers (or computers :-) to me
> >though - no one sends that regularly by hand for hours at a time.

> Foolish.

Weak attempt at a flame?

> The ships don't xmt on the shore station's frequencies - they
> work QSK - full breakin - using seperate frequencies.
[...]
> You're hearing the CQ tape.
[...]

You must tell me how to carry on a QSK conversation when you are running
your CQ tape Jeff. They must be *highly* skilled operators to do that - I
guess one of the lost arts of radio :-)

Strange that the SITOR and FAX stuff seems to be busy passing traffic all
the time even if you can only hear one side of it.

2290. Repeater Dir.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 16:54:55 UTC
From: AGRI098@UNLVM.UNL.EDU
Message-ID: <199402281759.JAA13538@ucsd.edu>
Source record: 270342

What we need is to help get the info to someone that will put the data togather. As was said before we can not use the info that is in the ARRL version. We gather and post from other sorces... Are there enough of us to get all the info we need? Is there a person we can mail the info to using a form the requires minimal messing to put in a data base? Is my hand up? (not sure) Let me know what you folks think....
Roy WB0WWA

AGRI098@unlvm.unl.edu

2291. Have a say about ARRL policy

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 17:08:34 UTC
From: bruce@pixar.com
Message-ID: <1994Feb28.170834.1217@pixar.com>
Source record: 270343
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In response to a "questionable" ARRL decision, I have formed a
single-topic discussion list on ARRL policy. Copies of the discussion
will be made available to various ARRL officials, to ignore or read as
they see fit. This effort is not sponsored or approved by ARRL,
although I am an ARRL member and a field organization candidate. The
list is open to all.

This will be the only announcement of the list that I make to the usenet.
To subscribe, send mail to LISTSERV@pixar.com with this text:

subscribe arrl-policy YOUR-NAME-HERE YOUR-CALLSIGN-HERE

2292. No more FCC Daily Digest postings to rec.radio.amateur.misc

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 17:15:22 UTC
From: bruce@pixar.com
Message-ID: <1994Feb28.171522.1547@pixar.com>
Source record: 270344

Since the FCC Daily Digests are now available via anonymous FTP to
FCC.GOV, I won't be posting any more of them to this newsgroup.

I do hope that you will retrieve and read the digests often. It's critically
important for us to follow and understand the FCC's operations.

Thanks

Bruce Perens

2293. Re: Getting Coax Seal OFF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 17:26:58 UTC
From: c2xjcb@kocrsv01.delcoelect.com
Message-ID: <1994Feb28.172658.10610@kocrsv01.delcoelect.com>
Source record: 270345
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

In article <2kjnai$1if8@st6000.sct.edu>, msmith@sct.edu (Matt Smith) writes:
>
> >Can anyone suggest a decent method for taking Coax Seal *off* of a
> >connector? It's a mess, and I'm not sure how to do it.
>
> Well, the ideal thing to do would be to put electrical tape on the connector
> _BEFORE_ you put the coax seal on, but since that's too late... The hasty
> option would be to cut the connector off and put on a new one. If you want
> to save the connector then just get off whatever you can then use the ball
> of that to get the rest off. I hope that Coax Seal is similar to the tar or
> roll of really sticky black or beige stuff that most people use. (Also
> referred to as "Ickum-pucky" (don't ask me)) Otherwise, cut off the
> connector.

I've never tried this, but at it's worst it means that you'll lobe-off
the connector (which is what you were going to do anyway) . . .

Try your standard, run-of-the-mill, $1.29/12oz can "Carburetor
Cleaner" spray (Gunk, STP, etc.) . . . it is great at disolving tarry
stuff. 1st get off as much of the Ickum-pucky as possible, then spray
on the carb cleaner; let it sit a while, then wipe-off with a trashy
cloth rag. Repeat until all traces are removed.

The only worry I have is if it will bother the coax jacket any. If it
does, then get your wire-cutter out, other wise you're done.

BTW:
Carb cleaner spray beats ANY commercial insecticide spray (like Raid,
etc.) for INSTANTLY killing bees and wasps. I had a wasp bothering me
in the garage once; it laughed at the "Raid Flying Insect" spray I
blasted at him. He landed on the window, I sprayed him with carb
cleaner, and he instantly fell to the floor begging me not to stomp on
him (sorry Charlie!). But I digress . . .
--
James C. Bach Ph: (317)-451-0455 The views & opinions expressed
Advanced Project Engr. GM-NET: 8-322-0455 herein are mine alone, and are
Powertrain Strategy Grp Amateur Radio: WY9F NOT endorsed, sponsored, nor
Delco Electronics Corp. Just say NO to UNIX! encouraged by DE or GM.

2294. Call Sign Re-issue

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 17:42:14 UTC
From: rogerm@hpscit.sc.hp.com
Message-ID: <50030048@hpscit.sc.hp.com>
Source record: 270346

Hi,

I recently heard that the FCC is now allowing people to get call signs
re-issued. I would like to my dad's call sign. He passed away 5 years ago.
Does anyone know the procedure to get a call sign re-issue?

Thanks,

Roger Myers
WB7PJS

2295. NACEC - DISASTER VOLUNTEER Info.

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 18:00:42 UTC
From: rps@cray.com
Message-ID: <1994Feb28.120042.22852@walter.cray.com>
Source record: 270347

I was asked to pass this along. :-)

Send Reply to :

NACEC.HQ@dadag.mmbbs.mn.org
Thanks!
___ ((~|~))
/_) _ _ rps@cray.com |
/ _/_/_/_)_/_)_ |__o
N0MRR @ KB0GF.MN.USA.NOAM -\<,
-.. . -. ----- -- .-. .-. -..-. -- --... ...-- ... -.- O/ O

========== cut here ==========
INTERNET.TST
FEBRUARY 14, 1994
ATTN: DISASTER VOLUNTEERS & MILITARY FAMILIES!!!

Our group is looking for volunteers to help expand our project nationwide! I have heard many things about Internet and have posted this message to see if there is anyone on the system that wants to help.. Please take a few minutes and read this bulletin. If you would like more information or wish to help, get in touch with me. I hope you find these 3 pages of information of interest.

Mr. Edward E. Addy
President, NACEC

W H A T I S N A C E C ?

NACEC is an acronym for "The North American Center for Emergency Communications". NACEC is not a radio club. It is a hybrid non-profit humanitarian organization. It was started under the name "Global Voices Project" on July 9th of 1992 and incorporated in Minnesota on January 8th 1993 for the purpose of improving the efficiency of other non-profit humanitarian organizations during their disaster aid and relief operations, throughout North America. NACEC also provides health and welfare communications assistance between members of the U.S. Armed Forces serving overseas and their families here at home.

The projects name was changed to The North American Center for Emergency Communications, (NACEC) by unanimous vote of The Board of Directors in August of 1993 to more closely reflect the projects mission and purpose.

W H Y W A S N A C E C F O R M E D ?
NACEC's mission is to provide communications support to aid

disaster victims and Military Families. NACEC was formed for one basic purpose "To reduce deaths and the amount of human suffering, through the development and implementation of an organization which can rapidly provide emergency communications.

Following a disaster this communications is essential to coordinate relief activities, greatly increasing the efficiency of disaster aid organizations to provide life saving aid to disaster victims.

We have found it to be a fact that without the ability to communicate you can not coordinate!

For Military Families the communications support provided comes in the form of NACEC's ability to handle health and welfare messages from its main high powered radio communications center, construction planned to start this Spring, to overseas military units located anywhere on the earth. NACEC is being developed and managed by the same people that provided The Desert Voices Project for Military Families during the Gulf War.

H O W D O E S N A C E C W O R K ?activity!

NACEC consists of two parts, the HQ/Communications Center and the Emergency Field Teams. The HQ/Communications center provides radio/wire integration (phone patch) and other HF radio, as well as tactical support services into a disaster area, when communications support is requested by a non-profit organization working to aid the victims of a disaster. This center is also used to provide HF radio support for Military Family health and welfare message and radio/wire integration traffic.

The Emergency Field Teams consist of two trained staff members. They are sent, when requested, into the disaster area with a complete commercial radio communications system. This system is used to tie together the many facets of the requesting organizations relief activities, while maintaining a very low draw on the pool of locally available volunteers within the disaster area. The field team also carries HF radio equipment that allows them to communicate back to NACEC's HQ/Communications center. When long distance telephone service is not available within the disaster area, the teams HF radio equipment is used to provide limited long distance service (via radio/wire integration), for the coordination and movement of relief supplies, materials, equipment and personnel into the disaster area.

H A S N A C E C E V E R B E E N O F S E R V I C E ?

YES! In July of 1993 assistance was requested by The Salvation Army who needed communications support for their flood relief operations in Des Moines, Iowa. Even though the project was not properly funded, 12 hours after the request was made an Emergency Field Team was in the disaster area to assist. The Team served for 10 days and helped The Salvation Army distribute over 53,000 meals to Victims and Volunteers. A very

successful and educational first mission for the project.

On January 17th of 1994 NACEC assistance was requested again by The Salvation Army. This time to handle message traffic into and out of the Southern California earthquake disaster area. Several hours after we began our mission, the American Red Cross requested and began using our services as well. This mission, handling dozens of messages, was successfully completed in only 72 hours. Long distance telephone service was then operating again into the disaster area. This mission was completed with the help of the Amateur Radio Community inside the disaster area. NACEC Emergency Communications Field Teams were not used in this mission.

N A T I O N W I D E, C O M M U N I T Y V O L U N T E E R
S E A R C H N O W U N D E R W A Y ! ! !

Volunteers are being sought from Communities throughout North America. These Volunteers will help get project information out into their Communities. In the event Military Families need our support in your community, or a disaster strikes your community, we will look to these volunteers for help with coordination. These volunteers will also help get fund raising information out to those persons and organizations within their communities that may wish to help with the project.

If you, or someone you know, would like to volunteer to help, send an SASE marked INTERNET.VIF and we will promptly send you a volunteer information form to complete.

I have set aside 50 of our January 1994 Newsletters for this internet test, if you wish a copy write INTERNET.NWS on the back of your SASE.

To receive both mark your SASE with INTERNET.VIF/NWS.

H O W T O R E A C H U S .

Direct all inquires to:
Mr. Edward E. Addy, President.

email: NACEC.HQ@dadag.mmbbs.mn.org

The North American Center for
Emergency Communications, NACEC
P.O. Box 23057
Minneapolis, Minnesota 55423
USA

Our Office number 9:00 AM - 5:00 PM CST is 612-798-4269

Thank You For Your Time & Interest.

2296. MicroSmith

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 18:17:16 UTC
From: ggs@lanl.gov
Message-ID: <1994Feb28.172404.5037@newshost.lanl.gov>
Source record: 270348
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna

Is there anywhere on the net or a BBS that specializes
in antenna codes. I am looking for the subject code to
optimize my antenna farmette. The xyl prefers that it does
not grow into a full blown farm.Thanks for any info.
Gerald Schmitt KC5EGG

2297. Re: MicroSmith

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 18:34:33 UTC
From: royle@tekig6.PEN.TEK.COM
Message-ID: <13911@tekig7.PEN.TEK.COM>
Source record: 270349
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna

ggs@lanl.gov (Gerald Schmitt KC5EGG):

>Is there anywhere on the net or a BBS that specializes
>in antenna codes. I am looking for the subject code to
>optimize my antenna farmette. The xyl prefers that it does
>not grow into a full blown farm.Thanks for any info.

MicroSmith isn't shareware. It can be purchased from the ARRL for the
very reasonable price of $39.00. If anyone does find it on a BBS, please
notify the ARRL.

Roy Lewallen, W7EL

2298. 5 by 5...

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 18:45:26 UTC
From: gregg@plains.nodak.edu
Message-ID: <gregg.68.000DC24B@plains.nodak.edu>
Source record: 270350

Ok, here's a trivial question that I don't know the answer to:

Where did the phrase, "I read you five by five." come from and what does it mean. I know it means good copy, but what specifically does it mean? Does it come from the early days of radar, of ham radio, of military aviation or what?

XXX
Joe in Fargo wants to know.
****
Internet: Gregg@Plains.NoDak.edu
Packet: KN0A@W0ILO.#SEND.ND.USA.NOAM
LL: 701-237-8353
The Library
North Dakota State University
Fargo ND
It should be:
"The Gregg Library"
but I have to die first.
****

2299. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 19:05:56 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.762462016@hpuerca>
Source record: 270351

In <1994Feb26.183908.15322@pro-haven.cts.com> phantom@pro-haven.cts.com (Tiffany Keller) writes:

>use...it's XYL and it stands for ex young lady....(which I take great
>offense to as a deragatory remark (I am not an "XYL" because I am only 22
>years old! :-)) The term is used to refer to one's wife...(because most

No offense intended. Besides, when I refer to my wife, XYL means
eXcellent Young Lady! :-) And since she holds an Extra ticket, she
deserves the title!

Just another OM note ...

Cheers & 73 Ed Humphries N5RCK
Hewlett Packard NARC Atlanta GA

2300. re: Jerk on 20 mtrs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 19:07:24 UTC
From: paul@cheers.dr.att.com
Message-ID: <CLy7sC.4DB@bigtop.dr.att.com>
Source record: 270352

Congrats on the upgrade Ken...welcome to the HF bands...unfortunatly
you are going to find a few idiots on at times...I really cannot figure
out what fun they get from causing QRM...But it's a fact of life if
your going to operate on HF...fortunatly you will find that about 99%
of the people on HF feel the same way you do about the idiots...the
best thing to do is try to ignore them, work around...don't let them
spoil the fun...if you really want to hear some idiots on, listen in
on 14.313 late some afternoon...some real morons hang out there.
anyway...73 hope to hear you on sometime.
Paul Anderson WB0ZRD at AT&T Bell Labs in Denver

2301. Scanners on aircraft!

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 19:12:40 UTC
From: mike@garfield.csuohio.edu
Message-ID: <1994Feb28.191240.4993@news.csuohio.edu>
Source record: 270353

I have seen (and taken part in) several threads discussing the
issue of operating radio scanners aboard commercial aircraft.

The following two items have been reprinted without permission from
the Continental Airlines February 1994 issue of Profiles in-flight
magazine. The first item is from page 73 and describes what
electronic devices are/are not allowed on board. The second item
is an informative article from page 66. Enjoy.

ITEM 1

Continental Airlines' Profiles in-flight magazine, February 1994,
page 73 at the bottom by the radio symbol, verbatim:

"Certain electronic devices may not be used aboard the aircraft at
any time: TV's, radio receivers or transmitters (AM/FM, CB,
scanners, remote control toys, etc.) and cellular phones.
Permitted are: pagers, calculators, shavers, cameras, tape players
and recorders (audio or video), and bionics (hearing aids,
pacemakers, etc.). Additionally, electronic games, personal
computers and CD players may be used except during take-off and
landing (below 10,000 feet)."

ITEM 2

Continental Airlines' Profiles in-flight magazine, February 1994,
article on page 66 under "Continental Country":

Calling All Stations

"New rules govern the use of portable electronic devices in flight"

By Lockwood Tallman

People who fly frequently have noticed that cabin crews are
making some new announcements, such as, "Once airborne, you will
be advised when the use of approved devices is permitted," and "The
use of approved portable electronic devices is now permitted."
The announcements are the result of new rules designed to
limit the effects of electromagnetic interference (EMI) on the
aircraft's navigation and communication systems. It has long been
recognized that personal electronic devices can emit EMI, and for
this reason airlines have banned the use of AM/FM radios and
televisions by passengers on board.
But along with the electronics revolution has come a plethora

of portable devices that easily take to the air with travelers.
Both the Federal Aviation Administration (FAA) and the aircraft
manufacturers have provided information to the airlines concerning
this trend and the need to ensure that increased use of portable
electronics does not compromise the aircraft's own electronics.
On Continental aircraft, portable electronic devices fall into
three categories: items that can be used at any time; items that
should not be used during taxi, takeoff, climb, approach and
landing; and items that should not be used at any time aboard the
aircraft.
Authorized for use at any time are tape players/recorders
(video or audio), cameras, shavers, calculators, pagers,
wristwatches and medical devices, including hearing aids,
pacemakers and FAA-approved life-support systems.
Authorized for use while the aircraft is cruising (not during
taxi, takeoff, climb, approach and landing) are electronic games
and entertainment devices (such as "Gameboys"), personal computers
and compact disc players.
Not permitted at any time are televisions, radios, cellular
phones, CBs, remote-controlled toys or any other kind of
transmitter.
Televisions and telephones installed on board the aircraft are
acceptable because they have been installed with the required
shielding and have been FAA-approved specifically for inflight use.

Caption under photograph of a Continental 747 in this same article:

" 'Gameboys,' CD players and PCs should should be used only when
the aircraft is cruising - not on takeoff or landing, when the
electromagnetic interference they emit could interfere with the
aircraft's own electronics."

Well, from what I can tell, this pretty much eliminates radio
scanners, ham HT's (even if just receiving), and shortwave
receivers from being used on aircraft, at least on all Continental
flights. Depending on your airline, your mileage may vary.

Your best bet is to ask a flight attentant, or better yet the
captain herself/himself or appropriate pilot-in-charge.

Hope this helps.

Mike

--
^v^v^v

2302. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 19:14:24 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.762462668@hpuerca>
Source record: 270354

In <2kqtae$cg5@news.delphi.com> mahjmac@news.delphi.com (MAHJMAC@DELPHI.COM) writes:

>It would seem to me that being alowed to use a keyboard doesn't conform
>to the whole reason CW is required. It is used on an international scale, and
>if you are ever in any type of emergency or spontaneous situation where you
>need to receive code with no keyboard, then you would be worthless.

>Mike

Amen. Testees should be required to carve their copy into wood.
Failing that, hand-made slate tablets could be substituted.

In a real emergency you'd copy on the floor in your own blood!

:-)
Ed Humphries N5RCK
HP Atlanta GA

2303. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 19:20:17 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Feb28192017@mipgsun.mipg.upenn.edu>
Source record: 270282
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

>(1) I sure would like to see a copy of the original letter making "lawyer
>noises".

I have faxed a copy of the letter to the person asking for the letter
but am hesitant to post the letter. It would only fan the flames
without any substantial purpose. As a matter of policy, I have been
faxing all those who ask for a copy of the letter but if there are too
many people asking for it, some other arrangements may have to be
made.

The various threads on this issue have been highly supportive of the
idea of the online repeater directory. For this, I am grateful since
there are people appreciate the work that the volunteers and I have
put into the project. If the ARRL is listening, it can readily tell
the attitudes of most hams here. Further, a number of more
industrious hams are supplementing my efforts to the league and I am
grateful for their assistance. I am still hopeful of a satisfactory
resolution to this issue. As of this moment, I have not heard any
further news from the league itself.

Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

2304. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 19:22:56 UTC
From: paulf@Csli.Stanford.EDU
Message-ID: <1994Feb28.192256.25854@Csli.Stanford.EDU>
Source record: 270355

phantom@pro-haven.cts.com (Tiffany Keller) writes:

> Regarding ham jargon...here's a good one you might be able to
>use...it's XYL and it stands for ex young lady....(which I take great
>offense to as a deragatory remark (I am not an "XYL" because I am only 22
>years old! :-)) The term is used to refer to one's wife...(because most
>hams are of male gender and all...) I think I might start refering to OMs
>(old men) as XYM and see if they like that...:-)

My wife (N6YBV) was never terribly happy about this one either (especially
since she's *younger* than I am). A little digging through some commercial
CW abbreviation lists led to the the discovery of the abbreviation "YF",
which is what I use (and advocate, if for no other reason than it's shorter).

--
-=Paul Flaherty, N9FZX | "Fighter pilots make movies. Bomber pilots make
->paulf@Stanford.EDU | history." -- Jake Grafton

2305. Re: Low power Bird slugs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 19:45:31 UTC
From: alanb@sr.hp.com
Message-ID: <CLy9Jv.BI9@srgenprp.sr.hp.com>
Source record: 270356

Zack Lau (KH6CP) (zlau@arrl.org) wrote:
: groverc@gvgadg.gvg.tek.com wrote:

: : Is there a Bird slug available that would do a credible job
: : of measuring <5w signals in the range 3-30MHz?

: None that are compatible with the Bird 43. We asked Bird and
: were told that they couldn't even do a custom slug.

I think I know why. A coupled-transmission-line directional coupler has a sensitivity limited by the physical length. And the sensitivity in inversely proportional to frequency -- That's why Bird slugs include a shunt capacitor to flatten out the frequency response. At low (HF) frequencies, I bet 50W is about the lowest sensitivity that is possible with the available line length.

AL N1AL

2306. Re: Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 19:55:25 UTC
From: northup@hoop.sw.stratus.com
Message-ID: <2kti7d$lai@transfer.stratus.com>
Source record: 270357

julian@bongo.tele.com (Julian Macassey) writes:

:
: The Conservative radio amateurs always make sure they are
: properly attired before engaging in QSOs.

Does this mean that we have to start practicing safe QSOs ?

:
: --
: Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
: Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

--
--

Bill Northup PHONE: (508) 460-2085
Stratus Computer Inc. INTERNET: northup@sw.stratus.com
55 Fairbanks Boulevard OR: northup@Vos.Stratus.com
Marlboro, MA 01752 Amateur Radio: n1qpr

2307. Re: Transformer Failure Modes?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 20:00:49 UTC
From: alanb@sr.hp.com
Message-ID: <CLyA9E.Bzx@srgenprp.sr.hp.com>
Source record: 270358

Mark E. Bailey (mebly@eng.umd.edu) wrote:
: The proverbial friend of mine has two transformers. They are 110/220 VAC
: input, 50 VAC output and rated at 15 amps.

: He needs 25 volts, not 50. The obvious solution is to feed 110 into the
: 220 input windings.

: Question: Do we have to de-rate the output current to 7.5 amps?

For a given secondary current, when you halve the primary voltage
(to 110V), the input current doubles. So theoretically, if you want
to keep the primary current the same, you would have to reduce the
output current rating by 1/2.

However, I don't think it's quite that bad. After all, the secondary
current is the same -- the only difference is the I^2*R loss in the
primary. Also, most transformers are rated for 100% duty factor.
If you are using this to make a 12V power supply for a transmitter
with a 50% duty factor, you could probably use the full 15A or even
a bit more.

AL N1AL

2308. JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 21:01:38 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199402282109.NAA17392@ucsd.edu>
Source record: 270359

>use...it's XYL and it stands for ex young lady....(which I take great
>offense to as a deragatory remark (I am not an "XYL" because I am only 22
>years old! :-)) The term is used to refer to one's wife...(because most

sheesh. at one time a slang in use had all married men as "old men" or "old boys" and their wives were the "old women".

a not-married woman was by default a Young Lady. those that are married became ex-young ladies...or would you prefer Old Woman.....YF is the current term i guess for wife and then there's SO....

the "old men" in the 50+ club today were still "old men" on the radio 50 years ago. that was the vernacular in force.

Those of you that get "That's Jake" in the funnies saw Jake Vest's idea of "Politically Correct Poker" today.....

bill wb9ivr

2309. Alpha Bravo Charlie Delta: phonetic alphabets (repost)

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 21:20:29 UTC
From: Brian.Kelk@cl.cam.ac.uk
Message-ID: <1994Feb28.212029.22449@infodev.cam.ac.uk>
Source record: 270360
Cross-posted to: alt.usage.english,sci.lang,rec.radio.amateur.misc,rec.radio.info

Alpha Bravo alphabets

Here is a collection of alphabets of the Alpha Bravo Charlie Delta kind, variously known as radio alphabets, phonetic alphabets and spelling alphabets. This collection currently includes alphabets for the following languages:

English, French, German, Dutch, Flemish, Italian, Rumantsch, Slovak, Polish, Hungarian, Swedish, Finnish and Russian.

This posting is essentially a repeat of the one of 11th January.

My thanks to the many contributors, not all of whom are acknowledged below.

I can make no guarantee of accuracy of this information; indeed please send me any corrections or additions.

In my capacity as the editor of this collection I have no objection to the further electronic distribution of this posting in full in circumstances where it is likely to be of interest.

Comments in square brackets are my own.

Brian Kelk bck1@cl.cam.ac.uk
28 February 1994

***** ENGLISH *****

The NATO phonetic alphabet:

Alpha Bravo Charlie Delta Echo Foxtrot Golf Hotel India
Juliet Kilo Lima Mike November Oscar Papa Quebec Romeo
Sierra Tango Uniform Victor Whiskey Xray Yankee Zulu

[The same alphabet, modulo Alfa and Juliett, is approved by the International Civil Aviation Organization and the FAA. Dates from about 1956.
UK police use Indigo instead of India (?)]

Telecom B:

Alfred Benjamin Charles David Edward Frederick George Harry Isaac Jack King London Mary Nellie Oliver Peter Queen Robert Samuel Tommy Uncle Victor William Xray Yellow Zebra

[Found in Swedish, Dutch, Hungarian telephone directories.
A Swiss directory has: Andrew Charlie Lussy Queenie Sugar]

British A:

Amsterdam Baltimore Casablanca Denmark Edison Florida
Gallipoli Havana Italia Jerusalem Kilogramme Liverpool
Madagascar New_York Oslo Paris Quebec Roma Santiago Tripoli
Uppsala Valencia Washington Xantippe Yokohama Zurich

[An 'international' alphabet in a Dutch telephone directory
has: Danemark. A 'French' alphabet in a Hungarian directory
has: Cassablanka Danemark Que'bec Upsala Zu"rich]

Used by New York police:

Adam Boston Chicago Denver Edward Frank George Henry Ida
John King Lincoln Mary Nancy Ocean Peter Queen Robert Sam
Thomas Union Victor William X-ray Young Zebra

Used by police in San Diego, California:

Adam Boy Charles David Edward Frank George Henry Ida John
King Lincoln Mary Nora Ocean Paul Queen Robert Sam Tom Unit
Victor William Xray Yellow Zebra

Sometimes used by radio hams (unofficial):

America Boston Canada Denmark England France Germany
Honolulu India Japan Kilowatt London Mexico Norway Ontario
or Ocean Pacific Quebec Radio Santiago or Spain Tokyo United
Victoria Washington Xray Yokohama Zanzibar

[Much variation: Amsterdam, Brazil, Baltimore, Chile,
Finland, Greece, Guatemala etc]

The ARRL (American Radio Relay League) alphabet (1948):

Adam Baker Charlie David Edward Frank George Henry Ida John
king Lewis Mary Nancy Otto Peter queen Robert Susan Thomas
union Victor William x-ray young zebra

[Nowadays the ARRL endorses the NATO/ICAO alphabet]

Allied Services 1945:

Able Baker Charlie Dog Edward Fox George How Item Jig King
Love Mike Nan Oboe Peter Queen Roger Sugar Tape Uncle Victor
William X-ray Yoke Zebra

From a book entitled "The Complete Morse Instructor..." (1944):

able baker charlie dog easy fox george how item jig king
love mike nan oboe peter queen roger sugar tare uncle victor
william x-ray yoke zebra

[This one seems to have undergone quite a lot of evolution, with different branches of the U.S. armed forces using different versions. Entries also cited: affirm, cast, hypo, inter, negat, option, over, prep]

Western Union:

Adams Boston Chicago Denver Easy Frank George Henry Ida John King Lincoln Mary New_York Ocean Peter Queen Roger Sugar Thomas Union Victor William X-ray Young Zero

British Army 1927:

Ack Beer Charlie Don Edward Freddy George Harry Ink Johnnie King London Monkey Nuts Orange Pip Queen Robert Sugar Toc Uncle Vic William X-ray Yorker Zebra

Royal Navy 1917:

Apples Butter Charlie Duff Edward Freddy George Harry Ink Johnnie King London Monkey Nuts Orange Pudding Queenie Robert Sugar Tommy Uncle Vinegar Willie Xerxes Yellow Zebra

U.S. Army 1916:

Able Buy Cast Dock Easy Fox George Have Item Jig King Love Mike Nap Opal Pup Quack Rush Sail Tape Unit Vice Watch X-ray Yoke Zed

***** FRENCH *****

Contributor: Erik Tjong Kim Sang <erikt@let.rug.nl>

anatole bernard c'ecile denise 'emile fran5cois g'erard henri isidore jean kl'eber louis marcel nicole oscar pierre quital robert suzanne th'er`ese ursule victor wagon xavier yvonne zo'e

Contributor: Rudolf Lais <chibm5hp@ibmmail.com>

(Swiss telephone directory)

Anna Berthe Ce'cile Daniel Emile Franc,ois Gustave Henri Ida Jeanne Kilo Louise Marie Nicolas Olga Paul Quittance Robert Suzanne The're`se Ulysse Victor William Xavier Yvonne Zurich

***** GERMAN *****

Contributor: mrosa@eso.org (Michael Rosa)

Anton Berta Caesar Dora Emil Friedrich Gustav Heinrich Ida Julius Karl Ludwig Martha Nordpol Otto Paula Quelle Richard Siegfried Theodor Ulrich Viktor Wilhelm Xanthippe Ypsilon Zeppelin

Umlaut: A"rger O"dipus U"bel

More recent replacements: Konrad Zacharias

Contributor: Erik Tjong Kim Sang <erikt@let.rug.nl>

anton bertha c"asar dora emil friederich gustav heinrich ida
julius kaufmann ludwig martha nordpol otto paula quelle
richard samuel theodor ulrich viktor wilhelm xanthippe
ypsilon zacharias

"a "arger
ch charlotte
"o "okonom
sch schule
"u "ubermut

Contributor: Rudolf Lais <chibm5hp@ibmmail.com>

(Swiss telephone directory)

Anna Bertha Caesar Daniel Emil Friedrich Gustav Heinrich Ida
Jakob Kaiser Leopold Marie Niklaus Otto Peter Quelle Rosa
Sophie Theodor Ulrich Viktor Wilhelm Xaver Yverdon Zuerich

Contributor: Christof A Neumann <neumann@informatik.tu-muenchen.de>

(issued by Deutsche Bundespost)

Anton Bertha Caesar Dora Emil Friedrich Gustav Heinrich Ida
Jakob Konrad Ludwig Martha Nordpol Otto Paula Quelle Richard
Siegfried Theodor Ulrich Viktor Wilhelm Xantippe Ypsilon
Zeppelin

sch Schule

Contributor: Steve Dunham <dunham@gdl.msu.edu>

Anton Berta Caesar Dora Emil Friedrich Gustav Heinrich Ida
Johann Kaufmann Ludwig Martha Nordpol Otto Paula quer
Richard Siegfried Theodor Ulrich Viktor Wilhelm Xaver
Ypsilon Zeppelin

ss Eszett

Contributor: Anno Siegel <anno4000@w172zrz.zrz.TU-Berlin.DE>

Arno Borvaselin Coburg-Gotha Doria Ernst Friedrichsroda
Gomorrha Herrenzimmer Ida Jawohl_Odol Kolberg_Ost Leonidas
Motor Nora Oekonom Per_Motorrad Quohnsdorf_bei_Forst
Revolver Sabine Tod Uniform Verbrennungstod Weltnordpol
Xolabaphon York_Yellowstone Zoroaster

oe Oekonomie
ue Ueberkonto

[This alphabet provides mnemonics for Morse code: a syllable
corresponds to a dash if it contains 'o', a dot otherwise.]

***** DUTCH and FLEMISH *****

Contributor: Erik Tjong Kim Sang <erikt@let.rug.nl>

Dutch Flemish

a anna arthur
b bernhard brussel
c cornelis carolina
d dirk desire
e eduard emiel
f ferdinand frederik
g gerard gustaaf
h hendrik hendrik
i izaak isidoor
j jan jozef
k karel kilogram
l lodewijk leopold
m marie maria
n nico napoleon
o otto oscar
p pieter piano
q quotient qualite
r rudolf robert
s simon sofie
t teunis telefoon
u utrecht ursula
v victor victor
w willem waterloo
x xantippe xavier
ij ijmuiden -
y ypsilon yvonne
z zaandam zola

***** ITALIAN *****

Contributor: ebuie@sed.csc.com (Elizabeth Buie)
ebuie@starlab.csc.com

Ancona, Bologna, Como, Domodossola, Empoli, Firenze, Genova,
Hacca, Imola, Jolly, Kappa, Livorno, Milano, Napoli,
Otranto, Pisa/Palermo, Quartomiglio, Roma, Savona/Siena,
Torino, Udine, Venezia, Wagner, Xilofono, York, Zara

Contributor: Rudolf Lais <chibm5hp@ibmmail.com>

(Swiss telephone directory)

Anna Battista Carol Davide Ernesto Federico Giovanni acca
Isidoro i_lungo cappa Luigi Maria Nicola Olga Pietro
Quintino Rodolfo Susanna Teresa Umberto Vittorio vu_doppia
ics ipsilon Zurigo

***** RUMANTSCH *****

Contributor: Rudolf Lais <chibm5hp@ibmmail.com>

(Swiss telephone directory)

Anna Berta Carla Dora Emil Flurin Guido Hugo Ida Judit Kilo
Luisa Maria Nesa Otto Paula Quirin Rita Silvia Toni Ursin
Victor Willi Xaver Yvonne Zita

***** SLOVAK *****

Contributor: Martin Votruba <votruba+@pitt.edu>

(telephone directory)

Adam, Boz~ena, Cyril, C~adca, Da'vid, D~umbier, Emil,
Frantis~ek, Gusta'v, Helena, CHrudim, Ivan, Karol, Ludvi'k,
L~ubochn~a, Ma'ria, Norbert, N~ - Nitra, Oto, Peter, Quido,
Rudolf, Sva"topluk, S~imon, Toma's~, T~ - Tepla', Urban,
Va'clav, W - dvojite' ve', Xaver, Ypsilon, Zuzana, Z~ofia

***** POLISH *****

Contributor: Michal Jankowski <michalj@fuw.edu.pl>

(Warsaw telephone directory)

Adam Barbara Celina Danuta Ewa Franciszek Genowefa Henryk
Irena Jadwiga Karol Leon L/ukasz Maria Natalia Olga Pawel/
Roman Stanisl/aw Tadeusz Urszula Wl/adysl/aw Xantypa Ygrek
Zygmunt

***** HUNGARIAN *****

(telephone directory)

Andra's Be'la Cecil Do'ra Eleme'r Ferenc Gizella Hajnalka
Istva'n Ja'nos Katalin Luca Ma'tya's Na'ndor Olga Piroska
Queen Ro'bert Sarolta Ti'mea Ubul Vilmos Walter Xe'nia
Ypsilon Zolta'n

***** SWEDISH *****

Contributors: simon@dront.nada.kth.se (Simon Tardell)
Jonas Wallgren <jwc@ida.liu.se>

Adam, Bertil, Cesar, David, Erik, Filip, Gustav, Helge,
Ivar, Johan, Kalle, Ludvig, Martin, Niklas, Olof, Petter,
Quintus, Rudolf, Sigurd, Tore, Urban, Viktor, Wilhelm,
Xerxes, Yngve, Z{ta,]ke, [rlig, \sten

where { is a with dots
] A with ring
[A with dots
\ O with dots

NB that W does not belong to the Swedish alphabet
(it is merely considered a graphical variant of V).

***** FINNISH *****

Contributor: Jukka Rahkonen <jrahkone@viikki.helsinki.fi>

Aarne Bertta Celsius Daavid Eemeli Faarao Gideon Heikki
Iivari Jussi Kalle Lauri Matti Niilo Otto Paavo Kuu Risto
Sakari Tyyne Urho Ville Viski [ks{ Yrj| Tseta]ke [iti \ljy

Uppercase Lowercase
] } a with circle (Swedish)
[{ a with dots
\ | o with dots

***** RUSSIAN *****

Contributor: tom@systemtechnik.tu-ilmenau.de (Thomas Planke)

Aleksej Boris Vasilij Grigorij Dmitrij Elena Zhenja Zoya
Ivan Ivan_Kratkij Kilowatt Leonid Maria Nikolai Olga Pavel
Roman Sergej Tatjana Uljana Fjodor Hariton Zaplja Chelovek
Shura Schuka Tviordiy_Znak Igrek Miagkiy_Znak Emilija Yuri
Jakow

***** END *****

Brian Kelk
Cambridge
U.K.
bck1@cl.cam.ac.uk

2310. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 21:29:04 UTC
From: zlau@arrl.org
Message-ID: <1994Feb28.212904.10734@arrl.org>
Source record: 270361

Seems to me that Gary wants to set up a digital network
the hard way, with only people interested in digital
networks.

In the Northeast, winning the 10 GHz contest depends
on *reliable* links. After all, there is the certainty
of rain and the even the possibility of snow... Dale
made his long haul contact and I didn't--with no
effect on the who won. Even my longest contact
was made over a path known to work well. This is
why I haul stuff up hiking trails, rather than
hoping for an opening....

I spend a lot of time in the contest setting up
schedules for *other* stations. Perhaps surprising
to beginners, but not veterans of 10 GHz work, is
relative inferiority of 2 meters once the antennas
are properly pointed. However, the best example
of cooperation was the hams who brought a carload of
gear to one ham's place--to force him to finish putting
together his SSB/CW station before the night was out!
Seems two hams got tired of hearing out it was "almost
ready" for the past 2 years.

I wasn't saying that you should have contesters
set up your links, much less maintain them. But,
why not get some hands on experience if its
available? People pay big $$ to get hands on
training with the guidance of experts. I know
in the Northeast there are groups willing to
help out beginners, especially if they are willing
to spend a weekend or two helping to make contacts.

Often, contesters just happen to have access to
the equipment you say is unavailable.

From what I've seen, HF contesters *do* have
a suitable mindset for setting up a network.
Perhaps not your idea of what a digital network
is suppose to be, but much of the Northeast
is linked by the Frankford Radio Club and the
Yankee Clipper Contest club (they are actually
competitors trying to wind DX contests).
They even have a source of funding--sales of CT
(one of the contest logging programs)
support the network. True, the network doesn't

support much more than DX spots and shortages
on a contest weekend, but if it suits the
needs of the people that spend their time building
and maintaining it....

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

(I wrote)
: >for weak signal testing. Incidentally, if you are serious about
: >getting on 10 GHz, the March 10 GHz contest results in QST list
: >a number of stations on the band.

: I was thinking of more than some crude relative indications, though
: that's often useful. But how many amateurs have frequency counters
: or spectrum analyzers that cover 10 GHz, or even bolometer power meters?
: I do, but I don't know many others who do. How many are setup to measure
: sidelobe responses for optimum feed positioning? Even I'm not set up to
: do that properly and have to depend on manufacturer antenna range data.
: How about simple deviation measurements on megabaud+ signals at 10 GHz?
: If we're going to build a reliable national network, we can't be cavalier
: about what frequencies we're using, or the power and performance of our
: systems.

: Note, I'm not interested *at all* in DXing or contesting. I consider both
: to be the antithesis to the cooperative model needed for effective networking.
: While I respect the technical prowess some contesters have shown, I don't
: think they have the proper mindset for designing reliable data links. By
: their nature, DXing and contesting are based on freak conditions, that
: once in a decade band opening, that unusual ducting condition, etc. They
: are not concerned about 7x24 fade margins, or 99% link reliability. Their
: goal is to *compete* with their compatriots for score rather than to
: cooperate day in and day out to maintain stable links. I'd be happier
: working with repeater owners whose concern for proper reliable coverage
: zones and 7x24 reliable service to the user community are primary.

: Look, we're finding that maintaining a 56 kb link is beyond the capabilities
: of a major number of digital enthusiasts. And that's pretty simple stuff
: that can be setup with just an ordinary station monitor and a scope. A
: national network isn't going to be maintained by people with more general
: knowledge or tools than that of the folks who maintain current digis and
: voice repeaters. Most of them are totally lost when it comes to medium or
: wideband data. It's *not* that hard, but we've got a major educational job
: ahead of us to get these people up to speed on these techniques. And we've
: got to offer packaged solutions that require a minimum of external test
: equipment to get up, and to maintain.

: The ideal piece of equipment will have indicators built in to indicate
: that it's operating correctly with a clean on-frequency signal, with
: proper modulation, and with undegraded receive sensitivity and selectivity.
: Having a built in CNR meter and discriminator center meter are probably
: mandatory, but that's not enough. You also need at minimum a reference
: marker source of known frequency and strength to check transceiver frequency,

: stability, and sensitivity. When you have two widely separated link ends,
: you must be able to determine if the end you're at is operating correctly
: or not, or if the problem is at the other end. You can't count on having
: service personnel at both ends of a link simultaneously.
--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

2311. Re: tube wanted..

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 21:31:16 UTC
From: vmike@olesun.okstate.edu
Message-ID: <1994Feb28.213116.6669@osuunx.ucc.okstate.edu>
Source record: 270362

In article <39227@mindlink.bc.ca>,
Vince Geisler <Vince_Geisler@mindlink.bc.ca> wrote:
>does anyone know where i can get an einac 100th or a 6an (i think there the
>same tube) for relitively cheeply? i need one for my linear amp..
>tia :-) vince....
>
>--
>vince geisler West vancouver bc
>(Society for Advancement of Amateur Astronomy).

fair radio sales has 100th's for around $27.

2312. Suggestions for HF mobile?

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 22:15:24 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <762473724snz@g8sjp.demon.co.uk>
Source record: 270363

Folks,

While I have now been fiddling around with radios of one sort or another for over 20 years, I have yet to try working mobile (and this means actually 'on the move') from a car. I have a rig which I can use - and IC 726, and reckon that 100W should be fun.

What I'm looking for are suggestions as to which bands would be more appropriate to maintain reliable communication between my car and a fixed station at between 200 and 1000 miles range during this coming summer (in Europe).

I notice that the local store has a nice selection of single-band centre (oops center) loaded whip antennae, and I wouldn't mind buying one or two of those, if appropriate. I'm planning to mount whatever antenna on directly on the (fairly large and elevated) roof of my car.

Ideas?

--
Iain Philipps

2313. Re: MODS REQUEST: IC-2330

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 22:21:53 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLyGsI.8GM@news.Hawaii.Edu>
Source record: 270364

In article <762309982snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>In article <CLupu3.KoI@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
>
> [snip]
> >
>
> Yup, you're starting to go tit-for-tat and grasping at straws. Also, I
^^^ ^^^^^^^^
Well! At least we know what's on YOUR mind. My faith in your masculinity has been restored.

I would never grasp at straws [hee hee hee].

> note that your reply verbiage ratio has gone up. I'd say your agitated.

No no no. Washing machines agitate. I'm `responding'.

>
> Thank you for playing. For another flame, please insert 25 cents.
>

Sounds like you're finally winding down. I'd say this is a good time to get back to the code debate on .policy. See ya, Jeffy.

Jeff NH6IL
>
> Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
>Internet: jangus@skyld.grendel.com | a fanciful dimension to any
> US Mail: PO Box 4425 Carson, CA 90749 | story."
> Phone: 1 (310) 324-6080 | Peking Noodle Co.
>

2314. Re: Jerk on 20 mtrs

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 22:21:53 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-280294172153@k4dii.ksc.nasa.gov>
Source record: 270365

In article <2ksunm$hmo@news.iastate.edu>, kenman@iastate.edu (Kenneth D Anderson) wrote:
> There was some JERK that was running up and down the band causing all kinds
> of intentional interference: from belching and whistling to calling people
> sh*theads to keying on a frequency to disrupt a QSO.

Ken-

He wasn't the only one. Some of those who act that way, even have extra-class licenses!

The most frequent occurrence seems to be related to groups of Hams who think they have a private frequency. On 75, 40 and 20 meters, there are many "nets" that last most of 24 hours. There are Hams who leave their radio on a single frequency during all their waking hours. They use it like an intercomm with others in their group, and make all kinds of noise when an outsider comes on, thinking it is an unused frequency.

Then, there are those like your JERK, who make a sport out of moving onto frequencies known to be inhabited by the above. They engage in shouting matches and harrangues, effectively making the frequency useless.

I think all of these people are just bored, and have way too much time on their hands! In cases like these, there may be no harm done, other than hurt feelings. However, the JERKs don't stop there. Some of them take special delight in disrupting nets that serve a good purpose, especially in times of some disaster or other emergency.

These JERKs certainly give Ham Radio a bad name. What can you do about it? Nothing but get upset. I believe the best response is to ignore such a person. Let them have their way, and vacate a frequency if necessary. When you react to them, you're doing just what they want. The only way to "spoil their fun" is to refuse to play with them!

73, Fred, K4DII

2315. Re: Errors in TNC2 firmware???

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 22:57:11 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-280294175712@k4dii.ksc.nasa.gov>
Source record: 270366

In article <2ks2o4$6tc@tern.csulb.edu>, byon@csulb.edu (Byon Garrabrant) wrote:
> I have recently been experimenting with TNC2 clones and had run
> across two peculiar "bugs" in the firmware of an MFJ 1278, and
> a tiny TNC2.

Byon-

If I understand you, the only real problem is that you can send two commands on one line. I didn't think you could do that, at least with a simple terminal program. A "|bcst" command may indeed do something strange, but I wouldn't consider it a "bug"!

73, Fred, K4DII

2316. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 23:00:27 UTC
From: ehare@arrl.org
Message-ID: <1994Feb28.230027.11824@arrl.org>
Source record: 270367

Paul Flaherty (paulf@Csli.Stanford.EDU) wrote:

: phantom@pro-haven.cts.com (Tiffany Keller) writes:

: > Regarding ham jargon...here's a good one you might be able to
: >use...it's XYL and it stands for ex young lady....(which I take great
: >offense to as a deragatory remark (I am not an "XYL" because I am only 22
: >years old! :-)) The term is used to refer to one's wife...(because most
: >hams are of male gender and all...) I think I might start refering to OMs
: >(old men) as XYM and see if they like that...:-)

: My wife (N6YBV) was never terribly happy about this one either (especially
: since she's *younger* than I am). A little digging through some commercial
: CW abbreviation lists led to the the discovery of the abbreviation "YF",
: which is what I use (and advocate, if for no other reason than it's shorter).

I like it a lot better than XYL, too. I usually use YL to describe my
YL, even though she is not a ham (she got really wierd when I had a
name badge made up that said N0CALL!) I have tried using the term OL
to describe any licensed lady, but I finally figured out that there are
some ways YLs *don't* want to be equal to OMs. :-)

73 from ARRL HQ, Ed
--

Ed Hare, KA1CV ehare@arrl.org
American Radio Relay League

2317. Re: Have a say about ARRL policy

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 23:08:19 UTC
From: ehare@arrl.org
Message-ID: <1994Feb28.230819.12135@arrl.org>
Source record: 270368
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Bruce Perens (bruce@pixar.com) wrote:

: In response to a "questionable" ARRL decision, I have formed a
: single-topic discussion list on ARRL policy. Copies of the discussion
: will be made available to various ARRL officials, to ignore or read as
: they see fit. This effort is not sponsored or approved by ARRL,
: although I am an ARRL member and a field organization candidate. The
: list is open to all.

: This will be the only announcement of the list that I make to the usenet.
: To subscribe, send mail to LISTSERV@pixar.com with this text:

: subscribe arrl-policy YOUR-NAME-HERE YOUR-CALLSIGN-HERE

Thanks, Bruce. I have ensured that several key staffers are made aware
of the mailing list. I, for one, have signed up. I also have been known
to pass along a post from time to time, as I see fit, or if I happen
to see it.

You can contact most ARRL HQ staffers by email. I will post a
list in my next post.

I also suggest that all hams with an opinion or suggestion about a
policy matter make their views known to their Division Director.
The Division Directors are listed on page 8 of any recent QST.
You can also usually find your Division Director at most major hamfests
or ARRL Conventions.

73 from ARRL HQ, Ed
--

Ed Hare, KA1CV ehare@arrl.org
American Radio Relay League

2318. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 23:21:00 UTC
From: dparker@netcom.com
Message-ID: <dparkerCLyJJ3.1o2@netcom.com>
Source record: 270369

Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:

: In article <2kqtae$cg5@news.delphi.com> mahjmac@news.delphi.com writes:

: > It would seem to me that being alowed to use a keyboard doesn't conform
: > to the whole reason CW is required. It is used on an international scale,
: > and if you are ever in any type of emergency or spontaneous situation
: > where you need to receive code with no keyboard, then you would be
: > worthless.
: >
: > Mike

: How about we change the test to laying on ones side in a crashed police
: car and be able to send with the wires hanging out of the broken mic?

: Would that satisfy the "emergency" nature of the requirement?

No, no, no you need to be able to pound out SOS with your forehead on the
cars horn at no less than 14 wpm with hands and legs pinned.

Then AND only then can you talk about your hemoroids on 40.

Dave

2319. IPS Daily Report 28 02 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 23:27:53 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Feb28.232753.1366@ips.oz.au>
Source record: 270370
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 28 February 1994
Summary for 28 February and Forecast up to 3 March
No warning is current.

1A. SOLAR SUMMARY
Activity: Very low

Flares: None

Observed 10.7 cm flux/Equivalent Sunspot Number : 093/038

1B. SOLAR FORECAST
01 March 02 March 03 March
Activity Low Low Low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 095/041

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : quiet to unsettled

Estimated Indices : A K Observed A Index 27 February
Learmonth 08 1-33 2122
Fredericksburg 05 06
Planetary 06 07

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
01 Mar 08 Quiet to unsettled.
02 Mar 10 Quiet to unsettled.
03 Mar 20 Quiet to unsettled with an isolated active period.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
28 Feb normal normal normal
PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
01 Mar normal normal normal
02 Mar normal normal poor to fair
03 Mar normal normal poor to fair
3C. GLOBAL HF PROPAGATION COMMENT
Conditions at high latitudes are expected to become degraded over
the last two days of the forecast period.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were near predicted with 20-30% enhancements 08-19UT.

T index: 57

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
01 Mar 50 Near predicted monthly values with enhancements to
25% during local night hours.
02 Mar 45 Near predicted monthly values.
03 Mar 45 Near predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2320. Mast-mount bracket wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 23:30:10 UTC
From: baffer@pnet01.cts.COM
Message-ID: <m0pbHWH-0000L7C@crash.cts.com>
Source record: 270371

I am looking for the mast-mount bracket that fits the Ham IV rotor. If you ahve one of these critters (hopefully, economically priced), please contact me at (619) 573-0774 or via this board.

73, KH6HKK

2321. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 23:34:38 UTC
From: glenne@sad.hp.com
Message-ID: <CLyK5q.ILK@srgenprp.sr.hp.com>
Source record: 270372

Zack Lau (KH6CP) (zlau@arrl.org) wrote:

> Seems to me that Gary wants to set up a digital network
> the hard way, with only people interested in digital
> networks.

Perhaps this is his way of keeping the user base small enough that the network he envisions can still provide at least mediocre service to each user. I don't see how that's going to happen with a national backbone of (only) 3000 56 kbps nodes otherwise.

> Perhaps surprising
> to beginners, but not veterans of 10 GHz work, is
> relative inferiority of 2 meters once the antennas
> are properly pointed.

I'm afraid this mindset among amateurs may be a serious hurdle to overcome. Popular wisdom has it that microwave is difficult and short range at best.

I find it interesting (and sad) that a similar "phobia" of short wavelengths was what resulted in amateurs getting shorter wavelengths, 200 meters and down, in the beginning. This time, however, amateurs seem to be on the wrong end of the opinion poll, even though ham radio presently has the spectral resources. Everyone else seems to have recognized where the value is. The commercial "vote" has been in for years which is why microwave has prevailed until just recently when fiber arrived.

Gary wrote:

> : If we're going to build a reliable national network, we can't be cavalier
> : about what frequencies we're using, or the power and performance of our
> : systems.

Which I agree with completely and is why I'd hate to see plans for a national network limited or hamstrung by a 56kbps-at-vhf is enough mindset.
It's going to take optimum paths, economical hardware along with careful system planning and the development of supporting protocols in order to make something which is attractive to information-age amateurs. There's no question that it's difficult. I just don't see that we have an alternative if the hobby is to stay relevant.

Glenn Elmore n6gn

ax.25 n6gn@wx3k.#nocal.ca.usa.na
amateur IP: glenn@SantaRosa.ampr.org

Internet: glenne@sr.hp.com

2322. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 23:42:47 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2ktvhn$1ir@news.acns.nwu.edu>
Source record: 270373
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <2knklj$d4m@dancer.cc.bellcore.com>,
sohl,william h <whs70@dancer.cc.bellcore.com> wrote:
>In article <2klrff$c01@cville-srv.wam.umd.edu>,
>Scott Richard Rosenfeld <ham@wam.umd.edu> wrote:
>>Just because there's an online repeater directory out there doesn't mean
>>that there's no market for the ARRL Repeater Directory. As stated prev-
>>iously, who really wants to carry around a bunch of 8-1/2 x 11 inch
>>sheets of paper, anyway?
>>
>>All of you people out there - have you seen that incredibly neat repeater
>>MAP book out there? It shows up at hamfests all the time, and MANY times
>>have I considered getting a copy, because it's a lot easier to look at
>>a map, compare it to your road map, and SEE what repeaters may be within
>>range. The ARRL seems to not be too worried about that one, and it
>>probably isn't cutting into the league's profits too much.
>
>That "MAP Directory" is also advertised in the March Issue of CG magazine
>on page 70. The Map directory is advertised as being 175 pages,
>it includes location, highways, plus other helpful info.
>

I owned a repeater Map book by ArtSci for a few days till I sold it to
someone who valued it more than I did. My opinion: crude maps, with a
very small fraction of repeaters on it. I found the ARRL
book, for all its flaws, to be significantly better.

Rajiv
aa9ch
r-dewan@nwu.edu

2323. 10-10#

Newsgroup: rec.radio.amateur.misc
Date: 1994-02-28 23:52:21 UTC
From: sandersm@yvax.byu.edu
Message-ID: <1994Feb28.165221.5814@yvax.byu.edu>
Source record: 270374

I am trying to get my 10 10-10 nbers. I would apprecite it if someone who
has a 10-10 number just give a UTC time and 10m Frequency and I'll be there.
73's Thanks. Chad.....KB7ZIU

2324. Dube Todd, please contact me

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 00:06:25 UTC
From: crisp@netcom.com
Message-ID: <crispCLyLMv.F0w@netcom.com>
Source record: 270375
Cross-posted to: rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.misc,rec.radio.scanner

I have some information regarding a source of equipment you may be interested
in.

--
Richard Crisp Cupertino, Ca. crisp@netcom.com
(415) 903-3832 wk (408) 253 4541 fax
"It is a good thing that we do not get as much government as we pay for"
-Will Rogers

2325. Looking for an Active Antenna Matching Circuit/Amplifier

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 00:16:11 UTC
From: toloo@eleceng.ee.QueensU.CA
Message-ID: <CLyM2z.9x@knot.ccs.queensu.ca>
Source record: 270376

Hello:
I am looking for an active circuit diagram that can amplify and
also certain frequency ranges of the signals received by the
antenna. Do you know where I can get such a circuit (a paper
drawn or the postscript file of its circuit diagram)
Thank You
Mansour

2326. Special Event - March 12, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 00:18:36 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-280294191836@k4dii.ksc.nasa.gov>
Source record: 270377

28.333 MOSQUITO NET

Members of the Titusville Amateur Radio Club will operate 1400-2300Z, March 12, 1994, to commemorate the 150th anniversary of Brevard County, Florida, and the 3rd anniversary of the TARC Mosquito Net.

CW - near the bottom of the Novice 10, 15, and 40 sub-bands

Voice - 28.333 (Mosquito Net frequency), and near the bottom of the General 15 and 40 sub-bands

For a certificate, make contact and send your QSL with a 9" X 12" self-addressed, stamped envelope to:

TARC
Post Office Box 73
Titusville, Florida 32781

We'll be listening for you!

KC4VIN, Carole Ann
Stinger #1, Net Manager
(TARC Mosquito net operates Wednesdays, 7PM Eastern on 28.333 MHz)

2327. Re: ARRL--->Online Repeater directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 00:30:50 UTC
From: dts@world.std.com
Message-ID: <CLyMrF.AF@world.std.com>
Source record: 270278

In article <9402281434.AA12050@umassmed.UMMED.EDU> sbaker@umassmed.UMMED.EDU (Stephen Baker) writes:
>The league publishes the repeater directory which it currently enjoys monopoly
>status. This must be enormously profitable for them as they are the sole source
>for such a directory, (maps aside). I wonder if they have priviledged access to
>this information by virtue of some role they play in the frequency coordination
>process?

And what role do you think the ARRL plays in frequency coordination? In
reality, the ARRL does not do frequecy coordination. Issues of band planning,
yes, but not coordination.

>
>If this is the case, then there is a conflict of interest issue here, and they
>should not in the repeatern directory business and frequency coordination
>business simultaneously if they will harrass competition.

they are not.

>
>As a league member, I feel it is the role of the League to encourage such
>innovations as an online repeater directory and callbook and should be providing
>these services to it's membership at cost or free themselves! I question how
>responsive the league is to the needs of the membership and to innovation. The
>league should evaluate it's programs for relevance and cost effectiveness. Is
>the code practice program worth the tremendous cost? Could that money be better
>spent setting up 800 lines for their BBS where code practice software could be
>downloaded? What would an internet RISC server cost to set up a server for
>callbook lookups, FTP, online repeater directories, packet gateway's, cellular
>vhf coordination (see 3/94 QST) etc.

Read the opening pages of the repeater directory. The publication indicates that
certain data were obtained by other groups allowing the ARRL to use copyrighted
data wwith permission. It would seem that the League has agreed to those
groups being able to copyright their lists. I would guess that those groups
see it as worthwhile to have their data printed in the repeater directory,
and so allow for its use in the publication.

>
>Ham radio has entered an age where these sorts of things are where
>experimentation is happening and as the central organized body in the hobby, the
>ARRL is the only group in a position to do some of these things. If they don't
>take a leadership role, some other group will eventually emerge to do this and
>they will have lost their chance to serve the hobby.
>
>

>--
>
>
>Stephen P. Baker phone: (508) 856-2625
>Lecturer in Biostatistics (508) 856-3131 fax
>Department of Academic Computing (413) 253-3923 home
>University of Massachusetts Medical School e-mail: sbaker@umassmed.ummed.edu
>55 Lake Avenue North -.- -.. .---- .--. ..-.
>Worcester, MA 01655

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

2328. Re: Call Sign Re-issue

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 00:36:14 UTC
From: dts@world.std.com
Message-ID: <CLyn0F.286@world.std.com>
Source record: 270279

In article <50030048@hpscit.sc.hp.com> rogerm@hpscit.sc.hp.com (Roger Myers) writes:
>
>Hi,
>
> I recently heard that the FCC is now allowing people to get call signs
^^^^^^^^^^^^

Change that to "has proposed allowing". It has not happened yet.

>re-issued. I would like to my dad's call sign. He passed away 5 years ago.
>Does anyone know the procedure to get a call sign re-issue?

When it becomes possible there will be articles in all the magazines, I am
sure...

>
>Thanks,
>
>Roger Myers
>WB7PJS

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

2329. Mac software, again!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 01:56:58 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CLyqqz.FMo@ucdavis.edu>
Source record: 270280

I KNOW this is a FAQ but I've never needed it until now and it doesn't show up in our FAQ so if the gentleman who keeps the MAc software list please e-mail me a copy I will be eterenally grateful.

Thanks,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2330. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 02:41:54 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CLystu.72n@news.Hawaii.Edu>
Source record: 270281

In article <rcrw90-280294094834@waters.corp.mot.com.corp.mot.com> rcrw90@email.mot.com (Mike Waters) writes:
>
>You must tell me how to carry on a QSK conversation when you are running
>your CQ tape Jeff. They must be *highly* skilled operators to do that - I
>guess one of the lost arts of radio :-)
>

The OTs used to be able to carry on a QSO and a verbal conversation simultaneously!
But you're correct here. One possibility is the op might be working a ship on one band and the other xmtrs are still carrying the CQ tape. That's doubtful, though; at NMO, what ever was sent on the key went out over ALL 6 xmtrs simultaneously. That way ships calling us on another band wouldn't think we went to sleep (which is not hard to do at 3am).

>Strange that the SITOR and FAX stuff seems to be busy passing traffic all
>the time even if you can only hear one side of it.

Dunno. Those are new modes to me...
I'll deny I ever said this but I will grant you that other modes will eventually take over CW (oh my God - I don't believe I admitted that) - what will it take? As long as the shore stations keep monitoring the CW frequencies some ships will keep using that mode. So the decision rests entirely in the lap of the shore stations.

73 Mike,
Jeff NH6IL

2331. Radio Amateurs on USENET List Feb 1994 Part 1 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 05:37:10 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Feb28.1@ve6mgs.ampr.org>
Source record: 270283
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part1
Last-modified: $Date: 94/36/28 22 36$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
First part contains primarily European calls with US call district 0.

The index of parts:
Part 1 contains 4x1bq through n0zyc
Part 2 contains nv1a through ka2zvz
Part 3 contains wn3a through kc4zwi
Part 4 contains kj5aa through kd6zwi
Part 5 contains aa7a through wa9zxm
Part 6 contains oa4hv through zs6tw

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
```

a return address, add optional `return user@host.domain'. For example:
Subject: Could be anything (sure!)
return wabbit@it.was.a.tewibble.storm.edu
lookup ka2nrc ve6tcp nm1d elmer
#
Last update February 28 1994
#
This document may be distributed freely, as long as there is no financial
gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
ISRAEL 4X,4Z
yosi@genius.tau.ac.il (Yossi Sharon) 4x1bq 93-12-11@
yosi@eng.tau.ac.il (Yossi Sharon) 4x1bq 93-12-11@
coolguy@circle.cs.jhu.edu (Guy Shechter) 4x1gs/n5uri 93-10-31
coolguy@cs.jhu.edu (Guy Shechter) 4x1gs/n5uri 93-10-24
gorski@vms.huji.ac.il (Azriel Gorski) 4x1pi/w7si 94-2-1
avip@acri.fr (Avi Plotnik) 4x6lp 93-9-23
cvtishbe@wis-ofer.weizmann.ac.il (Arye Tishbee) 4x6yo 94-2-15*
s2902081@techst02.technion.ac.il (Ben-Shalom Assi) 4z7aba 94-1-17@
s2301190@techst02.technion.ac.il (Yoram Rotbach) 4z9dea 94-1-17@
CYPRUS 5B
pci7787@zeus.tamu.edu (Ioannou Pantelis) 5b4acp 93-5-4@
PCI7787@TAMVENUS.TAMU.EDU (Ioannou Pantelis) 5b4acp 93-5-4@
JAMAICA 6Y
cheeky@cast.EDU.jm (Andrew) 6y5ew 93-6-5@
ALGERIA 7X

Nabil.Layaida@imag.fr (Layaida Nabil) 7x2kt 93-9-9@
layaida@imag.fr (Layaida Nabil) 7x2kt 93-9-9@
9A ???
sinisa@thphys.irb.hr (Sinisa Novosel) 9a7cwd 93-4-28@
9V Singapore
hky@nova.np.ac.sg (Hang Kim Yam) 9v1wi 93-12-9@
0005851359@MCIMAIL.COM (James Brooks) 9v1yc 94-2-13*
TAIWAN BV
victorc%oakhill@sps.mot.com (Victor Chen) bv2ch 94-2-4*
idpt224@tpts1.seed.net.tw (Eugene Wang) bv2ci 93-4-9@
CHILE CE
amsat-ce@cecux1.cec.uchile.cl (Ignacio Martinez Astorquiza) ce2mh 93-9-18
poelcker@cec.uchile.cl (Patricio Eduardo Oelckers Alvarez) ce3eoa 93-9-18
rcadiz@tolten.puc.cl (Rodrigo F Cadiz) ce3ojy 93-4-23@
ce6ezg@enlaces.ufro.cl (Raul Eduardo Burgos Vivero) ce6ezg/ce6fyt 93-12-11
ce6fyt@ce6fyt.radio.cl (Raul Eduardo Burgos Vivero) ce6ezg/ce6fyt 93-12-11
ce2usm@inf.utfsm.cl (Rodrigo E Rodriguez) ce6nug 93-10-4@
rrodrigu@loa.disca.utfsm.cl (Rodrigo E Rodriguez) ce6nug 93-10-4@
ce6nug@k2cc-2.ampr.org (Rodrigo E Rodriguez) ce6nug 93-10-4@
rrodrig@huracan.cr (Rodrigo E Rodriguez) ce6nug 94-2-12@
emillar@enlaces.ufro.cl (Eduardo C Millar) ce6uf 94-2-4*
emillar@ce6uf.radio.cl (Eduardo C Millar) ce6uf 94-2-4*
CUBA CM CO
radioaf@infomed.cu (Jose A Amador) co2ja 93-7-4@
co2ja@amsat.org (Jose A Amador) co2ja 93-7-4@
PORTUGAL CT
ct1boh@mcimail.com (Jose Carlos Cardoso Nunes) ct1boh 94-2-10
etfalcao@ua.pt (Pedro Filipe Monica Falcao Pais) ct1dnf 93-10-21@
etfalcao@ci.ua.pt (Pedro Filipe Monico Falcao Pais) ct1dnf 93-10-21@
avale@bart.inescn.pt (Antonio Valentim Couto e Vale) ct1dzy 93-9-9@
avale@bart.inesn.pt (Antonio Valentim Cuoto e Vale) ct1dzy 93-9-9@
etjfonte@ci.ua.pt (Jose Miquel Fonte) ct1enq 93-12-14@
etjfonte@ua.pt (Jose' Miguel) ct1enq 93-12-15@
etjfonte@zeus.ua.ci.pt (Jose' Miguel) ct1enq 93-12-15@
etruben@ua.pt (Ruben Mendes) ct1etz 93-5-27@
etruben@zeus.ua.pt (Ruben Mendes) ct1etz 93-5-27@
etruben@ci.ua.pt (Ruben Mendes) ct1etz 93-6-28@
etruben@zeus.ci.ua.pt (Ruben Mendes) ct1etz 93-6-28@
etfaas@ua.pt (Fernando Santos) ct1ext 94-1-11@
etfaas@zeus.ci.ua.pt (Fernando Santos) ct1ext 94-1-11@
jluis@ci.ua.pt (Joao Luis Sousa) ct1ezw 93-12-25@
GERMANY DB-DH Y2-Y9
wk@muninn.sta.sub.org (Hubert Weikert) db1mq 93-3-30
weikert@muninn.sta.sub.org (Hubert Weikert) db1mq 93-3-30
weikert@cubenet.sub.org (Hubert Weikert) db1mq 93-3-30
100031.374@compuserve.com (Hubert Weikert) db1mq 93-3-30
bernd.meyer@fernuni-hagen.de (Bernd Meyer) db6ag 93-7-1
meyer@amundsen.fernuni-hagen.de (Bernd Meyer) db6ag 93-9-23
meyer@fernuni-hagen.de (Bernd Meyer) db6ag 93-9-23
Klaus.Leschhorn@lrz-muenchen.de (Klaus Dieter Leschhorn) db8ck 93-11-11

a2832af@lrz1.lrz-muenchen.de (Klaus Dieter Leschhorn) db8ck 93-11-11
leschhorn@lrz.lrz-muenchen.de (Klaus Dieter Leschhorn) db8ck 93-11-11
BTITMARS@ESOC.BITNET (Barry Titmarsh) dc0hk/g8sau 93-2-26
Vossen.pad@sni.de (Peter Vossen) dc0kk 93-7-7
erb@insu1.etec.uni-karlsruhe.de (Olaf Erb) dc1ik 93-6-6?
dc1ik@db0sao.ampr.org (Olaf Erb) dc1ik 93-5-1?
olaf@dc1ik.ampr.org (Olaf Erb) dc1ik 93-5-1?
erb@insu7.etec.uni-karlsruhe.de (Olaf Erb) dc1ik 93-5-1?
remco@hip-hop.suvl.ca.us (Remco Treffkorn) dc2xt 93-4-9
bern@kleopatra.Uni-Trier.DE (Jochen Peter Bern) dd0kz 93-2-3
bern@uni-trier.de (Jochen Peter Bern) dd0kz 93-2-3
bern@uni-trier.dbp.de (Jochen Peter Bern) dd0kz 93-2-3
kpj@kpj.hact.de (Klaus-Peter Jasper) dd8ko 93-2-15
kpj@hact.hact.de (Klaus-Peter Jasper) dd8ko 93-2-15
hschu@sunrise.rz.uni-ulm.de (Hermann Schumacher) df2dr 94-1-19
hschu@sunrise.e-technik.uni-ulm.de (Hermann Schumacher) df2dr 94-1-19
hschu@dulruu51.bitnet (Hermann Schumacher) df2dr 94-1-19
gregor@rnivh.rni.sub.org (Gregor Fismer) df2ic 94-1-23
Kueppers@uni-bonn.de (Guido Kueppers) df2kw 94-2-13
uweb@hpbbn.bbn.hp.com (Uwe Behle) df3du 93-8-4
sinn@sol.cs.uni-sb.de (Markus Sinnwell) df3vl 93-5-17@
unrz45@cd4680fs.rrze.uni-erlangen.de (Dieter Dippel) df4rd 93-2-2
DIPPEL@RRZE.UNI-ERLANGEN.DE (Dieter Dippel) df4rd 93-2-2
UNRZ45@daphne.rrze.uni-erlangen.de (Dieter Dippel) df4rd 94-2-10
tdobert@telemation.de (Torsten Dobert) df6lt 94-1-19
hans.streibel@fernuni-hagen.de (Hans Streibel) df8xq 93-8-5
streibel@galaxy.fernuni-hagen.de (Hans Streibel) df8xq 93-8-30
streibel@fernuni-hagen.de (Hans Streibel) df8xq 93-8-30
wil@maschinenbau.tu-ilmenau.de (Wilfried Besig) dg0od 94-2-25*
mkl@rob.cs.tu-bs.de (Mario Klebsch) dg1am 93-11-30
sw@lobster.dinoco.de (Stephan Wanner) dg1gwn 93-3-22@
sven@anl433.erlm.siemens.de (Sven Werner) dg1hqo 93-7-13@
Sven.Werner@anl433.erlm.siemens.de (Sven Warner) dg1hqo 93-7-13@
sven@erlm.siemens.de (Sven Warner) dg1hqo 93-7-13@
sven@speedy.erlm.siemens.de (Sven Werner) dg1hqo 93-8-18@
boss@msoenix.GUN.de (Michael Soentgerath) dg3ed 93-3-30@
kneip@scoop.ims.uni-hannover.DE (Johannes [Hans] Kneip) dg3rbu 93-9-14@
torsten@rnivh.rni.sub.org (Torsten Leibold) dg4fex 93-12-25@
root@rnivh.rni.sub.org (Torsten Leibold) dg4fex 94-1-28@
rose@server.et-inf.fho-emden.de (Rolf Rose) dg4scv 93-5-13
UJ89@ibm3090.rz.uni-karlsruhe.de (Bruno Boettcher) dg5iae 93-11-7@
freiss.pad@sni.de (Martin W Freiss) dg5kx 93-5-25
bsieker@techfak.uni-bielefeld.de (Bernd Sieker) dg6yhi 93-8-4@
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2332. Radio Amateurs on USENET List Feb 1994 Part 2 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 05:37:20 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Feb28.2@ve6mgs.ampr.org>
Source record: 270284
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part2
Last-modified: $Date: 94/37/28 22 37$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Second part contains US call districts 1 and 2.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update February 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
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2333. Radio Amateurs on USENET List Feb 1994 Part 3 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 05:37:31 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Feb28.3@ve6mgs.ampr.org>
Source record: 270285
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part3
Last-modified: $Date: 94/37/28 22 37$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Third part contains US call districts 3 and 4.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update February 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
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Date: 1994-03-01 05:37:43 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Feb28.4@ve6mgs.ampr.org>
Source record: 270286
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

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Archive-name: radio/ham-radio/hams-on-usenet/part4
Last-modified: $Date: 94/37/28 22 37$
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I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Fourth part contains US call districts 5 and 6.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update February 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
US 5 District
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fjkrizan@maverick (Frank J Krizan) wa5abu 93-12-27
NIX@bigbrd.AUd.alcatel.COM (Paul N Nix) wb5agf 93-7-20
martin@datacomm.ucc.okstate.edu (Martin G McCormick) wb5agz 93-10-24
mab3474@venus.tamu.edu (Myles A Barkman) kg5ai/n5kqx 93-2-7
mab3474@rigel.tamu.edu (Myles A Barkman) kg5ai/n5kqx 93-2-7
ekays@promus.com (Gene D Kays) ka5aln 94-2-9
dube@cpdvax.CSc.ti.COM (Dube D Todd) ab5ap/n5pdk 93-5-16
Dube.Todd@f7009.n124.z1.fidonet.org (Dube D Todd) ab5ap/n5pdk 93-11-14
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bsn@fusion.ph.utexas.edu (Barry S Newberger) w5kh 93-10-10
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valsee@qat.tandy.com (Valerie R See) n5lpl 93-2-3
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uunet!kpc!sleat (Michael Sleator) kd6vbq 93-5-16@
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vfoao0ix@VAX.CSUN.EDU (Saul B Yochelson) wa6ven 94-1-23
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jmiller@atilla.afit.af.mil (Jeff C Miller) nh6zw/n8/afa1he/wd6cqv/afa8jm/afa1do 93-10-21
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2335. Radio Amateurs on USENET List Feb 1994 Part 5 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 05:37:53 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Feb28.5@ve6mgs.ampr.org>
Source record: 270287
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part5
Last-modified: $Date: 94/37/28 22 37$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Fifth part contains US call districts 7, 8 and 9.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update February 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
US 7 District
P11163@email.mot.com (Ned J Stearns) aa7a 93-10-24
jwalters@teleport.com (James H Walters) wb7aak 93-12-8
lynnr@srlr12.sr.hp.com (Richard Lynn Rhymes) wb7abp 93-7-29
lynnr@sr.hp.com (Richard Lynn Rhymes) wb7abp 93-7-29
kinzer@dtsdev0.sps.mot.com (Dave B Kinzer) ki7ad/kb7okq 94-1-8
kinzer@prcamfg.sps.mot.com (Dave B Kinzer) ki7ad/kb7okq 94-1-8
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2336. Radio Amateurs on USENET List Feb 1994 Part 6 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 05:38:05 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Feb28.6@ve6mgs.ampr.org>
Source record: 270288
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

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Archive-name: radio/ham-radio/hams-on-usenet/part6
Last-modified: $Date: 94/38/28 22 38$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Sixth part contains whatever is left over ... Canadian, Down under
and spots left here and there over the globe. Some Amateur Radio Related email
services are also itmeized at the bottom of the list.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update February 28 1994
```

#
This document may be distributed freely, as long as there is no financial
gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
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derek@facswpg.muug.mb.ca (Derek William John Hay) ve4hay 93-3-6
dwjhay@muug.mb.ca (Derek William John Hay) ve4hay 93-8-18
DELANEYG@wl.aecl.ca (H Grant Delaney) ve4hgd 93-2-7@
delaneyg@wm6.wl.aecl.ca (H Grant Delaney) ve4hgd 93-2-7@
ve4jq@ve4wgw.ampr.ORG (Jose Luciano Vieira) ve4jq 93-9-9
ve4kwg@draco.bison.mb.ca (Kevin Galaugher) ve4kwg 94-2-25*
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72667.2531@compuserve.com (Larry David Gadallah) ve4tcp/ve6vq 93-7-12
gadallahl@wl.aecl.ca (Larry David Gadallah) ve4tcp/ve6vq 93-7-12
gadallah@netcom.com (Larry David Gadallah) ve4tcp/ve6vq 93-7-12
larry@wu16.wl.aecl.ca (Larry David Gadallah) ve4tcp/ve6vq 93-7-5
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tmantler@inqmind.bison.mb.ca (Tony E Mantler) ve4tem 93-11-24
tessier@ee.umanitoba.ca (Tom R Tessier) ve4trt 93-3-6@
uumars@ccu.umanitoba.ca (U of Manitoba Amateur Radio Club) ve4um/ve4umr 93-3-2
ve4vv@draco.bison.mb.ca (ve4vv) ve4vv 94-2-10@
schellew@WU4.wl.aecl.CA (Wybrandus [Wayne] T Schellekens) ve4wts 93-7-24
schellew@wu2.wl.aecl.ca (Wybrandus [Wayne] T Schellekens) ve4wts 93-7-24
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bwalzer@lark.muug.mb.ca (Bruce D Walzer) ve4xor 94-1-23
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lance@lancea.actrix.gen.nz (Lance M Andrewes) zl2ajh 93-8-27
walker_cm@kosmos.wcc.govt.nz (Cliff M Walker) zl2aly 93-6-28
walker_d@kosmos.wcc.govt.nz (Dave C Walker) zl2bhe 93-9-9
walker_d@kosmos.wcc.govt.nz (Dave C Walker) zl2bhe 93-10-1
walker_d@ix.wcc.govt.nz (Dave C Walker) zl2bhe 94-1-17
wdk@frc.maf.govt.NZ (Wayne D Knowles) zl2bkc 93-3-2
G.Moretti@massey.ac.nz (Giovanni S Moretti) zl2boi 93-2-15
wk@frc.maf.GOVt.NZ (Wilbert Knol) zl2bsj 93-10-31@
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max@acme.gen.NZ (Max Wheatley) zl2max 94-2-10@
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awards@arrl.org (ARRL Awards, WAS) ARRL/w1aw 93-9-27
dxcc@arrl.org (ARRL DXCC) ARRL/w1aw 93-9-27
tis@arrl.org (ARRL Technical Information Service) ARRL/w1aw 93-9-27
qex@arrl.org (ARRL QEX Magazine) ARRL/w1aw 93-9-27
contests@arrl.org (ARRL Contests) ARRL/w1aw 93-9-27
pschleck@unomaha.edu,bowen@cs.buffalo.edu (Archive) ARCHIVE 93-8-25
70524.2272@CompuServe.COM (Dave Cowdin, Amsat Postings) AMSAT 93-8-25
peter.henne@gmd.de (Peter Henne) APT-STATS 93-8-25
cq-contest@tgv.com (CW Contest maillist) CQ 93-12-9
cq-contest-request@tgv.com (CQ Contest request) CQ 93-12-9
digital-faq@wattres.SJ.CA.US (Digital Amateur Radio FAQ Coordinators) DIGITAL-FAQ 93-8-26
elmers-request@unomaha.edu (Ham Radio Elmer List) ELMER 93-8-25
esrac@stack.urc.tue.nl (Eindhoven Student Radio Amateur Club) ESRAC 93-11-30
rra-wg@amdahl.com (radio.amateur working group) FAQ 93-8-25
algedi!gateway@UCSD.EDU (Gateway) Packet-Gateway 94-1-26
repeaters@wattres.sj.ca.us (Repeater Mapping Project) REPEATER 93-8-25
listserv@knuth.mtsu.edu (KA9Q Unix List Administrivia) KA9Q-UNIX 93-8-25
ka9q-unix@knuth.mtsu.edu (KA9Q Unix List Postings) KA9Q-UNIX 93-8-25
pschleck@unomaha.edu,jmaynard@oac.hsc.uth.tmc.edu (Guide Coordinators) GUIDE 93-8-25
hamradio-faq@uts.amdahl.com (Ham Radio FAQ) HAM-FAQ 93-8-25
hams-on-usenet@ve6mgs.ampr.ab.ca (USENET Amateurs List) HAMS-LIST 93-8-25
icom-request@CSCI-WierPC.etsu.edu (Icom Mailing List) ICOM 93-8-25
tkelso@afit.af.mil (TS Kelso, Keplerian Postings) KEPS 93-8-25
auspace@afit.af.mil (AU SPACE STUDY TECHNOLOGY TEAM, TS Kelso) AUSPACE 93-10-10
nos-bbs@hydra.carleton.ca (NOS BBS List) NOS 94-1-25
ampr-ca@hydra.carleton.ca (NOS BBS List) NOS 93-7-27
nos-bbs-request@hydra.carleton.ca (NOS BBS List) NOS 93-8-25
ted@tedb.demon.co.uk (Edward Batts, RSGB contact) RSGB/GB2RS 93-8-25
70247.3516@Compuserve.Com (George Wood, SCDX Bulletins) SCDX 93-6-6
elements-request@alsys.com (Shuttle Elements List) SHUTTLE 93-8-25
oler@rho.uleth.ca (Cary Oler, Solar Reports) SOLAR 93-8-25
oler@beta.uleth.ca (Cary Oler, Solar Reports) SOLAR 93-8-25
lukpla@scorch.apana.org.au (Luke Plaizier SPACE TRIVIA LIST) SPACE 93-8-27
tapr@tapr.ampr.org (Tucson Amateur Packet Radio) TAPR 93-8-25
tcp-group@UCSD.EDU (Advanced Amateur Radio Networking Group) TCP 94-2-12
vhf@w6yx.stanford.edu (VHF discussion list) VHF 93-3-30
K3VOA@BOPS.VOA.GOV (Voice of America Amateur Radio Club) VOA 93-8-25
rec-radio-request@ve6mgs.ampr.ab.ca (rec.radio.info moderator) rec.radio.info 93-8-25
rec-radio-info@ve6mgs.ampr.ab.ca (rec.radio.info postings) rec.radio.info 93-8-25

2337. Ramsey DF-1 Kit

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 05:40:25 UTC
From: sherwin1121@delphi.com
Message-ID: <Ri3I3cR.sherwin1121@delphi.com>
Source record: 270289

Anyone had any experience with this direction finding kit, and if so, what?
Thank you.
Sherwin.

2338. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 09:24:51 UTC
From: tcj@netcom.com
Message-ID: <tcjCLzBHG.Cx8@netcom.com>
Source record: 270290

John E. Taylor III (rohvm1.mah48d@rohmhaas.com) wrote:

> I'm an ARRL member, and considering ARRL put a fair amount of effort
> into compiling the Repeater Directory, I'd feel they weren't using
> my money wisely if they did _not_ enforce their copyright to the
> Directory.

I replied:

> I'm an ARRL member, too, but I couldn't disagree more with John's
> opinion on this issue....While I certainly recognize the ARRL's
> right and obligation to protect its commercial interests, its
> primary purpose is supposed to be furthering the art and practice of
> amateur radio. When these two objectives come into conflict I for
> one expect it League to support the latter objective without even a
> moment of hesitation.

John responds:

> Me, too. I'm not saying we don't _need_ an on-line repeater
> directory; I think one would be great. All I was pointing out is
> that copyright law says that your compilation of facts, and its
> particular presentation, is _yours_....Anybody who wants to compile
> a list of repeaters and publish it, electronically or otherwise, in
> their _own format_, is free to do so

On second look, it appears that you and I may be in "violent agreement" after all, John. It's this business about "format" that appears to be at the heart of the matter.

I don't think anyone has yet contested the fact that the *data* iteself is not protected by copyright law. Several folks have cited a precendent in which the court found in favor of a company that had been sued by a telephone company for republishing information from its white pages, even though this information included errors that were specifically designed to uncover this kind of activity. Given this, I imagine that the League would be hard pressed to win a court case, even if it could demonstrate that the *data* had been lifted directly from their directory.

So the question remains: exactly how does the *format* of N2JWQ's compilation infringe on that of the ARRL directory? It's true that the data items in the Directory are a subset of N2JWQ's database, but this doesn't seem like an infringement to me since all of these data items could be independently verified by just about anybody with an HT. And while I readily recognize that the League deserves credit for the resources they devoted to compiling this data, I don't believe this *effort* is protected by copyright law either.

Based on my own inspection of N2JWQ's data, the only potential infringement I can find is the codification scheme used to describe a repeater's class of access (e.g. o=open, c=closed, etc.) While I would consider this nit-picking on the part of the League, it really isn't worth worrying about since it would be a trivial matter to convert these codes to some other representation.

Even if I put aside my irritation with the League for impeding a project that would add tremendous value to the usability of this data, I still can't understand exactly how the League perceives that N2JWQ has infringed on its copyright. If I were to photocopy their Directory and sell my version for $4 instead of $6, then I think they'd have a damn good case against me. But from my point of view, nothing like that has occurred here.

Todd, KB6JXT

2339. Re: INTERNET -- PACKET gateway!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 10:50:30 UTC
From: seacat@eskimo.com
Message-ID: <CLzFGD.Eun@eskimo.com>
Source record: 270291

wa2ise@netcom.com (Robert Casey) writes:

>In article <CLoxAu.96q@on.bell.ca> ydupont@Qc.Bell.CA writes:
>>
>>I'm new to PACKET and I would like to know if it's possible to
exchange
>>mail between INTERNET and PACKET. Is there a gateway doing that?
What's
>>the procedure?

>This probably should be in an FAQ file.

>There shouldn't be any real problem with mail from Packet TO internet,
>but the problem lies with the internet TO packet direction. Problem
>is to do with FCC rules. No dirty words are allowed on packet, and
>many forms of commercial or business related messages are not allowed
>eighter. Not sure if you can order a pizza by packet, though. :-)

>Basically, this means that someone has to be a moderator and read all
>the mail going to packet. I doubt anyone's got that much time with
>nothing better to do. You could have a computer reject or remove all
>dirty words, but business/commercial related mail would need a human.

While it is possible to do, my question is why? would you want to do it?

After all, Ham radio is just that, Radio! Tieing it into hardlines in
that matter seems to stray from the topic of the hobby. Pointing mainly
at the matter of RADIO to RADIO digital communication. Thats the sport
of things. THink about it.
Just my opinion of course! :)

R.Seacat KB7ZFU/AA

2340. Re: Satellite progs on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 11:13:11 UTC
From: boyer@rd.eng.bbc.co.uk
Message-ID: <CLzGHz.558@bbc.co.uk>
Source record: 270292
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc

Scott Ehrlich (wy1z@netcom.com) wrote:

: I have now placed some satellite tracking programs on World:

: - stsplus.zip

: - stsorbit.zip

: - traksat {trak300a.zip & trak300b.zip} (latest version of traksat)

: They are available via anonymous FTP via

: ftp ftp.std.com:/pub/hamradio/pc/satellite

Just a short comment. I have traksat and it is really great and dead easy
to use.

John B
John.boyer@rd.eng.bbc.co.uk

2341. Re: Software for DOS-PC for decoding Morse

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 11:24:20 UTC
From: boyer@rd.eng.bbc.co.uk
Message-ID: <CLzH0K.5CK@bbc.co.uk>
Source record: 270293

Sasse (tt1h@dv.st.dlr.de) wrote:
: I am no radio amateur but enjoy listening to world radio. I am looking for
: software to decode Morse with (DOS). Who can help?

There is a program called Hamcomm ver 2.2 that will decode morse via a
very simple single op-amp interface. It is dos based I think you can get
it from ftp.funet.fi. If not try archie.
Oh yes I alost forgot it does rtty as well.

John B
John.boyer@rd.eng.bbc.co.uk

2342. Re: HamWindows

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 11:34:07 UTC
From: boyer@rd.eng.bbc.co.uk
Message-ID: <CLzHGw.5Fz@bbc.co.uk>
Source record: 270294

Michael Cowart (cowart@convex.com) wrote:
: Since no one responded to my query about DX Desktop, I assume no one on the
: net has used it.

: Now, does any have experience with HamWindows? I am interested in version 3.0

: Any praises, complaints, recommendations?

: thanks and 73,

: Mike, WA5CMI

What is HamWindows and what is DX Desktop?

John B

John.boyer@rd.eng.bbc.co.uk

2343. Digest of Articles - QST Jan 1993 (Long - 38k)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 11:56:01 UTC
From: wvanhorn@magnus.acs.ohio-state.edu
Message-ID: <2kvagh$7gq@charm.magnus.acs.ohio-state.edu>
Source record: 270295

Starting with the January, 1993 issue, digests of articles published in QST Magazine are being prepared, and will be posted on this newsgroup. They will appear approximately one per week through the 1993 issues and until they "catch up" with the current 1994 month. Subsequent issues will be posted monthly, as published.

It is hoped that others will volunteer to post similar digests of the other ham technical publications such as QEX, CQ, 73, COMMUNICATIONS QUARTERLY, RTTY JOURNAL, et al. Especially desirable would be digests of publications in other countries, such as the RSGB RADIO COMMUNICATIONS and ham magazines in Europe, Japan, Australia, and other countries around the world. We English speakers would especially enjoy them if they were translated into our language, but they would also be valuable additions to the world's knowledge if they were posted in the language of origin. Who knows? Some bi-lingual ham somewhere might translate them into English and re-post them.

Worldwide communications are getting better and better. The time has come to make the world's amateur press available to all hams throughout the world!

The major value of digests or abstracts is to give readers sufficient information to decide whether to obtain a copy of the full text. If any U.S. reader wants a copy of an article in QST, please inquire of other hams in your own neighborhood. Many have collections of back issues. Anyone who is unsuccessful in finding a fellow ham with a collection should try every library in the area, especially those at universities and technical colleges. If all else fails, a copy can be obtained from the ARRL Technical Department, 225 Main St., Newington, CT 06111-1494 USA for a fee of $3.00 per copy. Remember, it is both cheaper and quicker to obtain one locally.

Readers in most other countries can obtain copies from their own national ham organizations, sometimes translated into their own languages.

For those who intend to build an archive from the following digests, the first block of each article contains four items: Title, Author, Source, and Abstract. Ahead of the title is a two- or three-letter code to indicate which kind of article it is; e.g. "TA" for Technical Article, "HK" for Hints and Kinks, etc. They are structured to be easily captured by a computer program without human intervention.

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HAM DIGESTS -- QST, January, 1993

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TECHNICAL ARTICLES (TA)

Title> TA:Slow-scan TV - It Isn't Expensive Any More!
Author> Langner, John - WB2OSZ
Source> QST Jan 1993, pp. 20-30
Abstract> Slow-Scan Television (SSTV) is described and its history related. Relatively inexpensive equipment is available to send and receive SSTV according to standards now accepted by hams. The author offers an interface, in kit form, to link a computer with a transceiver to exchange SSTV images using any of the currently popular modes. It includes both hardware and the necessary software.

Digest> Slow-scan TV is a name given to a mode of transmission used by many hams to send single images to each other on the amateur bands, primarily the HF bands. In one sense, it is more akin to facsimile than to television in that it requires a substantial amount of time to send the image, such as a photograph or diagram. The system requires: (1) a source of the image in digital form, (2) the radio link, and (3) the receiving equipment that can convert the signal to a picture on a TV screen and/or some type of printer.

This article presents a basic description of slow-scan TV as practiced by the Ham community. It tells the history from the beginning in 1958, when a group of amateurs developed a black and white system capable of transmitting and receiving rather coarse monochrome pictures and displaying them on surplus radar cathode-ray tubes.

Years of ham development culminated in the mid-1970's with a system manufactured by Robot Research Company and called their Model 1200C Scan Converter. It was called that because it converted the electronic signal transmitted on the ham bands with a bandwidth limited to 3000 Hz. to the home-TV standard video signal so that it could be displayed on a common color-TV set. It provided a full-color image with 120 lines vertical resolution transmitted in eight seconds, but the cost was $1300 for the scan-converter alone.

The author notes that many hams who are interested in operating SSTV today are driven away with the belief that this mode is still very expensive. He shows that with the availability of computers in many, if not most, hamshacks and the development of much lower cost interface hardware, slow-scan TV is in the price range of a much larger segment of

the ham community.

Through the years a number of different SSTV modes have been developed, to be set up in computer software. They range from the original Robot 120 line black/white mode up to the highest resolution one now in use, known as AVT 188. It uses a 400-line RGB (for red, green, and blue) CRT display scheme.

The author describes in considerable detail the various functions that are required to transmit and receive the SSTV images. At the transmitting end, the image must be in digital form; either it is obtained in that form by downloading it from a computer source, or it must be developed by a TV camera, or optical scanner, plus a digitizer. This will break the picture into pixels, comparable to the dots on a newspaper photograph. Then each pixel is encoded as an audio tone between 1500 to 2300 Hz. and transmitted in sequence over conventional ham radio gear.

At the receiving end, the audio tones must be decoded into color and intensity values for each pixel and converted into a video signal for display on a TV screen. Most of the necessary digital processing can be done by a conventional home computer with the addition of a plug-in interface board.

The author describes an interface board and is offering it in kit form. He calls it the Pasokon TV Interface. The word is a Japanese-English abbreviation for "personal computer". The kit sells for $199.95 and includes the necessary software for processing any of the popular SSTV modes which utilize vertical resolution ranging from 120 to 400 lines.

The horizontal resolution is determined not by the transmitter, but rather by the receiver, to fit the requirements of the display device. Since the Pasokon is designed for use with an IBM-compatible computer containing a VGA display, it uses 320 pixels per line for all modes.

Any hams who are already equipped with HF station and IBM-compatible computer using 80286 or later CPU, at least 640 kilobytes of RAM and VGA displays, can get started by simply adding the Pasokon plug-in boards. They will be able to transmit images they have created on their own computers or obtained in computer form from other sources, and receive any image that has been transmitted to them.

To be able to send photographs taken by themselves or captured from a TV screen, they will need TV-cameras or scanners, and digitizers. The article lists a number of commercially available video digitizers, the prices of which vary with the speed at which one complete image can be processed. The fastest one, capable of capturing the real-time rate of video programming, 30 frames per second, sells for approximately $2000. At the other extreme, a kit is available for $89.95 that will process a limited-resolution image with a limited number of different colors in eight seconds.

Title> TA:High-Performance, Single-Signal, Direct-Conversion Receiver
Author> Campbell, Rick - KK7B
Source> QST Jan 1993, pp. 32-48
Abstract> Described is an improved direct-conversion receiver that offers single-signal performance. It eliminates the audio image by the phasing method of cancelation.

Digest> This same author wrote a similar article: "High-Performance Direct-Conversion Receivers", in QST's August, 1992 issue. That was a construction article that described a DC receiver, called the R-1. It has been duplicated by many hams who have reported excellent performance.

The present article gives construction details of a similar receiver, the R-2, that includes the added feature of "single-signal" performance. It overcomes the most important remaining shortcoming of the earlier receiver compared with superheterodynes. That is, it eliminates the "audio image" inherent in the basic direct-conversion process. In that process there is no intermediate frequency (i.f.); the local oscillator operates at signal frequency and converts the modulated r.f. directly to audio. So, when listening to a single-sideband signal, for example, the oscillator is at the frequency of the suppressed carrier and will convert to audio not only the desired SSB signal but also any interference that may appear where the other side band would be. In contrast, a single-signal system like the one in this article responds only to signals on one, selectable, side of the oscillator frequency.

The circuit used to perform this function is the familiar one that was used years ago in "phasing-type" SSB transmitters. This principle requires splitting the r.f. input into two separate channels with two mixers; the local oscillator signal to one mixer is shifted 90 degrees in phase from that to the other; the phase of the audio signal in one channel is also shifted by 90 degrees and the outputs of the two channels are combined in a summing circuit. The result is that the audio signals in one sideband add, and those in the other subtract to near zero signal level.

The article gives detailed construction parameters for operation on amateur bands from 3.5 Mhz. to 222 Mhz. and has designed a two-sided printed circuit board that contains all components except for those that are frequency-specific. The r.f. input circuits, including pre-amplifiers recommended for bands above 7.3 Mhz., and local oscillators, are mounted separately.

The printed circuit board is available for $20.00 from Applied Radio Science, P.O. Box 225, Houghton, MI 49931. A set of etching template and parts-overlay diagrams is available for an SASE from the ARRL Technical Department.

Mr. Campbell reports the results of tests that he made on a 40-meter model and compared them with measurements made on two commercial superhets: a modern solid-state transceiver with 2.4 Khz.

i.f. filter and an old Collins 75S-3C with its mechanical filter. He discovered, to his surprise, that the suppression of the unwanted sideband in the R-2 is actually the best of the three.

A similar 40-meter version of the R-2 was tested at ARRL Headquarters by Mark Wilson, AA2Z. He reports having used it during the CW Sweepstakes with excellent results. He even stated that the lack of AGC, which he expected to be an annoyance, was no problem to him. His final summary was: "This home-brew receiver holds its own, even under demanding conditions....I like projects you can build and enjoy without apologies. This is one of those projects."

Title> TA:Introducing METCON, A New Remote Control and Telemetry System
Author> Newland, Paul - AD7I
Source> QST Jan 1993, pp. 41-47
Abstract> Tucson Amateur Packet Radio (TAPR) is offering a control package to provide telemetry and control signals through conventional communication links, including radio. Included are three types of input modules for a variety of transducers. Reliable verification procedures prevent unauthorized persons from taking control.

Digest> This article describes a system developed by Tucson Amateur Packet Radio and now being offered for sale in kit form. It designed to operate at a remote location connected to the home base via a communications link which can be telephone, continuous radio link, packet link, or any other convenient method of signal transmission.

The system performs two types of functions: (1) measurement and telemetry, and (2) automatic control. Measurements are made by means of inputs from transducers and can represent temperature, power consumption, liquid level, wind velocity, number of times a motor has run over a time period, or any other of myriads of real-world variables.

METCON provides three basic ways that such variables can be represented: (1) a static value, such as temperature or battery voltage; (2) rate (pulses per time interval); and (3) total pulse count.

Automatic control is done by means of switch closures. The basic METCON board contains eight SPST relays with isolated contacts that can be used to actuate a.c. or d.c. circuits up to 24 volts above or below ground and with contact current not over .25 amps.

To facilitate the use of many different kinds of transducers, the manufacturer provides three kinds of input modules. The first of these is a voltage- or temperature- to-frequency module. It can be configured for full scale input ranges of 0-1, 0-10, or 0-100 volts d.c. Its output produces a continuous pulse train over the frequency range of 0-10 Khz. directly proportional to input voltage. In addition to accepting voltage input, it also can measure temperature with an on-board temperature-to-frequency transducer. Jumpers in the module can be set to configure conversion in either degrees Celcius or Fahrenheit.

Another module is an analog-to-digital converter. This provides an 8-bit output for each of 8 analog inputs. The input voltage ranges can be adjusted by means of jumpers and/or resistor substitutions for each input, independently.

The third module offered is an elapsed-time pulser that generates a pulse for each unit of time that its input is energized, from one pulse per second adjustable down to one pulse for every two minutes. By totalizing these pulses, one can obtain the total running time of a particular motor, for example.

As an example of a way the system can be used, the article describes a monitoring system for a boat anchored remotely in a harbor. In the owner's home would be a personal computer, a TNC, and a 2-meter transceiver. On the boat would be a 2-meter transceiver, a TNC, and a METCON system with transducers and modules. Under program control, or on demand, the owner could check to be sure that the boat is not filling with water, has not moved more than a specific distance from its anchorage, has not been broken into, and the like. Transducers proposed are a liquid-level float for bilge water, a pulser totalizing the number of times the bilge pump has run, entry switches on the hatch cover(s), and the like.

METCON also provides an elaborate authentication procedure so that no unauthorized person can take control of the system. Even if a would-be intruder should repeatedly record the owner's signals accessing the monitor over the air, it would not be possible to derive the accessing key.

Information and kits for METCON and the modules are available from Tucson Amateur Packet Radio (TAPR), P.O. Box 12925, Tucson, AZ 85732, phone (602) 749-9479.

Title> TA:A $5 Headset Mike
Author> Brede, Doug - W3AS/7
Source> QST Jan 1993, pp. 48-49
Abstract> Construction details for a simple, inexpensive microphone.

Digest> This is a construction article describing a very simple, small, and light-weight mike made from an electret element available from Radio Shack. The author mounts the tiny element on one end of a 6-inch piece of stiff wire and, on the other end, a spring-loaded battery clip. He attaches a length of RG-174 miniature coax cable to the mike and encloses cable and support wire in a length of shrink tubing.

In operation, the spring clip is used to hold on to the support band of a headset and the wire is bent to place the mike at a convenient location in front of the user's mouth. The user then can carry on QSO's with both hands completely free and the mike always in position.

The tiny microphone element contains within it a preamplifier which requires supply voltage between 1 and 10 volts at less than 1 milliamp. The author's rig, like many modern ones, supplies d.c. voltage on one

pin of the microphone connector, so he does not need a separate battery. If such voltage is not available, small penlite (size AAA) batteries will supply the required power. Battery life will be a year or more, in most cases. A wiring diagram is included.

The author reports that this simple and very inexpensive microphone is not only very convenient to use, but also its audio quality is very good. In using it, he had no problems with r.f. feedback in his shack. Using other mikes, he has had persistent problems due to the poor r.f. grounds, which are the best that he can obtain at his location.

PRODUCT REVIEW (PR)
conductor: James W. Healy, NJ2L
Sr. Asst. Technical Editor

Title> PR:Ten-Tec Omni VI MF/HF Transceiver
Author> Healy, Rus - NJ2L
Source> QST Jan 1993,pp. 65-68
Abstract> Specification and performance review of the latest version of Ten-Tec's Omni Transceiver. New features are DSP, built-in keyer, dual serial ports. Reviewer calls it the "easiest to use" of all new high-perfomance transceivers.

Digest> The Omni VI is the latest upgrade of the Omni line of transceivers. It has been specifically designed in accordance with the opinions and recommendations of DXers and contesters.

Among the many new features that this model contains, one of the most significant is Digital Signal Processing. The DSP system built into this rig duplicates many of the functions that are now being offered by the outboard DSP packages that are coming into fairly wide use on the ham bands. Included are the automatic notch filters that eliminate all heterodynes within a passband without reducing the fidelity of the underlying audio signals. Also provided are a wide selection of band-pass filters for use on CW, FSK, and SSB.

A built-in keyer is provided, with front-panel speed control and adjustable weighting. Also included are: FSK mode with a fixed 170-Hz. shift; separate receive antenna jack with a front panel selector button and indicator; and a reset button to clear the RIT and XIT offset without having to center the control knob.

Unique among available transceivers, the Omni VI provides two serial ports. One is a conventional RS-232 port that can be used for computer control, or other accessory control. The other port has a 1/8" jack compatible with ICOM's CI-V interface. Through both ports, it supports the ICOM command set, hence ICOM software should also work.

A wide variety of optional filters, including one dedicated specifically to FSK, are provided. Also a voice synthesizer and ALC annunciator are

available for vision-impaired operators.

The Omni VI is not available with an automatic antenna tuner. Also it does not provide general coverage reception or a transmitted-audio monitor.

Mr. Healy states that Ten-Tec is known for its excellent full-break-in (QSK) keying, and the Omni VI carries on this tradition. It operates in QSK mode all the time; the operator selects only the rate at which the receiver recovers; rapid for break-in, slow for semi break-in.

The reviewer's opinion is that the Omni VI is exceptionally well designed for convenient and efficient control under demanding conditions in DX pileups or in rapid-fire contest operation. He says flatly that "Of all the truly high-performance radios currently on the market, the Omni VI is the easiest to use....Ten-Tec's approach to designing and testing this radio shows their commitment to demanding users."

Title> PR:PacComm PacTOR Multimode Controller
Author> Ford, Steve - WB8IMY
Source> QST Jan 1993, pp. 68-70
Abstract> PacComm's newest TNC, designed for PacTOR; also operates in AMTOR, RTTY, CW. Reviewer finds performance superior in PacTOR, adequate in other modes.

Digest>This is a review of a new PacComm TNC specifically designed for PacTOR use. In spite of that fact, it is a fully-versatile multimode TNC and operates well also in the AMTOR, RTTY, and CW modes. As an extra-cost option, it can also be provided with HF packet mode.

The reviewer's opinion is that the performance on PacTOR is exceptional. One unique feature is automatic selection of PacTOR or AMTOR. When one calls CQ on either mode, an answer may be received either by a PacTOR or an AMTOR ARQ station. If the reply to a PacTOR CQ comes back in AMTOR ARQ, the PacComm controller automatically switches to AMTOR!

The reviewer found AMTOR operation to be "relatively smooth, aside from a few quirks". However, he rates performance on RTTY "only average".

The one item about which the reviewer is most critical is the deficiencies of the Owner's Manual. He feels that it gives a good discussion of theory and "fairly clear" set-up instructions, but falls down badly on the details of how to use the various modes. It seems to be written more for hams who already are well experienced with digital modes. His summary opinion is: "The unit is a good value for the money. Its PacTOR and AMTOR performance is excellent, and you get a CW keyer and RTTY operation in the bargain".

Title> PR:K1EA Software Digital Voice Processor
Author> Healy, Rus - NJ2L
Source> QST Jan 1993, pp. 71-72

Abstract> A plug-in card for IBM-compatibles. Digitizes, records, and plays back audio. Especially useful in contests.

Digest> The reviewed processor is a new piece of hardware being manufactured by Ken Wolff, K1EA, who is the author of the CT Contest Software. Its concept is simple: It takes audio input from a radio or a microphone, digitizes it, and stores it on your computer's hard disk. On demand, it plays it back, driving a transmitter or headphone, or both.

The unit is specfically designed to work with the manufacturer's CT software in contest operations. It allows the operator to record libraries of CQ, QRZ, call sign, contest exchanges, and many other kinds of messages for automatic playback during the contest period. In addition, it can record audio in increments from 5 seconds to 30 seconds so that if one misses a call sign during the "heat of battle", it can be instantly replayed it while simultaneously the device is continuing to record what is coming in through the radio!

All this is being done with very high fidelity. The digital sampling is being done at 9600 samples per second with a 12-bit resolution in the A/D converter. The reviewer reports that replaying the audio after it has been digitized, recorded, and restored to audio through a D/A converter, the result is indistinguishable from the live audio!

The reviewer's final summary expresses the opinion that: "If you're serious about voice contesting, you should consider adding a DVP to your station".

HINTS AND KINKS (HK)
conductor: David Newkirk, WJ1Z
Sr. Asst. Technical Editor

Title> HK:1-Watt In, 30-Watts Out With Power MOSFETs at 80-Meters
Author> Wyckoff, Jim - AA3X
Source> QST Jan 1993, pp. 50-51
Abstract> Construction article. Build a power amplifier for 80-meters using two common MOSFETs.

Digest> Mr. Wyckoff shows a wiring diagram and a photograph of a class-B linear amplifier that he built using inexpensive IRF-511 power MOSFETs. It is a push-pull amplifier designed for the 3.5-4.0 MHz. band and uses an adjustable bias circuit to balance the operating characteristics of the two transistors.

The author reports that the amplifier performs well and its stability is excellent. He does not advise attempting to operate the amplifier on the higher bands since the output power diminishes as the frequency increases. The amplifier delivers full 30-watts output with 1-watt drive on 80-meters, but on 10-meters its output is only 10-watts.

Title> HK:A Light-Operated Switch for Solar Panels
Author> Harbison, Lawrence - N7HRN
Source> QST Jan 1993, p. 51
Abstract> Construction article. Build a light-operated controller to open-circuit a solar panel used to charge batteries. Protects batteries from discharge.

Digest> The author lives in sunny Arizona and had available a 2.0-amp solar panel that he wanted to use as a power source to charge a deep-cycle battery. In such use, it is necessary to protect the battery from discharge when the sun goes down.

The simplest solution is to put a diode in the lead from the solar cells to the battery, but this sacrifices some 3- to 6-percent of the charge capacity due to the voltage drop. As a result, he designed a circuit that uses a cadmium-sulphide photoresistor to detect when the light becomes dim and opens a relay, isolating the battery.

A wiring diagram and photographs are included with the article.

Title> HK:Curing RFI in the Ham IV Control Unit
Author> Pataki, George - WB2AQC
Source>QST Jan 1993, p. 51
Abstract> Using by-pass capacitors to eliminate r.f. interference.

Mr. Pataki's ham transmitter has a 400-watt output and, when his beam was directed toward his house, the modulation on his signal caused the meter on the rotator controller to fluctuate. He found the effect annoying but was able to correct it by installing by-pass capacitors from each end of the rotator's direction-sensing pot to ground. He used .047 mfd. capacitors but indicates that any value from about .01 to .1 mfd. should work well. The capacitors should have a working-voltage rating of at least 25-volts d.c.

Title> HK:Take Notes With a Camcorder
Author> Jones, Clark - N7RPQ
Source>QST Jan 1993, p. 52
Abstract> Use a camcorder to record, in video and audio descriptions, details of work done on electronic gear.

Digest> The author reports his success in recording on a camcorder his experiences working on electronic gear. He mounts the camera in a fixed position having a clear view of the work surface and dictates a commentary as he goes. When the job is completed, he puts a label on the tape identifying the gear.

Although he uses standard, not high-quality tapes, he cautions against using inferior tapes that might deteriorate in time since he expects to keep them for long periods.

TECHNICAL CORRESPONDENCE (TC)
Conductor: Paul Pagel, N1FB
Associate Technical Editor

Title> TA:Touch-Control-Lamp RFI
Author> Wiley, James B. - KL7CC
Source> QST Jan 1993, pp. 53-54
Abstract> Describes RFI from "touch-control" lamps. They contain oscillators at 150-200 KHz. with no filtering. Recommends ways to locate offending lamps and what to do about them.

Digest> This letter regards a relatively new type of RFI problem many hams are now experiencing. It usually appears in the form of a broadband, slowly drifting, a.c.-modulated signal. The sources are touch-controlled lamps. They operate on the capacitance-relay principle; each has a sensing contact that one touches to turn the light on or off. It is connected to a tuned circuit that controls an oscillator. Touching it adds capacitance which detunes it, resulting in a drop in the signal level to a built-in detector that then open or closes a relay, or in some cases adjusts brightness level up or down.

Most of these operate at frequencies in the 150 to 200 Khz. region, but their outputs are typically very rich in harmonics. Interference from such devices usually appears as broad-band, a.c.-modulated signals, often appearing every 50 to 200 Khz. across the band. They typically drift slowly and consequently come and go.

This kind of interference sometimes can create problems as far as 1500 feet from the source. In many cases, the interference is two-way; a strong ham signal may actuate the lamp. The author notes a case in which he discovered the source of interference as a result of operating his high-power station on CW. The neighbor's offending lamp flashed on and off with the code!

To locate the source of such interfering signals, the author suggests the use of a portable short-wave receiver with a loop antenna. Even approaching the service entrance wires of a home containing an offending device is usually enough to get a noticeable signal. If the owner will permit entrance to his premises, the same radio can generally be used to point out the offending lamp.

He reports that it is usually not possible to eliminate the interference through the use of filters or other conventional RFI isolating techniques, because of the fact that the exposed contact plate itself acts like an antenna. FCC regulations, Part 15, prohibit consumer devices from interfering with communication services, but usually it takes considerable diplomacy to convince homeowners to stop using a device that they have bought and paid for. The ARRL publishes a variety of materials and guides. Anyone suffering from such interference is strongly advised to obtain the ARRL "RFI Package". It can be obtained by sending a 9 x 12 inch SASE with $0.98 postage to the Technical Department Secretary, ARRL, 225 Main Street, Newington, CT 06111.

FEEDBACK (FB)

Title> FB/TC:Dipoles Above Real Earth, QST Nov 1992, p. 68
Author>Michaels, Charles - W7XC
Source> QST Jan 1993, p. 54
Abstract> Error in a mathematical statement.

Digest> There is an error in the sentence "...to the feed point by a factor 1/sin2L, but..." It should have read: "...to the feed point by a factor 1/sin^2L, but...", where "sin^2" means sine-squared.

Title> FB/TA:A Dual Radio Speaker, QST Nov 1992, pp. 56-58
Authors> Ramhorst, Neil - KL7JGS and Cady, Fred - KE7X
Source> QST Jan 1993, p. 54
Abstract> Error in wiring diagram.

Digest> The wiring diagram showing the two-pole, 3-position switch is in error. The correct wiring is shown in this issue (January, 1993), p. 54.

GENERAL INTEREST ARTICLES (GI)

Title> GI:The Beat of a Different Drum:
Author> Booth, Rick - KM1G
Source> QST Jan 1993, p. 31
Abstract> Biography of Cop MacDonald, originator of ham SSTV.

Digest> Cop MacDonald, ex-W9OLS, who is now VY2CM, originated amateur Slow-Scan TV (SSTV) in about 1953. At that time he was in engineering school and learned that Bell Laboratories was working on a way to send signatures over telephone lines. The method used was a scanner with a scan-rate slow enough that the signal frequency did not exceed 3 KHz. Mr. Macdonald realized that the same scheme could be used by hams to send many different kinds of images over HF.

His first experiments used an oscilloscope with a phosphor that had a persistence of some 7- or 8-seconds. Hence, he designed a system that would scan as much area as it could reach in 6- or 8-seconds without exceeding the 3.0 KHz. frequency limit.

His first system used an AM subcarrier, with a 20-Hz. horizontal scan rate and a 6-second frame repetition rate. After a year or more of experiments, he changed to FM with a 15-Hz. horizontal rate and an 8-second frame scan.

Other hams heard about his experiments and joined in, but it was not until 1958 that QST published a comprehensive article on the new mode. Meantime, Mr. MacDonald was enjoying a successful career in electronic engineering and became the director of research for a company. At that

point, he decided upon a change of life style and took a back-packing trip around the world with his wife and daughter. Since then, he has moved to Canada and pursued other interests, including ecology, energy conservation, and meditation.

Title> GI:Excellence in Recruiting
Author> White, Rosalie - WA1STO
Source> QST Jan 1993, pp. 55-56
Abstract> How to interest newcomers to ham radio.

Digest> In this article, Ms. White discusses ways of interesting people of all ages in amateur radio. In 1992, the ARRL established a yearly award to be given to a person most deserving of recognition for their ability to attract "recruits" to the hobby.

Title> GI:Tall Ships Pose a Tall Order for Boston Hams
Author> Booth, Rick, KM1G
Source> QST Jan 1993, pp. 73-75
Abstract> Boston hams organize activities around the "Tall Ships" gathering.

Digest> In July, 1992, some 7-million people went to Boston to see the "Tall Ships", the square-rigged sailing vessels that gathered in Boston harbor to celebrate the 500th anniversary of Columbus' first voyage. Boston hams offered their services and helped the Boston Emergency Medical Service (EMS) care for the mass of visitors. This is the story of their experiences.

Title> GI:A Good Day at Effingham
Author> Johnson, Tom - N4TJ
Source> QST Jan 1993, pp. 76, 78
Abstract> Fiction.

Digest> This is a fictional tale about a ham in the non-existent town of Effingham, South Carolina who was also a news reporter. It involved a fire that started in an outhouse behind the county court house. Rumors of the fire spread, and grew, rapidly. As the stories spread, they became more exaggerated, which in turn caused them to be spread farther. The end result was that they reached not only the state capital but also to Washington, D.C., and there descended upon sleepy Effingham 28 fire engines, 596 National Guardsmen, and helicopters carrying advanced elements of the 82nd Airborne Division.

Title> GI:Maritime Mobile, Love Boat Style
Author> Tinley, Hugh - K0GHK
Source> QST Jan 1993, pp. 79, 81
Abstract> Operating maritime mobile on a cruise ship.

Digest> Mr. Tinley tells the story of his Caribbean cruise aboard a ship of Greek registry. He found that, with the help of the ARRL, he had no difficulty getting a Greek license to operate ham radio aboard the ship, and was allowed to set up his rig on the sundeck, between the bar and the swimming pool! His rig put out 10-watts on 10-meters, and he had an antenna on a fishing pole. With this, he operated for six days, during daylight hours. After sundown, 10-meter propagation dropped off and he was "forced" to pursue other activities on the ship during the evenings.

Title> GI:Life After Death: A New Beginning
Author> Wadsworth, Nat - WK1X as told to: Steele, Don - W1NFG
Source>QST Jan 1993, pp. 77-78
Abstract> A near-death experience. Recovery was aided by ham radio.

Digest> Nat Wadsworth, WK1X experienced cardiac arrest and suffered brain damage when his circulation stopped for 12-minutes. Emergency aid restored his heart and he lived, but was greatly impaired both mentally and physically. For a time, his memory was completely gone. His first recollections began when his wife told the physician, in Nat's presence, that he had been a ham operator. Little by little, his recollection of radio operation and Morse code came back. His recovery was accelerated when he obtained a transceiver and returned to the air. He is continuing to improve and his doctors credit ham radio for much of his progress.

Title> GI:30-Years Between Novice Roundups
Author> Luetzelschwab, Carl - K9LA
Source> QST Jan 1993, pp. 80-81
Abstract> Ham radio nostalgia.

Digest> The author became a ham in September, 1961, when he was entering the ninth grade in school. He relates his experiences in getting a station on the air and operating in the ARRL Novice Roundup competition in February, 1962.

In January, 1992, he decided to repeat the experience using gear identical to that he had used 30-years earlier. He was able to buy an old DX-20 transmitter and NC-60 receiver, two 40-meter crystals that he could triple and also use on 15-meters, and put up an inverted vee antenna at 25-feet height. He enjoyed the experience thoroughly, but admits that his score of 18 stations in 13 sections was not up to his performance 30-years earlier, when he worked 42 stations in 18 sections.
----------END----------

2344. Amateur Radio: Elmers List Info and Administrivia

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 12:00:13 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/admin-1-762523205@unomaha.edu>
Source record: 270296
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

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Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/elmers/admin
Revision: 1.6 12/26/93 15:45:09
Changes: Added new index file, Gopher, WWW, and WAIS entries

This administrivia file and the companion Amateur Radio Elmers Resource
Directory are intended for non-commercial distribution via Usenet. Any
other uses, please E-mail for permission.

A Brief Historical Overview:
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If there is any one constant in the changing state of the communications
art, it is that "Hams" (Amateur Radio Operators) have always been on
the forefront of it. Rumors abound where the term "Ham" came from.
Some of the more amusing are described at the end of this article.

Regardless of origin of the name, a "Ham" is universally recognizable as
one who experiments in radio and communications.

Whether it be constructing a low-power CW radio with vacuum tubes, or
designing TCP/IP packet networks, such experimentation has historically
spilled over into the mainstream such as was the case with Edwin
Armstrong, who developed the regenerative oscillator and FM radio, or
General Curtis LeMay (W6EZV) who was instrumental in making Single-
Sideband the communications standard for the Strategic Air Command
(1947-1992, now reorganized into a joint command called USSTRATCOM) and
eventually the U.S. Air Force. Although packet-switching techniques
originated from DARPA (Defense Advanced Research Projects Agency) and
the ARPANet, no one can deny the tremendous influence that amateurs
have had in demonstrating the viability of TCP/IP and AX.25
communications via radio links. The efforts of AMSAT (the Amateur
Satellite Corporation), including the development of many ham satellites
and the low-orbiting Microsats (communications satellites no bigger than
a breadbox that use store-and forward packet techniques), have certainly
advanced the state-of-the-art in communications, one of the defined
purposes of the Amateur Radio Service, as recognized by international
treaty.

Since in many cases hams are writing "the book", there is often no
"book" or other established reference for a beginner to refer to.
Traditionally, information has been passed on from ham to ham via word-
of-mouth. Like many of the traditional crafts, a variation of the
Master-Apprentice system has emerged, the Elmer-Novice relationship.
Called "Elmers" because they are usually older and wiser, having the
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benefit of many years in the hobby, including several failed projects, and an electric shock or two, they have traditionally been the mainstay of amateur radio, and the source of many new hams, particularly those interested in working on emerging technologies.

Even more importantly, Elmers provided an outlet for the impatient newcomer who wanted "to know everything, and right away." Faced with such a request, a good Elmer will smile and proceed to lead the novice through some project or operating experience. Several hours, days, or weeks later, the novice would have his answers, but would have earned them. Even better, the sense of accomplishment would boost the novice's confidence and nudge him or her down the road to being a model, experienced ham operator.

Many present hams feel that such an experience is missing today. In today's hustle-bustle world, the response to such natural curiosity and desire to learn is, more often than not, "I'm too busy" or "RTFM." As a result, the quality of new hams declines and the knowledge and operating habits they develop in their first formative months and years leave much to be desired. And the very same hams who claim that they "can't understand the new generation" also, in almost the same breath, lament about the "decline of amateur radio."

What is an Elmer today?
++++++++++++++++++++++

An Elmer today is of any age, male or female, who has some expertise and is willing to share it with beginners. Elmers don't even need to be licensed amateurs, just people with knowledge in some area of electronics or communications technology.

What is a Usenet Elmer?
++++++++++++++++++++++

With the ever-widening scope of the Internet, and the amateur radio newsgroups on Usenet, the potential for Elmers to share their knowledge to a wide audience has never been greater. To that end, I have started to maintain a list of such Elmers. Volunteers need only send me their name, E-mail address, and area of expertise. I have set up an administrivia mailbox for this purpose (elmers-request@unomaha.edu, the default Reply-To: of this message).

Those desiring a more extensive list, or who need more specific assistance, are encouraged to contact Rosalie White, WA1STO, Educational Services Manager at the American Radio Relay League, 225 Main St., Newington, CT 06111 or via electronic mail addressed to rwhite@arrl.org.

How may I obtain the latest copy of the Elmers List?
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There are currently 7 ways of obtaining the Elmers List. Any site at least reachable by Internet E-mail can use options 3 or 4:

1. Usenet News: The latest copy of the list can be found in the companion posting to this message, "Amateur Radio: Elmers Resource Directory." Since the list is cross-posted to rec.radio.amateur.misc, rec.radio.info, rec.answers, and news.answers on the 1st of each month, with an expiration date 6 weeks into the future, there should always be a copy available at most news sites. Check your newsreader documentation for information about reading previously-read articles.

2. Anonymous FTP: If your site is directly connected to the Internet, you may retrieve the latest copy via File Transfer Protocol (FTP) from the following sites:

ftp.cs.buffalo.edu /pub/ham-radio/elmers*
rtfm.mit.edu /pub/usenet/news.answers/radio/ham-radio/elmers/*

3. Mailing-List: Since the list is cross-posted to rec.radio.info, the latest copy may be obtained from the mailing-list gateway for that newsgroup (along with many other informational articles about radio) when it is published each month. To subscribe, send E-mail to:

listserv@ucsd.edu

and in the BODY (not the Subject) of the message, write:

subscribe radio-info

The server may not be able to determine your return address. In that case write:

subscribe radio-info (your E-mail address)

You should get an acknowledgement very shortly.

4. Mail-Server: If you don't want to read through the entire gateway of rec.radio.info, or want a copy of the list right away, send E-mail to:

mail-server@rtfm.mit.edu

and in the BODY (not the Subject) of the message, write:

send usenet/news.answers/radio/ham-radio/elmers/admin
send usenet/news.answers/radio/ham-radio/elmers/index
send usenet/news.answers/radio/ham-radio/elmers/list
send usenet/news.answers/radio/ham-radio/elmers/diff

and the latest copy of the list should be sent to you E-mail within 24 hours (the mail-server uses batch priority to reduce system demand).

The last three services are experimental. I'm not terribly familiar with them, and cannot offer much technical support regarding their use. (I'd appreciate feedback on whether or not you find them useful, though.)

5. Internet Gopher: The latest copy of the list should be available from the following Gopher sites, all at standard port 70:

cc1.kuleuven.ac.be
jupiter.sun.csd.unb.ca
gopher.univ-lyon1.fr
ftp.win.tue.nl
gopher.win.tue.nl

see also comp.infosystems.gopher

6. World-Wide Web (WWW): The latest copy of the list should be available from the following WWW site:

URL: http://www.cis.ohio-state.edu:80/hypertext/faq/usenet

under pages:

radio/ham-radio/elmers/admin
radio/ham-radio/elmers/index
radio/ham-radio/elmers/list
radio/ham-radio/elmers/diff

see also comp.infosystems.www

7. Wide-Area Information Service (WAIS): The latest copy of the list should be available from the WAIS server at rtfm.mit.edu (standard port 210) in database "usenet."

see also comp.infosystems.wais

How may I contribute to the Elmers List?
++++++++++++++++++++++++++++++++++++++

By using this resource, you are benefitting the net by obtaining assistance in the fastest and most efficient way possible. By volunteering to appear on this list, you are contributing to the good reputation of the radio-related newsgroups.

Thanks to all the volunteer Elmers, as well as courteous list users, for making this service a success.

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)

* Possible origins of the word HAM:

The acronym "Home Amateur Mechanic" or...

from the Cockney pronunciation of "L'amateur" or...

the initials of the founder of the American Radio Relay League, Hiram Maxim, W1AW (his actual middle name being Percy apparently notwithstanding) or...

from the call letters of one of the first amateur stations at Harvard, H.A.M. (please, no flames from W1XM at MIT)

Dale Mosby, N7PEX, offers the explanation that HAM must stand for "Hardly Any Money," considering the investment one could make in the hobby.

Knowledgeable individuals from the American Radio Relay League (ARRL), and other radio historians, seem to agree that the terms "Ham" and "Lid" (an inept operator) both originated with landline telegraphy. A "Ham" was a show-off and a "Lid" was a telegraph operator so inexperienced, he had to use a pot or can lid to rest his telegraph sounder on to properly copy the code.

As an interesting historical footnote, early telegraph operators may have been the first to experience the infamous curse of our communications age, Repetitive Stress (or "Carpal Tunnel") Syndrome (called "Glass Arm" in those days, which encouraged the invention of the semi-automatic or "bug" key).

(Larry E. McDonald, N6ZMB, wrote to point out another plausible origin, which doesn't necessarily contradict the ARRL version. The term "ham" may have been derived from "ham-fisted" or "ham-handed" to describe poor telegraph operators who were hired from the ranks of radio operators. Or maybe "ham-fisted" and "ham-handed" are derived from "ham." Who knows?)

2345. Amateur Radio: Elmers List Quick-Search Index

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 12:08:34 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/index-1-762523708@unomaha.edu>
Source record: 270297
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/elmers/index

Quick Search Index by Subject:

(Note: This index is not necessarily all-inclusive and some Elmers are listed more than once.)

AMATEUR RADIO EMERGENCY SERVICE MAILING LISTS
(ARES)/RADIO AMATEUR CIVIL
EMERGENCY SERVICE (RACES) Botterell (Networks in Emergency
Mangement)
Botterell (Networks in Emergency Engehausen, et al (AA4RE Packet
Management Mailing List) BBS)
Chilton (EMA Radio Officer) Dodell (Land-Mobile Radio,
Engehausen (RACES Bulletins) MARS Members)
Fyodorov (Russia) Freeman, M (ACC Equipment)
Humphries (ex-Asst. EC) Hurder (ARRL Field Organization)
Hurder (ARRL Field Services) Kluft (rec.radio.amateur
Magid Working Group)
Stader (EMAS SEC) Knapp, et al (Iowa State Elmers)
Wilson Prescott (Antique and Older
Tube Equipment)
AMATEUR TELEPRINTER OVER RADIO Meredith (PBBS Bulletin Forwarding,
(AMTOR)/PACKET TELEPRINTER OVER F6FBB Packet BBS)
RADIO (PACTOR)/RADIO TELETYPE (RTTY) Nerenberg (DX)
Schleck, et al (College Clubs)
Battles Walker, et al (QRP)
Doane
Feeney (PACTOR) MILITARY AFFILIATE RADIO SYSTEM
Freeman, J (AMTOR and PACTOR) (MARS)
Graham, P
Richards Doane (Navy)
Sayer (also decoding CHU's Dodell (Air Force, Mailing List)
ASCII time code) Miller (Air Force)
Monson (Army)
AMERICA ON-LINE Sargent (Army)
Taylor (Air Force)
Stader (Host, Welch, J (Navy/Marine Corps)
Ham Radio Club forum) Welch, V (Navy/Marine Corps,
list of MARS members on the
AMERICAN RADIO RELAY LEAGUE Internet, tentative BBS
(ARRL) conference)

Battles (QST Features Editor) MICROWAVE
Bloom (ARRL HQ Postmaster,
QEX Editor) Graham, P (1.2 Ghz repeaters)
Doane (CT SM) Hammill
Elmore (CO TC) Jahnke (SSB/CW SHF Contesting)
Hare (Laboratory Manager) Lau (Transverters up to
Hurder (Field Services Deputy 24 Ghz)
Manager) Sargent (3, 5, and 10 Ghz)
Jahnke (VEC Manager)
Lau (Technical Editor) MOBILE
Redding (Educational Advisor)
Stader (EMAS SEC) Carruth (FM and HT's)
Turner (Volunteer Counsel) Hare (RFI issues)
Wilson (SCV SM) Humphries
Keller (HF)
ANTENNAS Salmon (Maritime)
Sargent
Brewer (wire HF) Salyzyn (HF CW)
Billson (HF)
Brubaker (HF) NATIONAL TRAFFIC SYSTEM (NTS)
DePolo (including VHF/UHF)
Elmore Doane
Freeman, J (wire HF and 160m) Elmore
Graham, J (wire HF for Hurder (ARRL Field Services)
apartments) Salyzyn (Canada)
Halbert (simple designs) Sargent
Humphries (VHF and multi-band Zurn (Europe)
wire arrays)
Myers (and transmission NOVICE/TECH INSTRUCTION
lines)
Ornitz (including computer Billson
modelling) Bono (AutoExam/AutoCW)
Potter Carlson (Macintosh Hamstacks)
Rymell Chilton
Salnick Knapp, et al
Salyzyn Larson
Standerfer Magid
Stine (wire HF) Maia
Stockton Myers (including basic
Taylor electronics and communications
Zurn (wire HF) theory)
Redding
ANTIQUE AND OLDER EQUIPMENT Reeves
Salmon
Brewer (40's-70's) Stader
Keys (including HF and CW)
Prescott (Mailing List) PACKET
Moore, T (VHF)
Standerfer Angus (TCP/IP, NOS, UUPC,
Turner (including Kenwood and Tnet, and SNEWS, IP
Ten-Tec) Coordinator for CA - LA

and SF Valley subnet)
APPLE MACINTOSH COMPUTER Battles (AX.25 and TCP/IP)
Bloom (IP Coordinator for
Braun Connecticut subnet)
Carlson (Macintosh Hamstacks) Braun (TCP/IP, Macintosh, IP
Ehrlich (FTP archive) Coordinator for WNY subnet)
Stader (List of Macintosh Cole (TCP/IP and NOS)
Amateur Radio Software) Dodell (IP Coordinator for
Van Peursem (Savant) Arizona subnet)
Elmore (including TCP/IP)
BATTERIES Engehausen, et al (AA4RE Packet
BBS and Mailing List)
Hammill (Sealed Lead-Acid) Freeman, J (KAM, TCP/IP, NOS for
Meyers DOS and OS/2)
Stuart (including Ni-Cads) Fyodorov (AX.25 and TCP/IP in
Russia)
CALLSIGN PROJECT/NATIONAL TECHNICAL Graham, J (KAMterm)
INFORMATION SERVICE (NTIS) Graham, P (VHF)
Knapp, et al
Carruth Meredith (AZ Packet Coordinator,
Lloyd (including QRZ Ham-Radio PBBS Bulletin Forwarding Mailing
CD-ROM) List, F6FBB Packet BBS Mailing
List)
CIVIL AIR PATROL (CAP) Salyzyn (Canadian)
Sargent
Carlson Sayer (VHF)
Moore, J Schallehn (Kantronics)
Stader (TCP/IP and Macintosh)
COLLEGE CLUBS Vail (TCP/IP, TAPR/9600, IP
Coordinator for East/Central
Edwards Massachusetts subnet)
Knapp, et al Van Peursem (Savant and
Schallehn Macintosh)
Schleck (et al, Mailing List)
MEDIA (PUBLICATION/WRITING/
COMMERCIAL EQUIPMENT BROADCATING)

Dodell (Mailing List) Battles (QST)
Richards Bloom (QEX)
Lau (QST/QEX)
CW (MORSE CODE) Moore (Co-Host, Ham Radio and More)

Bono (AutoCW) PART-15 BROADCASTING
Elmore
Fyodorov (including Cyrillic) Ornitz
Keys
Rosenfeld POWER SUPPLIES
Salyzyn
Squicciarini Myers
Stine Stuart
Stockton

Tescher (Computer Programs) PRODUCT INFO/FEEDBACK
Zurn (including European
abbreviations) Appell (Alinco and Yaesu)
Freeman, M and Shirley (Advanced
DIGITAL SIGNAL PROCESSING (DSP) Computer Controls - ACC)

Bloom QRP (LOW POWER)
Edwards
Billson
EQUIPMENT TESTING/TROUBLESHOOTING Halbert (HF)
Sargent (VHF)
Billson Stockton
Brewer (Tube Gear) Turner (including Ten-Tec
Freeman, J (PC ISA Bus) Argonaut)
Hare (ARRL Laboratory Manager) Walker, et al (Mailing List)
Myers Zurn
Ornitz (Instrumentation)
Rymell (Electronics and Computer RADIO FREQUENCY INTERFERENCE (RFI)
Service Work)
Salnick Elmore
Salyzyn Graham, P (including PC's)
Standerfer Hare (including Automotive)
Stockton Myers
Taylor Stockton
Tescher Witte
Witte (Instrumentation)
RECIPROCAL LICENSING/FOREIGN OPERATION
FREQUENTLY ASKED QUESTIONS (FAQ's)
Andrews (New Zealand)
Bloom (ARRL E-mail and Info Server) Flaherty (South Pacific)
Cheeseman (Australia) Fyodorov (Russia)
Jahnke (VE Exams Scheduled) Levine (Australia and Japan)
Kluft (General) Salmon
Salyzyn (Radio Amateurs on Usenet, Salyzyn (Canada)
rec.radio.info Moderator) Stockton (UK)
Stader (Macintosh Amateur Radio Zurn (Italy and Germany)
Software)
Watt (Packet and Digital Modes) REPEATERS
Woods (Mail Order Electronics)
Battles
HANDICAPPED OPERATING Chilton
De Armond
Billson DePolo (VHF/UHF)
Doane Graham, P (including 1.2 Ghz)
Hurder Keller (220 Mhz)
Knapp, et al Knapp, et al
Schallehn (VHF/UHF)
HIGH FREQUENCY (HF)/ Witte
CONTESTING/DX
SATELLITES

Battles
Brubaker Bass (including low-cost, QRP
Chilton Microsat stations)
Elmore Feeney
Fyodorov Flaherty (including OSCAR)
Knapp, et al
Nerenberg (DX Mailing List) SEMINARS/LECTURES
Rosenfeld (including practical
QSLing tips) Humphries
Salmon (including DXpeditions) Redding
Salnick Stuart (Batteries and Power
Squicciarini Supplies)
Tidd (DXCC Databases)
Zurn TANDY COLOR COMPUTER AND OS-9

HOMEBREWING/DO-IT-YOURSELF Billson

Billson (6809 uP) TELEVISION, FAST-SCAN (ATV)
Bloom (including DSP)
Carruth (Digital Design, Chilton
Software) Feeney
Chilton Hammill
De Armond
DePolo (including VHF/UHF TELEVISION, SLOW-SCAN (SSTV)
design and construction)
Edwards (including DSP) Langner
Fyodorov (including computers)
Halbert (QRP) UNIX
Keys (Junk Box projects)
Kohnen (Tubes) Carruth (System Administration)
Lau (Transverters, VHF/UHF, Cole (including Linux)
Filters, repeatable projects) Ehrlich
Myers (Transmission Lines, Freeman, J
Analog and Digital Design) Sayer (especially SunOS)
Moore, T (Junk Box projects) Tescher
Rymell (Electronics and Computers, Van Peursem (HP-UX and System
Low-Cost projects) Administration)
Salyzyn
Stine (Tube Amplifiers, VERY HIGH FREQUENCY (VHF)/
Receivers, and Exciters) ULTRA HIGH FREQUENCY (UHF)
Stockton (including QRP)
Stuart (Batteries and Power Battles
Supplies) Carpenter (6 meters)
Taylor (Tubes and Amplifiers) DePolo (Weak Signal, Contesting,
Tescher and Repeaters)
Flaherty (including Amplifiers)
IBM PERSONAL COMPUTER (PC) AND Graham, P (Commercial Rig
CLONES Conversions)
Hammill (including ATV and DX)
Angus Humphries (2m FM)
Bono (AutoExam, et al) Jahnke (CW/SSB Contesting and

Braun Weak Signal)
Cole Lau (CW/SSB to 222 Mhz)
Ehrlich Moore, T
Freeman, J (including OS/2 and Richards (Monitoring)
ISA bus) Sargent (2 and 6 meter AM and
Fyodorov Contesting)
Keller Witte (including Portable
Tescher and Mountaintopping)

INTERNET SERVICES VOLUNTEER EXAMINER (VE) PROGRAM

Schleck Billson
Carlson (W5YI)
MAIL-SERVERS/ARCHIVES DePolo
Jahnke (ARRL VEC Manager)
Bloom (ARRL Info Server) Kohnen (W5YI)
Deignan (Buckmaster CD-ROM) Maia (W5YI VEC)
Ehrlich (Boston ARC FTP archive) Reeves
Harding (Ham Server) Rosenfeld (W5YI)
Shirley (ACC Equipment) Salmon (Sunnyvale)
Sternitzke (W5YI Asst. VEC)

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)

2346. Amateur Radio: Elmers Resource Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 12:08:55 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/list-1-762523726@unomaha.edu>
Source record: 270298
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/elmers/list

More information about this list can be found in the companion posting
to this file, "Amateur Radio: Elmers List Info and Administrivia."

73, Paul, KD3FU

Amateur Radio Elmers Resource Directory (as of 03/01/94)
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David Andrews ZL2SX

andrews@kai.ee.cit.ac.nz

I have been involved with the Amateur Radio International Travel Host
scheme. I also chair the NZART Frequency Management and Technical
Advisory Group, which is responsible for all repeater coordination and
band-planning (LF, MF, HF, VHF, UHF, and above) in New Zealand. I would
be pleased to answer any queries with regard to reciprocal licensing or
frequency coordination that may arise.

++

Jeff Angus WA6FWI

jangus@skyld.tele.com

I run NOS as a tcp/ip <--> AX.25 mail bbs gateway. I also run a few nodes,
soon to replace with Tnet-x1g on one and a PC NOS-switch on the other.
And, I have successfully installed UUPC/extended 1.11k and SNEWS for those
MS-DOS afficionados out there.

ampr.org IP Coordinator for California - Los Angeles and San Fernando
Valley subnet (44.016.xxx.xxx)

"We're here to help, we don't loan tools" (Just kidding....put me on the
list). Monday-Thursday 8 AM to 9 PM Pacific time, Friday 8 am to 5 pm.

--
netcom!bongo!jangus@skyld.tele.com "Als ik Kan", Gustav Stickley
US Mail: PO Box 4425 Carson, CA 90749-4425 1 (310) 324-6080

++

Jay Appell --> KA1SNA

1976-1978 FCC Personal Users Radio Advisory Committee
Task force for rules Rewrite Citizens Radio Service
Rules Interpretation

1988-Present Stratus Computer/ Technical Support Engineer

I am CEO of Creative Media Productions a multimedia consulting
company.

Address: Jay_Appell@cac.stratus.com
Telephone: 1-508-478-6969 X200 at Creative Media Productions
1-508-478-1429 24 Hour Ham radio BBS and other topics

I enjoy SCA reception and multimedia use in Amateur Radio. If anyone would
like to reach me by modem, 508-478-1429 (24 Hr) BBS 14,400.

I have been referred to as the ham responsible for digital users manuals
in amateur radio. The first manual was the DJ-590 and subsequent manuals
included the 560,580 and 600 for Alinco. My contacts in the amateur radio
community have helped other amateurs to know more about products, hidden
features and new product offerings. The BBS will now included the latest
info on YEASU and ALINCO products. If you have a product that you wish to
have evaluated for the general amateur community, please contact before
sending.

If you have questions with regard to customer service at these
companies, please forward to me and they will be passed to the company
contacts.

++

Ken Bass K4EVH

bassanco@access.digex.net

Licensed since 1959.

Experience in presently mostly Microsats, but I have experience on Modes A,
B, J, and Oscars. I have concentrated on "cheap" and low-power setups, like
my Microsat setup using in-the-attic homebrew/Radio Shack omnidirectional
antennas.

++

""
Brian Battles, WS1O I Tel 203-666-1541, x222 I
QST Features Editor I Fax 203-665-7531 I "Stamp out sex:
ARRL HQ I Internet bbattles@arrl.org I Get married!"
Newington, CT USA I Amprnet ws1o@ws1o.ampr.org I
""

VHF packet (AX.25 and TCP/IP)
HF SSB and RTTY
FM/repeaters
Clubs/activities
Public relations

Writing (for newsletters and ARRL publications)

++

Bob Billson, KC2WZ Internet: bob@kc2wz.bubble.org
21 Bates Way UUCP: ...!uunet!kc2wz!bob
Westfield, NJ 07090
908-232-2603 (evenings)

Advanced (since 1975) Troubleshooting
Homebrewing C and 6809 uP programming
Antennas (particularly HF) Volunteer Examiner
Digital Communications QRP

OS-9 operating system (UUCP is run on my Tandy Color Computer 3 :-))

10m is my favorite band even when it is "dead".

Member of Handi-Hams. Work as an Interpreter for the Deaf (I am hearing).

Interested in helping *any* would-be ham get their ticket. Ham Radio is a
great(!) hobby and should not kept a secret!

++

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League | Justice is being allowed to do whatever
225 Main St. | I like. Injustice is whatever prevents
Newington, CT 06111 | my doing so. -- Samuel Johnson

Postmaster, ARRL HQ (arrl.org)
QEX Editor
Digital Signal Processing (DSP)
ampr.org IP Coordinator for Connecticut subnet (44.088.xxx.xxx)

Collecting information for the next annual ARRL Computer Networking
Conference.

For information about the ARRL info server, send E-mail to info@arrl.org
with the word "HELP" in the message body.

++

/**\
* Rich Bono IMRICH UUCP:rbono@necis.ma.nec.com *
* (508) 635-6300 NM1D AMPR: nm1d@nm1d.nh.usa.noam *
**/

Author of the following MS-DOS ham programs:

AutoExam - Examination simulator and study aid
AutoCW - Morse Code practice program
DOSGATE - allows users to run programs on your PC remotely (AutoExam
compatible)
AutoCall - Allows use of the Buckmaster HAMCALL CD-ROM online callbook

with DOSGATE
AutoFax - Allows reception of weather fax using Kantronics TNC's
SeeSats - Real time satellite tracking (text only), DOSGATE compatible

Most of these programs are available from wuarchive.wustl.edu under
/mirrors/msdos/hamradio or write me at:

7 Red Field Circle
Derry, NH 03038

and enclose:

A FORMATTED high density diskette (either 1.44 MB or 1.2 MB; 3.5" or 5.25").
A Self Addressed STAMPED return diskette mailer.
A note explaining that you want a copy of AutoExam and/or AutoCW
(or one of the other programs).

I am always receptive to individuals interested in maintenance,
enhancements, and non-commercial distribution for these shareware
programs.

++

NETWORKS IN EMERGENCY MANAGEMENT ("Nets") DIGEST

"Networks In Emergency Management" is a moderated forum on the
use of computer networks and networked computers in the practice of
emergency management.

To join the "nets" mailing list, please send e-mail to
be" in the text
of the message. To remove yourself from the list, send mail to
that same address with the word "unsubscribe" in the text.

- Art Botterell
acb@oes.ca.gov
(916) 262-1600 (in emergencies)
California Office of Emergency Services

++

Curtis Braun (curtis@computronics.com) (N2HKD)
Computronics, POBOX 1002 Fairport,NY 14450
Guest@Digital Telstar,Network Operations Center Kodak

Apple Macintosh, IBM-PC, and Sun Computers

I have extensive knowledge on Appletalk protocol down to the bit level.
I have also worked with various iterations of MacTCP applications.
(Routers, hubs, gateways, Ethernet, Localtalk, etc)

I am also familiar with the look and feel of the Mac OS, (Ver. 6 & 7),
and its associated troubleshooting. I have some application
experience with numerous programs. (including ARAP Apple remote
dial-in stuff).

ampr.org IP Coordinator for Western New York subnet (44.069.xxx.xxx)

(There is a readdressing plan which I will gladly mail to anyone
who requests it.)

++

John Brewer WB5OAU

brewer@anarky.enet.dec.com

Wire antennas, restoration, operation and parts/tubes supplies
for most 40's-70's vintage gear.

++

Alan Brubaker, K6XO
alan@dsd.es.com

HF Antenna Systems
Contest Operating
General HF Operations
Propagation

++

Diana L. (Syriac) Carlson
Hudson, NH
dls@genrad.com
KC1SP

QSL Bureaus (how to use them)
Volunteer Examiner Service (how to become one)
Macintosh Hamstacks (available from uxc.cso.uiuc.edu
under /pub/ham-radio)
Civil Air Patrol

++

Robert (Bob) Carpenter W3OTC

rc@cmr.ncsl.nist.gov
w3otc@amsat.org

6 meter SSB DX
Central States VHF Society

"2m FM isn't ham radio, but it's a good way to contact radio amateurs."

Disclaimer: Opinions expressed are those of the sender
and do not reflect NIST policy or agreement.

++

73 de Rusty Carruth, N7IKQ P.O. Box 27001, Tempe, AZ 85285
(602) 870-3330 !'s:{ames!ncar!noao!asuvax,mcdphx}!anasaz!rusty
@'s: rusty@anasazi.com LastResort: rusty%anasaz.UUCP@asuvax.eas.asu.edu

Join the Usenet Un-Net: 1700-1900Z Saturdays, 28.410 or 28.390 MHz

I'm willing to act as a reference for anyone wanting info on getting
tapes (especially Callsign tapes) from the Department of Commerce
National Technical Information Service (NTIS) or wanting other info on
callsign-project related stuff.

One of these days I'll actually be around for the un-net! I promise, really!

My job is currently System Administrator for a large Unix site so I know a
little bit about day-to-day Unix operations and Unix installation :-)
I also have much experience with constructing email paths that will work
rather than bounce.

I also have a fair amount of experience in hardware/software interfacing
and machine control.

++

Mark Cheeseman VK2XGK

cheese@asstdc.oz.au

Maintainer of the aus.radio FAQ

A copy of the FAQ may be obtained via anonymous FTP from
grivel.une.edu.au under /pub/ham-radio/aus.radio/faq/australia.

Please direct all feedback, submissions and administrivia to my E-mail
address above.

++

Ken Chilton
KA1TIH, Advanced Class
53 Alan Road
Marlborough, MA 01752
chilton@emc.com
Design Engineer

Amateur Qualifications:
Trustee of the Algonquin Amateur Radio Club Repeaters:
446.675 -- 223.86 -- 53.47
Assistant Radio Officer for the City of Marlborough
Emergency Management Agency
NESMC Region 440 MHz frequency coordinator
Trained in Electronics Engineering, Electrical Engineering,
Computer Sciences, Computer Programming, and Management
Knowledgeable in Rules, Regs, and interpretations

Areas I am also interested:
Homebrewing
Repeater Hardware, Control, Operation
Packet (AX.25)
Net Control Operations

Electromagnetics and EMP
HF SSB and CW operating
Satellite and Shuttle operation
Amateur Television
Elmering new HAMs

++

Derrick C. Cole KC4WEJ

cole@concert.net

Anything having to do with PC's, DOS, Unix, Linux, C, NOS, TCP/IP et al
is fair game. I'm not much help in the electrical/circuit department (but
I am learning/applying, though! :) If you feel such information could be
useful, I would of course offer any/all help I could provide.

++

John De Armond WD4OQC

jgd@dixie.com

Marietta, GA

Construction techniques, telemetry, repeater design and maintenance,
most aspects of circuit design.

++

Rev. Michael P. Deignan KD1HZ

A new ham-radio archive site and callsign server center has been set up
on the Internet.

The Buckmaster CD-ROM callsign database (which includes international
calls) and all the Buckmaster CD-ROM public domain files are available
for retrieval!

To access the Buckmaster callsign server

rlogin/telnet: 155.212.2.2 (or, ns.risc.net)
login as: hamradio (no password)

To access the file archives:

ftp to: 155.212.2.2
login as: ftp / anonymous
password: your email address

Please direct all feedback and administrivia regarding this service to
root@ns.risc.net.

++

-=-=-=

To subscribe to or unsubscribe from either of the above lists, please
send electronic mail to:

listserv@stat.com

and include the command:

subscribe list-name

or

unsubscribe list-name

as the first line of your message, where list-name is either
land-mobile-radio or mars-list. An acknowledgement/welcome message
should follow very shortly.

++

Thomas Edwards N3HAU

tedwards@eng.umd.edu

Technopagan Priest
Member, University of Maryland ARA - W3EAX

Digital Signal Processing (DSP)
Eectronics Engineering

The UMARA is running a World-Wide Web hypertext page at:

URL: http://w3eax.umd.edu/w3eax.html

Give it a try!

++

Kim Elmore, N5OP
1103 South Gay Drive
Longmont, CO 80501

elmore@brightband.rap.ucar.edu
n5op@n5op.ampr.org

I'm the Technical Coordinator for the Colorado Section.
Areas of expertise:
RFI/EMI
Antennas
DX'ing
Contesting
HF propagation
CW

Areas where I have enough knowledge to be dangerous:
Troubleshooting
Traffic Handling
Homebrewing and construction practices

++

Roy Engehausen AA4RE

enge@almaden.ibm.com

AA4RE Packet BBS

Poster of RACES Bulletins

Thanks to Chris Spell <spell@seq.uncwil.edu>, there is now a mailing
list for AA4RE BBS program sysops. I hope all will subscribe. It
should be very helpful to all of us.

To send a message to the mailing list send it to:

aa4re@matsci2.uncwil.edu

To subscribe to the mailing list a user needs to send a message to:

aa4re-request@matsci2.uncwil.edu

With the following in the body of the message:

subscribe aa4re your_account_name@your.address.whereever

To unsubscribe one would send this text in the message:

unsubscribe aa4re your_account_name@your.address.whereever

++

```
==========================================================================
| Scott Ehrlich Internet: wy1z@neu.edu |
| Amateur Radio: WY1Z AX.25: wy1z@wa1phy.#ema.ma.usa.na |
|------------------------------------------------------------------------|
| Know your weaknesses, show your strengths - Anonymous |
==========================================================================
```

Maintainer of the Boston ARC FTP area on world.std.com - check it out!
(Featuring amateur radio software for the Macintosh and ARRL files from
info@arrl.org)

I've been playing with most models of Macs from the 512 on up for a
number of years now. I'm also great with DOS, UNIX, and my VMS isn't
too bad, either. :)

++

F. Kevin Feeney WB2EMS
Network Video Engineer
172 Caldwell Hall
Cornell University
Ithaca, NY 14853-2602
Phone - (607) 255-5186
FAX - (607) 255-5771
EMAIL - fkf1@cornell.edu

Pactor, Satellites, and Amateur Television

I'd like to hear from people with Pactor experience, maybe even make a
sched with someone for a maiden Pactor QSO.

++

Reciprocal Licensing (South Pacific)
VHF (Propagation, Power Amplifiers)
Satellites (Project Oscar)

--
-=Paul Flaherty, N9FZX/5W1JX |"The enemy of the good is the better."
->paulf@Stanford.EDU | -- William "Wild Bill" Donovan

++

++
+ Jay Freeman, WT9S Packet: wt9s@w9yci.il.usa.noam +
+ internet: freeman@eagle.sangamon.edu +
++

I can assist anyone with most PC installation/troubleshooting
problems. I have a good deal of experience installing and configuring
OS/2, have a good grasp of Unix (not a wizard yet though :), and a
thorough familiarity with the ISA bus and the cards that go in it.

On the radio side of things, I like digital modes and experimenting with
antennas, specifically:

- PACTOR and AMTOR
- Configuring Kantronics All-Mode (KAM) TNC's for proper operation
- Over a decade of packet experience, including setting up both DOS and
OS/2 versions of KA9Q NOS
- HF wire antennas, including 160m full-wave delta loops

++

Monte Freeman KC4GPW

Operations Department / Information Technology
Georgia Institute of Technology, Atlanta Georgia, 30332
Internet: ccoprfm@prism.gatech.edu
Bitnet: ccoprfm@gitvm1.bitnet

I am the list owner of a mailing list for people who have/are interested
in products produced by Advanced Computer Controls Inc. (ACC). For those who
might not know what ACC does; they produce products (mostly for the amateur
radio service) such as repeater controllers, digital voice recorders, remote
base control units, etc.

To join the ACC (Advanced Computer Controls) equipment discussion
mailing-list, send E-mail to listserv@gtri01.gatech.edu with "subscribe
acc-l your-name" in the body of the message. An acknowledgement and
welcome message will follow. Administrivia, policy questions,
or other queries may be directed to me.

(see also Mike Shirley WB6WUI)

++

Andy B. Fyodorov RW3AH, WL7AP

rw3ah@emercom.msk.su

PACKET: RW3AH @ R3ARES.#MOS.RUS.EU (temporarily down)
IP: 44.178.1.7 or rw3ah@gw.ra3apw.ampr.org

PO Box 899 Moscow
Zip-127018 Russia

Licensed since 1975
Experience in Emergency communications, Russian ARES Chief
Coordinator (since 1987) of Russian ARES Organization matters and networks
Owner of R3ARES BBS
General HF, Contesting, Net Controlling operations
Data communications, networks (TCP/IP, AX25)
computers (IBM PC, home made)
homebrewing electronics
antennas (particularly HF).
Proficiency in CW (Morse code)
(also former Ten-Tec dealer in ex-USSR)

++

Jim Graham

#include <std_disclaimer.h> 73 DE N5IAL (/4)

INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W
AMATEUR RADIO: n5ial@w4zbb (Ft. Walton Beach, FL) AMTOR SELCAL: NIAL

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

KAMterm is a host mode terminal program for Kantronics TNCs that I wrote
and released as shareware.

My professional field is telecom (data communications is my key area of
expertise).

I also have experience with wire HF antennas for apartments and other
small spaces.

++

KJ6NN
Philip Graham
723 Berkshire Place
Milpitas, CA 95035

EMAIL: phil@ncd.com

My skills are listed below in no special order
- PC RFI reduction (Wrote a chapter for the new ARRL RFI BOOK)
- Repeaters (How to put one up)
- Repeaters (How to use one, without making others mad)
- 1.2 GHz (My repeater is on this band)
- VHF packet only (I hate HF packet)
- HF DX
- HF AMTOR, RTTY, ASCII
- Putting up a tower and/or HF beam

++

Dan Halbert, KB1RT
halbert@crl.dec.com

QTH: West Newton, MA, near Boston.

Building homebrew QRP gear.
Information about QRP-NE Club.
Advice on simple antennas.

++

Brian Hammill, KD4BFJ | brianh@dante.exide.com
Software Engineer | Exide Electronics - Small Systems Group
Raleigh, NC | "Powering Your Network with Intelligent Solutions"

I am especially interested in VHF/UHF and microwave amateur bands as well
as Amateur television. I am treasurer and a founding member of the
newly-formed Triangle Amateur Television Association in Raleigh-Durham-
Chapel Hill, NC. I am willing to share my expertise in the following
areas:

ATV - Getting started, starting local activity, repeaters.
VHF/UHF - Propagation, what you need to get started, operating portable,
contesting, DX.

Sealed Lead Acid Batteries - How to take care of them.

++

Steve Harding KA6ETB

st252.0578 alternate: harding@nas.nasa.gov
For amateur radio related information, send a message to:
ham-server@grafex.Cupertino.CA.US
Place HELP and GET INDEX on separate lines in the text.

HAM-server has over 10-megs of amateur radio related information on-line,
with more being continually added.

++

Ed Hare, KA1CV | ehare@arrl.org
American Radio Relay League |
225 Main St. |
Newington, CT 06111 |
(203) 666-1541 - voice
(203) 665-7531 - FAX
ARRL Laboratory Engineer

Radio Frequency Interference (RFI) matters
Equipment Testing

I want stories about automotive EMI problems, dealings with dealers, and, if possible, solutions. I plan to forward these to my contact at the Society of Automotive Engineers (SAE).

If anyone knows the *right* people at any particular company, I want to know. I am also pursuing (via the SAE) more official channels.

EMI/RFI Resource List and RFI Tips package available. A business SASE with 98 cents postage is appreciated. Electronic versions available soon. Please specify the desired documents in your correspondence.

Many amateur radio informational documents (including EMI/RFI files) are also available from the ARRL info server. Send E-mail to info@arrl.org with the word "HELP" in the message body.

++

Ed Humphries Hewlett-Packard NARC Atlanta GA
N5RCK Internet edh@hpuerca.atl.hp.com

Past President, Williamson County (TX) ARC
Former Assistant Emergency Coordinator for
Williamson County ARES/RACES

2-meter FM, VHF Antennas, Mobile Installations
Organizing Amateur Radio Seminars and Programs
Multiband wire antennas, Field Day Activities
and general WeatherNet & public service enthusiast

++

| | | Deputy Manager, Field Services, ARRL.
| |___| The ARRL Amateur Radio Emergency Service, the ARRL
| uck | |urder National Traffic System, The Amateur Auxiliary to
------ | | the FCC's Field Operations Bureau, the ARRL
KY1T Field Organization and the ARRL Monitoring System.
---
lhurder@arrl.org Prodigy - MGTS39A, BIX - ARRL,
MCI Mail - RPALM, MCI Mail - "ARRL", America On Line - "ARRL HQ"
Compuserve - 70007,3373 (ARRL HQ) -- Genie ARRL.HQ

Matters relating to the ARRL field organization, including emergency communications, traffic handling, referrals to

local Technical Coordinators, the Amateur Auxiliary to the
FCC's Field Operations Bureau, ARRL Volunteer Counsels, Public
Information Coordinators, etc.

Matters relating to Amateur Radio and the disabled/handicapped.
Suggestions on how computers and Amateur Radio can be easily
and very inexpensively) combined to assist the disabled.

At the very least, I can be a forwarding point to the others here at
ARRL HQ who CAN answer specific questions that are not covered above.

FIELDORG is an electronic mail reflector dedicated to hams interested
in any and all types of ARRL Field Organization matters. To subscribe,
send an E-mail message to FIELDORG-REQUEST@world.std.com.

++

Bart J. Jahnke, KB9NM | USENET: bjahnke@arrl.org
Manager, ARRL Volunteer |
Examiner Program | BIX: ARRL
ARRL VEC Dept. | PRODIGY: MGTS39A (c/o Luck Hurder)
225 Main St | MCI ID: 215-5052
Newington, CT 06111 | CompuServe: 70007,3373
Voice (203) 666-1541 | America On-Line: ARRL HQ
FAX (203) 665-7531 |
---
* Listings of Examination Opportunities -- bi-weekly postings
* Volunteer Examining procedures - ARRL VE Manual
* Support and Instruction for Volunteer Examiners - Coordinating Exams
* Member, National Conference of VECs Question Pool Committee
* Information on what's required to become an Amateur Radio licensee
* Contributing Editor - QST Magazine - Exam Info column
* On-the-air interests: VHF/UHF/SHF SSB/CW Weak Signal Operating and Contests

++

Michael S. Keller AB5EL

mkeller@flp.mhs.compuserve.com (work)
71620.447@compuserve.com (personal, checked far less often)

Areas of particular knowledge:

PC-style computers
Mobile installations (rearranging mobile HF right now)
Repeaters (after a fashion--building a 1.25m repeater)

++

R.D. Keys

Dept. of Crop Science
NCSU
Raleigh, NC 27695-7620

rdkeys@csemail.cropsci.ncsu.edu

de NA4G, "Boat Anchor Bob", an ol' cw fart .....

If I can be of assistance in older equipment, junk-boxing
your way to hamdom, the cheapskate's approach, let me
know.

22 yrs a ham, extra class, mostly cw, mostly boat anchors
and radio in the traditional sense.

{Telegraphy has been in my family for almost 100 years!}

++

Ian Kluft KD6EUI PP-ASEL
ikluft@thunder.sbay.org (home) ikluft@uts.amdahl.com (work) Santa Clara, CA

Maintainer of rec.radio.amateur.misc and rec.radio.cb FAQ lists

Please direct all FAQ submissions, feedback, and administrivia to
hamradio-faq@kluft.com or cb-faq@kluft.com.

A mailing list for rec.radio.amateur.* FAQ and Netiquette posting
maintainers, as well as anyone with a sincere interest in helping
keep the rec.radio.amateur.* newsgroups the friendly and useful
forums they are today, is now available. To subscribe, send E-mail
to rra-wg-request@amdahl.com.

++

Steven M. Knapp KA9QOA Computer Engineering Senior
sknapp@iastate.edu Vice President Cyclone Amateur Radio Club
Iowa State University; Ames, IA Durham Center Operations Staff

A few members of our ham radio club were interested in helping out.
Since our turnover is usually 4 years or so (graduation is a horrible
thing), I thought it may be difficult for us to keep the list up to
date. I thought that by creating a local mailing list called
"elmers@iastate.edu" we could add or remove people as need be. There
would always be at least one person receiving mail on that list,
usually more! Even after I graduate, this list will be maintained
allowing ISU hams to easily help others.

Currently we have people with packet experience, some HF experience,
much repeater experience, in addition to a considerable background in
theory, as many here are electrical engineering or computer engineering
students. If a question can not be answered by the readers of the list,
there are many other local hams that could be prodded for the info.

Our local ham radio club has been especially interested in helping local
disabled hams (or hams to be) get on the air. But anyone local who
needed help would find a group at their door ready to work.

++

I'll be glad to help out with tube circuits and VE testing.
(W5YI VE# 3182)

73,
Louis J. Kohnen K2ANC
Penfield, NY near Rochester

K2ANC.Wbst128@xerox.com

++

John Langner WB2OSZ
115 Stedman St.
Chelmsford, MA 01824-1823
(508) 256 6907 (home - civilized times only please)
johnl@avs.com

Slow-Scan Television

++

Alan Larson WA6AZP

larson@net.com
larson@w6yx.stanford.edu

My areas are fairly general, and I teach classes
(Novice, with code, and upgrade sessions) at W6YX. My
main audience is to the Stanford (University)
community.

++

Zack Lau KH6CP/1 Expertise: Design of SSB/CW amateur transceivers
c/o ARRL Lab : up to 222 MHz. Design of transverters
Newington CT 06111 : up to 10.5 GHz. Basic lossy filter
(203)-666-1541 : design. Developing repeatable projects
zlau@arrl.org : using cheap, easy to get parts.

I'm now starting to look into 24 GHz SSB/CW gear using 10 Ghz as a
convenient IF.

Especially looking to help anyone wanting to be a QST/QEX
author--I can't write it all myself!

++

Bob Levine KD1GG, VK2GYN, 7J1AIS

bob_levine@jericho.mc.com

Amateur radio licensing in Australia and Japan

++

[Fred Lloyd, AA7BQ Fred.Lloyd@West.Sun.COM]
[Sun Microsystems, Southwest Area Solaris Transition Manager]

[Phoenix, AZ (602) 275-4242]

Co-Coordinator, "Callsign Project" (see also Carruth)

The QRZ Ham Radio CDROM is here! For ordering information, call
Walnut Creek at +1 800 786-9907 (overseas +1 510 674-0783).

++

Joel Magid WU1F

magid@wrksys.enet.com

ARES/RACES
Novice Instruction
General Theory

++

Fred O. Maia, W5YI

3511297@mcimail.com

P.O. Box 565101
Dallas, TX 75356

1-(800)-669-9594

Volunteer Examiner Coordinator
The W5YI Report
License Exam Study Materials
VE Exam Schedules Nationwide

++

Daniel J. Meredith N7MRP
Arizona Packet Coordinator
Voice/Data = (602) 956-2566
Ax.25 = n7mrp@n7mrp.az.usa.na
Internet = dan@aznet.stat.com

Owner of the PBBS Bulletin Forwarding Mailing List

The purpose of this list is to provide Sysops and Networkers a server in
which to forward bulletins and also discuss forwarding problems and obtain
forwarding partners. This server is also for the exchange of general
information relevant to all Amateur Related PBBS software packages available
today.

Owner of the F6FBB Packet Bulletin Board System Mailing List.

The purpose of this list is to provide both sysops and networkers
with tricks/tips/help as well as software updates for the F6FBB
packet bulletin board system.

To subscribe to or unsubscribe from either of the above lists, please
send electronic mail to:

listserv@stat.com

and include the command:

subscribe list-name

or

unsubscribe list-name

as the first line of your message, where list-name is either bull-fwd
or mars-list. An acknowledgement/welcome message should follow very
shortly.

++

John Monson WB0PLW, AAA9EC

johnm@is.sprint.com
816-854-3015, Work hours (Missouri, Central Time)

Army MARS (Chief Staff Emergency Coordinator)

++

Bob Myers KC0EW
Hewlett-Packard Co.
Ft. Collins, CO

myers@fc.hp.com

Antennas, Novice/Tech instruction, batteries, power supplies, RFI, equip.
testing/troubleshooting, FAQs, homebrewing. Basic theory questions also
welcome.

My particular interest is in antennas and transmission lines, but I'm
also more than willing to answer whatever I can in general radio theory,
propagation, analog and digital electronics, etc.. (I'm a display engineer
in "real life", have done my share of digital design, and have taught
communication electronics at the local community college. I'm also active
in some display and television standards activities.)

++

Jeffrey C. Miller, NH6ZW/N8, AFA1HE | The Air Force is
AFIT School of Engineering | paying me to be a
Wright-Patterson AFB, OH | student, not write this
jmiller@afit.af.mil | or any other opinion!

USAF MARS

++

John Moore 7525 Clearwater Pkwy, Scottsdale, AZ 85253 USA
john@anasazi.com Amateur call:NJ7E Civil Air Patrol:Thunderbird 381
Voice: day or eve:(602) 951-9326 FAX:602-861-7642 (by prior arrangement)

Civil Air Patrol

Co-Host - Ham Radio and More

Ham Radio and More is available for free to any AM station that is willing to run it with national ads intact. If you want there to be a nationwide amateur radio talk show, call your local station and ask them to get the program. They don't have to be part of the Talk America network. They can call KFNN in Phoenix (602-241-1510) or Talk America at 508-460-0588.

++

Tom Moore K1KAY

[no E-mail address at this time]

home phone: (508) 840-6843

QSX: Fitchburg 145.45 MHz
Harvard 145.41 MHz
6m AM 50.40 MHz

Junque-box specialties
old conversions vhf-oriented
shoulder to cry (or laugh) on

++

Lyndon Nerenberg VE6TCP/VE6BBM

lyndon@unbc.edu

To subscribe to the DX mailing list, send an E-mail request to:

dx-REQUEST@unbc.edu

asking to be added. A short introductory message will promptly follow.

++

| ___ ________ | Dr. Barry L. Ornitz WA4VZQ
| | / / | | Eastman Kodak Company
| | / / | | Eastman Chemical Company Research Laboratories
| |< < K O D A K| | Process Instrumentation Research Laboratory
| | \ \ | | P. O. Box 1972, Building 167B
| |__\ ________| | Kingsport, TN 37662 615/229-4904
| | INTERNET: ornitz@kodak.com

Part 15 Low-Power Broadcasting

Antennas (including expertise in computer modelling using MININEC and
NIST modelling programs)

Instrumentation (my profession)

++

Dave Potter, K1MBO

potter@think.com

electronics theory, regulations, antennas and
transmission lines, operating practices.

++

There is an active mailing list for fans of hollow state
(i.e. tube) radio equipment. Send a subscription request to:

boatanchors-request@gnu.ai.mit.edu

and you will be added to the group!

An additional note: You can save the list owner (me!) a lot of trouble
by including your email address in the text of your subscription requests.
boatanchors is a mail alias, not an automated listserv. Thanks!

Paul Prescott
N1AAC
regnad@gnu.ai.mit.edu

++

Terrence R. (Terry) Redding WB5LMJ

DOMAIN: terry%red@lawton.lonestar.org
UUCP: . . . !rwsys!lawton!red!terry
PACKET: WB5LMJ @ WB5MJS.OK.USA.NA
Voice 405 536-8822, Ben's Place (Benjamin Franklin) BBS 536-6988 9p to 6a
PhD candidate, University of Oklahoma in Adult and Higher Education
Educational Advisor, American Radio Relay League
221 SW Crystal Hills Drive, Lawton, Oklahoma 73505

I am primarily an adult educator conducting research in self-directed
learning. I have been involved in the following activities:

- Teach licensing classes, since 1974.
- Organize clubs, Stuttgart Amateur Radio Club, Panama Canal Astronomy
Club, Lawton Astronomy Club.
- Public speaking and publish on growth in volunteer organizations,
marketing adult and higher education and teaching amateur radio
courses.
- Research in adult learning theory, adult motivation and organizational
theory.
- Conducted a SAREX activity that involve seven communities, 21 schools
and 3,000 children.

I am primarily interested in assisting amateur radio clubs grow.

++

Tony Reeves
KK6XC
QTH Beach Area of So. Los Angeles
Torrance, Redondo Beach, Hermosa Beach, Manhattan beach

tony@hacgate.scg.hac.com

Novice training, local VE for Novice-Tech tests,
General questions

++

James J. Richards

richardsjj@oa.frc.com

First-Class FCC Radiotelephone License

25 years of Public Safety Communications and Computer-
Aided Dispatch

Scanners - Digital Comm - Freqs - Business Band - Public Safety
MDT's - Fax - RTTY

++

_________ _________ The
\ / Long Original
ham@wam.umd.edu Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 109 QSLed on dipoles _________| Dipoles! Antenna!

Contact VE, University of Maryland ARA (W5YI VEC)

CW, HF DX, and QSLing

I'm by no means a QSL expert, and I don't even get the GO-list or have a
packet setup to get into the local packetcluster - but I'm always glad to
help out with practical QSLing tips. I still haven't been able to get
any cards out of ex-Soviet Asia, and I don't know that I ever will, to be
honest. Oh well, I'll just keep trying.

++

John Rymell N3PFF
ryme@bloomu.edu
Bloomsburg University
Bloomsburg, PA

Have over 25 years in electronic/computer service work, antennas, SWL,
and a love of building just about anything from next to nothing (:^)!
Glad to help those in need.

++

Stephen R. Salmon E-mail: steve@carlyle.com
Carlyle Systems, Inc. Phone: 415-345-2500
2000 Alameda de las Pulgas Fax: 415-349-3874
San Mateo, CA 94403

DXing - not Honor Roll, but about 200.

DXpeditioning (some) - did a single-handed one to North Cooks and Palmyra in 1990

Marine operation

I'm a VE (Sunnyvale VEC) and help administer the tests about every two months at the Berkeley Yacht Club. I also teach a novice class there every year or two.

Reciprocal Licensing/Foreign Operation

(I've done some foreign operation, and plan to do more. I'm getting ready for a circumnavigation/worldwide DXpedition).

73, Steve, AA6LF

++

Bob Salnick, Spokane,WA | USENET: oliveb!isc-br!tau-ceti!DejaVu!salnick
Amiga 1000, WB 1.3 | INTERNET: salnick@DejaVu.spk.wa.us
WA9BVE |

I can help people with HF stuff, cheap antennas, and am willing to help troubleshoot problems with rigs.

I believe that one of the pillars of ham radio - construction/ understanding at the burn-your-hand-with-a-soldering-iron level - is drifting out of ham radio. With Japanese radios which cost so much, fewer and fewer hams are willing to risk their warranty to service their own equipment. I would like to see a turn-around here...

++

Mark Salyzyn, VE6MGS mark@ve6mgs.ampr.ab.ca

Qualifications:

Repair Technician
Electrical Engineer (11+ years)
Advanced Amateur (Canadian) since 1988

Advice of value:

HF + VHF construction, homebrew, repair, circuitry, programming and mods
Operating Mobile
Packet Radio (Radio, TNC, AX.25, TCP/IP)
NTS (Net Control for 80m CW Alberta Traffic Net for 3 1/2 years)
Canadian Tests, Rules and Regulations
Antennas, Design and Installation

General Electronics, Repair, Diagnosis and Design
CW training
Having fun with Amateur Radio communications

Maintainer of Radio Amateurs on Usenet E-mail address directory

Please direct all Radio Amateurs on Usenet E-mail address feedback, submissions, and administrivia to hams-on-usenet@ve6mgs.ampr.ab.ca.

Moderator of rec.radio.info newsgroup

Please direct all rec.radio.info submissions to rec-radio-info@ve6mgs.ampr.ab.ca and all feedback and administrivia to rec-radio-request@ve6mgs.ampr.ab.ca.

++

Andrew Sargent N8OFS, AAN5HJT

andrews@fms.com
andrews@telemax.com

My primary interests include: 6M AM, 10GHz, 5.65-5.925 GHz, 3.3-3.5 GHz, the fact of being a No-Code is not a crime, 2M AM, 2M FM QRP SIMP, packet radio experimentation, mobile operations, NTS, VHF Contesting, and of course... Army Mars.

If your interested in Army MARS, e-mail me. If your interested in Air Force or Navy MARS, e-mail me and I will send you a list of those members which I have compiled. Try to decide, then let me know.

++

Nick Sayer <mrapple@quack.kfu.com> |
N6QQQ @ N0ARY.#NOCAL.CA.USA.NOAM | "Don't make me come in there..."
+1 408 249 9630, log in as 'guest' |
PGP 2.1 public key via finger | -- Powdered Toast Man

HF RTTY/AMTOR, Decoding CHU
VHF Packet
Unix, especially SunOS
Network Time Protocol (NTP)

(MC68HC11 Mailing List has moved, mc68hc11-request@elden.cse.nau.edu is now the place to write to get connected.)

++

Steve Schallehn, KB0AGD | Internet : steve@matt.ksu.ksu.edu
Kansas State University | UUCP : ..!rutgers!ksuvax1!ksuvm.bitnet!steve
Manhattan, Kansas 66506 | Bitnet : STEVE@KSUVM
Packet: KB0AGD @ K0VAY.#NEKS.KS.USA.NA

A contact for people with question about Kantronics packet equipment. I am not affiliated with Kantronics, but know quite

a bit about them.

University Clubs (Member of Kansas State ARC, W0QQQ)

VHF/UHF Repeaters

++

Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Internet Services (Finding FAQ's, using Usenet, FTP, telnet,
Archie, FTP mail-servers, mailing lists, etc., etc.)

Also willing to provide newsreader kill/select file help to anyone
interested in customizing their presentation of the rec.radio.*
newsgroups

College Clubs

Ham-Univ mailing list for college clubs has found yet another new
home at the New Jersey Institute of Technology. E-mail for
subscription information.

Maintainer of this list

Please direct all Elmers List submissions, feedback, and administrivia
to elmers-request@unomaha.edu.

++

Mike Shirley - WB6WUI mikey@slic.cts.com GEnie: SLIC
PO Box 460 Lakeside, CA 92040 USA PGP v2.1 Public Key Available

For archival information about ACC equipment, send E-mail to
acc-l-archives@slic.cts.com with "help" in the body of the message
or try my BBS at +1 619 390-7542 (390-SLIC).

(see also Monte Freeman KC4GPW)

++

Marty Squicciarini NR3Z

skitch@nadc.navy.mil

DX and Contesting
QSL'ing

++

Terry Stader - KA8SCP/1, America Online Ham Radio Club Host

Internet: tstader@aol.com _or_ p00489@psilink.com
(Files/messages larger than 27K, please send to "p00489@psilink.com")

KA8SCP@WA1PHY.#EMA.MA.USA.NOAM _or_
ka8scp@ka8scp.ampr.org [44.56.4.82]

- registered ARRL Instructor (teaching for the last 6 years Novice/Tech classes with an 87% pass rate)
- Host of the America Online Ham Radio Club (like CompuServe only a LITTLE smaller!)
- President for 5 consecutive years of an ARRL Special Service Club (The Police Amateur Radio Team of Westford, MA - WB1GOF)
- ARRL Section Emergency Coordinator (SEC) for EMAS section
- Area 1 Communications Officer for the Massachusetts Emergency Management Agency (formerly Mass. Civil Defense Agency)
- Expertise with Apple // and Macintosh computers. (I have over 80 MB of Mac ham radio software available.) and ham-related
- Operate TCP/IP with Macintosh
- plus all around source of information about communications

Maintainer of Macintosh Amateur Radio Software List

++

Bill Standerfer * Hewlett-Packard Company
CFI-A, IA, ME * VXI Systems Division
bills@lvld.hp.com * Loveland, CO 80539
Baron N222AB - KF0DJ - Pikes Peak 253 * 303-679-2378

I'm certainly willing to be an Elmer if there's a need. I hope I've learned a few things in 27 years on the air. :-) Here's a list of subjects I might be able to help with:

Antennas
General Operating Practices
Older (Tube) Equipment
Test Equipment and Measurements

++

Steve Sternitzke, NS5I

sds@sat.datapoint.com

I work with the W5YI-VEC organization ("official" title - assistant VEC) and I write the VE manuals for W5YI. Add my name to the list of people who are available to answer questions about volunteer exams, FCC stion pools, etc.

++

Dave Stine WA2JTA/6

My areas of expertise are:

- vacuum tube amps, receivers, exciters
- CW operating tips
- wire antenna tips, hints & kinks

++

David Stockton, GM4ZNX

dstock@hpqmola.sqf.hp.com

SWL since 1960
Licensed since 1984 (UK full class A)
Degrees in electronics&comms and digital techniques etc.
Currently senior design engineer doing RF design

Fairly broad interest in amateur radio (but not contests!)

Antennas, Transmission lines,filters from fundamental theory to practice
Receiver structures and circuits from simple to state of the art.
Transmitters, ATUs
Test equipment
Wide experience of troubleshooting/repairing equipment.
Professional experience of EMC/RFI
QRP
UK Operation and Licensing

My morse is flaky, but I keep working on it
No interest in contests
No interest in packet radio or in fixing computers

++

Ken Stuart, W3VVN
48 Johnson Road
Pasadena, Md. 21122
401-437-1758 (home)

kstuart@oasys.dt.navy.mil

via packet: W3VVN @ N3ETI.MD.USA

Have been licensed since '53, currently Advanced class. ARRL Technical
Advisor since '80 on Batteries and Power Supplies. You may have seen
my article in the Feb. '91 issue of QST on NiCads. Authored the rewrite
of the power supply chapter of the ARRL handbook in '85 when the new
format was generated (large page, versus the old small size). Most
of the stuff is still unmodified. Currently lecturing on battery
care and feeding to clubs in the Baltimore/Annapolis area.

I have been employed as a power supply design engineer for about the
last 25 years.

++

Roger H. Taylor, PE rtaylor@ux1.cso.uiuc.edu
1106 Rayburn Ct. K9ALD AFA3WG
Mahomet, IL 61853 Outdoor writer (Fishing)
217-586-4958 Skamania Reign Supreme!
Manager, Network systems, OIM, University of Illinois

Help on antennas, Air Force MARS, components, Tube circuits,
linear amplifiers, troubleshooting.

++

Ren J. Tescher N0PVI Resume~
ren@ncar.ucar.edu AAS, Electronic Technology
Electronic Technician/Sysop AAS, Computer Systems Technology
Research Applications Program (RAP) 4 years consumer electronics repair
National Center for 2 years calibration lab and repair
Atmospheric Research (NCAR) 2 year unix sysop
Rm 2078 Bldg 2, 3450 Mitchell Ln. ethernet and serial cable
PO Box 3000, phased-array radar
Boulder, CO 80307 (303)497-8407 doppler weather radar
FAX (303)497-8401 PC's
He knows enough to be dangerous. non-freon appliance repair
dona nobis pacem strung interior phone lines, too!
***I will email at your request, morse code programs for the
Sun, IBM Basica, and SCO which I've saved off the net.***

++

Bob Tidd KJ6CS

inp@violet.berkeley.edu

Computerized DXCC databases and query software (written in
BSD-Unix compatible C) available on request. Would welcome ports
to IBM-PC or Macintosh.

++

Clark Savage Turner, Graduate Student Researcher
Safety Critical Software Group home:
Department of Info. and Computer Science 1514 Verano Place
Irvine, CA. 92717 Irvine, CA. 92715
(714) 856 4049 (714) 856 2131

WA3JPG, QRP #3526
HHH WAS #489

Admitted to practice law in California, Massachusetts, and New York.
ARRL Volunteer Counsel

I would (have been doing it by default) be happy to be an Elmer in the
area of older HF gear, especially QRP operation with Ten Tec Argonauts
(and Power Mites, etc.). Also have experience with other 10-20 year-old
economy HF rigs, particularly the Kenwood TS-520.

++

_____
| | Johnathan Vail vail@tegra.com (508) 663-7435
|Tegra| jv@n1dxg.ampr.org N1DXG@448.625-(WorldNet)
----- MEMBER: League for Programming Freedom (league@prep.ai.mit.edu)

ampr.org IP Coordinator for East/Central Massachusetts subnet
(44.056.xxx.xxx)

TAPR/9600 modem (putting some stuff together for a local repeater)

++

Jim Van Peursem - KE0PH

jvp@iastate.edu

Author of Savant, the packet radio communications program for the
Apple Macintosh. For more information, consult Terry Stader's List
of Macintosh Amateur Radio Software.

Also have a few years experience in Unix (especially HP-UX) and system
administration.

++

--Bruce Walker WT1M (bruce@think.com)
Chuck Adams K5FO (adams@chuck.dallas.sgi.com)

The QRP Internet mailing list is open to all topics relating to low-power
amateur radio operation. Example topics: portable operation, equipment
design and construction, solar and battery power, QRPp, contesting, ...

The mailing list address is QRP@Think.COM; mail to that address will be
sent to everyone on the list without human intervention. There is also an
administrative address QRP-Request@Think.COM which will be monitored by the
list maintainer(s); please use that for such requests as adding or removing
yourself from the list, questions about the FTP access, etc.

++

Steve Watt KD6GGD Packet: KD6GGD @ N0ARY.#NOCAL.CA.USA.NA
ICBM: 121W 56' 53.1" / 37N 20' 16.7" Internet: steve@wattres.SJ.CA.US
"A person reveals his character by nothing so clearly as the joke he resents."
-- G. C. Lichtenberg

Maintainer of rec.radio.amateur.digital.misc FAQ

Please direct all FAQ submissions, feedback, and administrivia to
digital-faq@wattres.sj.ca.us. If you think you have some valuable
insights into non-packet digital modes, PLEASE contact me through
that address. You might get added to the list... No, that's not
a threat. ;)

++

John Welch N9JZW, NNN0WYZ
jjw@seastar.org

Navy/Marine Corps (NMC) MARS

++

Vikki Welch WV9K, NNN0AEE
vikki@seastar.org

Navy/Marine Corps (NMC) MARS
Region Four ECOMM Planning Officer: NNN0ASG TWO

There are other NMCMARS Members on the Internet and I'll be compiling a
list, if anyone is interested. I'd also welcome any correspondence
with other members of MARS. We are currently considering a MARS
conference on a dial-up BBS.

++

Areas of Interest: ARES/RACES, Emergency Comm, and ARRL
Field Organization.

73's de Steve Wilson, KA6S

SCV Section Manager
813 Berryessa St.
Milpitas, Ca 95035

Hm (408)946-7410 Wk (408)473-2580
stevew@netcom.com

++

Bob Witte HP Colorado Springs Division
bobw@col.hp.com P.O. Box 2197
Phone:(719) 590-3230 Colorado Springs, CO 80901
Radio: KB0CY
"There is no such thing as ground."

Mobile
RFI
Equipment Testing (instrumentation)
Repeaters
VHF/UHF (including mountaintopping/portable operation)

++

John F. Woods WB7EEL

jfw@ksr.com

Maintainer of My List of Mail Order Electronics Companies

Available via anonymous FTP from ftp.cs.buffalo.edu under /pub/ham-radio
or rtfm.mit.edu under /pub/usenet/rec.radio.amateur.misc

++

Martin A. Zurn IK2RMZ, DL1GBZ

Home QTH: v. Fermi 10, 21027 Ispra (VA) Italy
(Northern Italy near Swiss Border)

Position: Lat 45d49m N Long 8d38m E WW-Loc: JN45ht
O only

Work QTH: TP 680, Centro CCR, 21020 Ispra (VA) Italy
E-mail at work: martin.zurn@jrc.it

Expertise:

Technical: Elbugs (incl. features like dot/dash memories, squeezing, touch sensors, auto spacing) Antennas used: Windom, Delta Loop, Trap Dipole, Marconi wire.

Operational: CW Operator since 1981, QRP Operation, Traffic handling nets (NTS, Swedish QTC nets) CW operating in several West European languages (Ham radio shorts, use of foreign CW characters in Italian, German, French, Spanish, and Swedish). QSLing (How to design a QSL that satisfies award hunters and operators of the QSL buro)

Club life: Mbr of AGCW, UFT, GQRP, HSC, VHSC, SMHSC, SCAG,...

Admin: License Regulations in Italy and Germany

Mathematics: Spherical Trigonometry, beam headings, calculation of sunset/sunrise times, etc.

++

End of Directory

2347. Amateur Radio: Changes to Elmers Resource Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 12:09:17 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/elmers/diff-1-762523751@unomaha.edu>
Source record: 270299
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/elmers/diff

(Note: This diff file is taken from the list body only.)

/usr/bin/diff -c (last month's) (this month's)

*** /u3/pschleck/faq/elmers/list.body.old Tue Feb 1 06:02:45 1994
--- /u3/pschleck/faq/elmers/list.body.new Tue Mar 1 06:00:04 1994
***************
*** 1,4 ****
! Amateur Radio Elmers Resource Directory (as of 02/01/94)
++++++++++++++++++++++++++++++++++++++++++++++++++++++++

David Andrews ZL2SX
--- 1,4 ----
! Amateur Radio Elmers Resource Directory (as of 03/01/94)
++++++++++++++++++++++++++++++++++++++++++++++++++++++++

David Andrews ZL2SX

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu (personal mail)
elmers-request@unomaha.edu (Elmers List administrivia)
```

2348. Used HF help

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 14:27:20 UTC
From: JMG@tntech.edu
Message-ID: <01H9G94LGM44ERWEIP@tntech.edu>
Source record: 270300

HI,

boy thanks to this group I have been having a lot of success obtaining
information for an upcoming article.

I have decided to ask for some more help:

I would like comments/opinions about the following used gear in respect
to :
known to be good/bad-special known problems
special features/like filtering/processing
options that are recommended
3rd party availability of options/accesories
parts/service availability
** current price range.

Rigs:
Kenwood: TS520/530, 820/830, 430/440
Icom: 735
Yaesu: 101ZD, 102, 107, 757GX, GXII
Ten Tec:Century 22, Argosy (I and II), Delta I, Corsair, Omni?

73 and thanks

Jeff, AC4HF

2349. Re: Repeater Dir.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 14:36:58 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-010394093439@136.141.220.39>
Source record: 270301

In article <199402281759.JAA13538@ucsd.edu>, AGRI098@UNLVM.UNL.EDU (Roy)
wrote:

> What we need is to help get the info to someone that will put the data
> togather. As was said before we can not use the info that is in the ARRL
> version. We gather and post from other sorces... Are there enough of us
> to get all the info we need? Is there a person we can mail the info to
> using a form the requires minimal messing to put in a data base? Is my
> hand up? (not sure) Let me know what you folks think....

I'll be happy to supply the information for the W3SK, WE3E and WR3B
repeaters in Bucks County, PA. Just let me know to whom I should send it.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

2350. Hamblaster Update

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 14:38:29 UTC
From: jwa@tellabs.com
Message-ID: <1994Mar1.143829.7840@tellab5.tellabs.com>
Source record: 270302

2-15-94

I hope that this will clear up a few questions about
the Hamblaster.

Disclaimer

This IS NOT an ad. The Hamblaster is not a product
that's being sold to amateurs or any other group.
It's a 3 year effort by myself and Will Torgrim N9PEA.
We have been doing this as a hobby, hopefully, to
improve Amateur radio.

Finely, the development cost thousands of dollars
and we haven't earned a single penny for our efforts.

We have considered the possibility of making the PC boards
available and a "hard to get parts kit" but there is a
support issue that needs to be resolved.

The Hamblaster is not a software package. It requires a
special sound card that uses a Texas Instruments TMS320C25
DSP to run filters or audio demodulators. It can interface
to a TNC via a TTL digital port and replace the TNC's poor
filtering.

It's not compatible with other sound cards but it can
co-exist with them. I use my Soundblaster Pro and Hamblaster
together. I can, for example, run a filter on the the Hamblaster,
connect it's output the Soundblaster and record a CW signal using
the SB software under the Windows environment.

New Developements

1) Adaptive (LMS) filter

We now have an operational adaptive filter. It converges
on and filters out continuous tones. Last night I was
copying SB on 40 meters and I transmitted an interfering
signal using a Kenwood TS440 and a dummy load. The
heterodyne was so strong that it was almost impossible to
copy the QSO. I connected the receiver's headphone output
to the Hamblaster and loaded the LMS filter. I then turned
off the computer.

The heterodyne was completely removed ad I was able copy
voice clearly with no interference. The was some background
but it wasn't objectionable.

There will be some controls added to the LMS filter that will allow you to adjust the delay, filter taps and noise floor. I'll keep you posted!

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

2351. QSL help pse

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 15:34:47 UTC
From: kenman@iastate.edu
Message-ID: <2kvnan$jf5@news.iastate.edu>
Source record: 270303

Haven't rcvd my callbook yet. Could some kind soul look these up for me?

CT4UW

P4ZGG
(He kept saying Zero, but I assume this was for Z and not for 0?)

Tnx and 73, Ken

--
Ken Anderson N0ZEM Kenman@iastate.edu PH: 515.294.8996
126 Soil Tilth Bldg., Iowa State University, Ames, Iowa 50011

2352. Re: MSK receiver?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 16:21:08 UTC
From: scottcr@wkuvx1.wku.edu
Message-ID: <1994Mar1.102108.1@wkuvx2.wku.edu>
Source record: 270304
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

In article <TM.94Feb23143402@koppelo.cs.tut.fi>, tm@koppelo.cs.tut.fi (M{nnist| Tatu) writes:
>
> Does anyone know where to find or how to build a radio receiver that
> picks up MSK (minimium shift keying) modulated 100 bits/sec data
> transmitted on aprox 300 kHz carrier signal?
>
> This would be used to receive differential GPS-corrections from a
> reference station.
>
> Any pointers?
> --
> --
> Tatu Mannisto Tampere Univ. of TeXnology
> +358 31 434 456 home Internet: tm@cs.tut.fi
> +358 31 162 951 work (HB230)
> --

Normally you would mix a LO with the ~ 300 khz to get say, a 50 khz IF,
then use something like a EXAR 2211 FSK demod to recover the data.

Or, use a phillips 615 (NE or SA) to do the mix, lo, and demod, all
on one chip.

--
SCOTTCR@WKUVX1.WKU.EDU aka Chris Scott- C/E Public Radio- Western KY U
Telco: (502) 745-3834 Hm & Fax: (502) 781-1232
...just another insignificant VAX user. \\\//
(o o)
--oo0-(_)-0oo----------------------

2353. Re: 5 by 5...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 16:35:25 UTC
From: zardoz@ornews.intel.com
Message-ID: <2kvqsu$r0d@ornews.intel.com>
Source record: 270305

In article <762531813snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:

>In article <gregg.68.000DC24B@plains.nodak.edu> gregg@plains.nodak.edu writes:

> > Where did the phrase, "I read you five by five." come from and what does
> > it mean. I know it means good copy, but what specifically does it mean?
> > Does it come from the early days of radar, of ham radio, of military
> > aviation or what?

> It comes from the RST signal reporting system.

I would question this. You will never hear an air traffic controller give a signal report greater than 5X5. In fact, I've never heard one give a report under 5X5 for that matter. It seems to me they have 3 signal reports commonly used:

"Taylorcraft 99999, You're 5 by 5. Squawk 4747, transistion approved".

"Aircraft calling, you're garbled and unreadable. Remain clear of ARSA/TCA".

"Aircraft calling, you're scratchy and unreadable. Remain clear of ARSA/TCA".

The last two phrases are often used in response to aircraft handhelds. I've started using 5X5 myself after becoming disgusted with the abuse of 5X9. I used to always use 5X7 out of generosity but a more middle figure is probably better. 5X9 should require meter repair while 5X0 obviously means you only hear hiss. Actually, "Loud and Clear" has no more syllables than "Five by Five" and will probably be better understood by a wider audience.

A Tailorcraft suits me fine.

--
zardoz@ornews.intel.com WA7LDV

2354. Re: FT-530 vs TH-78A

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 16:45:45 UTC
From: Allen Wallace <allen@dtint.dtint.com>
Message-ID: <1994Mar1.164545.2089@dtint.dtint.com>
Source record: 270306

In article <1994Feb27.210832.5738@yvax.byu.edu> , sandersm@yvax.byu.edu writes:
>I am debating on wether to buy a Yaesu FT-530 or a Kenwood Th-78A. I would like
>to hear experiences from owners of both radios. I am new to this hobby and
>would appreciate any info. 73's TNX Chad

I am also looking at both radios! Please post answers to the internet!
--

Tom Kimpton(System Administrator) {root,tom}@dtint.dtint.com
Digital Technology Int. (801)226-2984
500 W. 1200 South, Orem UT, 84057 FAX (801) 226-8438

2355. QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 16:57:10 UTC
From: Allen Wallace <allen@dtint.dtint.com>
Message-ID: <1994Mar1.165710.2145@dtint.dtint.com>
Source record: 270307

In the last QST, they reviewed 4 different dual-band HTs. The question I have, is what is their extended TX / RX frequency range when modified?

For example, I've heard a rumor that the TH-78A can transmit AM down in the aircraft band. I don't believe it, nor would I ever want to transmit down there!

I've also heard that most receive well into the 800 MHZ range.

Can anyone enlighten me?

73,

Allen Wallace
--

Tom Kimpton(System Administrator) {root,tom}@dtint.dtint.com
Digital Technology Int. (801)226-2984
500 W. 1200 South, Orem UT, 84057 FAX (801) 226-8438

2356. Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 17:18:33 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-010394101352@waters.corp.mot.com.corp.mot.com>
Source record: 270308

In article <CLystu.72n@news.Hawaii.Edu>, jherman@uhunix3.uhcc.Hawaii.Edu
(Jeff Herman) wrote:

> The OTs used to be able to carry on a QSO and a verbal conversation
> simultaneously!

I could do that once too, but not at 30 wpm :-)

I said:

> >Strange that the SITOR and FAX stuff seems to be busy passing traffic all
> >the time even if you can only hear one side of it.
>
> Dunno. Those are new modes to me...

New to me too - thats why I am spending time on them :-)

> I'll deny I ever said this but I will grant you that other modes will
> eventually take over CW (oh my God - I don't believe I admitted that)

I share your regret, CW is still a *lot* of fun. However the reality is
that the world is going the other way...

BTW did you see the article about spark/arc transmitters in this month's
QST? Not *that* would be fun to play with!

> - what will it take? As long as the shore stations keep monitoring the
> CW frequencies some ships will keep using that mode. So the decision rests
> entirely in the lap of the shore stations.

Not quite, I suspect it is essentially economics. Like the Japanese
proposal for totally unmanned ships programmed to go from sea bouy to sea
bouy! I hope I never see that, but if it saves a buck ...

--
Phooey on it all - I'm going sailing for a year or two!!!

2357. Re: A transmission line loss question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 17:52:23 UTC
From: markb@hpcss01.cup.hp.com
Message-ID: <64660001@hpcss01.cup.hp.com>
Source record: 270309

Cut the cable to the shortest length. That will reduce the loss the most.
There is no reason to have the transmission line any particular length.
THis is an old wives tale.
Read the ARRL book Refelections if you are curious, or learn how
to use a SMITH chart.

2358. QSL Route, help.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 17:55:17 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Mar2.015517.1@ntuvax.ntu.ac.sg>
Source record: 270310

Hi,

I need help with QSL route for the following:-

JA7KDC, BV200, 4F2IR, BV6ER, 9V1WR, JR6HI, 4S7OF, K5WOT

Tks.

73 de 9V1 Daniel

2359. Body Parts by J. Herman

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 17:59:25 UTC
From: jangus@skyld.grendel.com
Message-ID: <762544765snx@skyld.grendel.com>
Source record: 270311

Waiting now for the headlines in the LA Times, Dateline Hawaii:

"Deranged Professor detonates 5 pounds of plastic explosive in mens
room on campus. Police sifting through wreckage are puzzled by the
large quantity of black basket weave material. Several used condoms
and a radio were also found at the blast site."

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2360. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 18:01:43 UTC
From: drumhell@claudette.nrl.navy.mil
Message-ID: <CLzzEw.Mzu@ra.nrl.navy.mil>
Source record: 270312

In article <CLwrFv.M1o@odin.corp.sgi.com> adams@chuck.dallas.sgi.com (Charles Adams) writes:

> 1. Many complain about their penmanship. Looks like to me you can kill
> two birds with one stone. Get a book on penmanship (they still
> write those don't they?). Find the best style to copy and work on
> penmanship at the same time.
>
> 2. Start with cursive, don't DON'T print.
>
> 3. Practice not dotting i's and j's and don't cross the t's.
> This will come in handy later at higher speeds.
>
> [the rest deleted]

Good advice. I started to use cursive at about 10 wpm because I knew that as I approached higher speeds, printing would become a `bottleneck.'

I have very neat penmanship (I spent a few years in Catholic school), but it really goes to hell at my current limit of 20 wpm+. This kind of bothers me, as I have always taken pride in my penmanship.

But here's a curious thing... now *cursive* is becoming a bottleneck, and the main reason is the lower case letter `m.' I can't write it fast enough. (Three humps in a row!) I can follow along at 20 wpm fairly well, but when I hit the letter `m,' I often stumble and miss the rest of the word. What to do? Suggestions.

And another question about Morse code... Has anyone taken any of the Morse code tests for a FCC radiotelegraph license? If so, what method of copying do the examiners allow? Is it strictly by hand (pencil and paper), or can you use a keyboard? For the second class license you must be able to copy plain English at 25 wpm, which is kind of fast for pencil and paper. (Well, too fast for me at least.)

-Dave
--
David Drumheller, KA3QBQ phone: (202) 767-3524
Acoustics Division, Code 7140 fax: (202) 404-7732
Naval Research Laboratory
Washington, DC 20375-5350 e-mail: drumhell@claudette.nrl.navy.mil

2361. International Callsign servers?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 18:06:07 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Mar2.020607.1@ntuvax.ntu.ac.sg>
Source record: 270313

Hi,

Are there any callsign servers out there which hold references
for non-US/Canadian (eg. for japan) callsigns?

73 de 9V Daniel

2362. Re: Super Morse 4.10 is out!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 18:22:00 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCM00Co.4Cv@netcom.com>
Source record: 270314

You can grab a copy via anonymous FTP on World:
ftp ftp.std.com:/pub/hamradio/pc/theory-and-morse

Scott

--
```
================================================================================
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
| Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
================================================================================
```

2363. LOW BAND DX'ing book

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 18:59:45 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-010394105223@fp2-st-affairs-11.uoregon.edu>
Source record: 270315

Did anyone notice that the latest issue (March) QST now says ARRL publications is selling: "Antennas & Techniques for Low Band DX'ing"?

It's described as revised and expanded 2nd ed. 1994 by John Devoldere, ON4UN.

Looks like the wait is over!

The listing is under Antennas & Transmission Lines in the ARRL publications section.

2364. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 19:56:34 UTC
From: ah301@yfn.ysu.edu
Message-ID: <ah301-010394145634@sy_j.pgh.wec.com>
Source record: 270316

In article <199402282109.NAA17392@ucsd.edu>,
William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:

> >use...it's XYL and it stands for ex young lady....(which I take great
> >offense to as a deragatory remark (I am not an "XYL" because I am only 22
> >years old! :-)) The term is used to refer to one's wife...(because most
>

is there a list of jargon and their meanings used by hams on 2m/440,
terms like

destinated
very good
fine business

73s
Jerry N3RKD

2365. Re: Satellite progs on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 20:37:07 UTC
From: ian@isis.demon.co.uk
Message-ID: <762554227snz@isis.demon.co.uk>
Source record: 270317
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc

In article <wy1zCLLyFJ.IpF@netcom.com> wy1z@netcom.com "Scott Ehrlich" writes:

>
>I have now placed some satellite tracking programs on World:
>
>- stsplus.zip
>
>- stsorbit.zip
>
>- traksat {trak300a.zip & trak300b.zip} (latest version of traksat)
>
>
>They are available via anonymous FTP via
>
>ftp ftp.std.com:/pub/hamradio/pc/satellite
>
>
>If you have any problems, questions, or comments, please e-mail them to me.
>
>I tried very hard to search for stsplus through many archie searches, and
>only found one site which carried it. I hope that by making it available
>on World it will be easier to obtain.

Ah, but which version of STSPLUS is it ? The damned thing gets updated
two or three times a year, or so it seems. The version numbering is pretty
unusual as well. For what it's worth, the latest I've seen is 9353, which
if I recall the method makes it the last week in '93. 9333 was the last
major upgrade.

Regards
Ian.
--

| Ian Smith | "The Moving Finger writes;
| ian@isis.demon.co.uk | and, having writ, Moves on."

2366. Re: Repeater for SD to Anaheim?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 21:02:20 UTC
From: garym@alsys.com
Message-ID: <CM07s2.5HC@alsys.com>
Source record: 270318

In <hlb.762455075@loral> hlb@li.loral.com (hlb) writes:
>Is there a 2m repeater between San Diego and Anaheim that would enable
>communication? Or perhaps a set of repeaters that could be linked?
>Providing of course we joined the necessary clubs?

There's a couple of possibilites that come to mind immediately. First, Santiago Pk gets into most of SD pretty good and I think it should get Anaheim.

On 2M you should try 145.22- (103.5)on Santiago Pk. There are other LA/Orange county rptrs that you can get from SD with gain antennas (but not very well with typical mobile antennas). I used to get into Crestline just fine using 40w into a 13dbd yagi array from Escondido. Another possibility is the 147.09+ repeater on Catalina, but I don't know how well it gets to Anaheim.

On 220, the Condor net should do it, they also have a rptr on Santiago that gets SD (224.82- 156.7), plus they have a repeater at Big Bear (224.18-156.7) that should cover Anaheim.

--GaryM
--
Gary Morris KK6YB Internet: garym@alsys.com
San Diego, CA USA Phone: +1 619-457-2700 x128 (work)

2367. Hamfest in NJ

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 21:03:34 UTC
From: taylor@tix.timeplex.COM
Message-ID: <9403012103.AA05055@tix.timeplex.com>
Source record: 270319

One of the first Hamfests this Spring season is the Splitrock ARA
and West Morris Wireless combined event in Denville NJ, Sat. March
5th at 8 am. Vendors at 6 am. Also VE session starts promptly at 9 am
(1 session only, register starting at 8). If ur in the NNJ/NY Metro
area, take rt 80 to exit 37 to Morris Catholic HS on Morris Ave.,
Denville. talk in on 2 mtrs 146.985 RPT.

KC2WE

2368. Re: 5 by 5...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 21:48:54 UTC
From: debmoore@netcom.com
Message-ID: <debmooreCM09xI.87y@netcom.com>
Source record: 270320

Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:

: In article <gregg.68.000DC24B@plains.nodak.edu> gregg@plains.nodak.edu writes:

: > Where did the phrase, "I read you five by five." come from and what does
: > it mean. I know it means good copy, but what specifically does it mean?
: > Does it come from the early days of radar, of ham radio, of military
: > aviation or what?

: It comes from the RST signal reporting system. (I'll let others flame
: each other as to its orginations.) The scales being R for readibility
: S for signal strength and T for tone. (We're speaking morse wireless
: here.) R is from 1 (not readable) to 5 (perfectably readable). S is
: from 1 (I can't hear it) to 9 (It's really loud) and T for for tone
: with 1 (rough AC buzz) to 9 (pure note).

: Of course, with the advent of phone (am and ssb) operation they dropped
: the tone report. And as most DXers will tell you, "You're 59 LA" doesn't
: have any bearing on received signal, but instead means, "I want a QSL
: card."

As a radio operator in the USMC in the early sixties, we used a scale of
1 - 5 for Signal Strength, hence 5x5. The military 2 1/2 ton truck was
known as a 6x6, so the "saltier" operators would say "I hear you like
a truck".

73's___Bob
--
==========
Bob Shilling Berkeley, CA debmoore@netcom.com
KK6QQ rcshilling@lbl.gov
DoD# 1195

2369. XYLs (was Re: JARGON)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 22:13:01 UTC
From: fms@sw.stratus.com
Message-ID: <2l0ele$6is@transfer.stratus.com>
Source record: 270321

On a slightly related note, I met N2XYL this past weekend. I heard somebody clear with this person on the repeater, but didn't hear the person's voice. My first thought was "Wow, I sure hope a woman got that call!" Sure enough, I met Tina at the North Berkshire ARC meeting that evening. She was quite amused at having gotten N2XYL as her call, and agreed with me that it was good that a woman got it!

Personally, when I talk to a fellow ham about his wife, I talk about his wife, not his XYL. And Dan's not old enough to be my OM... :-)

73 de Faith N1JIT
--
Faith M. Senie InterNet: fms@vos.stratus.com
Stratus Computer, Inc. InterNet: fms@hoop.sw.stratus.com
55 Fairbanks Blvd. Pkt Radio: n1jit@wa1phy.ma.usa.na
Marlboro, MA 01752 Phone: (508)460-2632

Curiosity doesn't flourish among the burned-out...

2370. How Long Have You Waited?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 22:23:36 UTC
From: mmjjmm@post.its.mcw.edu
Message-ID: <2l0f98$di8@post.its.mcw.edu>
Source record: 270322

Has anyone taken the Tech exam prior to Jan 15 and still not gotten the callsign. I am trying to gauge how long the wait is currently taking.X

--
Michael J. Malloy
Medical College of Wisconsin Truth is a Virus
mmjjmm@post.its.mcw.edu

2371. Re: 10-10#

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-01 22:50:58 UTC
From: genem@cup.hp.com
Message-ID: <CM0Csy.6q6@cup.hp.com>
Source record: 270323

: Anyone know how to find out my old number?
: Mike AA4MW

I checked the 10-10 server (209-781-1344) and AA4MW doesn't appear in
there as having a number.

+---+
|Gene Marshall \-\-\ email: genem@cup.hp.com |
|Hewlett Packard Co., MS 42UN | Tel: 408/447-5282 |
|Software Svcs & Tech. Division (SST) | ___o Fax: 408/447-5039 |
|11000 Wolfe Road L^\<._ AA6IY@N6LDL.CA.USA.NA |
|Cupertino, CA 95014 (_)/ (_) CompuServe: 75060,260 |
+---+

2372. Mobile Phone

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 00:35:33 UTC
From: wnelson@nyx10.cs.du.edu
Message-ID: <1994Mar2.003533.10017@mnemosyne.cs.du.edu>
Source record: 270324

I am looking for a way to make phone calls from my car through my own phone line, not a cellular service. I have heard a little about 'autopatches', but have some questions.

1 - I this possible with half duplex on one frequency? if so, would the person on the other end have to dial some touch-tone to switch the base unit from receive to transmit, etc?

2 - Is there a charge for using ham repeaters.

3 - Would my best bet be to try to get a ham lisence? My only reason would be for the phone service.

4 - Could it be done with a CB? Would it be legal? What is the range?

Thank you very much!

--
W. Robert Nelson (wnelson@nyx.cs.du.edu)

2373. Repeater for SD to Anaheim?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 00:40:39 UTC
From: William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM
Message-ID: <9402017625.AA762568839@smtpgty.anatcp.rockwell.com>
Source record: 270325

Howard [hlb@li.loral.com] writes:

>Is there a 2m repeater between San Diego and Anaheim that would
>enable communication? Or perhaps a set of repeaters that could
>be linked? Providing of course we joined the necessary clubs?

>Thanks for the help.

Three possibilities come to mind, depends a lot on where in San Diego:

BARC 146.920 - pl114.8

Catalina 147.090 + pl107.2

CLARA 145.220 - 103.5

Note that CLARA has been having some QRM problems of late, but when it is
up, that's the one for San Diego to Orange County (and then some).

73

Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI
(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com
---
Who are you? * I am number 2. * Who is number 1? * You are number 6.

2374. Re: 5 by 5...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 00:47:25 UTC
From: julian@bongo.tele.com
Message-ID: <1994Mar2.004725.11637@bongo.tele.com>
Source record: 270326

In article <debmooreCM09xI.87y@netcom.com> debmoore@netcom.com (Bob Shilling) writes:
>As a radio operator in the USMC in the early sixties, we used a scale of
>1 - 5 for Signal Strength, hence 5x5. The military 2 1/2 ton truck was
>known as a 6x6, so the "saltier" operators would say "I hear you like
>a truck".

I have been known to give a 2 by 2 report. I reserve it
for the obnoxious, ill mannered operators who have
transmitters with more Watts than their IQ.

It means I hear you Too damn loud and Too damn often.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

2375. Re: How Long Have You Waited?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 00:53:44 UTC
From: ijordan@freenet3.scri.fsu.edu
Message-ID: <2l0o2o$8fh@freenet3.scri.fsu.edu>
Source record: 270327

I took the test with a friend around December 11th, and it took exactly 8 weeks to come for both of us. My brother took it a week later, and it took exactly 9 weeks to come. Hope that helps and good luck.{

Ian Jordan
KC7ANP

--
* * Ian Jordan * *
KC7ANP

2376. IPS Monthly Solar Geophysical Summary

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 01:00:55 UTC
From: rwc@icarus.syd.ips.oz.au
Message-ID: <1994Mar2.010055.4755@ips.oz.au>
Source record: 270228
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

ISSUED BY RWC SYDNEY, SUMMARY FOR FEBRUARY 1994

1. INDICES

SOLAR MAGNETIC AUST
Day 10 cm flux A-INDEX T INDEX
February 01 094 06 61
February 02 096 14 76
February 03 098 10 55
February 04 095 10 43
February 05 093 21 50
February 06 095 39 -4
February 07 096 45 -31
February 08 095 42 -24
February 09 101 32 21
February 10 094 28 -4
February 11 093 38 20
February 12 098 27 26
February 13 098 30 36
February 14 101 28 48
February 15 104 26 72
February 16 105 16 41
February 17 106 11 54
February 18 106 07 51
February 19 108 23 81
February 20 108 13 51
February 21 105 65 64
February 22 107 51 -9
February 23 107 11 24
February 24 105 03 52
February 25 097 12 71
February 26 094 06 27
February 27 095 06 55
February 28 093 57

10 CM FLUX SUNSPOT NUMBER A INDEX AUST FLARES
T INDEX
Monthly Monthly Yearly Monthly Monthly >M1.0
Month Average Average Average Average Average
February 94 99.5 35.9 22.5 38.0 2
January 94 115.0 58.8 12.4 60.2 11
December 93 104.9 49.4 10.4 56.4 8
November 93 95.8 34.8 11.7 50.0 3
October 93 100.2 55.4 11.6 31.3 3

September 93 86.3 21.7 12.3 33.6 2
August 93 93.7 42.0 52.1 11.0 48.7 1
July 93 99.0 57.3 54.4 10.6 59.6 4
June 93 109.4 49.1 55.8 13.0 62.6 13
May 93 112.4 61.2 59.6 11.0 64.3 5
April 93 115.5 61.9 63.4 15.7 77.7 3
March 93 136.6 70.5 66.5 18.9 81.5 13
February 93 142.5 90.5 69.1 12.8 76.0 18

IPS Predicted (Yearly Smoothed) Sunspot Numbers for September 1993-August 1994
Month Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug
SSN 48.3 45.5 42.8 40.5 38.3 36.3 35.7 34.4 32.5 30.7 27.8 25.4

Latest T-Indices for IPS Advanced Stand-Alone Prediction System-(ASAPS)
Last update: Febraury 1994 Solar-Geophysical Summary
Year Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
1988 45 42 58 74 72 84 84 95 115 133 117 128
1989 147 164 135 140 141 157 162 149 143 159 164 152
1990 150 128 135 129 126 137 136 137 141 136 122 132
1991 143 177 173 165 136 124 142 128 137 132 122 131
1992 153 173 157 136 97 81 88 67 69 68 85 90
1993 75 78 81 65 63 63 59 50 36 34 33 42*
1994 39* 37* 36* 35* 34* 31* 29* 27* 24* 22* 21* 19*
1995 19* 18* 17* 16* 15* 14* 14* 13* 12* 11* 11* 10*
1996 10* 9* 9* 8* 8* 7* 8* 8* 9* 10* 11* 12*
1997 13* 14* 16* 18* 20* 22* 25* 28* 32* 35* 40* 46*
Asterisk indicates predicted value.
For information concerning ASAPS for an IBM PC (or compatible) contact IPS.

The IPS Monthly T-index is derived from the observed monthly median values
of foF2 for each hour at up to 40 ionospheric stations worldwide.
These records become available from IPS stations in Australia very soon after
each month, but the majority are received up to one year later.
This means that the exact observed value of the monthly T-index is not
available until some months later.

The predicted smoothed monthly T-indices are computed by using a statistical
analysis of the observed monthly T-indices for all solar cycles since 1938.
The IPS T-indices may not be updated each month but only when sufficient new
data becomes available.
==========
2. FLARES AND FADEOUTS

All M flares with an energy greater than or equal to M1 are tabulated under
class M flares.
However, times of fade-outs are shown only for flares with an energy greater
than X-ray class M3.

DATE CLASS M CLASS X FADEOUT POSSIBLE
FLARES FLARES ON DAYLIGHT CIRCUIT
February 20 1 0104-0216 UT
February 27 1

2.1 Comments on Solar Activity.

Solar activity was at very low to low levels for most of February.
Two M-class flares were observed during the month, the largest, an M4.0/3B
was observed at 0141UT on February 20, and an M2.8 was observed at
0920UT on February 27.
The daily 10cm flux showed very little variation throughout the month.
The peak value for the month was 108 observed on February 19 and 20. The
minimum value for the month was 93 observed on February 5, 11 and 28.

==========
3. GEOMAGNETIC DISTURBANCES (for Learmonth, WA)
DATE COMMENTS

February 5-16 The field was at active levels on Feb 5, increasing
to major storm levels on Feb 6 and 7. Activity then
reduced to active to minor storm levels Feb 8 to 14,
declining further to active levels Feb 15-16.

Febraury 21-22 Major storm levels observed following a sudden
commencement of 135nT at 0900UT on the 21st. This SSC
was due to an M4 flare on 20th. A recurrent
disturbance was also expected during this interval.

3.1 Comments on Geomagnetic Activity.

Conditions during February were disturbed. The peak A index
for the month was 65 observed on the 21st. The long disturbance
Feb 5-16 appears to be due to a broad south polar coronal hole.

==========
4. IONOSPHERIC DISTURBANCES (for Sydney)
DATE TIMES

February 6 Depressed 30% 00-05UT and 21-22 UT.

February 7 Depressed 20-30% all day.

February 8 Depressed 20-30% during daylight hours.

February 9 Depressed 20-30% 00-03UT.

February 10 Depressed 20% during daylight hours.

February 16 Spread F observed during local night.

February 21 Depressed 20% after local dawn.

February 22 Depressed 30% during daylight hours.

4.1 Comments on Ionospheric Conditions.

Propagation conditions up to February 24 were degraded.
Degraded communications were experienced Feb 5-16, and Feb 21-22.
The deepest depressions were observed on February 7th, 8th and 22nd.
==========
5. IPS WARNINGS AND ALERTS ISSUED

WARNINGS
NO ISSUE TIME ISSUE DATE BEGIN END COMMENTS
3 2312 UT 03 2 1994 07 2 1994 11 2 1994 Magnetic and Ionospheric
4 0249 UT 11 2 1994 12 2 1994 17 2 1994 Magnetic and Ionospheric
5 2318 UT 14 2 1994 15 2 1994 17 2 1994 Magnetic and Ionospheric
6 2319 UT 17 2 1994 20 2 1994 23 2 1994 Magnetic and Ionospheric

SIGNIFICANT EVENT SUMMARY NO TIME DATE COMMENTS
None Issued.

SWF WARNING NO TIME DATE
None Issued.

DATE OF ISSUE TYPE OF ALERT
07 Feb Magnetic
09 Feb Magnetic
12 Feb Magnetic
13 Feb Magnetic
20 Feb Proton (start)
22 Feb Magnetic
23 Feb Magnetic
23 Feb Proton (end)

DATE SWF BEGIN-END (UT)
None issued
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2377. This Week in Amateur Radio First Anniversary Show

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 01:12:05 UTC
From: kxkvi@delphi.com
Message-ID: <xl4pnoV.kxkvi@delphi.com>
Source record: 270229

FOR IMMEDIATE RELEASE

Community Video Associates, Inc., has announced that "This Week in Amateur Radio" will celebrate its first anniversary on Saturday, March 5th. "This Week in Amateur Radio", the hobby's only satellite-delivered audio bulletin service, is carried on the Omega Radio Network each Saturday at 7:30 PM EST, on Galaxy III, transponder 17 (9H), 5.8 MHz wideband audio (4.040 GHz). Galaxy III is a Hughes HS 376 commercial communications satellite located in geosynchronous orbit at 93.5 degrees west longitude.

"This Week in Amateur Radio" is retransmitted "live" or by tape delay on HF amateur radio nets and VHF/UHF repeaters throughout North America. The program offers the latest news stories on technological advancement, national and international regulatory activites, operating news, ARRL, AMSAT, and RAC bulletins, and weekly features on contesting, YL activities, hamfests and conventions, DX, and satellite operation. Each weekly "newsmagazine" lasts 60 to 90 minutes and is suitable for retransmission on amateur frequencies.

"TWIAR"'s First Anniversary program will be about 120 minutes in length and feature live telephone call-in segments throughout the show. Calls will be taken at 518/877-7374. Affiliates that usually carry the program by tape delay are encouraged to "go live" for this special March 5th feature.

The program is produced in the Albany, New York area by Hudson Division Assistant Director Stephan Anderman, WA3RKB, and George Bowen, N2LQS. Weekly program summaries are circulated on amateur packet bulletin boards, FidoNet, GEnie, USenet, and Internet. For additional information or retransmission permission, contact WA3RKB at 518/877-7374, at P. O. Box 8592 - Albany, New York 12208-0592 or via amateur packet @ WA2UMX.#ENY.NY.USA.NA.

2378. Re: ACE Communications - good? bad?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 01:28:13 UTC
From: U29255@uicvm.uic.edu
Message-ID: <94060.192813U29255@uicvm.uic.edu>
Source record: 270230

Too bad... I dealt with them about ten years ago, and they were tripping over themselves to give me excellent service. They spent a lot of time describing products to me, and then when I ordered the radio, decided I had enough fun (in a couple of weeks) and sent it back, they gave me my money back pronto. I liked them.

2379. Re: Call Sign Re-issue

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 01:51:19 UTC
From: clmorgan@miavx3.mid.muohio.edu
Message-ID: <1994Mar1.205119.2008@miavx3.mid.muohio.edu>
Source record: 270231

In article <50030048@hpscit.sc.hp.com>, rogerm@hpscit.sc.hp.com (Roger Myers) writes:
>
> Hi,
>
> I recently heard that the FCC is now allowing people to get call signs
> re-issued. I would like to my dad's call sign. He passed away 5 years ago.
> Does anyone know the procedure to get a call sign re-issue?
>
> Thanks,
>
> Roger Myers
> WB7PJS

I'd expect this will come under the "vanity call sign" program ... if and
when it occurs ... and will require FCC 610V.

I doubt that they (the Government) will reissue old calls if they can be sold
thru the vanity program (sure don't like that name!!!).

Good luck. Hope you get it.

73 >< Carl
K8NHE

2380. Re: How Long Have You Waited?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 02:32:41 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2l0ts9$k3d@bigfoot.wustl.edu>
Source record: 270232

Ian Jordan (ijordan@freenet3.scri.fsu.edu) wrote:
: I took the test with a friend around December 11th, and it took exactly 8
: weeks to come for both of us. My brother took it a week later, and it
: took exactly 9 weeks to come. Hope that helps and good luck.{

: Ian Jordan
: KC7ANP

: --
: * * Ian Jordan * *

I got my CSCE on 23 Dec; still waiting today. Luckily, I have plenty of
classes to keep me busy and not wondering.

--jesse

2381. BY hams imprisoned by PRC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 03:01:54 UTC
From: becker@shell.portal.com
Message-ID: <CM0oF8.78v@unix.portal.com>
Source record: 270233

I found this on the DX reflector, and post it here.
>
> MORE ON THE VOA STORY ABOUT "BY" OPS. Fred, K3ZO, who has just recently
> returned from Thailand where he operated as HS0ZAR, had doubts about the
> Voice of America (VOA) report that all BY hams have been rounded up and
> sent to labor camps. Fred stated he heard and worked plenty of BAs, BYs
> and BZs while in Thailand, so he decided to investigated the Voice of
> America broadcast and found the following information:
>
> Here is the exact VOA text, which was based on a news item that was on
> the REUTERS news wire on February 16th: "Police in China have cracked
> down on the country's largest group of amateur radio operators, and
> have sent three of the group's leaders to labor camps.
>
> The "Official China Business Times Today" (Wed. Fed. 16th) Identified
> the group as "Radio-Air-Salon", based in Henan Province (BY6). It said
> police have caught 61 members of the group -- which had effectively
> taken over some 27 radio channels.
>
> The report said Radio-Air-Salon members often interrupted regular
> broadcasts with their own conversations and illegally listened in on
> restricted frequencies. It said the use of technical equipment to
> create chaos in the airwaves is a new type of illegal activity.......
>
> Fred comments he has tried to work as many different Chinese stations
> as possible while he was in Thailand, but he never heard BY6. The ARRL
> reports that their information shows only one licensed amateur radio
> station in PRC, club station BY6SRA, licensed to the Shanxi Branch of
> the China Radio Sports Association (CRSA). CRSA is the IARU member
> society for China. Fred points out that the VOA broadcast only mentions
> that three members of one club were sent to "re-education camps", this
> is a far cry from "ALL BY's". This is a prime example of how RUMORS can
> spread like wildfires and blow things out of proportion Also, the press
> has often referred to all manners of radio hobbyists as "AMATEUR RADIO
> OPERATORS." The group of hobbyists mentioned in the broadcast may be
> engaging in SWL and CB type activities rather than actual amateur
> operations. Fred states such activities are widespread in Asia and has
> experienced pirate "CB" operations on the 40 meter band while operating
> from HS-land. So in summary, amateur radio is alive and well in PRC.
> Reports of activity this week by BY1QH on both 40 and 80 meters is
> proof. Also, Martti, OH2BH, was in Beijing recently and visited the
> operators and station of BY1PK. Martti stated things were just fine
> and no one is rounded up in the labor camps. As matter of fact, foreign
> operators may be licensed in PRC soon. (TNX to K3ZO, N8II and OH2BH)

> ----------------------------
> Tedd Mirgliotta KB8NW
> InterNet: kb8nw@barf80.nshore.org
> Basic Amateur Radio Frequency BBS (BARF-80) +1 216/237-8208
> "Totally devoted to Amateur Radio" - 24 Hrs a day 8/N/1 14.4k-300 baud
>

2382. Re: CQ - magazine.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 04:07:54 UTC
From: Joe_Behar@magic-bbs.corp.apple.com
Message-ID: <1994Mar01.230754.321158@magic-bbs.corp.apple.com>
Source record: 270234

The addres is
CQ Communications, Inc.
76 North Broadway
Hicksville, NY 11801-2953 USA

Joe

2383. Re: Getting Coax Seal OFF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 04:37:48 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar2.043748.24842@ke4zv.atl.ga.us>
Source record: 270235

In article <2kvt4j$37b@bigfoot.wustl.edu> jlw3@cec3.wustl.edu (Jesse L Wei) writes:
>This *really* digresses from radio, but most solvents kill anything
>(including people) pretty well--kills grass, animals, plants, people. . .

Yeah, great stuff. Don't tell the tree-huggers, they'll try to get them
banned. :-(

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2384. Re: Mobile Phone

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 05:15:08 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar2.051508.25139@ke4zv.atl.ga.us>
Source record: 270236

In article <1994Mar2.003533.10017@mnemosyne.cs.du.edu> wnelson@nyx10.cs.du.edu (W. Robert Nelson) writes:
>I am looking for a way to make phone calls from my car through my own phone
>line, not a cellular service. I have heard a little about 'autopatches', but
>have some questions.
>
>1 - I this possible with half duplex on one frequency? if so, would the
> person on the other end have to dial some touch-tone to switch the base
> unit from receive to transmit, etc?

Yes it's possible, and no the party on the phone isn't permitted to turn around the link (in the amateur service). A licensed individual has to do that, and it's normally done by the mobile operator dropping his carrier. IE you unkey the mic and the patch begins transmitting the phone line audio. When you key again, the patch starts feeding your audio to the phone line. Hence *half* duplex.

Note a repeater can do this easily because it's listening on a different frequency than that on which it's transmitting. For a *simpatch*, which isn't a repeater, it's a bit more complex. The patch *samples* the frequency at short intervals (say 1/10th second every second) by dropping it's carrier and listening for yours. If it hears your carrier, it turns around, if not it goes back to transmitting phone audio. The short pops aren't too annoying.

>2 - Is there a charge for using ham repeaters.

Technically no. Amateurs aren't allowed to charge for the use of their stations. However, repeater owners have the right to limit access to their equipment, and one way they do that is to require operators to be members of their "club". There may be annual dues associated with the club.

>3 - Would my best bet be to try to get a ham lisence? My only reason would
> be for the phone service.

No. It's expressly forbidden for amateurs to use patches solely to avoid telco charges. If you want mobile phone, get a mobile phone. Patching is allowed in the amateur service only for experimental purposes, and for public service and emergency uses. They are not to be treated as alternatives to cellular, IMTS, or other common carrier systems. (Casual patches should be viewed as ways of *testing* the experimental or emergency system.) This is covered in Article 32 of the international regulations. (The FCC allows quite a bit more latitude for *domestic uses only* than what the international regulations require, but that doesn't mean there's a blank check to abuse the amateur system as a way of avoiding

using the public telecommunications systems.)

>4 - Could it be done with a CB? Would it be legal? What is the range?

I've heard simpatches being used on CB (Hell, I've heard all sorts of things on CB). I'm not sure whether such an interconnect is legal in the CB service. Part 95 doesn't say, but it may fall under the same common carrier restrictions as other telco bypass schemes. Simpatches are legal in certain *commercially* licensed services. That would be your best course if you *must* interconnect to the telco system via your home line. Otherwise, an IMTS or cellular phone is your best alternative.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2385. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 05:42:02 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar2.054202.25433@ke4zv.atl.ga.us>
Source record: 270237

In article <1994Feb28.212904.10734@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
>Seems to me that Gary wants to set up a digital network
>the hard way, with only people interested in digital
>networks.

Actually I'm trying to say we need to set up the network
the *right* way with people who will *keep* the network
operational as a service provider. That's a different
mentality than that normally found among DXers and
contesters. (Not that there aren't some from those groups
who *also* have the service mentality, just that it isn't
a normal part of DXing or contesting.)

>In the Northeast, winning the 10 GHz contest depends
>on *reliable* links. After all, there is the certainty
>of rain and the even the possibility of snow... Dale
>made his long haul contact and I didn't--with no
>effect on the who won. Even my longest contact
>was made over a path known to work well. This is
>why I haul stuff up hiking trails, rather than
>hoping for an opening....

In reading the articles on 10 GHz operating in the current
QST, one wouldn't get the impression of *reliable* links
with 50 db fade margins that work reliably 7x24 year after
year. *That's* the kind of links a digital network must
have.

>I wasn't saying that you should have contesters
>set up your links, much less maintain them. But,
>why not get some hands on experience if its
>available? People pay big $$ to get hands on
>training with the guidance of experts. I know
>in the Northeast there are groups willing to
>help out beginners, especially if they are willing
>to spend a weekend or two helping to make contacts.

I don't oppose people tapping into the contesting
domain for some experience and training on 10 GHz
equipment. But I must caution them that the sort
of training that they'll get isn't directly transferable
to setting up and maintaining *reliable* data trunks.
I got my own training and experience in the commercial
world setting up and maintaining intercity relay sites.
That's the sort of carefully engineered systems we have
to have for a national data network.

>Often, contesters just happen to have access to
>the equipment you say is unavailable.

Looking at the cummulative results table in QST, I'd
say that such equipment is spread mighty thin for a
national network.

>From what I've seen, HF contesters *do* have
>a suitable mindset for setting up a network.
>Perhaps not your idea of what a digital network
>is suppose to be, but much of the Northeast
>is linked by the Frankford Radio Club and the
>Yankee Clipper Contest club (they are actually
>competitors trying to wind DX contests).
>They even have a source of funding--sales of CT
>(one of the contest logging programs)
>support the network. True, the network doesn't
>support much more than DX spots and shortages
>on a contest weekend, but if it suits the
>needs of the people that spend their time building
>and maintaining it....

Ah yes, DX Packetcluster. "Hey George, the link's flaky."
"Well put up stacked beams and pile on the kilowatts,
to hell with the other digital users, the DX spots
have to get through." (I've actually heard exchanges
like that. The lack of cooperation between the Packetcluster
operators and the rest of the digital community is somewhat
legendary. It's that Type A DXer mentality.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2386. IRS 501(c) tax-exempt status for our club - How?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 06:12:33 UTC
From: "Scott W. Binder" <swbinder@delphi.com>
Message-ID: <x68qPgR.swbinder@delphi.com>
Source record: 270238

Hello - I was wondering if anyone was a member of a club that has Federal 501(c) tax-exempt status? We would like to know how to do so ourselves.

We are Humboldt Amateur Radio Club, Inc., and are a state non-profit organization. We have three chapters, each independantly governed and maintaining their own identity. We have been working with a local attorney who took our three page Constitution and By-Laws and turned it into twelve pages of legalese and left out many important parts, such as the identification of our chapters.

There has to be a relatively pain-free way to do this. Does anyone have any advice on how to proceed from here?

Thanks in Advance,
Scott W. Binder AB6TR
Secretary, H.A.R.C.

Scott W. Binder, AB6TR / / / / Internet: swbinder@delphi.com
1000 7th #8 /-/-/---/-/-/ FidoNet: 9@1:125/37
Arcata, CA 95521-6172 / / ||/ / GEnie: S.BINDER1
(707)826-7473 || Delphi: SWBINDER
PGP Public Key on Request || Packet: AB6TR@K7WWA.#NORCAL.CA.USA

2387. Calling Deleware Hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 06:13:43 UTC
From: pfeuffer@comtch.iea.com
Message-ID: <2l1aqn$98a@krel.iea.com>
Source record: 270239

[No readable article body recovered]

2388. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 06:46:48 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar2.064648.25809@ke4zv.atl.ga.us>
Source record: 270240

In article <CLyK5q.ILK@srgenprp.sr.hp.com> glenne@sad.hp.com (Glenn Elmore) writes:
>Zack Lau (KH6CP) (zlau@arrl.org) wrote:
>
>> Seems to me that Gary wants to set up a digital network
>> the hard way, with only people interested in digital
>> networks.
>
>Perhaps this is his way of keeping the user base small enough that the
>network he envisions can still provide at least mediocre service to each
>user. I don't see how that's going to happen with a national backbone of
>(only) 3000 56 kbps nodes otherwise.

If you can show how to setup and *maintain* 7x24 megabaud+ links to all areas of the US, I'm all for it. I don't see a chance in hell of that happening so I'm trying to bring this discussion around to things that are within the realm of the *possible*. 56 kb beyond LOS links look possible to me, many thousands of 10 GHz megabaud+ LOS sites do not. It's not microwave *technology* that's the problem, it's the *sites* and the people to maintain them that are the problem. Amateurs don't have enough of either to establish a *national* microwave network, and little or no hope of getting them. (Local or regional megabaud+ links may be possible in certain areas, and I encourage that, but it just isn't going to happen nationwide unless we suddenly get 20 million new hams with optimum geographic dispersion.)

We're dealing with a very sparse matrix here. You don't seem to understand that as you sit in a dense metroplex with hams on nearly every block. The rest of the country just isn't like that. *Most* of our links are 60-80 miles long, over unfavorable terrain, to sites we can *get*. Nearly *none* of them are LOS. We *depend* on the beyond LOS propagation available most easily at lower frequencies to maintain those links. (If we could muster the power to do microwave forward scatter, that would be different, but there just aren't enough surplus TWTs out there to do the job, and site managers frown on 32 ft dishes on their towers. We *can't* depend on inversions and ducts, they just aren't reliable enough.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2389. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 07:01:07 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar2.070107.25919@ke4zv.atl.ga.us>
Source record: 270241

In article <ah301-010394145634@sy_j.pgh.wec.com> ah301@yfn.ysu.edu (Jerry Sy) writes:
>
>is there a list of jargon and their meanings used by hams on 2m/440,
>terms like
>
>destinated

This means "I'm tired of listening to you, windbag. I'm going somewhere
else." (On rare ocasions that somewhere else may be outside the car, but
not usually.)

>very good
>fine business

These are just null noises emitted instead of, or in addition to, "Uhhh"
and Ahhh" as space fillers for dead air. In some rare instances, they
may actually mean "OK" or "I heard you", but the ham couldn't bring himself
to use plain English. Their presence almost always means that no real
conversation is occurring.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2390. Re: Have a say about ARRL policy

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 07:10:55 UTC
From: dan@mystis.wariat.org
Message-ID: <wsTJic3w165w@mystis.wariat.org>
Source record: 270242
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

ehare@arrl.org (Ed Hare (KA1CV)) writes:

> You can contact most ARRL HQ staffers by email. I will post a
> list in my next post.
>
> I also suggest that all hams with an opinion or suggestion about a
> policy matter make their views known to their Division Director.
> The Division Directors are listed on page 8 of any recent QST.
> You can also usually find your Division Director at most major hamfests
> or ARRL Conventions.

Ours has even been at the last 3 membership meetings of our club (must
have been that we have had some GREAT presentations lately). Can't beat
that for conviencence, Ed.

(Please do not consider this an endorsement of the ARRL.) :)

Dan N8PKV

--
"We are all now safe from crime. The Brady 'Law' has taken effect.
All can sleep peacefully knowing our paternalistic government will
take care and protect us! Of course I also believe in Santa Claus,
The Easter Bunny, The Tooth Fairy and The Great Pumpkin!"

2391. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 09:00:02 UTC
From: kmeyer@bbs.xnet.com
Message-ID: <kmeyer.3b0x@bbs.xnet.com>
Source record: 270243
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

grady@netcom.com (Grady Ward) writes:

>The FBI just announced their new wiretap bill for 1994.
>
>Among its many provisions, monitoring cordless phone
>will be criminalized, just like cellular is now.
>
>Presumably the FCC will have to act to ban all scanners
>that can tune the 46.xx range... I might suggest you buy those

It seems to me the FBI and FCC are trying to drive scanner manufacturers out of business by continually forcing them to redesign the circuitry. These laws aren't enforceable anyway unless you use the info in such a way that it can be proven you listened, which in itself is illegal.

2392. Re: Low power Bird slugs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 09:14:13 UTC
From: M.Willis@ee.surrey.ac.uk
Message-ID: <1994Mar2.091413.18768@ee.surrey.ac.uk>
Source record: 270244

In article <CLy9Jv.BI9@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) writes:
|> Zack Lau (KH6CP) (zlau@arrl.org) wrote:
|> : groverc@gvgadg.gvg.tek.com wrote:
|>
|> : : Is there a Bird slug available that would do a credible job
|> : : of measuring <5w signals in the range 3-30MHz?
|>
|> : None that are compatible with the Bird 43. We asked Bird and
|> : were told that they couldn't even do a custom slug.
|>
|> I think I know why. A coupled-transmission-line directional coupler
|> has a sensitivity limited by the physical length. And the sensitivity
|> in inversely proportional to frequency -- That's why Bird slugs include
|> a shunt capacitor to flatten out the frequency response. At low (HF)
|> frequencies, I bet 50W is about the lowest sensitivity that is possible
|> with the available line length.
|>
|> AL N1AL

Not quite Al, you can get lower power HF slugs but they have severly restricted bandwidth, close coupling is required and the response suffers.

A good side of this is if you get a 1KW slug for VHF it often covers more than the frequency written on it. If you get a 1kW 200-500 MHz slug, it does a reasonable job on 144 MHz (you can always calibrate it against a known meter calibration on 144 MHz, and not too bad on 23 cms.

I have a 500W 50-125 MHz slug that is fine on 144 MHz. The error is less than I can measure against my genuine 250W 144 MHz slug.

I also use a 200-500 MHz 5W slug. It is fine on 432 MHz but also quite useful on 144 MHz. It is way out of calibration but it is still directional.

The onl HF slug I have is 500W 2-30 MHz. I think that is the lowest power available to cover the whole band

Mike
|>

2393. Re: Satellite progs on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 12:03:37 UTC
From: boyer@rd.eng.bbc.co.uk
Message-ID: <CM1DI1.GsJ@bbc.co.uk>
Source record: 270245
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc

John Boyer (boyer@rd.eng.bbc.co.uk) wrote:
: Scott Ehrlich (wy1z@netcom.com) wrote:

: : I have now placed some satellite tracking programs on World:

: : - stsplus.zip

: : - stsorbit.zip

: : - traksat {trak300a.zip & trak300b.zip} (latest version of traksat)

: : They are available via anonymous FTP via

: : ftp ftp.std.com:/pub/hamradio/pc/satellite

: Just a short comment. I have traksat and it is really great and dead easy
: to use.

: John B
: John.boyer@rd.eng.bbc.co.uk

Sorry. Did I say traksat? I actually meant Satra version 1.0. That's the
problem with all these sat tracking progs what to call them.
I have played with tracksat 3 and I found it hard to drive.

John B
John.boyer@rd.eng.bbc.co.uk

2394. IMPORTANT NOTICE

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 13:19:04 UTC
From: jwa@tellabs.com
Message-ID: <1994Mar2.131904.13602@tellab5.tellabs.com>
Source record: 270246

3-2-94

CORRECTIONS

In the March 94 issue of QST "Packet Perspective" Stan Horzepa
WA1LOU wrote an article about the Hamblaster.

I would like to make this correction

The Address should have been

Jack Albert (WA9FVP)
203 York Pl.
New Lenox, Il
60451

Ph (815)-723-6564

The address in my signature file (below) is my work QTH.

Tellabs Operations Inc. does not manufacture and
is not involved with the research and development
of the Hamblaster.

All inquires should be sent to the address above.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

2395. Ham exam, 3/5, U of MD

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 13:39:20 UTC
From: ham@wam.umd.edu
Message-ID: <2l24u8$1mp@cville-srv.wam.umd.edu>
Source record: 270247

There will be an Amateur Radio Exam this Saturday, March 5, at 10:00 a.m.
in the Student Union Building on the U of Maryland, College Park campus.
The cost for the test session is $5.75, and we will be giving all five
written elements as well as 5, 13, and 20 wpm code.

Form 610's will be provided. For more help, or if you plan to come, please
e-mail me here at ham@wam.umd.edu or give me a call at 301-206-9921 (h)
or 301-901-9260 (w).

Scott NF3I
--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 125 QSLed on dipoles __________| Dipoles! Antenna!

2396. Thanks for get-well QSL's to N3AKP!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 13:49:04 UTC
From: andy@clark.net
Message-ID: <2l25gg$4hd@clarknet.clark.net>
Source record: 270248

I'd like to thank all of you who took the time to send Ron, N3AKP a "get well" QSL card. He's scheduled to be released from the hospital today, and will be delighted to find all those cards waiting for him!

He'll be recovering for about 6 weeks at home, so you can still send him a QSL if you'd like to; his address is Ron Nord, N3AKP, 3621 Halls Creek Lane, Owings, MD 20736.

73, andy-k4adl

2397. Waveguide filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 14:04:38 UTC
From: zlau@arrl.org
Message-ID: <1994Mar2.140438.5160@arrl.org>
Source record: 270249

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: Ok, if you're co-located with a Class B or C FM station, you're going
: to have to deal with +50 dbW ERP signals, that's +80 dbm. Even if you get
: 70 db isolation, the signal at the diode is still +10 dbm. You've got
: to do a lot better than that. A waveguide beyond cutoff is most effective
: as a filter if it's length is 1/4-wave or greater at the frequency of
: the interfereing source. (Attenuation doesn't get much better once you
: pass the 1/4-wave depth.)

This description of microwave waveguide on VHF signals is *wrong*

According to Very High-Frequency Techniques by the
Staff of Radio Research Laboratory, Harvard University

The attenuation constant in dB/cm is

(8.686)*2*PI/lamdac*(1-(f/fc)^2)^0.5

where lamdac is is the cutoff wavelength and fc is the
cutoff frequency. Note that for frequencies well below
the cutoff frequency, the attenuation is essentially
constant. This gives a simplified equation,

loss=54.5*d/lamdac p. 10 1993 Microwave Update
Evanescent Mode Waveguide Filters by Reed Fisher

Thus, 1.2 inches of WR-90 gives 36 dB of attenuation.
100 dB of attenuation would require 3.25 inches of
waveguide. Additional attenuation would be expected
due to the poor coupling between the probe/diode in
the waveguide and VHF waves. A 10 GHz quarter wave
monopole isn't exactly a reasonable 100 MHz antenna.

If Ku band interference is a problem, no-tune 10 GHz
waveguide filters can be constructed using a drill
press, a 6 inch dial caliper, and a 100 watt soldering
iron. You can make a bandpass filter by putting in
posts down the center of the waveguide to break it up
into resonant sections. You can also solder sections
of waveguide to iris plates (plates with holes in them).

Making a filter for a 2M IF transverter is just
possible, while the tolerances are less critical for
wider filters. Alternately, it ought to be possible
to tune them up with a pair of ARR Gunnplexers,
using the relative signal strength meter.

WR-90 is surprisingly easy to work with, being about
the right dimensions for most people to work with.

6 GHz waveguide is too big and 24 GHz too small for
most people.

The big disadvantage is its weight--I wouldn't recommend
using WR-90 in a radio to be carried up a difficult hiking
trail. But, these spots without access roads usually
don't have big installations of radio transmitters, so
extreme filtering measures aren't needed.
--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

2398. Re: ACE Communications - good? bad?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 14:26:34 UTC
From: md@maxcy2.maxcy.brown.edu
Message-ID: <1994Mar2.142634.5985@cs.brown.edu>
Source record: 270250

In article <CLr3n7.Jwy@avalon.chinalake.navy.mil>,
erik@peewee.chinalake.navy.mil (Tom Servo) writes:

|> I purchased a scanner from them for $465 using visa which I returned
|> as soon as I tried it (another story). They sat on my money for one
|> month after receiving the returned unit.

This really isn't all that uncommon. Most businesses wait until they
receive notification from the bank that a deposit was made for $X.
They then process a credit memo for your credit card, which has to
be processed by the credit card company, so it can take upwards of
two months before a credit is realized. Not ideal, by any means,
but not uncommon or completely unacceptable either.

I purchased an AR-2500 from ACE, the only complaint I have is that I
asked for a schematic for modification purposes, and I received a
hand-drawn schematic which was very difficult, if not impossible in
places, to read.

The scanner itself, internally, seemed rather cheesy, but then again,
there really isn't alot to scanners, is there? The first question that
I, and other friends who saw the unit, asked ourselves was "is this
thing really *worth* $450?" Since I've never opened a Bearcat or
Uniden, I really have nothing to compare it to.

Overall, the unit works just fine, and I have no complaints with
performance. From that perspective, I would say that indeed, yes,
the unit is "worth" $450, since it performs as expected, and I was
willing to pay $450 for that level of performance.

Would I purchase another unit from ACE? I would have to say yes.
Would I purchase the same unit? Probably.

MD
--
-- Michael P. Deignan
-- Population Studies & Training Center
-- Brown University, Box 1916, Providence, RI 02912
-- (401) 863-2668

2399. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 14:49:07 UTC
From: julian@bongo.tele.com
Message-ID: <1994Mar2.144907.26098@bongo.tele.com>
Source record: 270251

In article <1994Mar2.070107.25919@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>very good
>>fine business
>
>These are just null noises emitted instead of, or in addition to, "Uhhh"
>and Ahhh" as space fillers for dead air. In some rare instances, they
>may actually mean "OK" or "I heard you", but the ham couldn't bring himself
>to use plain English. Their presence almost always means that no real
>conversation is occurring.

Ah! The joys of "Hamspeak" as my ex-wife called it. It seems radio amateurs are true masters of content free communication. Yes, I know the previous sentence contains an oxymoron.

Wheras real mortals will say: "Blew a fuse this morning". A true ham will spin it out with a desciption of what equipment was drawing current at the time, who was effected, the duration of the outage and the total milage driven to buy a new fuse. A skilled ham communicator can spin a simple event out so that the description of it takes three times longer than the duration of the actual event.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

2400. Re: Passed General written, how long do I have to pass code?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 15:24:03 UTC
From: kevin jessup <kevin.jessup@mixcom.mixcom.com>
Message-ID: <1994Mar2.152403.22403@mixcom.mixcom.com>
Source record: 270252

In <ah301-220294163128@sy_j.pgh.wec.com> ah301@yfn.ysu.edu (Jerry Sy) writes:

>In article <1994Feb22.160515.24890@isc-br.isc-br.com>,
>bruceo@loki.isc-br.com (Bruce Oscarson) wrote:

>>
>> I passed my General written exam a while back, but was only able to
>> copy 5 wpm.
>>
>> Does anyone know how long I have to pass the 13 wpm before I have to
>> take the written exam over again?

>where I took my exams, if you do not pass the codes, they don't let you
>take the written exams (makes sense). So your being able to take the
>written exam without the 13 wpm is something new to me.

Around here, you can take all the writtens (on up to extra) without
taking a single code test. You are then issued a Cerificate of
Successful Completion of Examination (CSCE) for the written elements
that you have passed. I was told I had one year to then pass any
desired code tests. If, for example, I passed 13 WPM within the
one year period, but not the 20WPM (required for extra class), I would
then have to retake the EXTRA class written before again trying for
an extra class license.

--
/`-_ kevin.jessup@mixcom.com
{ }/ Marquette Electronics, Inc
\ / N9SQB, ARRL, Amateur Radio
|__*| N9SQB @ WD9ANY.#MKE.WI.USA.NA

2401. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 15:31:10 UTC
From: CSLE87
Message-ID: <CSLE87-020394103111@145.39.1.10>
Source record: 270253
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <rcrw90-280294091343@waters.corp.mot.com.corp.mot.com>,
rcrw90@email.mot.com (Mike Waters) wrote:

> In article <1994Feb27.133807.12203@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us
> (Gary Coffman) wrote:
>
> > In article <rcrw90-250294135425@waters.corp.mot.com.corp.mot.com> rcrw90@email.mot.com
(Mike Waters) writes:
> > >
> > >In other words "we have to make money off it" is a perfectly valid reason,
> > >especially considering the man-years of effort that went into creating the
> > >publication in the first place!
>
> > Now like I said, I don't mind the League trying to turn a buck, but
> > they've sure got a lot of gall making lawyer noises to Yee claiming
> > he's ripping them off when *they* are ripping off the efforts of the
> > coordinating bodies.
>
> (1) I sure would like to see a copy of the original letter making "lawyer
> noises".

This has been addressed by fax from the receiver to specific requestors.

> (2) I wonder how many quadrillions of dollars the Lagues *actually* makes
> of this particular publication?

Which would make the issue of monetary damages moot, especially since ARRL
has not previously defended their claimed (but untenable) claim of
copyright
against others who print maps, lists, etc.

>
> (3) Gathering and supplying the data is certainly part ofthe effort, but
> by no means all the effort that goes into compiling such a list and getting
> it published.

No, but it is a critical part, and some of the coordinators have (wisely)
placed restrictions of the dissemination of that data, which the ARRL seems

not to acknowledge either literally, in their publication, or in the
practice of inhibiting others who also have the same access to the facts.

> (4) Did you ever stop to think that there may even be some *other* reason
> for objecting to misues of copyright? Like if you let one person abuse
> your copyright then others will try and maybe get away with it on that
> basis? I can certainly think of some crazies who would gladly abuse ARRL

> publications fortheir own purposes, both to make money and to just make
> anuisance of themselves - we have a few examples who post to these
> newsgroups for example.

There is also the point that the ARRL may themselves be abusing the copyright process and harrassing other publishers. In fact, if a pattern were found,
the League could be charged with anti-trust violations and the membership could potentially be charged individually with conspiracy and tried under the RICO statutes. Heavy stuff - is it worth the bad PR to amateur radio in

general and the costs to ARRL in particular??

The real issue is whether a valid claim of copyright exists at all. The previous recent legal precedent says that there can be no valid copyright granted to ownership of the facts, merely the presentation of them (in the specific ARRL case, in PRINTED form). Therefore the presentation of a larger set of data, similar in form (and in a totally different media) is

not subject to copyright protection. Just because Encyclopaedia Brittanica copyrights their encylopaedia does not mean that they have sole ownership of the facts presented therein. They own _their_ _presentation_ only.

>
> (I'm not a lawyer so this is not a legal opinion :-)

Likewise, but experience tells me that if the phone companies with all their legal resources LOST the US District Curt case protecting their claimed copyright of the contents of a telephone directory, the League stands precious little chance of winning, much less recouping the legal costs from the sale of their version of a repeater directory.

What do you think, Gary and Mike? If someone should file charges based on the RICO aspect, does anyone win other than the lawyers? And will ARRL dues go up once again to pay for this folly?

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

Some of the opinions expressed above aren't even claimed by the author!
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

2402. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 15:44:42 UTC
From: glenne@sad.hp.com
Message-ID: <CM1nqJ.MBx@srgenprp.sr.hp.com>
Source record: 270254

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

> In reading the articles on 10 GHz operating in the current
> QST, one wouldn't get the impression of *reliable* links
> with 50 db fade margins that work reliably 7x24 year after
> year. *That's* the kind of links a digital network must
> have.

> If you can show how to setup and *maintain* 7x24 megabaud+ links to all
> areas of the US, I'm all for it. I don't see a chance in hell of that
> happening so I'm trying to bring this discussion around to things that
> are within the realm of the *possible*. 56 kb beyond LOS links look
> possible to me, many thousands of 10 GHz megabaud+ LOS sites do not.

> It's not microwave *technology* that's the problem, it's the *sites*
> and the people to maintain them that are the problem. Amateurs don't
> have enough of either to establish a *national* microwave network, and
> little or no hope of getting them. (Local or regional megabaud+ links
> may be possible in certain areas, and I encourage that, but it just
> isn't going to happen nationwide unless we suddenly get 20 million new
> hams with optimum geographic dispersion.)

> We're dealing with a very sparse matrix here. You don't seem to understand
> that as you sit in a dense metroplex with hams on nearly every block. The
> rest of the country just isn't like that. *Most* of our links are 60-80 miles
> long, over unfavorable terrain, to sites we can *get*. Nearly *none* of them
> are LOS. We *depend* on the beyond LOS propagation available most easily at
> lower frequencies to maintain those links. (If we could muster the power to
> do microwave forward scatter, that would be different, but there just aren't
> enough surplus TWTs out there to do the job, and site managers frown on 32 ft
> dishes on their towers. We *can't* depend on inversions and ducts, they just
> aren't reliable enough.)

At least you and I agree on the need for engineered, reliable links
and that construction of a network will take a great deal of
cooperation. I've emphasized that one of the few strengths amateur networking
may have is "ins" and access to local sites. All these are
points I've tried to make in some of my CNC contributions.

And in case you think I'm in a densely populated, ideal terrain out here,
think again. Mountains only work for you when you can get access and have
helpers to maintain them (as you suggest). I end up spending a lot of my time
with a 3 arc-second elevation database trying to figure out how to make
a well connected network out of sparse users and large obstacles. My few
links are (too) long just as you say yours are there.

My argument with your 56kbps approach is that it simply doesn't come close to being enough capacity. It isn't nearly adequate for the needs of a competetive nationwide amateur network. And, in addition,depending on non-LOS propagation while maintaining reliability is an even less optimum use of resources.

How do you intend to support even a fraction of the "20% of hams who call packet their primary mode" with even *mediocre* performance (never mind something competetive with telephone line modems which would stimulate and support growth), 50 dB fade margins etc?

You've presented some equations relative to non-quality paths, troposcatter etc, could you show us how a system like that can provide the required total information capacity and approximately what it might cost?

Could you present an estimation for us all of what the approximate vhf hardware and resulting per-user capacity of a reliable nationwide network of 3000 56 kbps full duplex nodes (your numbers) using beyond LOS propagation might be? Please show not only margins and hardware for an individual link but also an estimate of the spacial and frequency reuse problem/potential.

My estimates and opinion of the above indicate that it falls orders of magnitude short of providing service adequate to support itself in an amateur environment. I truly hope you can show me my error(s) and that a beyond-LOS vhf network is viable.

Glenn Elmore n6gn

ax.25 n6gn@wx3k.#nocal.ca.usa.na
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

2403. Re: Keyboards at testing

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 15:54:00 UTC
From: steve.allen@brent.uucp
Message-ID: <21376.553.uupcb@brent.uucp>
Source record: 270255

mahjmac@news.delphi.com (MAHJMAC@DELPHI.COM) writes

>It would seem to me that being alowed to use a keyboard doesn't conform
>to the whole reason CW is required. It is used on an international scale, and
>if you are ever in any type of emergency or spontaneous situation where you
>need to receive code with no keyboard, then you would be worthless.

The entire morse test is multiple-guess! There is *no* relation
to anything real in the morse test. No smoke, no fire, no screaming
sailors, nothing.
Seriously, I was astounded at the low level of comprehension
required in the 13-wpm test I took. I had slaved for a month to be
sure I could tell "FT-100" from "FT-101" in the middle of a qso.
Then I take the test and the questions are "Rig is: A: Yaesu B:
Icom C: Kenwood D: Heathkit."
Of course you should be allowed to use your keyboard. Sheesh.
-Steve N2WSA

. QMPro 1.51 . It's more fun than sex-- it's the Sunspot Index

---
The Brentwood BBS! 12 Nodes (914)-381-1600

2404. Re: Body Parts by J. Herman

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 15:58:18 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-020394085746@waters.corp.mot.com.corp.mot.com>
Source record: 270256

In article <762544765snx@skyld.grendel.com>, jangus@skyld.grendel.com
(Jeffrey D. Angus) wrote:

>
> Waiting now for the headlines in the LA Times, Dateline Hawaii:
>
> "Deranged Professor detonates 5 pounds of plastic explosive in mens
> room on campus. Police sifting through wreckage are puzzled by the
> large quantity of black basket weave material. Several used condoms
> and a radio were also found at the blast site."

Best laugh I have had in weeks!

To bad it is essentialy an "inside" joke for readers of
rec.amateur.radio.xxx

Thank you!
--
Phooey on it all - I'm going sailing for a year or two!!!

2405. Re: Transformer Failure Modes?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 16:03:40 UTC
From: CSLE87
Message-ID: <CSLE87-020394110341@145.39.1.10>
Source record: 270257

In article <CLyA9E.Bzx@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) wrote:

> Mark E. Bailey (mebly@eng.umd.edu) wrote:
> : The proverbial friend of mine has two transformers. They are 110/220 VAC
> : input, 50 VAC output and rated at 15 amps.
>
> : He needs 25 volts, not 50. The obvious solution is to feed 110 into the
> : 220 input windings.
>
> : Question: Do we have to de-rate the output current to 7.5 amps?
>
> For a given secondary current, when you halve the primary voltage
> (to 110V), the input current doubles. So theoretically, if you want
> to keep the primary current the same, you would have to reduce the
> output current rating by 1/2.
>
> However, I don't think it's quite that bad. After all, the secondary
> current is the same -- the only difference is the I^2*R loss in the

And here is the problem! Since R stayed the same and I is doubled, the I^2*R loss is FOUR times what it was previously. The transformer must now dissipate much more heat than it was designed for. Just put both transformers
in parallel (phased properly, of course) to get back to the full 15 amperes,
7.5 from each core.

> primary. Also, most transformers are rated for 100% duty factor.
> If you are using this to make a 12V power supply for a transmitter
> with a 50% duty factor, you could probably use the full 15A or even
> a bit more.

Nothing from the original questioner said anything about operating at a reduced duty cycle, but if you want to gamble at 25%, go ahead. Copper heats up rather quickly, and the steel core does not carry away the heat very well, so wear hot-mitts if you need to work on the chassis.

>
> AL N1AL

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

Some of the opinions expressed above aren't even claimed by the author!
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

2406. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 16:09:00 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-020394104747@136.141.220.39>
Source record: 270258

In article <tcjCLzBHG.Cx8@netcom.com>, tcj@netcom.com (Todd Jonz) wrote:

> I don't think anyone has yet contested the fact that the *data* iteself is not
> protected by copyright law. Several folks have cited a precendent in which
> the court found in favor of a company that had been sued by a telephone
> company for republishing information from its white pages, even though this
> information included errors that were specifically designed to uncover this
> kind of activity. Given this, I imagine that the League would be hard pressed
> to win a court case, even if it could demonstrate that the *data* had been
> lifted directly from their directory.
>
> So the question remains: exactly how does the *format* of N2JWQ's compilation
> infringe on that of the ARRL directory? It's true that the data items in the
> Directory are a subset of N2JWQ's database, but this doesn't seem like an
> infringement to me since all of these data items could be independently
> verified by just about anybody with an HT. And while I readily recognize that
> the League deserves credit for the resources they devoted to compiling this
> data, I don't believe this *effort* is protected by copyright law either.

Yeah, I don't think we have any basic disagreement here. I gotta dig up some of the relevant case law, though! Anyhow, part of the problem _may_ well have to do with something Dan Senie, N1JEB, posted:

>>Read the opening pages of the repeater directory. The publication indicates
>>that certain data were obtained by other groups allowing the ARRL to use
>>copyrighted data wwith permission. It would seem that the League has agreed to
>>those groups being able to copyright their lists. I would guess that those
>>groups see it as worthwhile to have their data printed in the repeater
>>directory, and so allow for its use in the publication.

Could well be that part of the agreement by which the ARRL got to use the other folks' copyrighted material included a requirement to prevent unauthorized use by others. They _might_ just be doing something they _have_ to do.

If you do independently verify, or compile, the basic data (as by posting a request for _original_ repeater information here, and using that for the directory), and present it in a format different from the ARRL directory, I don't think you infringe their directory (caveat: I'm not a lawyer).

But if you have the same columns in the same order, with the same abbreviations and symbols, you're probably infringing their format, under US copyright law, even if your directory is on-line and not printed. How close you can come to somebody else's presentation of data and not infringe is the sort of thing that keeps lawyers driving Beemers.

Maybe we should wait and see if Conway has any success negotiating with the League. That might be something where ARRL members might have some influence: e-mail the league (or at least the guys listed in the directory recently posted) and your director, and urge them to grant permission to use data/format for an on-line directory.

--
73 de John Taylor W3ZID
rohvm1.mah48d@rohmhaas.com

2407. Re: 10-10#

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 16:13:15 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-020394091256@waters.corp.mot.com.corp.mot.com>
Source record: 270259

In article <CM0Csy.6q6@cup.hp.com>, genem@cup.hp.com (Gene Marshall) wrote:

> : Anyone know how to find out my old number?
> : Mike AA4MW
>
> I checked the 10-10 server (209-781-1344) and AA4MW doesn't appear in
> there as having a number.

Does it cover old numbers or just currently paid up? I suppose I should
call it myself and try - thanks.

73 Mike
--
Phooey on it all - I'm going sailing for a year or two!!!

2408. Re: Mobile Phone

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 16:18:33 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-020394091541@waters.corp.mot.com.corp.mot.com>
Source record: 270260

In article <1994Mar2.051508.25139@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> In article <1994Mar2.003533.10017@mnemosyne.cs.du.edu> wnelson@nyx10.cs.du.edu (W. Robert Nelson) writes:
> >I am looking for a way to make phone calls from my car through my own phone
> >line, not a cellular service. I have heard a little about 'autopatches', but
> >have some questions.
> >3 - Would my best bet be to try to get a ham lisence? My only reason would
> > be for the phone service.
>
> No. It's expressly forbidden for amateurs to use patches solely to
> avoid telco charges. If you want mobile phone, get a mobile phone.

Quite apart from the legal arguments that Gary points out, I think you will find that the amateur equipment ends up costing almost as much as a cellular phone, and is much more complicated to operate!

In part this is due to the fact that amateur equipment is much more flexible than a telephone and hence more complex.

--
Phooey on it all - I'm going sailing for a year or two!!!

2409. This Week on Spectrum 03/05/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 16:25:25 UTC
From: spectrum@starcomm.overleaf.com
Message-ID: <2l2ell$k8u@starcomm.overleaf.com>
Source record: 270261
Cross-posted to:
rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.scanner,rec.video.satellite,rec.radio.cb,alt.radio.scanner,alt.radio.pirate

This week on Spectrum we will scan the skies. Our guest will be our own
Gary Bourgois (The Birdwatcher). Gary is an expert on the world of
satellite tvro systems. Lots of folks enjoy his features on Spectrum,
but never before has he been live on the show to answer your satellite
and space related questions.
--
Spectrum airs live Sunday at 0300 UTC (2200 EST Saturday) on:

WWCR, 5810 KHz, Nashville, TN (World Wide)
WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
KHNC, 1360 AM, Denver, CO (Denver Area)
Omega Radio Network, Galaxy III, X17, 5.8 MHz WIDE audio. (Satellite)

Spectrum is rebroadcast:

Sunday at 1500 EST, on WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Monday at 0400 UTC (2300 EST Sunday),
on WWCR, 7435 KHz, Nashville, TN (World Wide)

--
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spectrum@overleaf.com, askspectrum@attmail.com, spectrumshow@genie.geis.com
+1 800-787-SPECTRUM, +1 908-671-4209

2410. Re: Mobile Phone

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 16:31:50 UTC
From: CSLE87
Message-ID: <CSLE87-020394113151@145.39.1.10>
Source record: 270262

In article <1994Mar2.051508.25139@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> In article <1994Mar2.003533.10017@mnemosyne.cs.du.edu> wnelson@nyx10.cs.du.edu (W. Robert Nelson) writes:
> >I am looking for a way to make phone calls from my car through my own phone
> >line, not a cellular service. I have heard a little about 'autopatches', but
> >have some questions.
> >
Unnecessary stuff deleted for brevity
> >
> >4 - Could it be done with a CB? Would it be legal? What is the range?
>
> I've heard simpatches being used on CB (Hell, I've heard all sorts of
> things on CB). I'm not sure whether such an interconnect is legal in
> the CB service. Part 95 doesn't say, but it may fall under the same
> common carrier restrictions as other telco bypass schemes. Simpatches
> are legal in certain *commercially* licensed services. That would be
> your best course if you *must* interconnect to the telco system via
> your home line. Otherwise, an IMTS or cellular phone is your best
> alternative.
>

Actually Part 95 *does* address (and forbid) the use of any telephone interconnection to the phone lines for Class D stations. Check 95.420 (CB Rule 20) for details and specific wording. The sad part is that, as Gary mentions, almost anything goes on 27 MHz these days.

BTW, interconnect is also prohibited on GMRS (aka Class A CB) in section 95.141 with the exception of control circuits as detailed in 95.127. I vote

for the "real" car phone as the best choice.

Gary, keep up the good work of "Elmering via Usenet" and if they ever ask me for nominations for Chief of same, your name will be first up.

> Gary
> --
> Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
> Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
> 534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
> Lawrenceville, GA 30244 | |

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

Some of the opinions expressed above aren't even claimed by the author!
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2411. Re: QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 16:41:36 UTC
From: devlin@lf.hp.com
Message-ID: <2l2fk0$eqj@hpavla.lf.hp.com>
Source record: 270263

Allen Wallace (allen@dtint.dtint.com) wrote:

: For example, I've heard a rumor that the TH-78A can transmit AM down in
: the aircraft band. I don't believe it, nor would I ever want to transmit
: down there!

Actually, there are quite a few hams with pilot's licenses that would
love to have a radio that can do that. A typical aviation handheld
costs around $500 and they are becoming a very popular accessory as a
backup radio.

If anyone can confirm or deny this rumor please do so.

--
Lee Devlin N3IWP | HP Little Falls Site | phone: (302) 633-8697
Piper Colt N4986Z | 2850 Centerville Rd. | email:
'Spirit of rec.aviation'| Wilmington, DE 19808 | devlin@lf.hp.com

2412. Re: NACEC - DISASTER VOLUNTEER Info.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 16:48:32 UTC
From: wps@ElSegundoCA.NCR.COM
Message-ID: <5673@tdbunews.teradata.COM>
Source record: 270264

In article 94Mar1072619@turquoise.usafa.af.mil, jcmiller@turquoise.usafa.af.mil (Jeff Miller, Homer Simpson's alter ego) writes:
-->In article <1994Feb28.120042.22852@walter.cray.com> rps@cray.com (Russell P. Starksen) writes:
-->
--> ==================== cut here ======================
--> INTERNET.TST
--> FEBRUARY 14, 1994
--> ATTN: DISASTER VOLUNTEERS & MILITARY FAMILIES!!!
-->
--> Our group is looking for volunteers to help expand our project
--> nationwide! I have heard many things about Internet and have
--> posted this message to see if there is anyone on the system that
--> wants to help.. Please take a few minutes and read this bulletin.
--> If you would like more information or wish to help, get in touch
--> with me. I hope you find these 3 pages of information of interest.
-->
--> Mr. Edward E. Addy
--> President, NACEC
-->
--> W H A T I S N A C E C ?
-->
--> NACEC is an acronym for "The North American Center for Emergency
--> Communications". NACEC is not a radio club. It is a hybrid non-
--> profit humanitarian organization. It was started under the name
--> "Global Voices Project" on July 9th of 1992 and incorporated in
--> Minnesota on January 8th 1993 for the purpose of improving the
--> efficiency of other non-profit humanitarian organizations during
--> their disaster aid and relief operations, throughout North America.
--> NACEC also provides health and welfare communications assistance
--> between members of the U.S. Armed Forces serving overseas and their
--> families here at home.
-->
--> The projects name was changed to The North American Center for
--> Emergency Communications, (NACEC) by unanimous vote of The Board of
--> Directors in August of 1993 to more closely reflect the projects
--> mission and purpose.
-->
--> W H Y W A S N A C E C F O R M E D ?
--> NACEC's mission is to provide communications support to aid
--> disaster victims and Military Families. NACEC was formed for one
--> basic purpose "To reduce deaths and the amount of human suffering,
--> through the development and implementation of an organization which
--> can rapidly provide emergency communications.

-->
-->
-->(much deleted)
-->
-->
-->This is very interesting. Sounds like a mirror image of MARS, ARES, RACES,
-->and NTS rolled into one. I wonder what functions those organizations fail
-->to fulfill that this new organization seeks to do.
-->
-->I also find it curious that Mr. Addy makes no mention of a callsign.
-->
-->73 from sunny (truly!) Colorado Springs,
-->
-->Jeff
-->
-->
-->--
-->Jeff Miller, NH6ZW/N0, AFA1HE/5 (for now) (ex WD6CQV, AFA8JM, AFA1DO)
-->USAFAnet Manager and General Troubleshooter [jcmiller@gems.usafa.af.mil] or
-->HQ USAF/DFYC, USAF Academy, CO 80840 [millerjc%dfyc@dfmail.usafa.af.mil]
-->55: It's not a good idea, it's just the law. E-mail for NMA info.

Could this be Mr. Addy?

Call-Sign: KE0EG Class: ADVANCED
Previously: KA0TOG Class: GENERAL
Real Name: EDWARD E ADDY Birthday: JUL 9, 1953
Mailing Address: 3875 DODD RD, EAGAN, MN 55123
Valid From: MAR 11, 1986 To: MAR 11, 1996

Bill Starkgraf wps@ElSegundoCA.ncr.com
AT&T Global Information Solutions (310) 524-5754
El Segundo, CA (800) 222-6245 x5754

Call: KD6UQB Simi Settlers ARC
Simi Valley, CA

2413. 10 meter remote linking

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 17:26:37 UTC
From: kreblon@doc.cc.utexas.edu
Message-ID: <2l2i8d$aj9@doc.cc.utexas.edu>
Source record: 270265

Howdy!
Im the trustee of our 145.21 442.15 1294.0 29.66 repeater system
here at UT austin. Normally, I leave the 10 meter link on 29.66
virgin islands repeater, but the dual phase cancellation and remote
noise added up gets old.
Im looking for other repeater/remote operators who would like to leave
thier remotes on a simple frequency..say 29.480..so we could converse
when the band was open. Maybe start a trend...?
Any takers?

Bob Nagy Kreblon@ccwf.cc.utexas.edu

2414. Re: 5 by 5...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 17:39:30 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-020394123111@136.141.220.39>
Source record: 270266

In article <2kvqsu$r0d@ornews.intel.com>, zardoz@ornews.intel.com (Jim Garver) wrote:

> In article <762531813snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
> >In article <gregg.68.000DC24B@plains.nodak.edu> gregg@plains.nodak.edu writes:
>
> > > Where did the phrase, "I read you five by five." come from and what does
> > > it mean. I know it means good copy, but what specifically does it mean?
> > > Does it come from the early days of radar, of ham radio, of military
> > > aviation or what?
>
> > It comes from the RST signal reporting system.
>
> I would question this. You will never hear an air traffic controller give
> a signal report greater than 5X5. In fact, I've never heard one give a
> report under 5X5 for that matter. It seems to me they have 3 signal reports
> commonly used:
>
> "Taylorcraft 99999, You're 5 by 5. Squawk 4747, transistion approved".
>
> "Aircraft calling, you're garbled and unreadable. Remain clear of ARSA/TCA".
>
> "Aircraft calling, you're scratchy and unreadable. Remain clear of ARSA/TCA".
>
> I've started using 5X5 myself after becoming disgusted with the abuse of 5X9.
> I used to always use 5X7 out of generosity but a more middle figure is
> probably better. 5X9 should require meter repair while 5X0 obviously means
> you only hear hiss. Actually, "Loud and Clear" has no more syllables than
> "Five by Five" and will probably be better understood by a wider audience.

This appears to go back to military usage during WWII (maybe earlier, but _I_ wasn't around to verify that), and a radiotelephone signal-report scale that was 1 - 5 on both readability and strength. Thus "5 by 5" is a good as it gets.

Doesn't the Airman's Information Manual have something in it about signal reports. I seem to recall they encouraged plain-language reports, which make sense; using "5 by 5" from the tower sounds like a non-approved attempt at a personal "style." Most people understand it, but also understand "solid copy" or "loud and clear" at least as well.

--
73 de John Taylor W3ZID

rohvm1.mah48d@rohmhaas.com

2415. Re: Jerk on 20 mtrs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 17:39:52 UTC
From: jim@n5ial.mythical.com
Message-ID: <1994Mar2.173952.3499@n5ial.mythical.com>
Source record: 270267

In article <2ktv3r$h6t@crcnis1.unl.edu> mcduffie@unlinfo.unl.edu
(Gary McDuffie Sr) writes:
>kenman@iastate.edu (Kenneth D Anderson) writes:

First off, congrats on the upgrade!

>>Is this guy a fixture on 20 meters, or did I just get lucky?
>
>You got lucky. That is to say that you were lucky you only heard one
>station doing that. It is fairly common these days. I didn't say
>liked, I said common. Unfortunately, today's appreciation and respect
>of one's license is at an all time low for many.

I just remembered one of the key reasons why I abandoned the voice segment
of the HF bands so long ago..... Yes, it's all coming back to me now. :-)

I don't know how you feel about other modes (and of course, that choice is
strictly your own), but you might want to consider looking into some of the
other modes, such as cw, RTTY, AMTOR and PacTOR (my personal favorites
these days...cw is another, although I'm severely out of practice, and
would probably have problems even copying 20 wpm, much less 30, like I used
to), packet, etc.... I've never worked RTTY, but I'm guessing that it's
basically like AMTOR/PacTOR---basically free of the lids, and loaded with
lots of good folks.

You might also want to check out the WARC bands. I haven't been on any of
them except 30m, myself, but I'm told that they're all much cleaner (I'm
told that they're also frequented by lots of good folks, and I know this
was certainly true of 30m when I was basically living on 30m several years
ago).

Later,
--jim

--
73 DE N5IAL (/4) < Running Linux 0.99 PL10 >
jim@n5ial.mythical.com ICBM: 30.23N 86.32W
|| j.graham@ieee.org Packet: N5IAL@W4ZBB (Ft. Walton Beach, FL)
E-mail me for information about KAMterm (host mode for Kantronics TNCs).

2416. Re: QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 17:52:29 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.94Mar2125229@prince.cs.columbia.edu>
Source record: 270268

devlin@lf.hp.com (Lee Devlin) writes:

> Actually, there are quite a few hams with pilot's licenses that would
> *love* to have a radio that can do that. A typical aviation handheld
> costs around $500 and they are becoming a very popular accessory as a
> backup radio.

The problem here, of course, is that the aviation handhelds are type
accepted for aviation use, and the TH-78A is not. It's against FCC
regulations to use the TH-78A to transmit in the aircraft band. If I
had one along in an airplane and there was an emergency requiring its
use, then I'd use it, but I wouldn't expect the FCC to be pleased.
-Steve

2417. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 18:45:32 UTC
From: peterson@physc1.byu.edu
Message-ID: <1994Mar2.114532.1432@physc1.byu.edu>
Source record: 270269
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

In article <kmeyer.3b0x@bbs.xnet.com>, kmeyer@bbs.xnet.com (Karl Meyer) writes:
> grady@netcom.com (Grady Ward) writes:
>
>>The FBI just announced their new wiretap bill for 1994.
>>
>>Among its many provisions, monitoring cordless phone
>>will be criminalized, just like cellular is now.
>>
>>Presumably the FCC will have to act to ban all scanners
>>that can tune the 46.xx range... I might suggest you buy those
>
> It seems to me the FBI and FCC are trying to drive scanner manufacturers out of
> business by continually forcing them to redesign the circuitry. These laws
> aren't enforceable anyway unless you use the info in such a way that it can be
> proven you listened, which in itself is illegal.

Even better, any kid who goes down to the toy store and picks up one of those $10.00 pairs of walkie talkies can monitor cordless phone conversations. In fact, my son could not only hear but he could also talk on the cordless phone at my mother-in-law's the last time we were up there. It was a bit funny because he could only hear one side of the conversation and when he talked only one of the two could hear him (and I don't remember which was which) but it worked great. So, the FCC is now going to make it illegal to own a walkie talkie from "Toys R Us"?

Bryan Peterson, ki7td
ki7td@byu.edu

2418. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 18:49:54 UTC
From: mark@ve6mgs.ampr.org
Message-ID: <1994Mar2.184954.28300@ve6mgs.ampr.org>
Source record: 270270

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>I was thinking of more than some crude relative indications, though
>that's often useful. But how many amateurs have frequency counters
>or spectrum analyzers that cover 10 GHz, or even bolometer power meters?

How many amateurs have these peices of equipment even on 1MHz ...

Ciao 73 de VE6MGS/Mark -sk-

2419. Re: QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 19:03:27 UTC
From: brunelli_pc@delphi.com
Message-ID: <ZG2IvWv.brunelli_pc@delphi.com>
Source record: 270271

Allen Wallace <allen@dtint.dtint.com> writes:

>For example, I've heard a rumor that the TH-78A can transmit AM down in
>the aircraft band. I don't believe it, nor would I ever want to transmit
>down there!

Allen,

Properly modified, the th78 ca TUNE from 50mhz to 999.975mhz, with a
few gaps at 200 and 500. rx sensitivity varies but it is useable from
100mhz up.
One thing that the article didn ot address is the poor intermod
rejection of several of the reviewed units. Here in central CT
tyhe pager industry is booming and nmy rig is very (th78) sensitive
to it. Rumor has it that the standard is the best for imd rejection.

On the up side, the th78 has eexcellent features, easy to use, not
THAT hard to program, and the alpha-numeric display riulkes!!
that is RULes.... bad editor.....

the manual is about the worst of any i have seen, but until hewlett
packard starts making ht's, i do not see it getting better.

good luck

pete brunelli
n1qdq

2420. Re: Have a say about ARRL policy

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 19:06:07 UTC
From: hlester@helium.gas.uug.arizona.edu
Message-ID: <2l2o2v$4ju@auggie.CCIT.Arizona.EDU>
Source record: 270272
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <1994Feb28.230819.12135@arrl.org>,
Ed Hare (KA1CV) <ehare@arrl.org> wrote:
>You can also usually find your Division Director at most major hamfests

How much do they usually sell for?

:)

2421. Re: How's the Kenwood TH-28A?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 19:08:23 UTC
From: brunelli_pc@delphi.com
Message-ID: <Zk2J3ov.brunelli_pc@delphi.com>
Source record: 270273

William L. Phillips <wlp2y@faraday.clas.Virginia.EDU> writes:

>I am considering as a replacement the Kenwood TH-28A. It is only
>2m TX, but, frankly, I won't miss 440 (I have used it only a few times
>since I have had my radio). It is smaller, lighter, allows paging
>and message storage (sort of), has a greater number of freq. memories,
>has a shorter, stockier antenna, has the same output power as my
>present radio... the list goes on.

Will,
I got to use a th28 before i bought my th78. It is a great radio
but .... no lit keypad??? a friend n1qhr, says it is the only
downside to the rig. otherwise, small, light, and built well.

also, consider the new mini ht's , i have checked out the kenwood and
yaesu and the are both excellent rigs.

good luck

petye brunelli
n1qdq

2422. Re: 10 meter remote linking

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 19:47:06 UTC
From: "F. Kevin Feeney" <fkf1@cornell.edu>
Message-ID: <2l2qfqINNmuj@newsstand.cit.cornell.edu>
Source record: 270274

In article <2l2i8d$aj9@doc.cc.utexas.edu> Bob Nagy,
kreblon@doc.cc.utexas.edu writes:
>Howdy!
>Im the trustee of our 145.21 442.15 1294.0 29.66 repeater system
>here at UT austin. Normally, I leave the 10 meter link on 29.66
>virgin islands repeater, but the dual phase cancellation and remote
>noise added up gets old.
>Im looking for other repeater/remote operators who would like to leave
> thier remotes on a simple frequency..say 29.480..so we could converse
>when the band was open. Maybe start a trend...?
>Any takers?
>
>Bob Nagy Kreblon@ccwf.cc.utexas.edu
>

Sounds like a fun idea, but the frequency is not so hot. 29.3-29.5 is a satellite subband, used for downlinks from a number of low orbit satellites and I think 29.480 would put you in the upper part of RS12's downlink. I've had a number of satellite sessions trashed because of FM operators who didn't realise they were in the satellite band - unfortunately an FM signal takes out about 20Khz, which can be most of the transponders bandwidth, and will ruin a dozen CW and SSB qsos that the operator simply does not hear because of his limiter and because they are relatively weak signals. :-(

I don't have a frequency reference here to check for sure, but I'm fairly certain I have them correct. Perhaps 29.550 would be a nice round number instead. Actually 29.6 isn't a bad choice either - depending on how busy it gets.

If you do this, let me know as I and I'm sure some other operators locally would be interested in participating. A 10 meter link would be a nice widget to hang on our underused 440 repeater :-)

73 de Kevin, WB2EMS

2423. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 20:03:55 UTC
From: bote@access3.digex.net
Message-ID: <2l2rfb$sho@access3.digex.net>
Source record: 270275
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

yee@mipg.upenn.edu (Conway Yee) writes:
>The various threads on this issue have been highly supportive of the
>idea of the online repeater directory. For this, I am grateful since
>there are people appreciate the work that the volunteers and I have
>put into the project. If the ARRL is listening, it can readily tell
>the attitudes of most hams here. Further, a number of more
>industrious hams are supplementing my efforts to the league and I am
>grateful for their assistance. I am still hopeful of a satisfactory
>resolution to this issue. As of this moment, I have not heard any
>further news from the league itself.

(I don't know why I am jumping into this morass, but...)

Conway Yee and I discussed this subject via email some weeks ago.

This current discussion seems to be based on conjecture
and speculation.

The ARRL is not the source of the repeater information.
The area coordinators are the sources of the compiled
information. Having seen the data that is sent to
the ARRL, I can confidently say that the effort
of Bart Jahnke at the ARRL is minimized, since the regional
coordinators must supply the data to the ARRL in
a format almost identical to that which appears
in the Repeater Directory. The ARRL simply appends
the data together and voila! a Repeater Directory.

Further, since I am now designing and implementing a computerized
information system for T-MARC (welcome to the 1980s!)
I am happy to report that T-MARC is implementing
an "ombudsman" to verify the accuracy of its own data.
The ombudsman will take the list of repeaters and
verify that each one is on the air. This is where
the "time and effort" come in, and it is a good thing
since frequencies are getting scarce in the Washington
Baltimore area.

So, if an on-line database is built from coordinators'
data, then it is the compilers of that database
who should be on the warpath, not the ARRL. (Ironic, isn't it?)
But, I thought that the whole idea of Conway's database
was that net.hams would supply the empirical data,
so it would be home-grown. Maybe I'm confused, too?

Also, computerization will make it easier to present
the data in useful ways, so that John Q. Ham can look
up repeaters by frequency, by location, or by callsign
to name a few.

I still think that accuracy is crucial, since inaccurate
data is worse than no data at all.

So, why are we still jabbering about this?
Don't say nothin, jes do it!

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 32 days until Opening Day!

2424. Re: ARRL--->Online Repeater directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 20:09:07 UTC
From: bote@access3.digex.net
Message-ID: <2l2rp3$spb@access3.digex.net>
Source record: 270276

sbaker@umassmed.UMMED.EDU (Stephen Baker) writes:
>for such a directory, (maps aside). I wonder if they have priviledged access to
>this information

These and the other questions you raise are answered in other
posts.

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 32 days until Opening Day!

2425. Re: Low power Bird slugs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 20:19:27 UTC
From: zlau@arrl.org
Message-ID: <1994Mar2.201927.4604@arrl.org>
Source record: 270277

Mike Willis (M.Willis@ee.surrey.ac.uk) wrote:

: Not quite Al, you can get lower power HF slugs but
they have severly restricted
: bandwidth, close coupling is required and the response suffers.

So why wouldn't Bird sell us a set? We were succesful in
getting other custom slugs for our Bird 43s.

The lowest power HF slugs are the 25-60 MHz 5 watt slug
and the 50 watt 2-30 MHz slug.

: The onl HF slug I have is 500W 2-30 MHz. I think that
is the lowest power available
: to cover the whole band

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

2426. Re: Low power Bird slugs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 20:52:22 UTC
From: ehare@arrl.org
Message-ID: <1994Mar2.205222.5201@arrl.org>
Source record: 270128

Zack Lau (KH6CP) (zlau@arrl.org) wrote:

: Mike Willis (M.Willis@ee.surrey.ac.uk) wrote:

: : Not quite Al, you can get lower power HF slugs but
: : they have severly restricted
: : bandwidth, close coupling is required and the response suffers.

: So why wouldn't Bird sell us a set? We were succesful in
: getting other custom slugs for our Bird 43s.

Actually, we never told Zack that Bird would indeed have sold us
a set. As best I remember, the cost for the custom element
as a few hundred dollars and the bandwidth was such that we
would have had to buy one for nearly each band. It just didn't
look like I wanted to pursue getting them for the ARRL Lab.

Bird was quite cooperative and helpful in answering our
inquiry.

: : The only HF slug I have is 500W 2-30 MHz. I think that
: : is the lowest power available
: : to cover the whole band

The 50-watt element covers from 2-30 MHz.

73 from ARRL HQ, Ed

--

Ed Hare, KA1CV ehare@arrl.org
American Radio Relay League

2427. The QRZ CD - it's great!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 20:58:43 UTC
From: dbushong@wang.com
Message-ID: <CM229w.Iqo@wang.com>
Source record: 270129

I received my QRZ CD today and played with it a little. I'm posting this just to let everyone know that it's for real, and it works as advertised.

The callsign data is current as of about October, 1993. There is an ASCII file that contains all of the data (about 60 Meg) in case you want to write your own interface to access the data (e.g., a logging program, QSL card mailer, or something like that). There is also some source code which illustrates how you might do this.

--
Dave Bushong, Wang Laboratories, Inc.

2428. Re: Getting Coax Seal OFF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 21:01:16 UTC
From: woodj@apollo.robins.af.mil
Message-ID: <1994Mar2.130116.1@apollo.robins.af.mil>
Source record: 270130
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

In article <ericr.762116748@access3>, ericr@access3.digex.net (Eric Rosenberg) writes:
>
> Can anyone suggest a decent method for taking Coax Seal *off* of a
> connector? It's a mess, and I'm not sure how to do it.
>
> Please email your repsonses...
>
> Thanks --
> Eric
>
>
> --
> Eric Rosenberg WD3Q, EI4VPS, ZL0ADG, J20BY, etc.
> 338 14th Street, NE voice: +202-547-3441
> Washington, DC 20002 USA fax: +202-547-3613
> ericr@access.digex.com wd3q@amsat.org
>

I think WD40(tm) will cut it. I don't know know what would be a good cleaner
to remove the WD40... Jim KA4GHX

2429. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 21:39:39 UTC
From: mjsilva@ted.win.net
Message-ID: <110@ted.win.net>
Source record: 270131

In article <CLwqAH.LHE@odin.corp.sgi.com>, Charles Adams (adams@chuck.dallas.sgi.com) writes:
>In article <14@ted.win.net>, mjsilva@ted.win.net (Michael Silva) writes:
>|>
>|>
>|> >BTW, how do some of the people key
>|> >so darned fast CW? Its like 30-40 wpm on my computer. Can they really decode
>|> >this by ear or do they use computers for decoding too?
>|> >
>|> >
>|> Can only tell you that the world record for receiving CW (via ear,
>|> to manual typewriter), is 77.5 wpm, c. 1939. Sends a shudder up
>|> your spine, no?
>|>
>|> Mike Silva, KK6GM
>|>
>|>
>
>World Record is 75.2 WPM. It will not stand for much longer.
>
>

I gladly concede the figure. Didn't have my "Morse" book around when I wrote it, so I was working from memory. The story as I remember it was that a couple of guys made it to 75, so they cranked the machine up (to 77.5? 80?) and nobody could copy solid. Then the judges looked at what had been copied and interpolated (!) a figure for the winner.

Why won't it stand much longer?

Mike, KK6GM

2430. Re: Amateur Radio Newsline #863 25 Feb 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 21:44:58 UTC
From: myers@cypress.West.Sun.COM
Message-ID: <2l31cr$836@newsworthy.West.Sun.COM>
Source record: 270132

In article XeUSjGG8y1wH057yn@dorsai.dorsai.org, bigsteve@dorsai.dorsai.org (Steve Coletti) writes:

[from Newsline #863]

> In preparation of a civil complaint against one user, Radus
> wrote to the FCC's Private Radio Bureau to find out exactly
> where his client stood in regard to Part 97.205 E. His inquiry
> was answered by Personal Radio Branch Chief John B. Johnston
> W3BE. Johnston is well versed in Part 97 regulatory matters in
> that he was the guiding hand that crafted the latest version.
> After quoting section 97.205 E, Johnston added the rule applies
> whether a repeater is coordinated as an "open" or "closed"
> repeater. In fact, Johnston says -- and again we quote -- " Rule
> 97.205 E without qualification, permits the individual
> responsible for proper operation of a repeater to limit the use
> of a repeater to certain user stations." -- end quote.

> * * * Newsline Copyright 1994 all rights are reserved. * * *

Big surprise. I've always read it this way; there's no mention of open vs closed coordination in Part 97; why shouldn't 97.205(e) mean exactly what it says?

However, I do not believe 97.205(e) is the basis for civil action to prevent someone from using a particular frequency. In other words, if I want to prevent my repeater from repeating certain stations, either by manual or automatic means, I have that right. But litigating for a civil injunction goes way beyond limiting the use of my equipment.

A horrible precendent.

---
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

2431. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 21:49:07 UTC
From: mjsilva@ted.win.net
Message-ID: <111@ted.win.net>
Source record: 270133

In article <CLwrFv.M1o@odin.corp.sgi.com>, Charles Adams (adams@chuck.dallas.sgi.com) writes:
>Good on going discussion guys/girls.
>
>1. Many complain about their penmanship. Looks like to me you can kill two birds
> with one stone. Get a book on penmanship (they still write those don't they?).
> Find the best style to copy and work on penmanship at the same time.
>
>2. Start with cursive, don't DON'T print.
>
>3. Practice not dotting i's and j's and don't cross the t's. This will come in
> handy later at higher speeds.
>
>4. Use only half the horizontal width of the page.
>
>5. Write small, remember t=d/v, where t is the time to write a critter, d is the
> distance pen/pencil must move, and v is the velocity at which you can move the
> pen/pencil over the writing surface. Use ballpoint, not pencil. Pencil drags
> too much. I hate ballpoint, as i am OF and prefer fountain pen, but I use ballpoint
> for copying code up to 40 or 45 wpm, if i must write it down.
>
>

Unfortunately the books I read when I was learning the code long ago seemed to imply that printing in caps was the way you wrote down your message, so that's what I learned, even to the point of forcing myself to learn to write my E's as a backwards 3 for speed. Now that I've decided to go for 20 I've broken down and started using cursive, and it's going very well. Also, my handwriting has never been better. I end up with a beautiful document at the end of each QSO!

73,
Mike, KK6GM

2432. Re: Body Parts by J. Herman

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 22:08:15 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CM25Hs.L3I@news.Hawaii.Edu>
Source record: 270134

In article <762544765snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>Waiting now for the headlines in the LA Times, Dateline Hawaii:
>
>"Deranged Professor detonates 5 pounds of plastic explosive in mens
>room on campus. Police sifting through wreckage are puzzled by the
>large quantity of black basket weave material. Several used condoms
>and a radio were also found at the blast site."
>

COMPTON (Reuters) - Police psychologists today were extremely puzzled as to why a Compton man, identified as Jeffrey Angus, had stopped northbound traffic on the Santa Ana freeway by running along side cars only to stare at the crotches of male drivers and passengers. Witnesses stated he was yelling obscenities and clothed only in a black basket-weave print belt; a 2-way radio was said to be clipped to the belt (one ham radio operator who claimed to be a victim of Angus' staring said that the radio appeared to be on a frequency of 147.435 MHz - this could not be confirmed).

Story compiled by Jeff NH6IL

2433. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 22:15:28 UTC
From: lapin@casbah.acns.nwu.edu
Message-ID: <2l3360$4jr@news.acns.nwu.edu>
Source record: 270135

In article <9402271401591.gilbaronw0mn.DLITE@delphi.com>,
Gilbert Baron <gilbaronw0mn@delphi.com> wrote:
>>I've got some bad interference on 80 through 10
>>meter bands from an electric fence about 500
>>feet away. The effect is very sharp clicks
>>about 3-4 per second. Analog noise blanker
>>works some but not 100%.
>>
>>Anyone have any cures?
>>
>>Tnx,
>>Ned Hamilton, AB6FI
>>
>
>Well, if you ground the fence, case closed.
>
> Gil Baron, El Baron Rojo, W0MN Rochester,MN
> "Bailar es Vivir"
> PGP2.3 key at key servers or upon request
>

Just my curiousity about the fence: Are we talking about a real
electrified fence or is this what is commonly called an "invisible fence"
that send out a weak rf signal, received by a pet's collar to create a
shock when the pet tries to cross the "fence"?

Greg KD9AZ

2434. Madison to Kalamazoo info...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 22:21:32 UTC
From: jason@yar.cs.wisc.edu
Message-ID: <2l33hc$517@spool.cs.wisc.edu>
Source record: 270136
Cross-posted to: rec.autos.driving,alt.travel.road-trip,rec.radio.amateur.misc

I plan on travelling from Madison Wisconsin to Kalamazoo Michigan in a couple of weeks. My route is going to be I-90 to Chicago (via Rockford), and then I-94 to Kalamazoo (via Gary). Any speedtraps, 2m repeater, etc. that you can alert me to would be appreciated...

In addition, any info on Kalamazoo sights (romantic or otherwise) would be helpful.

Thanks in advance!!!

--
Jason J. Hanson | 1510 Tripp Circle #VI309 | (608) 264-1079
Univ. of Wisconsin | Madison, WI 53706-1294 | Ham: N9LEA (Extra)
-- jason@yar.cs.wisc.edu =*+++*= n9lea@n0ary.#nocal.ca.usa.na --

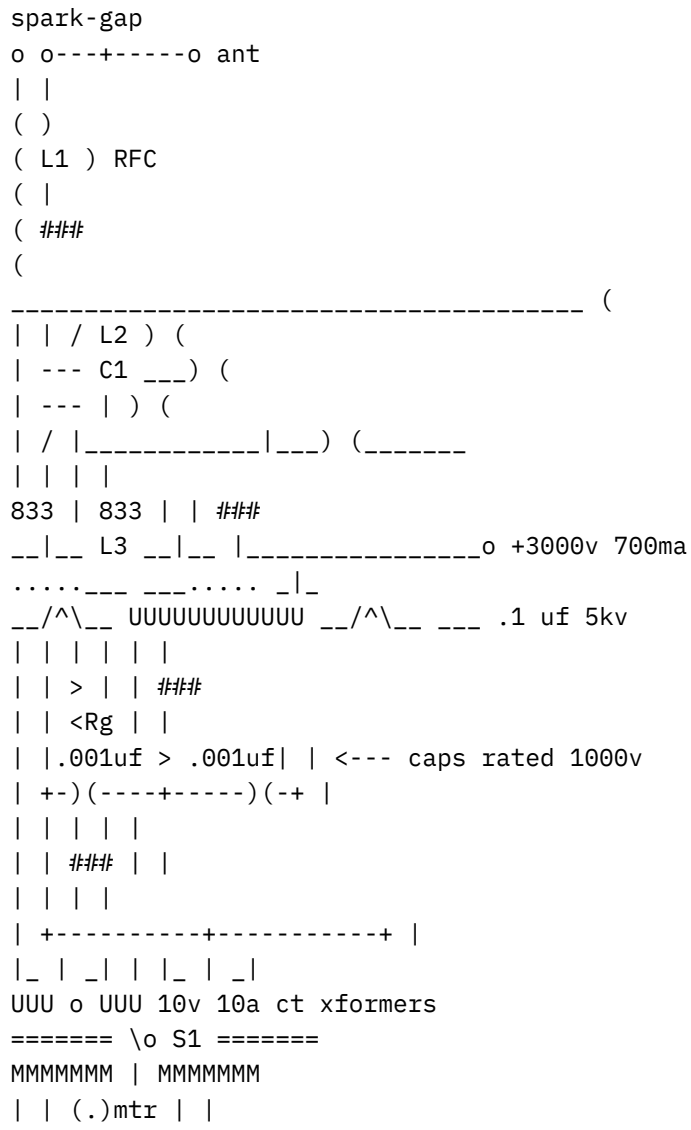
2435. Spark! (was: Re: RAMSEY FX TRANSCEIVER

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 22:22:56 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CM2668.L7v@news.Hawaii.Edu>
Source record: 270137

In article <rcrw90-010394101352@waters.corp.mot.com.corp.mot.com> rcrw90@email.mot.com (Mike Waters) writes:
>....
>BTW did you see the article about spark/arc transmitters in this month's
>QST? Not *that* would be fun to play with!
>

<BONG BONG BONG> MIKE WATERs OF CORP.MOT.COM YOU SAID THE MAGIC WORD: SPARK!
Your prize is the following Spark Gap Transmitter circuit, designed by
Randy, WA1UNW. {Remember, wear heavy rubber gloves when operating}:

TSB xmitter



```
o 117v o | o 117v o
>D F-24-a 's may be subbed for
| carbon mic 833's if supply's are made
### larger.
```

How it works:

The 2 tubes form a push pull power oscillator which makes alternating
current, but at a radio frequency.
This is done by use of L1 , L3, and the 2 little tubes.

In this case, the actual frequency is not important, sence the objective
is to generate maximum bandwidth...the goal of any 'phone station.
C1 is used to obtain maximum power by resonating L1 to L2's natural freq.

This RF voltage is stepped up by a factor of 30 to 100X by L2 and sent on
to the spark-gap, where the actual RF-to-be-sent is generated.

The RFC keeps the ant ckt at DC ground, yet will not short out the RF...which
is sent from the sparkgap, to the ant.

The ant wants to be one wire, and end fed. No coax required..just hook 'er
up and duck.

The length of the antenna determines the sending band it will be on.
The formula to use to get that length is...

Feet = (468/(((F*F) +730) -(F*F))) *35.5

F = frequency in Mhz (rounded off to nearest 100 Khz)

Voice modulation is done by use of a special Carbon Microphone, as used in
the 1920's...which can handle several amps.

Here, rather than sending RF thru the mic as was done back then, only DC
is sent thru.

That way, the operator (or inflictor) won't get an RF burn on his lips if
he speaks too close to the mic.

That modulates the power to the tubes , which varies the intensity of the
spark which then puts quite suitable a signal on the air.
The intellegibility will match the content of some of the QSO's now on the air.

To operate:

1 Place mouth near carbon microphone.
2 Close S1 and adjust C1 for dip in current (mtr) quickly.
3 Make oinking and Mooing noises to indicate your presence to everyone.
4 Open S1 when you get around to it.

****

Have fun, Mike (and don't tell the authorities where you got this from...)

Jeff NH6IL

2436. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 22:48:21 UTC
From: kreblon@doc.cc.utexas.edu
Message-ID: <2l353l$hbv@doc.cc.utexas.edu>
Source record: 270138

Yowzer!..I had the same problem out at the radio ranch outside Austin.
Well, I was about to take direct action when the static stopped.
The reality is that after the dogs..or whatever..get zapped a few
times, they can turn off the fence cuz they won't go near it.
You might mention that in the same breath as mentioning the potential
health hazards to humans that this high voltage generator could have.
They can turn it on once a month to re-inforce the lesson..and save
electricity the rest of the month!

73's Bob Nagy AA5PB
145.21 442.15 1294.0 29.66 UT aus.

2437. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 23:09:44 UTC
From: jbloom@arrl.org
Message-ID: <1994Mar2.230944.7194@arrl.org>
Source record: 270139

Glenn Elmore (glenne@sad.hp.com) wrote:
: How do you intend to support even a fraction of the "20% of hams who call
: packet their primary mode" with even *mediocre* performance (never mind
: something competetive with telephone line modems which would stimulate and
: support growth), 50 dB fade margins etc?

If 20% of hams are using packet as their primary mode when (for the
vast majority of them) the support consists of poorly engineered
1200-baud links and 300-baud HF links, doesn't it make sense that
at *least* that 20% would find 56-kbit/s useful? Understand, I'm
not arguing that faster speeds aren't desirable; they are. The
faster the better, within reasonable economic limits. But "fast
enough" is a relative term. It depends on the amount of data you
want to send and the response times you require. And it's like
hard disks: you'll fill a 20 Mbyte disk to capacity or a 500 Mbyte
disk to capacity, depending on which you have. Sure, you'd rather
have 500 Mbytes, but a heck of a lot of useful work gets done on
20 Mbyte disks. Sure, 56 kit/s isn't enough. Neither is
2 Mbit/s. Neither is 100 Mbit/s, because we can *always* fill it
up.

If you are going to insist that a 56-kbit/s network isn't useful,
what are the useage assumptions you are starting from? I bet I
can develop a (practical) set of usage assumptions that show
your proposed network to be unacceptably limited.

I'm not saying I don't agree that a higher speed network is desriable.
I'm just saying that the utility of the network vs. the speed
is purely a matter of degree, and rests on opinions about what
represents usable network capacity, not on hard data.

By the way... where can I buy my Hubmaster system? I *know* where
I can get the 56-kbaud hardware.
--
Jon Bloom KE3Z jbloom@arrl.org

2438. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 23:27:35 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CM2960.93I@ucdavis.edu>
Source record: 270140

Julian Macassey (julian@bongo.tele.com) wrote:

: Wheras real mortals will say: "Blew a fuse this morning". A
: true ham will spin it out with a desciption of what equipment was
: drawing current at the time, who was effected, the duration of the
: outage and the total milage driven to buy a new fuse. A skilled ham
: communicator can spin a simple event out so that the description of it
: takes three times longer than the duration of the actual event.

Nah,
A real Ham(tm) would have ten of the required fuses on hand but would
still manage to use teh wrong value the first three times. He (or she)
would then explain when and where they bought the fuse ten years ago.
The worst part is that many other Real Hams(tm) will actually be
interested and probably pump the first ham for more information. :-)

cheers,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2439. IPS Daily Report 02 03 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 23:29:38 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar2.232938.28680@ips.oz.au>
Source record: 270141
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 2 March 1994
Summary for 2 March and Forecast up to 5 March
IPS Warning 07 was issued on 02 March and is current
for period 03-09 March.

1A. SOLAR SUMMARY
Activity: Low

Flares: None

Observed 10.7 cm flux/Equivalent Sunspot Number : 98/45

1B. SOLAR FORECAST
03 March 04 March 05 March
Activity Low Low Low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 100/48

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : quiet to unsettled

Estimated Indices : A K Observed A Index 1 March
Learmonth 12 2323 3233
Fredericksburg 12 10
Planetary 10 10

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
03 Mar 20 Unsettled.
04 Mar 30 Active.
05 Mar 35 Active to minor storm.

2C. MAGNETIC COMMENT
Geomagnetic activity is expected to increase over the next
few days due to a coronal hole.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH

02 Mar normal normal normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
03 Mar normal fair poor
04 Mar fair poor poor
05 Mar fair poor poor
3C. GLOBAL HF PROPAGATION COMMENT
Degraded HF comms are expected over the next few days.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were 10 to 15% above predicted monthly values

T index: 73

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
03 Mar 60 About 15% above predicted monthly values.
04 Mar 30 Near predicted monthly values.
05 Mar 10 10 to 20% below predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
Communications are expected to become degraded over the next few
days.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2440. Re: Yaesu 2400H recs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 23:30:29 UTC
From: stevenbl@sco.COM
Message-ID: <1994Mar02.233029.28849@sco.com>
Source record: 270142

In article <9402270310.AA21723@jumbo.Read.TASC.COM> racuti@tasc.com writes:
>Hi,
>
> I would appreciate feedback from those who have
> the 2400 as to what they like or dislike about the
> rig. I'm also open to any other suggestions on the
> choice of a 2M mobile rig. Thanks.
>
> -- Rich N1QVT
>| Richard A. Cuti Voice: 617-942-2000 x3309 |
>| TASC Internet: racuti@tasc.com |
>| 55 Walkers Brook Drive Compu$erve: 76170,420 |
>| Reading, MA 01867 Amateur Radio: N1QVT |
>| |
>| (Opinions are strictly those of me, myself and I) |
>+---+
>

The 2400 has been a great. I've run it 2 years mobile and no problems.

2441. test

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 23:37:14 UTC
From: victorc%oakhill@sps.mot.com
Message-ID: <CM29M3.CpA@oakhill.sps.mot.com>
Source record: 270143

```
test
```

2442. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-02 23:51:35 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.762652082@hpuerca>
Source record: 270144

In <1994Mar2.144907.26098@bongo.tele.com> julian@bongo.tele.com (Julian Macassey) writes:

>A skilled ham
>communicator can spin a simple event out so that the description of it
>takes three times longer than the duration of the actual event.

I don't know about 3x, but every since my wife became a ham, she
has taken to giving me a 45 minute summary of 30 minute TV shows
that I didn't want to watch, much less hear about :-)

Cheers &73 Ed-N5RCK
HP Atlanta GA

2443. Re: Madison to Kalamazoo info...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 00:22:57 UTC
From: dc@panix.com
Message-ID: <DC.94Mar2192253@panix.panix.com>
Source record: 270145
Cross-posted to: rec.autos.driving,alt.travel.road-trip,rec.radio.amateur.misc

In article <2l33hc$517@spool.cs.wisc.edu> jason@yar.cs.wisc.edu (Jason Hanson) writes:

I plan on travelling from Madison Wisconsin to Kalamazoo Michigan in a couple
of weeks. My route is going to be I-90 to Chicago (via Rockford), and then
I-94 to Kalamazoo (via Gary). Any speedtraps, 2m repeater, etc. that you can
alert me to would be appreciated...

Univ. of Wisconsin | Madison, WI 53706-1294 | Ham: N9LEA (Extra)
-- jason@yar.cs.wisc.edu =*+++*= n9lea@n0ary.#nocal.ca.usa.na --

I'm going the oposite way; Tucson, AZ to Madison, WI.
East to TX then turn left if it's cold.
North to MT then turn right if it has thawed.

My experience is that in winter speed enforcement is a secondary
concern. As a general rule, the urban-rural 55-65 slowdown zones
and near state lines (after entering a state) are where troopers
are concentrated.
--
David Crawford dc@panix.com crawford@Arizona.EDU

2444. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 00:25:52 UTC
From: davros@bga.com
Message-ID: <2l3aqg$h6o@ivy.bga.com>
Source record: 270146

AAARRRRRGH!!!!

Now why, pray tell, would someone want to write down cw at hi speed?!??!?
Yeah, OK, write down call, QTH, signal report, blah blah for the log if
you must, but *why* do people insist on copying on paper?! Why why why?!
:) Head copy is:
1) Fast. No middle step. Just copy and go on and copy more!
2) Environmentally conscious! (Like I care, but anyway...) Yep, one less
tree to kill.
3. Natural! (Well, if you like cw anyway...) Sit back and enjoy it!
4) Convenient! No more hunting for a pen and paper to scribble on...

Head copy! Is it a lost ... h'mm. Well, do people head copy anymore?
Besides me, I mean?
--
Buddy Brannan, KB5ELV | God is love.
Riff-Raff #4 | Love is blind.
Internet: davros@bga.com | Buddy is blind.
davros@ccwf.cc.utexas.edu | Buddy is God.

2445. Re: Have a say about ARRL policy

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 00:56:50 UTC
From: rwilkins@ccnet.com
Message-ID: <2l3cki$mb0@ccnet.ccnet.com>
Source record: 270147
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

howard n lester (hlester@helium.gas.uug.arizona.edu) wrote:
: In article <1994Feb28.230819.12135@arrl.org>,
: Ed Hare (KA1CV) <ehare@arrl.org> wrote:
: >You can also usually find your Division Director at most major hamfests

: How much do they usually sell for?

: :)

I have seen them go for at least five hundred dollars at an auction. But
then they may only last for two years. ;)

--
Bob Wilkins bwilkins@cave.org

2446. Re: Have a say about ARRL policy

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 01:39:34 UTC
From: ehare@arrl.org
Message-ID: <1994Mar3.013934.8757@arrl.org>
Source record: 270148
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

howard n lester (hlester@helium.gas.uug.arizona.edu) wrote:

: In article <1994Feb28.230819.12135@arrl.org>,

: Ed Hare (KA1CV) <ehare@arrl.org> wrote:
: >You can also usually find your Division Director at most major hamfests

: How much do they usually sell for?

: :)

Ah, Howard, my dear friend, you can always find a way to get me
in more trouble. :-)

A warm and personal 73 from ARRL HQ, Ed

--

Ed Hare, KA1CV ehare@arrl.org
American Radio Relay League

2447. speed traps

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 02:06:53 UTC
From: oo7@pan.as.utexas.edu
Message-ID: <2l3gnt$i3a@geraldo.cc.utexas.edu>
Source record: 270149

dc@panix.com (David W. Crawford) asks:

>>I plan on travelling from Madison Wisconsin to Kalamazoo Michigan
>>in a couple of weeks. My route is going to be I-90 to Chicago (via
>>Rockford), and then I-94 to Kalamazoo (via Gary). Any speedtraps,
>>2m repeater, etc. that you can alert me to would be appreciated...

Hey, good buddy, doncha got your ears on?
Just go at 90 mph, you'll find them - is that a Roger?

Derek "try 55" Wills (AA5BT, G3NMX)
Astronomy Dept, Univ. of Texas
oo7@pan.astro.utexas.edu

--

2448. Re: personal communication Australia <-> USA

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 02:24:45 UTC
From: dave@eram.esi.com.au
Message-ID: <5220@eram.esi.com.au>
Source record: 270150
Cross-posted to: aus.radio,rec.radio.amateur.misc

In article <gradyCLxxqM.IID@netcom.com>,
grady@netcom.com (Grady Ward) writes:

| But PGP key exchange by radio is perfectly OK.

I guess that this would be a poor time to comment that if it were not for
the headers that scream out "Look at me! I'm a PGP message!" it would be
indistinguishable from 7PLUS, or R95, or UUENCODE, etc...

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

2449. mods for TR-751A

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 02:25:22 UTC
From: amb@news.cs.columbia.edu
Message-ID: <2l3hqi$l9k@shiva.cs.columbia.edu>
Source record: 270151

Does anyone know of any? The rig has been around for a while, and it doesn't seem to have the tightest front end around, so I'd guess there's something that can be done to open up rx if nothing else...

[I've scanned through the few most popular ftp sites for mods that I know of, with no luck, as well. Of course, I wouldn't argue with ic-u4at mods either...]

Thanks!

andrew
kb2ozr

2450. Easy to get 6:1 balun?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 02:31:58 UTC
From: wier@merlin.etsu.edu
Message-ID: <wier-020394203159@198.213.12.252>
Source record: 270152

Having a scanner with a 50 ohm input, I decided to try
a tv antenna (yagi) as a directional antenna. Small snag -
I got a 300 to 75 ohm transmormer, fed it to the 50
ohm input and it seemed to work reasonably well, but
I'd still like to get a better match. Does anyone know
where you can come up with a 300 ohm balanced to 50
ohm unbalanced (coax) transformer which would be good
up to about 1Ghz?

THANKS & 73's de WB5KXH

======== insert usual disclaimers here ============
Bob Wier, East Texas State U., Commerce, Texas
keeper of the Adobe Photoshop, MC68HC11, ICOM mailing lists
wier@merlin.etsu.edu (watch for address change)

2451. Re: Transformer Failure Modes?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 02:34:45 UTC
From: alanb@sr.hp.com
Message-ID: <CM2Htx.K42@srgenprp.sr.hp.com>
Source record: 270153

Karl Beckman (CSLE87) wrote:
: In article <CLyA9E.Bzx@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom)
: wrote:

: > Mark E. Bailey (mebly@eng.umd.edu) wrote:
: > : The proverbial friend of mine has two transformers. They are 110/220 VAC
: > : input, 50 VAC output and rated at 15 amps.
: >
: > : He needs 25 volts, not 50. The obvious solution is to feed 110 into the
: > : 220 input windings.
: >
: > : Question: Do we have to de-rate the output current to 7.5 amps?
: >
: > For a given secondary current, when you halve the primary voltage
: > (to 110V), the input current doubles.

Well, even genius HP engineers blow it sometimes :=) I realized as soon
as I posted the above that I had answered a totally different question
than was asked, but was not able to kill the posting before it went out.
I was thinking of the case where you apply the 110 volts to HALF the
input winding, so the output voltage is the same, and the input current
is doubled.

I only had one email reply calling me on it. Come on, gang, is nobody
reading my postings? :=)

To answer the original question, it would work fine to run the transformer
at 1/2 the rated voltage. You would be able to get at least as much
output current (at 1/2 the voltage). The transformer would run nice and
cool, since it is only handling 1/2 the power.

AL N1AL

2452. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 02:44:50 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CM2IAr.H43@ucdavis.edu>
Source record: 270154
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Karl Beckman (CSLE87) wrote:
: There is also the point that the ARRL may themselves be abusing the
: copyright process and harrassing other publishers. In fact, if a pattern
: were found,
: the League could be charged with anti-trust violations and the membership
: could potentially be charged individually with conspiracy and tried under
: the RICO statutes. Heavy stuff - is it worth the bad PR to amateur radio in

Do you really think that League members could be tried under the RICO statutes? I hope this is hyperbole and not stupidity. Even in the most recent misuse of RICO, ie. Operation Rescue, I have heard of no member who didn't actively violate the rights of others by participating in blockades being prosecuted. The prosecution would, if anything, be against the League itself that is the purpose of incorporation.

: general and the costs to ARRL in particular??

The arguement about bad PR and such is a much better argument and I personally think there will be an on-line directory with or without the Leagues cooperation. But you can't expect them to not protect their copyrights to the best of their abilities.

: The real issue is whether a valid claim of copyright exists at all. The
: previous recent legal precedent says that there can be no valid copyright
: granted to ownership of the facts, merely the presentation of them (in
: the specific ARRL case, in PRINTED form). Therefore the presentation of
: a larger set of data, similar in form (and in a totally different media) is
: not subject to copyright protection. Just because Encyclopaedia Brittanica
: copyrights their encylopaedia does not mean that they have sole ownership
: of the facts presented therein. They own _their_ _presentation_ only.
Yeah sure, according to your interepretation I could just digitize the EB and make it available on CD and there isn't a damn thing they could do about it. If this still seems like an acceptable interpretation to you please explain how?

: > (I'm not a lawyer so this is not a legal opinion :-)

: Likewise, but experience tells me that if the phone companies with all
: their legal resources LOST the US District Curt case protecting their
: claimed copyright of the contents of a telephone directory, the League
: stands precious little chance of winning, much less recouping the legal
: costs from the sale of their version of a repeater directory.

One more time, the league is not saying you can't duplicate the work they have done in the directory, the facts are the facts. You cannot copy the

data directly off of their publication without permission.

: What do you think, Gary and Mike? If someone should file charges based on
: the RICO aspect, does anyone win other than the lawyers? And will ARRL
: dues go up once again to pay for this folly?

Gary thinks that RICO is a violation of basic civil rights and as such
should not be brought to bear against anybody because you could
prosecute under other existing laws based upon actions rather than
intent nad if we let the government (RICO is a criminal recourse) get
their foot in the door we could end up with Janet and the ATF in
Newington if we aren't careful.

Mike thinks that's just what the ARRL needs, to be torched by Janet et. al.

Note The preceeding paragraphs regarding Gary and Mike are in jest and
please infer smileys wherever applicable. If I won't speak for the U.
why would I speak for them?

cheers,
Dan (I hope Gary and Mike have a good sense of humor) Todd
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2453. Anyone using JPS NIR 10?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 02:45:09 UTC
From: wier@merlin.etsu.edu
Message-ID: <wier-020394204509@198.213.12.252>
Source record: 270155

I have LOTs of ignition noise in the mobile while operating
on HF. Although I've been warned that DSP won't do much
towards knocking down impulse type noise, I've been using
a W9GR homebuilt unit and find that the improvement is
worthwhile.

About the only DSP unit which specifically mentions noise
reduction is the JPS NIR10 (which now had a Rev. 3.0
firmware upgrade). I'd be interested in opinions of
how well the current software works for noise reduction.

I know there was a QST review of the original unit in
(I think) Oct 91, but I don't have that issue here in
Texas (home qth is normally west of here).

Please e-mail or post here.

THANKS & 73's de WB5KXH

======== insert usual disclaimers here ============
Bob Wier, East Texas State U., Commerce, Texas
keeper of the Adobe Photoshop, MC68HC11, ICOM mailing lists
wier@merlin.etsu.edu (watch for address change)

2454. ARRL DX Bulletin #12 - February 28, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 03:16:02 UTC
From: Jim Reisert AD1C <reisert@wrksys.enet.dec.com>
Message-ID: <$arld.012@ampr.org>
Source record: 270156
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
ZCZC AE10
QST de W1AW
DX Bulletin 12 ARLD012
>From ARRL Headquarters
Newington CT February 28, 1994
To all radio amateurs

SB DX ARL ARLD012
ARLD012 DX update

Documentation has been received and approved for the following
operations:

Call: Operations Beginning (mm/dd/yy):

3V8W 07/17/93 CW only 7, 14, 18, 21Mhz
7Q7JA 05/07/90
8Q7BX 12/07/93
8R1/KD4GMV 01/11/94
8R1/KK4WW 01/11/94
9M2/DK7PE 05/17/93
A35CW 01/06/94
FS/W2QM 12/01/93
H44/DK7PE 12/13/93
HI8/7Q7JA 07/19/91
P29VCW 05/18/93
T7/DK7PE 05/10/93 144 Mhz
VK9MM 09/18/93
V51/7Q7JA 07/18/91
V63MV 12/23/92
YJ0AXX 12/23/93
ZD9SXW 09/29/93
ZK1ACW 01/17/94
ZV0ASN 01/01/94
NNNN

--
James J. Reisert Internet: reisert@wrksys.enet.dec.com
Digital Equipment Corp. UUCP: ...decwrl!wrksys.enet.dec.com!reisert
146 Main Street - MLO3-6/C9 Voice: 508-493-5747
Maynard, MA 01754 FAX: 508-493-0395
```

2455. Re: INTERNET -- PACKET gateway!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 03:59:10 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2l3nae$pr@bigfoot.wustl.edu>
Source record: 270157

```
: While it is possible to do, my question is why? would you want to do it?
:
: After all, Ham radio is just that, Radio! Tieing it into hardlines in
: that matter seems to stray from the topic of the hobby. Pointing mainly
: at the matter of RADIO to RADIO digital communication. Thats the sport
: of things. THink about it.
: Just my opinion of course! :)
:
: R.Seacat KB7ZFU/AA
```

What about this situation: I'd like to keep in touch touch with non-amateur friends, who I usually use email for. (internet) but when I'm not at college (i.e. at home), I'd like to be able to get email. I just talked to the local sysadmin about this, and I'd essentially be forwarding my email (pre-screened by a program I'd have to write, of course, for length and content), to myself in Dallas. Sound feasible? It _is _ getting past the hardline, as I dont' always have access to the internet.

--jesse(>10 weeks and waiting)

2456. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 04:09:55 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2l3nuj$pr@bigfoot.wustl.edu>
Source record: 270158

Daniel D. Todd (ez006683@chip.ucdavis.edu) wrote:
: Julian Macassey (julian@bongo.tele.com) wrote:

: : Wheras real mortals will say: "Blew a fuse this morning". A
: : true ham will spin it out with a desciption of what equipment was
: : drawing current at the time, who was effected, the duration of the
: : outage and the total milage driven to buy a new fuse. A skilled ham
: : communicator can spin a simple event out so that the description of it
: : takes three times longer than the duration of the actual event.

: Nah,
: A real Ham(tm) would have ten of the required fuses on hand but would
: still manage to use teh wrong value the first three times. He (or she)
: would then explain when and where they bought the fuse ten years ago.
: The worst part is that many other Real Hams(tm) will actually be
: interested and probably pump the first ham for more information. :-)

Now this is my question: do hams *ever* talk about anything besides what
kind of rig (s)he's got, ham problems, ham equipment, etc? As a waiting
(as in for my ticket) prospective, I've liistened to the local repeaters,
and personally, the conversations seem pretty boring if that's all you
ever talk about. Have I missed anything? or something? Is the purpose
of ham radio to talk about the technicalities of it? I know that the
whole nature of it requires technicality, but isn't there more to
it than that?

--jesse (still waiting)

2457. The ARRL is a business (was "Re: ARRL--->Online Repeater directory")

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 04:38:54 UTC
From: tcj@netcom.com
Message-ID: <tcjCM2nKv.28C@netcom.com>
Source record: 270159

Stephen Baker (sbaker@umassmed.UMMED.EDU) writes:

> The league publishes the repeater directory which it currently
> enjoys monopoly status. This must be enormously profitable for them
> as they are the sole source for such a directory

John E. Taylor III (rohvm1.mah48d@rohmhaas.com) replies:

> Enormously profitable? I don't think the League makes a _bundle_ on
> anything. They _are_ a business, though. As others have pointed
> out, non-profit does not mean that you can't _make_ money, it just
> governs what you _do_ with the money you make.

A league official recently told me that the ARRL spends an average of $75 per year per member. If I'm not mistaken, membership costs only $40. That extra $35 per capita has to come from somewhere.

As John very correctly points out, being a non-profit organization and generating revenue are not mututally exclusive. Although I'm neither a tax lawyer nor an accountant, my understanding is that, excluding an allowed accrual for operating expenses, a non-profit organization's income and expenses must balance to zero at the end of its fiscal year.

Todd, KB6JXT

2458. subscribe

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 04:59:39 UTC
From: zabrodsk@med.ucalgary.CA
Message-ID: <Pine.3.89.9403022146.A16985-0100000@ume>
Source record: 270160

ve6gk interested in what you have to say!

2459. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 05:13:46 UTC
From: tcj@netcom.com
Message-ID: <tcjCM2p6z.67n@netcom.com>
Source record: 270161
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

John Boteler (bote@access3.digex.net) writes:

> I thought that the whole idea of Conway's database was that net.hams
> would supply the empirical data, so it would be home-grown. Maybe
> I'm confused

I interpretated Conway's project more as an effort to liberate the data from the printed page and get it into a machine-readable format, making it vastly more useful. If some of the erroneous data in the published directories gets corrected in the process, so much the better.

> Having seen the data that is sent to the ARRL, I can confidently say
> that the effort of Bart Jahnke at the ARRL is minimized, since the
> regional coordinators must supply the data to the ARRL in a format
> almost identical to that which appears in the Repeater Directory.
> The ARRL simply appends the data together and voila! a Repeater
> Directory.

Interesting point. By this measure, it would seem to me that the volunteers who have undertaken to keypunch the data (reagardless of their sources) for Conway's project deserve more credit for their efforts than the League does.

> I am happy to report that T-MARC is implementing an "ombudsman" to
> verify the accuracy of its own data. The ombudsman will take the
> list of repeaters and verify that each one is on the air.

Bravo! Perhaps some of the other coordinating bodies will follow T-MARC's example. There are a handful of repeaters listed for my area that I've never heard a peep out of since I bought my first HT in '85. When I hear that there are long waiting lists in my area for a coordinated pair on 2M or 75cm, I often wonder if these phantom allocations are preventing someone else from getting a machine on the air, or whether they are merely bits of dross at the bottom of the files that nobody has ever bothered to clean up. Any thoughts, anyone?

> I still think that accuracy is crucial, since inaccurate data is
> worse than no data at all. So, why are we still jabbering about
> this? Don't say nothin, jes do it!

It seems to me that there's a much better chance for input from users concerning inaacuracies to have an impact on Conway's database than it does on the existing directories.

Todd, KB6JXT

2460. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 05:57:41 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CM2r85.1IF@ucdavis.edu>
Source record: 270162

Jesse L Wei (jlw3@cec3.wustl.edu) wrote:
: Now this is my question: do hams *ever* talk about anything besides what
: kind of rig (s)he's got, ham problems, ham equipment, etc? As a waiting
: (as in for my ticket) prospective, I've liistened to the local repeaters,
: and personally, the conversations seem pretty boring if that's all you
: ever talk about. Have I missed anything? or something? Is the purpose
: of ham radio to talk about the technicalities of it? I know that the
: whole nature of it requires technicality, but isn't there more to
: it than that?
Yes, Their latest surgery and their DX count but you'll have to pass the
13wpm code exam. If you can pass a 5wpm exam you can talk about crummy
sun spot numbers and 10X10 numbers instead.

: --jesse (still waiting)
Just like the energizer bunny... you keeep waiting and waiting... and
waiting. Hang in there.

cheers,
Dan

--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2461. ** New England Ham - Electronic Fleamarket Dates ** 1 March ** Update

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 07:38:36 UTC
From: w1gsl@ATHENA.MIT.EDU
Message-ID: <2l445s$dp5@senator-bedfellow.MIT.EDU>
Source record: 270163
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics,ne.forsale

```
New England Area Ham - Electronic Flea Market *** DATES *** 1994 P 1 of 2
All events are Ham Radio/ Electronic related except ~_____~
********************************************************************************
1994 Contact Source
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5 March Lewiston ME AARC @Multi P CTR $3@8 $5/T@7:30 Sal W1CUW 207 998 2853 F

5 March Twin Mt NH LARK + NCARC @TownHall 8A b$2 s$4 Gil WB1DVD 603 444 2290 F+

6 March Northampton MA MtTomARA @Smth VoT $12@8 $3@9 Jim K1MEA 413 527 3199

6 March Braintree MA SSARA @ DAV $14/T@9 $2@10:30 Thaire KA1MJR 508 230 2248 F

13 March Bristol CT ICRC @Eastern HS b$4@9 s$10/t@7 Chuck K1DFS 203 747 6377 F+

19 March Hudson NH IRS @Lions Hall $10/T@6:30 $2@8 John KA1FYB 603 881 5796 F

20 March Westboro MA MMRA @HS $2@10A sell@8AM$8-22 Walter N1HBR 508 481 0994 F+

20 March Yonkers NY WECAfest @Raceway $5@9 $10tg-$20/table@6 914 962 9666

26 March Portland ME @UofSME gym $6@6:30 $4@8 x6bI295 Ron KA1FI 207 846 9090 F

26 March Upper Saddle R NJ CRRC @SrHS Jack W2EHD 201 768 8360

26,27 March Baltimore MD Hamboree @Timonium 8A- $5 Sell $5/10+ 800 HAM FEST

2 April Waterford CT SCRAMS @MuniHall Auction@10 free Bob KA1BB 203 739 8016 +

10 April Framingham MA @ HS $14@8 $10tg $5@9 $2@10 Barry WN1N 508 877 4947 F+

10 April Southington CT SARA @HS? N1GCV 203 621 6191 D

17 April Cambridge MA FLEA at MIT Nick 617 253 3776 F
buy $2@9A sellers $10/sp@7A $8in adv $35/sp "Season Pass"
3rd Sunday Each Month April thru October

17 April Agawam MA HCRA @ Southwick Rec Ctr $3@9 Barry N1IJK 413 747 7010

23 April Nashua NH NE Antique RC $5@9 $1@10 @Res Ctr Church Ray 508 865 1290

23 April Montreal PQ WIARC B$3 $10/Table ti146.91- Jan VE2OL 514 636 4824 +

23,24 April Waltham MA Photographica 10-5 $5 ~photo~ (bef 9PM) 617 965 0807 F

24 April Pittsfield MA NoBARC @Taconic HS $7@7 $2@8 Chuck NZ1Z 413 447 8377 +

29,30 April 1 May Dayton OH F

1 May Buzzards Bay MA WARC @FO Eagle Barry N1EZH 508 759 7924 T+
```

1 May Yonkers NY @Lincoln HS $5@9 $18/T@7 Otto WB2SLQ 914 969 1053 +

6,7 May Rochester NH Hoss Traders @FG ex13 off rt 16 $5 noon fri Joe K1RQG

10-12 May Boston MA ELECTRO @ Hynes "Electronics trade show" +

15 May Cambridge MA FLEA at MIT Nick 617 253 3776 F

15 May Poughkeepsie NY Mt B ARC @Arl HS $10@6 $5@8 Ken KL7JCQ 914 485 9617
~~~~~~
LAST UPDATE 3-1-94 de W1GSL P 1 of 2
****
Additions/ Corrections via Internet w1gsl@athena.mit.edu
SASE for updated copy. TCPIP w1gsl@gw.w1mx.ampr.org
AX.25 w1gsl@wa1phy.#ema.ma.usa
US Mail W1GSL POB 82 MIT Br Cambridge MA 02139
P 2 of 2
~~~~~~
1994 Contact Source
~~~~~~
20,22 May Rochester NY NYS ARRL Conv Harold K2HC 716 424 7184 A

21 May Forestdale RI RIFMRS @VFW 8A Rick K1KYI 401 725 7507

30 May Whitman MA WARC @Rt 14+18 sell@$10/sp (monday) 617 447 1277 F

5 June Newington CT @HS Flea + ARRL HQ OH Al N1JWF 203 747 1925 T

19 June Cambridge MA FLEA at MIT Nick 617 253 3776 F
buy $2@9A sellers $10/sp@7A $8in adv $35/sp "Season Pass"
3rd Sunday Each Month April thru October

17 July Cambridge MA FLEA at MIT Nick 617 253 3776 F

23 July Nashua NH NE Antique RC $5@9 $1@10 @ Res Ctr Church Ray 508 865 1290

7 Aug Wellesley MA WARS @Babson Trim Hall $2@9 Barbara N1ICQ 617 329 2628 F+

13 Aug Charlotte VT @Old Lantern CG 8A- $5 su 3P Fri Dave N1ERD 802 893 7660 T

21 Aug Cambridge MA FLEA at MIT Nick 617 253 3776 F

27 Aug Gardner MA MARC @Drive-in $5@6 $2@8 Bill WJ1Y 508 939 2643 T

10 Sept Berlin VT CVTARC Robert McCorkle 802 433 6172 A

17 Sept Forestdale RI RIFMRS @VFW 8A Rick K1KYI 401 725 7507

18 Sept Cambridge MA FLEA at MIT Nick 617 253 3776 F

21-24 Sept Rochester NY Antique WA Conf Joyce 607 739 5443

25 Sept Framingham MA @ HS $14@8 $10tg $5@9 $2@10 Barry WN1N 508 877 4947 F+

25 Sept Yonkers NY @Lincoln HS $5@9 $18/T@7 Otto WB2SLQ 914 969 1053 +

1,2 Oct Boxboro MA NE Div Conv. Gene W1VRK 617 631 7388 A
~~~~~~

8,9 Oct Durham CT Nutmeg @FG Opens 4PM sat $5-25 Jim N1IZF 203 349 3353 F

16 Oct Cambridge MA FLEA at MIT Nick 617 253 3776 F

22,23 Oct Waltham MA Photographica 10-5 $5 ~photo~ (bef 9PM) 617 965 0807 T

29 Oct Nashua NH NE Antique RC $5@9 $1@10 @ Res Ctr Church Ray 508 865 1290

12 Nov Plymouth MA Mayflower RC @Mem Hall 9-3 sell@8 Jim NM1F 508 747 2224 T+

13 Nov Branford CT SCARA @intrm sch Brad WA1TAS 203 265 9983 T
~~~~~~
LAST UPDATE 3-1-94 de W1GSL P 2 of 2
Source F= Flyer T= tentative early info + = new info this month
A= ARRL J= John Roberts D= W1DL WR NV 73 CQ QST = Mags
This list has been compiled from many sources. While we believe the info to
be accurate the author can not be responsible for changes or errors.
Check with the sponsoring organizations for more details. This list will be
posted monthly to USENET. Mailed copies are sent when additions are made.
****
Additions/ Corrections via Internet w1gsl@athena.mit.edu
SASE for updated copy. TCPIP w1gsl@gw.w1mx.ampr.org
AX.25 w1gsl@wa1phy.#ema.ma.usa
US Mail W1GSL POB 82 MIT Br Cambridge MA 02139

New England Area Ham - Electronic Flea Market *** DATES *** 1994 ***

Page 3 Electronic distribution only. This page has the overflow if any P3
from the paper version.
~~~~~~
1995 Contact Source
~~~~~~
15 Jan Yonkers NY @Lincoln HS $5@9 $18/T@7 Otto WB2SLQ 914 969 1053 +

~~~~~~
LAST UPDATE 3-1-94 de W1GSL P 3
****
Additions/ Corrections via Internet w1gsl@athena.mit.edu
TCPIP w1gsl@gw.w1mx.ampr.org
AX.25 w1gsl@wa1phy.#ema.ma.usa
US Mail W1GSL POB 82 MIT Br Cambridge MA 02139
SASE for updated copy as issued.

2462. Re: Looking for QSL routes

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 10:55:25 UTC
From: oh3mep@lehtori.cc.tut.fi
Message-ID: <2l4fmt$lv5@lehtori.cc.tut.fi>
Source record: 270164

>: OH3PM

Perhaps this should be oh2pm ? At least if qso is made during some
major contests. I have never heard abt oh3pm , perhaps there is none.
Can't check right now.

Pete
--

********** oh3mep@cc.tut.fi **********
* Petri Keskinen * Kitiniitynkatu 7a3 * 33850 Tampere * Finland * Europe *
********** oh3mep@oh3rce **********

2463. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 12:49:12 UTC
From: jwittich@b4pph107.bnr.ca
Message-ID: <1994Mar3.124912.8838@brtph560.bnr.ca>
Source record: 270165

Tin cans is another good one. Maybe not as colorful as XYL,
but should help with the project. For the new fellows, tin
cans is an OF word for headphones. Ya don't hear it much
any more. I guess everybody uses speakers now.

73.
Jeff (yet another one!)

--
****
jwittich@bnr.ca * BNR claims they know nothing of my
AC4ZO * employment here.
****

2464. Re: Amateur Radio Newsline #863 25 Feb 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 12:58:01 UTC
From: kd1hz@anomaly.sbs.com
Message-ID: <2l4msp$9sr@paperboy.ids.net>
Source record: 270166

myers@cypress.West.Sun.COM (Dana Myers) writes:

> However, I do not believe 97.205(e) is the basis for civil action to
> prevent someone from using a particular frequency. In other words,
> if I want to prevent my repeater from repeating certain stations, either
> by manual or automatic means, I have that right. But litigating for a
> civil injunction goes way beyond limiting the use of my equipment.

> A horrible precendent.

I disagree completely. I applaude the decision.

As the trustee for a local 440mhz repeater, if I want someone off
my machine, up to now the only recourse I have had is to ask them
politely. If they continued to to operate "simplex" on my repeater
input, well, golly, that was just too bad for me, huh?

Since there are dozens of CB scumballs who, unfortunately, with the
declining price of dual-band radios, have decided to explore 440 (I
guess it was inevitable), I welcome this precident wholeheartly, as
now I can easily, with the FCC's backing, keep the effluvia from
overflowing onto my machine. Overall, the quality of life for the
users of my machine is increased, as they don't have to deal with
the aftermath of a poorly implemented nocode license on a daily
basis.

MD
--
-- Michael P. Deignan, KD1HZ -
-- Internet: kd1hz@anomaly.sbs.com - I never tell the truth, because I
-- UUCP: ...!uunet!anomaly!kd1hz - I don't believe that there is such
-- AT&TNet: 401-273-4669 - a thing...

2465. Re: Have a say about ARRL policy

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 14:34:25 UTC
From: dan@mystis.wariat.org
Message-ID: <3Z9Lic3w165w@mystis.wariat.org>
Source record: 270167
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

hlester@helium.gas.uug.arizona.edu (howard n lester) writes:

> In article <1994Feb28.230819.12135@arrl.org>,
> Ed Hare (KA1CV) <ehare@arrl.org> wrote:
> >You can also usually find your Division Director at most major hamfests
>
> How much do they usually sell for?
>
> :)
>
Do you really want us to tell you what they are WORTH?

:-)

--
"We are all now safe from crime. The Brady 'Law' has taken effect.
All can sleep peacefully knowing our paternalistic government will
take care and protect us! Of course I also believe in Santa Claus,
The Easter Bunny, The Tooth Fairy and The Great Pumpkin!"

2466. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 14:41:59 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar3.144159.3607@ke4zv.atl.ga.us>
Source record: 270168
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

In article <1994Mar2.175938.12119@alw.nih.gov> weisen@alw.nih.gov (Neil Weisenfeld) writes:
>Rather than thickening the law books, the government should educate the
>public about what is going on. The public will demand encrypted
>cordless phones and the manufacturers will deliver. Then the radio
>voyeurs have more challenges to liven up the sport :-). All the law is
>going to do is damage the lives of the very few people who get caught and
>damage the lives of the many who blab all sorts of confidential information
>on their cordless phones.
>
>I'd be interested if other people agree.

I agree, both with the idea that government is too quick to say "there ought to be a law" and that scanner hobbiests are at heart voyeurs. That's where the basic difficulty arises. Laws against Peeping Toms have existed for centuries. Congress is trying to extend that principle into the wireless age, but they're making the same mistake here as they are with the problem of violence in society. Banning scanners will be no more effective than banning guns, and has the undesirable side effect of causing unnecessary harm to legitimate users of these tools. The real problem in both cases is sick and twisted individuals with no sense of morals or ethics, not the hardware that enables them to pursue their voyeurism or violence.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2467. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 14:51:46 UTC
From: julian@bongo.tele.com
Message-ID: <1994Mar3.145146.13395@bongo.tele.com>
Source record: 270169

In article <2l3nuj$pr@bigfoot.wustl.edu> jlw3@cec3.wustl.edu (Jesse L Wei) writes:
>Now this is my question: do hams *ever* talk about anything besides what
>kind of rig (s)he's got, ham problems, ham equipment, etc?

I like to talk about drunkeness, debauchery, politics and
current affairs. This may be the reason that no one ever talks to me
on the Los Angeles repeaters.

Mind you, when I do get technical and say things like "Your
deviation is low", they offer to change their batteries.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

2468. Re: Electric Fence RFI/ Liabilities

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 14:59:41 UTC
From: galen@picea.CFNR.ColoState.EDU
Message-ID: <1994Mar3.145941.105846@yuma>
Source record: 270170

>In article <9402271401591.gilbaronw0mn.DLITE@delphi.com>,
>Gilbert Baron <gilbaronw0mn@delphi.com> wrote:
>>>I've got some bad interference on 80 through 10
>>>meter bands from an electric fence about 500
>>>feet away. The effect is very sharp clicks
>>>Anyone have any cures?
>>>Ned Hamilton, AB6FI
>>
>>Well, if you ground the fence, case closed.
>> Gil Baron, El Baron Rojo, W0MN Rochester,MN

If you disable an electric fence and the livestock gets out and causes
damage or gets killed, you're in big trouble. Those critters are expensive,
and if someone hits one with a car...

If you can wait a few weeks until the grass starts to grow, the livestock
will get a few zaps, learn about the fence, and I'll bet the owner shuts
it off.

It also helps to make sure the fence has good grounds and no partial shorts
to fence poles, the grass, etc.

Galen, KF0YJ
I get E-fence I too.

2469. Re: Easy to get 6:1 balun?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 15:01:01 UTC
From: julian@bongo.tele.com
Message-ID: <1994Mar3.150101.13485@bongo.tele.com>
Source record: 270171

In article <wier-020394203159@198.213.12.252> wier@merlin.etsu.edu (Bob Wier) writes:
>Having a scanner with a 50 ohm input, I decided to try
>a tv antenna (yagi) as a directional antenna. Small snag -
>I got a 300 to 75 ohm transmormer, fed it to the 50
>ohm input and it seemed to work reasonably well, but
>I'd still like to get a better match. Does anyone know
>where you can come up with a 300 ohm balanced to 50
>ohm unbalanced (coax) transformer which would be good
>up to about 1Ghz?

You are making a rash assumption that the input impedance of
your scanner is 50 Ohms across its range. Trust me, it isn't.

If your antenna is not working optimally with your scanner,
there are many things that could be wrong besides the balun and coax
impedance. Loss in the balun at frequencies of interest may be one, so
get the best TV/UHF balun you can find. The antenna may not be optimum
at the frequencies of interest.

Feeding your scanner with 75 Ohm coax won't make any
difference that you will notice. Feeding it with a long run of cheesy
coax will make a difference.

Getting your antenna up high and in the clear will make a
difference.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

2470. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 15:30:14 UTC
From: zlau@arrl.org
Message-ID: <1994Mar3.153014.6322@arrl.org>
Source record: 270172

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: Ah yes, DX Packetcluster. "Hey George, the link's flaky."
: "Well put up stacked beams and pile on the kilowatts,
: to hell with the other digital users, the DX spots
: have to get through." (I've actually heard exchanges
: like that. The lack of cooperation between the Packetcluster
: operators and the rest of the digital community is somewhat
: legendary. It's that Type A DXer mentality.)

Considering what Gary has written, I don't find the lack
of cooperation a surprise. Nor do I really think it to
be a problem worth solving, due to the lack of excess
capacity to be shared. Actually, having a number of
separate networks may actually be an advantage in an
emergency, since the redundancy may help assure that
something is still working after the disaster strikes.
It might also be useful for seeing what actually works
better in the real world.

BTW--how else does one improve a point to point link,
besides using bigger antennas and more power? The only
solutions I can think of are changing frequencies or
adding sites. Obviously, if there is an interference
problem, it is easier if the *other* guy were to move.
I don't think there is any disagreement that sites are
hard to find, which is why I say people should keep an
open mind and consider a variety of possibilities.

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

2471. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 15:34:56 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar3.153456.3808@ke4zv.atl.ga.us>
Source record: 270173

In article <CM1nqJ.MBx@srgenprp.sr.hp.com> glenne@sad.hp.com (Glenn Elmore) writes:
[I wrote]
>> We're dealing with a very sparse matrix here. You don't seem to understand
>> that as you sit in a dense metroplex with hams on nearly every block. The
>> rest of the country just isn't like that. *Most* of our links are 60-80 miles
>> long, over unfavorable terrain, to sites we can *get*. Nearly *none* of them
>> are LOS. We *depend* on the beyond LOS propagation available most easily at
>> lower frequencies to maintain those links. (If we could muster the power to
>> do microwave forward scatter, that would be different, but there just aren't
>> enough surplus TWTs out there to do the job, and site managers frown on 32 ft
>> dishes on their towers. We *can't* depend on inversions and ducts, they just
>> aren't reliable enough.)
>
> At least you and I agree on the need for engineered, reliable links
>and that construction of a network will take a great deal of
>cooperation. I've emphasized that one of the few strengths amateur networking
>*may* have is "ins" and access to local sites. All these are
>points I've tried to make in some of my CNC contributions.

Yes, but as you indicate below, the sites we *can* get aren't usually
sufficient for a LOS network of national scope. I can't emphasize enough
how *big* the vacant spaces are between groups of amateur packeteers in
much of the country, or how unsuited to LOS paths much of the terrain
separating them is.

> And in case you think I'm in a densely populated, ideal terrain out here,
>think again. Mountains only work for you when you can get access and have
>helpers to maintain them (as you suggest). I end up spending a lot of my time
>with a 3 arc-second elevation database trying to figure out how to make
>a well connected network out of sparse users and large obstacles. My few
>links are (too) long just as you say yours are there.

Yes, but, for example, there are more hams in LA metro than in all of
Georgia. Other states are even less densely populated with amateurs
and/or suitable high sites. This is a source of incredible frustration
to a potential network designer.

> My argument with your 56kbps approach is that it simply doesn't come
>close to being enough capacity. It isn't nearly adequate for the needs
>of a competetive nationwide amateur network. And, in addition,depending
>on non-LOS propagation while maintaining reliability is an even less
>optimum use of resources.

The only reason I'm pushing 56 kb BLOS links is that I think they're closer
to *possible* than microwave LOS links in many cases. I do *not* say
we shouldn't use faster links where we can make them work. I just don't

think that's going to be enough places to fill out the national network. I think we're going to have to use beyond LOS paths for a lot of the links, just as we do now at 1200 and 9600 baud. If we can upgrade most of those to 56 kb, we'll have made a large improvement in the network capacity and capability. Now I know that doesn't fullfill your dream of a data superhighway, but just as we don't build interstates anymore because it's too costly to serve the remaining areas, I think we have to scale our network plans to the reality of paved two lane rural highways. That's still a big step up from the game trails and dirt ruts we're using now.

> How do you intend to support even a fraction of the "20% of hams who call
>packet their primary mode" with even *mediocre* performance (never mind
>something competetive with telephone line modems which would stimulate and
>support growth), 50 dB fade margins etc?

As the telcos know, most traffic is local. Out of LATA traffic is orders of magnitude less than what the local switches have to support. I'm talking about the out of LATA connectivity here. If a local area can support megabaud+ local hubs, great, but for the vast expanses the national net has to cross, that's not viable. A 20:1 ratio of intra-LATA to inter-LATA capacity is reasonable.

> You've presented some equations relative to non-quality paths, troposcatter
>etc, could you show us how a system like that can provide the required
>total information capacity and approximately what it might cost?

I'll give a quick cost estimate, about $6 million in capital outlays and a continuing site rental of around $1.5 million per year. That'll buy us a 47X increase in speed, and a much higher increase in effective throughput due to engineered duplex non-contending links, over what we have now, and give us the full connectivity that we currently lack. Long distance performance will be limited by the network delays and capacity limits, but at least it will exist.

> Could you present an estimation for us all of what the approximate vhf
>hardware and resulting per-user capacity of a reliable nationwide
>network of 3000 56 kbps full duplex nodes (your numbers) using beyond
>LOS propagation might be? Please show not only margins and hardware for
>an individual link but also an estimate of the spacial and frequency reuse
>problem/potential.
>
> My estimates and opinion of the above indicate that it falls orders of
>magnitude short of providing service adequate to support itself in an
>amateur environment. I truly hope you can show me my error(s) and that a
>beyond-LOS vhf network is viable.

Well there is an existance proof that beyond LOS VHF networks are viable in the amateur community, *the existing 1200 baud networks*, and their site costs are on the same order as the proposed system. What I'm proposing is a dramatic upgrading and expansion, at low UHF, of that system, but with the careful engineering and organizational maintenance that the current

system lacks. No it won't carry long distance digitized voice or video, much as I would like that to be true, nor will it allow remote interactive logins on a coast to coast basis, but it will allow the movement of Email and other bulk data transfers in a timely manner in a way that's completely divorced from the commercial communications infrastructure. And higher speed links in local areas, *where they are viable*, will allow some of those advanced features. We just can't support that kind of bandwidth and response time on a national basis. Too many sites, too much geography, too few hams.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2472. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 15:52:38 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar3.155238.4193@ke4zv.atl.ga.us>
Source record: 270174
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <CM2IAr.H43@ucdavis.edu> ez006683@chip.ucdavis.edu (Daniel D. Todd) writes:
>
>Gary thinks that RICO is a violation of basic civil rights and as such
>should not be brought to bear against anybody because you could
>prosecute under other existing laws based upon actions rather than
>intent nad if we let the government (RICO is a criminal recourse) get
>their foot in the door we could end up with Janet and the ATF in
>Newington if we aren't careful.

That's right on, good mind reading. While I think the ARRL position is
shaky at best here, I don't want to see tanks rumbling down Main St.
in Newington either. The BATF and FBI death squads are already bad
enough, let's not have the Copyright Office or the FCC start donning
ninja suits and slaughtering Americans too.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2473. Alpha Bravo Charlie Delta

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 16:12:00 UTC
From: steve.allen@brent.uucp
Message-ID: <21377.553.uupcb@brent.uucp>
Source record: 270175

Brian.Kelk@cl.cam.ac.uk writes:

>Used by New York police:
>Adam Boston Chicago Denver Edward Frank George Henry Ida
>John King Lincoln Mary Nancy Ocean Peter Queen Robert Sam
>Thomas Union Victor William X-ray Young Zebra

Current NYPD usage is:
Adam Boy Charlie David Eddie Frank George Henry Ida John King
Larry Mary Nancy O Peter Queen Robert Sam Thomas Union Victor
Queen Robert Sam Thomas Union Victor William X-ray Yankee Zebra

The Midtown North Sector C patrol sometimes refers to itself as 'Charles
Of The North.'

-Steve N2WSA

. QMPro 1.51 . It's more fun than sex-- it's the Sunspot Index

----
The Brentwood BBS! 12 Nodes (914)-381-1600

2474. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 16:16:21 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar3.161621.4366@ke4zv.atl.ga.us>
Source record: 270176

In article <2l3nuj$pr@bigfoot.wustl.edu> jlw3@cec3.wustl.edu (Jesse L Wei) writes:
>Now this is my question: do hams *ever* talk about anything besides what
>kind of rig (s)he's got, ham problems, ham equipment, etc? As a waiting
>(as in for my ticket) prospective, I've liistened to the local repeaters,
>and personally, the conversations seem pretty boring if that's all you
>ever talk about. Have I missed anything? or something? Is the purpose
>of ham radio to talk about the technicalities of it? I know that the
>whole nature of it requires technicality, but isn't there more to
>it than that?

Sure. Hams also talk about their operations and illnesses a lot. Old
people tend to be sick a lot. And then there's the continuous blather
about traffic. One rare ocasions you'll stumble across a group that
actually will tackle interesting topics. Some hams have a life outside
radio. For the last two mornings, the discussion on my repeater has
centered on restoring old Dodge Powerwagons. We also freely discuss
politics, Unix wizard tricks, and the merits of .410 shotshell derringers
versus .22 Mag derringers as belly guns. We try to keep the ham radio
related discussions off-line and handle that at lunches and over the
telephone. Seems somehow "business related" to talk about radio on
the radio.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2475. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 16:38:21 UTC
From: CSLE87
Message-ID: <CSLE87-030394113822@145.39.1.10>
Source record: 270177

In article <1994Mar2.184954.28300@ve6mgs.ampr.org>, mark@ve6mgs.ampr.org (Mark G. Salyzyn) wrote:

> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>
> >I was thinking of more than some crude relative indications, though
> >that's often useful. But how many amateurs have frequency counters
> >or spectrum analyzers that cover 10 GHz, or even bolometer power meters?
>
> How many amateurs have these peices of equipment even on 1MHz ...
>
> Ciao 73 de VE6MGS/Mark -sk-

Actually, judging by the number of persons tuning up live, very few even have dummy loads _without_ the bolometer. Others commenting on a different (and hopefully expired) thread would tell you that a spectrum analyzer on 2M is useful as a Ramsey-finder. Unfortunately there are more deficient radios out there than the few Ramsey kits that were not properly aligned by the builder. A few more deficient operators, too!

--
"To continue discussion, insert new thread here."
--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

Some of the opinions expressed above aren't even claimed by the author!
Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

2476. Re: Madison to Kalamazoo info...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 17:43:05 UTC
From: Jim.Rees@umich.edu
Message-ID: <2l57j9$bt3@lastactionhero.rs.itd.umich.edu>
Source record: 270178
Cross-posted to: rec.autos.driving,alt.travel.road-trip,rec.radio.amateur.misc

In article <2l33hc$517@spool.cs.wisc.edu>, jason@yar.cs.wisc.edu (Jason Hanson) writes:

In addition, any info on Kalamazoo sights (romantic or otherwise) would be helpful.

The best route from Madison to Kazoo is via the Lake Michigan ferry, the Badger. But it doesn't operate this time of year.

The premier tourist attraction in Kazoo used to be the Gibson guitar factory. Now it's the brewery.

Check Hunt's Guide for other things to see and do.

2477. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 18:12:37 UTC
From: ah301@yfn.ysu.edu
Message-ID: <ah301-030394131237@sy_j.pgh.wec.com>
Source record: 270179

In article <edh.762652082@hpuerca>, edh@hpuerca.atl.hp.com (Ed Humphries)
wrote:

> In <1994Mar2.144907.26098@bongo.tele.com> julian@bongo.tele.com (Julian Macassey)
writes:
>
> >A skilled ham
> >communicator can spin a simple event out so that the description of it
> >takes three times longer than the duration of the actual event.
>
> I don't know about 3x, but every since my wife became a ham, she
> has taken to giving me a 45 minute summary of 30 minute TV shows
> that I didn't want to watch, much less hear about :-)
>

speaking of hamspeak and contentless communication ;^)

from my observation, usually the retired people are the experts at
that. Yesterday on my way home from work and the usual nut net
with about 8 people talking, and all of a sudden the two retired
people took over and was talking hamspeak (like repeating the same thing
over and over again each time they spoke), and then they were about
to clear because they said they do not want to hog the repeater
(yeah right), but I think they talked about ten more times after they
said clear before they actually let the repeater go. of course,
everybody in the net was trying to be polite and nothing was said
about it.

2478. Re: QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 18:38:56 UTC
From: ep588deb@pts.mot.com
Message-ID: <ep588deb-030394133528@192.8.211.199>
Source record: 270180

In article <1994Mar3.005310.8172@arrl.org>, ehare@arrl.org (Ed Hare (KA1CV)) wrote:

You micht want to take a look at the EIA standard for communications receivers as a starting point. EIA-204 is the number, I beleive. Most of the IM situations the I have been involved with have been in band with a half dozen channels situated so that several IM products ended up on channel. EIA specs 2 and 4 channel spacing. You could extend that to include interferers in the Paging band. Just a suggestion

> brunelli_pc@delphi.com wrote:
>
> : One thing that the article did not address is the poor intermod
> : rejection of several of the reviewed units. Here in central CT
> : the pager industry is booming and nmy rig is very (th78) sensitive
> : to it.
>
> The problems encountered by handhelds with strong out-of-band signals
> are probably a combination of image responses and true out-of-band
> IMD. Image is fairly easy, and I have asked Mike Gruber, our
> test engineer, to measure that for the next FM rigs that come
> through for Product Review testing.
>
> IMD is not so easy. While we can certainly measure it with ease,
> the real question is what to measure. There are probably hundreds
> of possible combinations of out-of-band signals that could cause
> problems. Not only do we not have the staff time to measure them
> all, we don't have the page space to print them all, and the average
> reader probably wouldn't want to wade through all of the numbers
> in the test-result table. (I sure wouldn't!)
>
> I want to start analyzing the problem (to ultimately propose a
> solution to the QST editorial team) by soliciting reports of
> image-response problems and IMD problems experienced in metro
> areas. What are the involved frequencies? If it is a single
> transmitter, what is its frequency; what ham frequency is getting
> creamed? Even approximate frequencies are useful, so saying that
> a 900-MHz signal got through would be useful, for example. For IMD
> reports, what two signals are beating together to create a
> signal in the ham band? For IMD, accurate frequencies are better,
> but they may not always be known.
>
> Please send any reports to ehare@arrl.org, and post them here, if
> you wish. I would appreciate the email report, though, just in
> case our news feed gets wierd again and I miss a few posts.

>
> If I can identify the specific problem areas I can put together
> a test series and add them to the Product Review test battery.
> Once we are confident that our choices are correct, and the numbers
> we are getting are good, then I can pitch it to the editors to determine
> how the information can be best made available to our members.
>
> 73 from ARRL HQ, Ed
>
>
> Rumor has it that the standard is the best for imd rejection.
> :
> : On the up side, the th78 has eexcellent features, easy to use, not
> : THAT hard to program, and the alpha-numeric display riulkes!!
> : that is RULes.... bad editor.....
> :
> : the manual is about the worst of any i have seen, but until hewlett
> : packard starts making ht's, i do not see it getting better.
> :
> : good luck
> :
> : pete brunelli
> : n1qdq
> --
>
> -----
> Ed Hare, KA1CV ehare@arrl.org
> American Radio Relay League

--
David Bengtson All Standard Disclaimers apply
Motorola Paging and Wireless Data Group Sorry, no witty quote.
MS 98
1500 NW 22nd Ave
Boynton Beach, FL 33467

2479. Re: Copying High-Speed CW: Print or Script?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 19:03:30 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <CM3rLu.A90@odin.corp.sgi.com>
Source record: 270181

In article <2l3aqg$h6o@ivy.bga.com>, davros@bga.com (Buddy Brannan) writes:
|> AAARRRRRGH!!!!
|>
|> Now why, pray tell, would someone want to write down cw at hi speed?!??!?
...stuff deleted
|> Head copy! Is it a lost ... h'mm. Well, do people head copy anymore?
|> Besides me, I mean?
|> --
|> Buddy Brannan, KB5ELV | God is love.
|> Riff-Raff #4 | Love is blind.
|> Internet: davros@bga.com | Buddy is blind.
|> davros@ccwf.cc.utexas.edu | Buddy is God.

i still copy "in the head" at high speeds above 45 wpm and mobile cw.
i do like to write everything down below 45 wpm for : a) practice, b) keep
record of qso in case i wanna write some letter/note with qsl card,
and c) not lose the skill. use it or lose it. :-)

dit dit
--
Chuck Adams K5FO CP-60
adams@sgi.com

2480. Status of Online Repeater Directory Project....

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 19:05:39 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Mar3190539@mipgsun.mipg.upenn.edu>
Source record: 270207

In the subsequent two posts, I enclose copies of the two letters that the ARRL has or will send me. The second letter has not yet been received so I am unable to verify the accuracy of the email version compared to the printed version but I have no reason to believe that there will be any differences.

In response to the two written letters as well as a telephone conversation that I had with Mr. Imlay, the author of the letters, I state below the current aims of the project, the objections that the ARRL has with the existing database as I understand the situation, and the current ideas to work around the restrictions imposed on the project. The list of ARRL objections stems from both the two letters posted and the telephone conversation I had with Mr. Imlay. It is my current plan to give the project one last try before giving up.

==========

GOAL

The creation of an online database of amateur repeaters. The advantage of an online database is obvious since it allows arbitrary user searches. This is far less restrictive than what is currently available. An online repeater directory is more easily updated to correct for errors, new repeaters, repeaters that no longer exist and changes in repeater status. It is my hope that the ARRL will not turn around and publish a online directory of their own as this would make my efforts a waste. I am more than willing to let the ARRL carry the ball if they so desire. If so, I can fold up shop, consider the project a success and get on with my life; I have plenty of other interesting projects in the back burner.

ARRL OBJECTIONS

The ARRL objects to the geographic descriptions used in the current database. Specifically, they object to the middle location descriptor between State and immediate location.

The ARRL objects to the contents of the comments field. The use of ARRL abbreviations (e.g. o for open, etc) will not be permitted if it can be construed to be coming from the ARRL repeater directory.

The ARRL will not give permission to use the data in the repeater directory in any form. Any data present in the online directory must not have its source from the ARRL directory.

PLANS FOR THE PROJECT

The parts of the ARRL database not subject to copyright will be extracted and used as a starting point for a new directory.

Given my understanding of the ARRL's restrictions, I believe that I can restart the online directory project without making the current data format obsolete. The definitions for the fields that the ARRL objects to will be clarified and any extensions will make use of some of the reserved fields. This way, existing software that has been written to use the database will not have to be rewritten.

The comments field will use only English words. This plan may have to change if it turns out that this unduly burdens any software that is written to access the data.

The middle geographic descriptor (field 11, minor region designation) will be revised. From what I understand, field 10 (major region designation in which we generally put the State) and field 12 (immediate location) is not under dispute. Since we may have problems with using the designations North, East, West, South, etc. since the ARRL uses these designations sporadically in the directory, I am hoping to use nearest major city or some other landmark that would be familiar to a traveller NOT living in the area. For example, a repeater in Hell's Kitchen in NYC would be designated as being in New York City in field 11.

I have heard opinions that say that the data is not subject to copyright (one such opinion motivated me to start this entire thing) and others which say that it is. Ultimately, I do not care one way or another. I prefer to avoid the threat of legal action in the first place. Given this, I plan to comply with the ARRL requirement not to use the directory as a source of information. The revised project will take input primarily from users with coordinator input where this is possible. From what I understand, some coordinating bodies are likely to refuse to cooperate. We will consider coordinating body data to be the "icing on the cake."

I have received flames to the effect that any repeater directory must contain totally accurate information and that allowing a measure of inaccuracy defeats any benefit whatsoever. I note, however, that no totally accurate database exists anywhere. All the databases currently available contain numerous errors and all are a crude approximation of reality. While accuracy would be nice, the online database will probably not be able to achieve the level of accuracy that some would like; it simply is not practical at all. The online directory project will rely on the honesty and the good faith of its users. In effect this is the same trust that is relied upon by every repeater database. While accuracy is appreciated, it will not be allowed to overburden the data collection.

The renewed project will require a great deal of manpower which I or the number of volunteers currently available can devote. I am hoping divide the workload in some way. User data will hopefully be collected already in the format that I described previously so that

the collector will not have to do this.

Since I hope to not make the current file format obsolete, data collection from users can proceed immediately even before the next version of the format has been decided upon. I am hoping to use some of the reserved fields to indicate linked repeater systems.

While I have no particular desire to copyright the collected data, a number of volunteers expressed the interest to prevent the data from being "stolen". Thus, this will be done in all likelihood.

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

2481. first letter

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 19:07:31 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Mar3190731@mipgsun.mipg.upenn.edu>
Source record: 270208

This is a (hopefully accurate) transcription of the first letter that was sent to me. Any typographical errors not noted below are my own. These are not my words and are the words of the ARRL. The use of the symbol "$" is in lieu of a non printable symbol in the letter.

Conway Yee, N2JWQ/AA

================== begin letter ================================

January 28, 1994

Mr. Conway Yee N2JWQ
2144 East 21 Street
Brooklyn, NY 11229

Dear Mr. Yee:

This office represents the American Radio Relay League, Incorporated. I have been referred an Internet message posted by you concerning the publication of a repeater database on line. While the League does not wish to be uncooperative, and is in fact supportive of volunteer efforts to provide information to radio amateurs, it is unfortunately obligated to enforce its copyrights, or lose the ability to do so. Your use of the Repeater Directory, and its format, as the basis for your on-line database is an infringement of the League's copyright. We are compelled to request that you cease any use of it in putting together any repeater database.

I understand from your Internet message that you have been informed that use of the data from the Repeater Directory is not a copyright infringement. I disagree with whatever source you have consulted, however. The Repeater Directory is a compilation, as defined at 17 U.S.C. $101, and is protected as such by 17 U.S.C. $103. Furthermore, your database uses the format of the League's Repeater Directory, and by your own admission uses the same coding sequence for the characteristics for each repeater. This is a separate basis for concerns about copyright infringement.

The enforcement of copyrights is not something in which the League wishes to involve itself, and we certainly do not intend to deprive anyone of information about repeaters. We are placed, however, in a difficult position, to the extent that the League's copyright cannot [sic] be enforced selectively. We are therefor obligated to request that you immediately stop all use of the Repeater Directory as you have commenced to do. We apologise [sic] for having to take this position, but must pursue any further publication of your database in any form which uses either the compiled data contained in

the Repeater Directory, or its format.

We hope that this does not cause you significant difficulty, and that you understand our position in the matter.

Yours very truly,

Christopher D. Imlay, N3AKD
General Counsel, ARRL

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

2482. second letter

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 19:08:08 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Mar3190808@mipgsun.mipg.upenn.edu>
Source record: 270209

This is a copy of the letter that is the reply to my queries to the ARRL. This was taken directly from an email sent to me via email. Any typographical errors are the ARRL's.

Conway Yee, N2JWQ/AA

Mr. Conway Yee N2JWQ
2144 East 21st Street
Brooklyn, NY 11229

Dear Mr. Yee:

I am indeed surprised that my letter to you of January 28 has caused such concern among your Internet group. I hope that my last letter to you was not misinterpreted. Perhaps you would be kind enough to upload my letter to you and this one, without editorial comment, so that there will not be any confusion in the future on the part of Internet participants.

There are several reasons why the League, a publisher of materials for radio amateurs, and a membership organization, is required to maintain the copyright protection for its intellectual property. First, and perhaps most importantly, the law is that unless a copyright holder protects its property upon being alerted to an infringement, it cannot do so in the future. Therefore, if the League is ever going to protect its copyright in the compilation that is the repeater directory, it must do so uniformly, and on a timely basis.

Second, the repeater directory is one of the League's publications that it sells to fund its membership services. The publication is produced, in part, because the document is a service to radio amateurs. Also, in part, it is sold as a means of offsetting the costs of the League's programs, so that it may keep its dues at a reasonable level for members and continue to provide association services. The League provides certain services only to members, and others to everyone. The costs associated with this are substantial. It is not inexpensive to protect amateur frequency allocations, for example. The revenue for these programs comes, in large part, from the sale of publications. No reasonable person could expect that the materials that make up the compilation, which cost a significant amount to compile and produce in any case, would simply be given away. If we lost copyright protection for the Repeater Directory, others could simply produce a similar product and sell it. While

this is not your intention, of course, it may be that of others.

Third, we haven't the authority to permit you to copy the Repeater Directory even if it was otherwise reasonable to do so. Some of the material in the directory is itself copyrighted material, compilations of data, from regional repeater coordinating entities. We use that data by agreement with the copyright holders. Those agreements are not broad enough to permit us to authorize other uses of those compilations. Your unauthorized use of the Repeater Directory would constitute a violation of their copyright not only by you, but by the League as well.

You ask whether it is the League's position that it owns the "facts" present in the League's copyrighted publication. The directory is a compilation, and as such the document as a whole is protected. The League does not own the data, but it does own the compilation. Without attempting to teach a course in copyright law, the concept is that a copyright holder owns not an idea, but the creator's particular expression of that idea. You are certainly enough entitled to create your own repeater database, but you cannot copy the League's Repeater Directory as a means of doing so, and you cannot use the format of the League's Repeater Directory, including but not limited to the coding of the characteristics of the repeaters, and the geographic presentation of the data. The copyright holder has, among other rights, the exclusive ability to copy or reproduce the work, and to distribute copies of the work, as well as the right to prepare modified or different versions of the work, called derivative works.

If you want to prepare a repeater listing, you will have to do what the League, or any other preparer of a copyrighted work containing data, does: compile your own listing of repeaters by contacting repeater trustees, coordinators, and the like, and make your own listing. Any use of copyrighted works, such as the MACC repeater listing, or the Repeater Directory, in making your own compilation, is a copyright infringement. For the above reasons, we have to enforce the copyright.

I hope that this clarifies my last letter, and that there will not be any further misunderstanding proliferated on the Internet. You are of course entitled to your opinion of the copyright laws in the United States, and of the League's interest in protecting its ability to continue to publish the Repeater Directory. Basic fairness, however, demands that any factual representations made on the Internet on this subject be accurate.

Yours very truly,

Christopher D. Imlay, N3AKD
General Counsel, ARRL

cc: David Sumner
Barry Shelley
Jay Mabey

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
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Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

2483. Re: 40 meter QRP (cw or ssb)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 19:10:07 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <CM3rww.AHw@odin.corp.sgi.com>
Source record: 270182

In article <110@ted.win.net>, mjsilva@ted.win.net (Michael Silva) writes:
...stuff deleted...
|> >World Record is 75.2 WPM. It will not stand for much longer.
...more stuff deleted...
|> Why won't it stand much longer?
|>
|>
|> Mike, KK6GM
|>
|>

it should be broken by one or more people within the next year.
my prediction.

dit dit

--
Chuck Adams K5FO CP-60
adams@sgi.com

2484. Re: The ARRL is a business (was "Re: ARRL--->Online Repeater directory")

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 19:26:23 UTC
From: Anthony_Pelliccio@brown.edu
Message-ID: <Anthony_Pelliccio-030394142257@138.16.64.49>
Source record: 270183

In article <tcjCM2nKv.28C@netcom.com>, tcj@netcom.com (Todd Jonz) wrote:

> Stephen Baker (sbaker@umassmed.UMMED.EDU) writes:
>
> > The league publishes the repeater directory which it currently
> > enjoys monopoly status. This must be enormously profitable for them
> > as they are the sole source for such a directory
>
> John E. Taylor III (rohvm1.mah48d@rohmhaas.com) replies:
>
> > Enormously profitable? I don't think the League makes a _bundle_ on
> > anything. They _are_ a business, though. As others have pointed
> > out, non-profit does not mean that you can't _make_ money, it just
> > governs what you _do_ with the money you make.

It is profitable for the executives of the corporation. That's right, why
do you think some of these guys have made a career out of the ARRL? Not
because of their love of amateur radio but because of their love of power
and money. Very simple.

> A league official recently told me that the ARRL spends an average of $75 per
> year per member. If I'm not mistaken, membership costs only $40. That extra
> $35 per capita has to come from somewhere.

Actually, I'll have to go over the annual report I have for the ARRL more
closely.

> As John very correctly points out, being a non-profit organization and
> generating revenue are not mututally exclusive. Although I'm neither a tax
> lawyer nor an accountant, my understanding is that, excluding an allowed
> accrual for operating expenses, a non-profit organization's income and
> expenses must balance to zero at the end of its fiscal year.

Actually you're pretty much correct but you can roll some of your
non-profit dollars into other tax periods.

Tony

--
== Anthony_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)
== Box 1908, Providence, RI 02912 Tel. (401) 863-1880
== All opinions expressed are those of the individual, and not those
== of Brown University.

2485. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 19:55:12 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CM3u00.5L5@news.Hawaii.Edu>
Source record: 270184

In article <2kcdqj$nto@crcnis1.unl.edu> mcduffie@unlinfo.unl.edu (Gary McDuffie Sr) writes:
>rcrw90@email.mot.com (Mike Waters) writes:
>
> >The need is not to show that someone *is* or *could* cheat, but for them to
> >prove that they *could not* cheat.. If you want to use some piece of
> >equipment in a testing session *you* must show that (a) you are not using
> >it to cheat and (b) it won't disturb the other test takers.
>
>Oh, we are back to guilty_until_proven_innocent now? Be real!

Gary: I guess you mean to say `Be realistic' - not sure what `Be real' means.
I believe Mike is being realistic - talk to some of the OT VEs about what
some folks will do, in regards to cheating, in order to pass their test.

When I give a math exam I have to be quite vigilant in watching my
students; I've given quite a few Fs over the years to those I've caught
cheating. The students who've spent many, many hours preparing for an exam
should not have to share their reward with someone who was irresponsible
in their studies, whether it's a government radio exam or math exam.

73,
Jeff

==========
Jeffrey Herman NH6IL jherman@hawaii.edu, who, in his spare time, cannibalizes
old TV sets to make QRPp transmitters (CW, of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500 kc CW)
NMC6 (U.S, Coast Guard Group Monterey)

Vietnamese Proverb: If you study you will become what you wish
If you do not study you will never become anything.
==========

2486. Re: Probable demise of the online repeater directory project

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 21:11:05 UTC
From: mark@ve6mgs.ampr.org
Message-ID: <1994Mar3.211105.26195@ve6mgs.ampr.org>
Source record: 270185

rohvm1.mah48d@rohmhaas.com (John E. Taylor III) writes:

>You should check with a lawyer on this, but it's my understanding that if
>you do the basic research to compile all the data _yourself_, and choose a
>format that is dissimilar to the existing, copyrighted work, you probably
>don't infringe it.

Why must he do it himself? If he gets submissions from every user on the network indicating independant repeater status, even if it is in the same format, he is not violating any copyright. The repeater directory, like the phone book and the call book, are simply compilations of data.

Why must he hire a lawyer?

If he (or a submitter) used the ARRL repeater directory to generate the data, then the ARRL can be miffed if it wants. However, the Repeater Project that was being collected was intended to be an independantly generated document.

Explain to me why CallBook Enterprises is not suing Devon (for maintaining the buffalo.edu archive) or Fred (over his work in the QRZ CDROM)? ...

Ciao -- 73 de VE6MGS/Mark -sk-

2487. Help: Neighbor's CW interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 21:30:15 UTC
From: watson@lobby.ti.com
Message-ID: <watson.7.000F6A2B@lobby.ti.com>
Source record: 270186

I'm not a radio operator, just trying to get along with one. Need advice on how to eliminate neighbor's 100 watt 10 meter CW transmissions from my house intercom speakers. Only thing that works is turning down the volume at each speaker, then we can't hear the doorbell since it's part of the intercom/radio. We have put a hi-pass filter on the FM lead, disconnected the AM lead, soldered .01mf caps across the speaker terminals, and grounded his antenna to an 8' copper clad rod. Nothing works. I'm betting some of the ARRL guys on the net have the answer. Any ideas?
Thanks very much!

Sam Watson | watson@lobby.ti.com
Texas Instruments |
Dallas Texas | (214)995-4590

2488. Re: Help: Neighbor's CW interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 21:56:57 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2l5mf9$t01@news.acns.nwu.edu>
Source record: 270187

In article <watson.7.000F6A2B@lobby.ti.com>,
Sam Watson <watson@lobby.ti.com> wrote:
>I'm not a radio operator, just trying to get along with one. Need advice on
>how to eliminate neighbor's 100 watt 10 meter CW transmissions from my house
>intercom speakers. Only thing that works is turning down the volume at each
>speaker, then we can't hear the doorbell since it's part of the
>intercom/radio. We have put a hi-pass filter on the FM lead, disconnected the
>AM lead, soldered .01mf caps across the speaker terminals, and grounded his
>antenna to an 8' copper clad rod. Nothing works. I'm betting some of the
>ARRL guys on the net have the answer. Any ideas?

I commend you for taking the initiative to reduce RFI. A few notes/questions:

Fact: unplugging antenna/high pass filter did not help
Probably the RFI is coming in through other wires.

Fact: level of clicks are affected by volume control
Q: Where is the volume control?

if the vol control is at the console then the rfi is comming in from other
wires such as from door mic to console. Try ferrite bead and/or
capacitors.

Fact: capacitor at speakers did not help
i) common mode (capacitor would have helped differential mode) rfi
i.e., rf voltage is present at both wires of the speaker
Try ferrite beads. I think that Radio Shack carries them. Pass
both the wires through them. If you can get a toroid then wrap a
number of turns with both wires.
ii) rfi is coming in from from other wires such as from door

Other suggestions:

One possibility is that the field strength at you house is so large
that it would be tough to isolate long stretches of wire in you intercom
system. Can the ham locate the antenna further away from you?

Does the ham have a good rf ground?

Rajiv
aa9ch
r-dewan@nwu.edu

2489. Re: Help: Neighbor's CW interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 22:06:05 UTC
From: jholly@cup.hp.com
Message-ID: <CM4025.Mvv@cup.hp.com>
Source record: 270188

Sam Watson (watson@lobby.ti.com) wrote:
: I'm not a radio operator, just trying to get along with one. Need advice on
: how to eliminate neighbor's 100 watt 10 meter CW transmissions from my house
: intercom speakers. Only thing that works is turning down the volume at each
: speaker, then we can't hear the doorbell since it's part of the
: intercom/radio. We have put a hi-pass filter on the FM lead, disconnected the
: AM lead, soldered .01mf caps across the speaker terminals, and grounded his
: antenna to an 8' copper clad rod. Nothing works. I'm betting some of the
: ARRL guys on the net have the answer. Any ideas?
: Thanks very much!

: Sam Watson | watson@lobby.ti.com
: Texas Instruments |
: Dallas Texas | (214)995-4590

The place to bypass is at the amplifier, not many feet from it at the speaker.
Right at the output of the audio amp should be bypassed. Also, you might
try line filtering. By the way, what does the CW transmission sound like?
Jim, WA6SDM
jholly@cup.hp.com

2490. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 22:28:48 UTC
From: glenne@sad.hp.com
Message-ID: <CM4141.BKG@srgenprp.sr.hp.com>
Source record: 270189

Zack Lau (KH6CP) (zlau@arrl.org) wrote:

: BTW--how else does one improve a point to point link,
: besides using bigger antennas and more power? The only
: solutions I can think of are changing frequencies or
: adding sites. Obviously, if there is an interference

With radio, once you've acquired quality paths, improvements on a single link are through increased antenna gain (whether by increasing the frequency or increasing the physical antenna size), except for a few rare propagation mechanisms, improving the receiver (until it's KT(ant)B limited) and increasing transmit power.

For a point-point circuit another improvement comes from decreasing rms path length. This means adding hops. This works since dividing a path in two (say) and adding one additional hop costs 3 dB (maybe less) in hardware but improves C/N by at least 6 dB (which is why I made a point of correcting one of Gary's previous errors).

The only other mechanism for improvement I can think of is to find a way to get guided waves instead divergant ones. In a wide area wireless context, I can't think of any that offer a lot of amateur networking potential. Inversions and ducts fit into this camp, as perhaps does some skywave and even groundwave propagation. Total internal reflection (fiber optics) is the miracle worker in this area but I don't know where or how we might apply it to amateur radio.

Glenn n6gn

2491. IPS Daily Report 03 03 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 23:11:11 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar3.231111.22451@ips.oz.au>
Source record: 270190
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 3 March 1994
Summary for 3 March and Forecast up to 6 March
IPS Warning 7 was issued on 02 March and is still current.

1A. SOLAR SUMMARY
Activity: low

Flares: None

Observed 10.7 cm flux/Equivalent Sunspot Number : 101/49

1B. SOLAR FORECAST
04 March 05 March 06 March
Activity Low Low Low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 105/54

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : mainly quiet to unsettled levels,
apart from one minor storm period.

Estimated Indices : A K Observed A Index 2 March
Learmonth 13 3325 2122
Fredericksburg 17 17
Planetary 28 12

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
04 Mar 35 Active to minor storm.
05 Mar 35 Active to minor storm.
06 Mar 20 Active.

2C. MAGNETIC COMMENT
Coronal hole induced disturbance expected.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
03 Mar normal normal fair-normal

PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
04 Mar fair poor poor
05 Mar fair poor poor
06 Mar normal fair poor
3C. GLOBAL HF PROPAGATION COMMENT
Degraded HF comms are expected over the next few days.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were about 10% above predicted monthly values

T index: 64

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
04 Mar 30 Near predicted monthly values.
05 Mar 15 About 15% below predicted monthly values.
06 Mar 15 About 15% below predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
Communications are expected to become degraded over the next few
days.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2492. [Re:Yaesu FT530]

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 23:13:06 UTC
From: wstaub@random.ucs.mun.ca
Message-ID: <2l5qu2$2lc@coranto.ucs.mun.ca>
Source record: 270191

[No readable article body recovered]

2493. Re: Anyone using JPS NIR 10?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 23:13:17 UTC
From: markeh@netcom.com
Message-ID: <markeh-030394151317@markeh.slip.netcom.com>
Source record: 270192

I have both a NIR-10, latest ROM, and a W9GR DSP II (commercial, non-kit version). They are hooked up with a switch to let me quickly change between the two.

Overall, I have 4 reactions.

1. NEITHER makes a signal audible that would otherwise be uncopyable (SP?). They simply make it somewhat more plesant to listen to.

2. I prefer the NIR-10. IMO, the signal quality is better, but this is probably a matter of opinion. However, the NIR-10 also has a delay in passing the sound through, so it needs to by bypassed when monitoring on xmit - there is circuitry inside the NIR-10 to do this.

3. BOTH units generate enought high-pitched audio whine that they require a high-cut filter following them. I think that I am relatively sensitive to high pitched noise, but I still think that this shouldn't happen.

4. I am not using them in a mobile application, so I have no opinion on ignition noise. However, I do have an occasional/regular/annoying problem with power line noise (S-9, sometimes higher), as I have a 12KV line outside my house. The noise blanker on my xcvr is better for this than either of the DSP units. (And, of course, the NB is before the AGC point, which external filters cannot be) In fact, when this noise is present, the impulse noise seems to cause lower quality with the DSPs. Meaning, that when I am having a noise problem I always turn on the NB, and then sometimes turn on one of the DSPs.

Hope this helps

73 Mark KM6FM

In article <wier-020394204509@198.213.12.252>, wier@merlin.etsu.edu (Bob Wier) wrote:

> I have LOTs of ignition noise in the mobile while operating
> on HF. Although I've been warned that DSP won't do much
> towards knocking down impulse type noise, I've been using
> a W9GR homebuilt unit and find that the improvement is
> worthwhile.
>
> About the only DSP unit which specifically mentions noise
> reduction is the JPS NIR10 (which now had a Rev. 3.0
> firmware upgrade). I'd be interested in opinions of
> how well the current software works for noise reduction.
>
> I know there was a QST review of the original unit in

> (I think) Oct 91, but I don't have that issue here in
> Texas (home qth is normally west of here).
>
> Please e-mail or post here.
>
> THANKS & 73's de WB5KXH
>
> ======== insert usual disclaimers here ============
> Bob Wier, East Texas State U., Commerce, Texas
> keeper of the Adobe Photoshop, MC68HC11, ICOM mailing lists
> wier@merlin.etsu.edu (watch for address change)

2494. Re: Electric Fence RFI/ Liabilities

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 23:17:08 UTC
From: gcouger@olesun.okstate.edu
Message-ID: <1994Mar3.231708.18308@osuunx.ucc.okstate.edu>
Source record: 270193

In article <1994Mar3.145941.105846@yuma>,
Galen Watts <galen@picea.CFNR.ColoState.EDU> wrote:
>>In article <9402271401591.gilbaronw0mn.DLITE@delphi.com>,
>>Gilbert Baron <gilbaronw0mn@delphi.com> wrote:
>>>>I've got some bad interference on 80 through 10
>>>>meter bands from an electric fence about 500
>>>>feet away. The effect is very sharp clicks
>>>>Anyone have any cures?
>>>>Ned Hamilton, AB6FI
>
>If you can wait a few weeks until the grass starts to grow, the livestock
>will get a few zaps, learn about the fence, and I'll bet the owner shuts
>it off.
The farmer will not turn off the fence as long as there are livestock
inside. They can tell when its off some how. At least all the cows I
messed with in the last 30 years.

My suggestion is to get a cheap am fm radio and walk the fence and find
what is causing the problem. It may very well be in the charger. Try to
make friends with the farmer. That is not usualy very hard to do. Just
give him a ring when you see his stock out or stop by and give him a
hand and visit. Find out if he has several chargers and check them all
and ask him or help him put it on the fence.

Most chargers have some noise.
Good luck
Gordon AB5DG

2495. Re: Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 23:17:27 UTC
From: woodj@apollo.robins.af.mil
Message-ID: <1994Mar3.151727.1@apollo.robins.af.mil>
Source record: 270194

In article <2kti7d$lai@transfer.stratus.com>,
northup@hoop.sw.stratus.com (Bill Northup) writes:
> julian@bongo.tele.com (Julian Macassey) writes:
> :
> : The Conservative radio amateurs always make sure they are
> : properly attired before engaging in QSOs.
>
> Does this mean that we have to start practicing safe QSOs ?

Should the prophylactic go over the speaker or the key/microphone??
What about safe QSOs on packet!? Cover the the CRT and keyboard???
Maybe one big prophylactic covering the antenna would be a cure-all?
The answer: Abstinence. Result: Less band crowding. :^) Jim KA4GHX

2496. ANARTS RTTY BULLETIN 798 26/2/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 23:24:25 UTC
From: dave@eram.esi.com.au
Message-ID: <5232@eram.esi.com.au>
Source record: 270195
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS BULLETIN 798 26/2/94

SUNDAY TRANSMISSION SCHEDULES
3.545 MHz 0930 UTC In recess until
3rd April.94.
7.045 MHz -3 0030 UTC VK2CTD (Col)
14.070 MHz (amtor/fec) 0030 UTC VK2DPM (Alan)
14.091 MHz 0030 UTC VK2BQS (JIM)
146.675 MHz 0030/0930 UTC VK2JPA (PAT)
144.850 MHz (ax25 bbs) VK2JPA AT VK2RWI
146.675 MHz (rtty mmbbs/repeater) VK2RTY

Views expressed in this Bulletin are not necessarily those of
the Broadcast Officer. the Relay Officers or of the Society.

Some nominations for the VK2 WIA elections

We have some of the nominations for the VK2 WIA elections for
Council to be declared at the AGM on 10th April. The following
nominees are being supported by the Ad-Hoc Committee as in-
dependent candidates for the Council of the WIA (NSW Division)
and considered worthy of the trust and support of the
amateurs of NSW.

In no particular order we have the following candidates:

VK2KPC Pixie Chapple
VK2EFY Eric Fossey
VK2TCM Cesar Miranda
VK2SKY Richard Murnane
VK2CPK Peter Kloppenburg
VK2KUR Eric van der Weyer
VK2QZ Steve Pullen
VK2PJ Peter Jeremy
VK2AQJ Peter Jensen -- to be confirmed

There are other candidates nominating so there should be a
good list of willing workers to choose from to help get the
Division working harmoniously again.

Use your vote carefully.

STOP PRESS FOR FIELD DAY... The Morse Contest resulted in a win in

both xmitting and rxing to VK2IC. Errors were TWO marks and ONE mark respectively. He was presented with the Presidential Bottle for each victory. Well done and may he enjoy the fruits of victory.

Reminder of the change in 80m broadcast relay

Due to very poor propagation in this part of the cycle during summer months, it has been decided to drop the 80m relay of the cast from December to March inclusive. The relay will resume on the first Sunday in April, which is the 3rd this year.

BARTG Contest

Date: March 19-21 1994, sponsored by the British Amateur radio Teledata Group.
Contest period: from 0200Z Saturday to 0200Z Monday (48 hours).
Maximum operating time allowed: 30 hours for single operator and SWL entries.

Multi-operator stations may operate the whole 48 hours. The 18 hours of rest periods may not be less than 3 hours each. Times off operation must be shown on contest summary sheet.

Mode: RTTY only

Bands: 80, 40, 20, 15, and 10m.

Classes: A) Single op, all band
B) Single op, single band
C) Multi-op, all band
D) SWL

Exchange: Send: RST + QSO number + Time in UTC.

More next week

IPS weekly report
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18 - 24 February 1994
Issue no.: 08

Date of issue: 25 February 1994

Date 18 19 20 21 22 23 24
10cm 106 108 108 105 107 107 105
A 07 23 13 65 51 11 (06 estimated)
T 51 81 51 64 -09 24 52

Summary of activity

Solar activity was very low on 19th and 21st February, low 18th and 22nd-24th, and moderate on 20th. There was an M4 flare on 20th.

The geomagnetic field at Learmonth (WA) was quiet on 18th, mainly quiet to unsettled on 19th-20th with a brief active period on each of those days. On 21st the field was quiet until 0900UT when a sudden commencement of 135nT occurred raising the field to major storm levels. The field on 22nd was at active to minor storm levels until 1500UT, then returning to quiet to unsettled on 23rd, and quiet on 24th.

Ionospheric F2 critical frequencies on 18th-19th were 10 - 30 per cent above predicted values, then nearnormal on 20th until late in the UT day when frequencies were enhanced by 30 per cent. Frequencies were enhanced by up to 35 per cent on 21st until 1500UT when they became depressed by up to 30 per cent. This continued until 0700UT on 22nd then returned near predicted values for the rest of the day. On 23rd and 24th frequencies were mostly near normal, with a short depression on 23rd at 1200UT, and several brief enhancements of up to 30 per cent on 24th. Sporadic E blanketed the F region for a short period on 22nd, and may have affected F layer communi-cations on several occasions on 23rd February.

Forecast for the next week (25 - 3 March)

Solar : Very low to low.

Geomagnetic: Quiet to unsettled with isolated active conditions on the 3rd.
Ionospheric: Near predicted to 25 per cent enhanced. Sporadic E may affect F layer communications at times.
Possible depressions to 20 per cent on the 3rd.

Courtesy of IPS Radio and Space Services

VK2SG RTTY DX Notes, 18 February

VK2SG RTTY DXNotes for week ending 18 Feb. 1994 (BID RTDX0218)

Really we must say that 3Y0PI is the DXPEDITION OF THE YEAR '94 and our congratulations go to the all the crew for having shown to all of us a real example of wonderful operation under severe conditions. Was excited, during my qso, to see on the screen Luciano, Luciano, Luciano, 599 599 from 3Y0PI. Tnx Tony, WA4JQS and Luis, XE1L for the outstanding effort repair-ing rtty gear.

Our thanks this week go to ZS5S, W2JGR, WB2CJL, 9X5LJ,)5ICY, I5IGQ and IK5PWJ Packet Cluster, DJ3IW and the Central Europe DX Cluster node DB0SPC, the NJ0M node of the Twin Cities.

Bandpass:

Friday 11
0141-14090 V31JU 0644-14087 6W6JX
0649-14085 AH3D QSL JA1HGY see note
0701-14085 UT5RP 1505-14087 RA2FB
1837-21083 ZD7DP 1936-14086 CN8NP
2008-14082 V31JU 2050-14095 C91J
2145-14089 CX3ABE

Saturday 12
0018-14084 VP8WA 0641-14085 AH3D
0702-21070 Z21HS ARQ 0745-14085 SV5BYP
0840-14084 6W6JX 0854-21083 ZD7DP
1007-14084 SU1AH 1019-21070 7Q7LA ARQ
1335-14084 UN7LR 1338-14088 OD5PL
1309-14082 ER1PE 1351-14089 J28JJ
1409-14083 S50C 1534-21087 ZS9A
1552-21090 TZ6FIC 1602-21087 FG5FI
1635-21088 HH2PK 1716- 7037 EZ5AA
1746-21083 5R8DG 1843-21085 ZD7SM
2139-21091 AH6JF 2215-14082 3Y8PI QSL KA6V
2234-14083 FY5FJ

Sunday 13
0251- 3577 HH2PK 0516- 7039 HH2PK
0634-14087 EZ5AA 0640-14088 5B4VX
0816-21083 EZ5AA 0948-14084 TA5C
0959-21089 OD5PL 1044-28082 EZ5AA
1144-21085 4X6UO 1325-14087 YL3FW
1327-14083 S51DX 1336-21088 HH2PK
1405-14082 SV9ABG 1429-21086 PJ9JT
1435-21084 HP1AC 1440-14082 {G4CW
1436-21087 YI1AL 1438-21084 CP1FF
1522-21085 ZD7DP 1529-28087 9H1ET
1550-21090 FG5FI 1624-14081 J28JJ
1711-14084 HP1XVI 1919-21087 9J2HN

Monday 14
0243-14082 3Y0PI 2143-14087 FG5GH

Tuesday 15
0624-14085 C91AI 1445-14083 WP4Q

Wednesday 16
0800-14082 EA6NB 1455-21088 CU1AC
1512-14087 UT5DX 1548-14084 3A2LZ
1605-14087 EA8/ON8RI

Thursday 17
0845-14086 OM2GI 0850-14082 YL1ZE
0907-14085 UR0VS 1725-14086 S92ZM

Notes of Interest

ST PETER & PAUL ZY0. The operators on the Feb. 7th had severe problems with both generators. Fault was located on the kick-off cables which could not be repaired due to lack of suitable tools. They had to run on battery with about 10 watts until Feb. 14.

AH3D/KH0 Activity. Members of the International DX Golf Tournament have been active from 9 to 13 February as AH3D/KH0. While the SSB spot were reporting that call sign on RTTY no mention of /KH0 ??

BELIZE, V3. Large activity is expected from this country. Look for V31PP from 19 Feb to 12 March on all bands SSB and RTTY. Another operation is planned from Sigi, DL7UUO from 20 Feb. to March 3rd using V31UO on SSB, CW, RTTY and PACTOR.

GEORGIA, 4L. Piero, IK2BHX is now in Tiblisi as 4L1HX and will be there for a year. He promised RTTY activity soon. QSL via IK2MRZ.

Send your bandpass and notes for next week to Bob, WB2CJL @ W5KSI.#NOLA.LA.USA.NA or WB2CJL @ ZS5S.ZAF.AF.

GL de (DX2) Luciano, I5FLN @ ZS5S.ZAF.AF

Coming events

1994

March 19th-20th BARTG WW RTTY Contest

April 16th-17th SARTG WW AMTOR Contest

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President (Col) VK2CTD, or the Secretary (Pat) VK2JPA at VK2RWI.

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or by packet to VK2JPA at VK2RWI.

Email addresses for the Broadcast Officer are :

patl@extro.ucc.su.oz.au or VK2JPA @ VK2OP nsw.aus.oc

The Society welcomes news items on any digital subjects from anywhere in the broadcast footprint. We know we reach New Zealand and many South Pacific islands. We are looking forward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer
That concludes ANARTS NEWS798 26/02/94.

INSERTED BY VK2BQS Jim, Vice President ANARTS.

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

2497. Edco TX-146 2m Intermod Filter for HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-03 23:43:18 UTC
From: blake@lonestar.utsa.edu
Message-ID: <1994Mar3.234318.4663@ringer.cs.utsa.edu>
Source record: 270196

Does anyone know how well this device works? I saw it in my most recent catalog from Tucker Electronics and Computers. The description says it requires +12VDC, so I guess you would have to haul around an extra battery if you wanted to go pedestrian mobile! Has anyone tried it with the TH78a?
73,

--
O	Blake Schreckenbach,	"It's a 106 miles to Chicago, we've got a full	O
O	KC5DRP	tank of gas, half a packet of cigarettes, It's	O
O	University of Texas	dark, and we're wearing sunglasses. Hit it."	O
O| at San Antonio	-- Jake & Elwood Blues	blake@lonestar.utsa.edu |O

2498. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 00:21:23 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403031901591.gilbaronw0mn.DLITE@delphi.com>
Source record: 270197
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

>around for a long, long time as used equipment. The effects of the law
>will be to a) *not* severly restrict the availability of cordless-capable
>scanners and b) give the public a false sense of security.
>Rather than thickening the law books, the government should educate the
>public about what is going on. The public will demand encrypted
>cordless phones and the manufacturers will deliver. Then the aw is
>going to do is damage the lives of the very few people who getonfidential information
>on their cordless phones.
>
>I'd be interested if other people agree.
>
>
>--Neil
>

I could not agree more.

Gil Baron, El Baronvir"
PGP2.3 key at key servers or upon request

2499. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 00:45:11 UTC
From: rwilkins@ccnet.com
Message-ID: <2l60an$2l4@ccnet.ccnet.com>
Source record: 270198
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Todd Jonz (tcj@netcom.com) after my extensive editing, wrote:

: Bravo! Perhaps some of the other coordinating bodies will follow T-MARC's
: example. There are a handful of repeaters listed for my area that I've never
: heard a peep out of since I bought my first HT in '85. When I hear that there
: are long waiting lists in my area for a coordinated pair on 2M or 75cm, I
: often wonder if these phantom allocations are preventing someone else from
: getting a machine on the air, or whether they are merely bits of dross at the
: bottom of the files that nobody has ever bothered to clean up. Any thoughts,
: anyone?

: Todd, KB6JXT

Most coordinating bodies have a difficult time De-coordinating a former useful repeater. What is the process that your local coordinator uses?

How long can a repeater frequency remain inactive before the frequency is recoordinated?

Can some one buy or sell a coordination or does the frequency go to the next applicant waiting in line?

Have you ever contacted your local coordinator and pointed out these inaccuracies?

The southern california 220 spectrum management association must have a difficult task ahead, as they must de-coordinate several repeaters to accomodate the new fcc band plan for 222.000 - 222.150 MHz.

Bob

--
Bob Wilkins bwilkins@cave.org

2500. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 01:05:52 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Mar4010552@mipgsun.mipg.upenn.edu>
Source record: 270219
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: That's right on, good mind reading. While I think the ARRL position is
: shaky at best here, I don't want to see tanks rumbling down Main St.
: in Newington either. The BATF and FBI death squads are already bad

Jon Bloom KE3Z (jbloom@arrl.org), a ARRL HQ staffer, follows up with:
>I dunno. Might be entertaining.

Well, if ARRL HQ wants to be the recipient of our federal goon squad's
attentions and the taxpayer has no objections, I see absolutely no
reason whatsoever why the ARRL's preference for entertainment can not
be accomodated.

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

2501. frg-8800 stops operation after short time

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 01:06:32 UTC
From: pbauer@rnivh.rni.sub.org
Message-ID: <CM48Ey.1p6@rnivh.rni.sub.org>
Source record: 270199

My frg-8800 showed this problem a few months after I buyed it when
I was using a MIF-90 to tune quite fast through the frequencies:
At some time (30secs to few minutes) it stopped audio output. I then
stopped this computerized tuning and used it as normal receiver. Now
(lots of years later) the frq shows this behavior during normal operation:
turn it on, tune throuhg a few frequencies, and autio output stops.
The failure seems to be progressive: now I need to turn it of for a
while, and then I'm able to use it for a short period of time (<2 min)
and then the problem reoccurs...
Any ideas?

Gruss PB
/

2502. Chest Harness for HT?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 01:11:14 UTC
From: dbr@world.std.com
Message-ID: <CM48Mr.B9C@world.std.com>
Source record: 270200

A few years ago, at a cross-country ski center, I saw an employee with a handheld radio attached to his chest with some sort of harness. It held the radio at a diagonal angle such that the antenna (VHF duck) pointed at his left shoulder and the base of the radio pointed at the right side of his waist.

The harness seemed to be made out of neoprene or nylon and was black in color. I want one. It would be terrific for cross-country skiing, because if you fall, you don't fall on your radio. Even if you don't fall, it makes the radio easier to use because you can simply press the ptt switch without removing the radio from the harness.

Does anyone have any information?

-- Dan N2EDC

2503. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 01:36:49 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2l63bh$5k2@network.ucsd.edu>
Source record: 270201

All I want to do is build a ham radio digital link between San Diego and
Los Angeles that will get data there faster and cheaper than me driving.

I don't think I'll live long enough to see it happen.
- Brian

2504. Buckmaster and Packetcluster

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 01:55:15 UTC
From: n9hfr@pgd.adp.wisc.EDU
Message-ID: <12721.n9hfr@pgd.adp.wisc.edu>
Source record: 270202

the packetcluster node i use is having problems with the buckmaster
online callbook. it won't give any nxxx calls. it says "not found".
even for calls i know are good. it used to work fine.after an update
this started. the sysop has tried everything he can think of. called the
author of packetcluster,etc. this is not the cd-rom, it comes on manny
floppies and is on the hard drive. this happens with any "n" call,
1x2,1x3,2x1. anyone with a similar problem or ideas please contact me.

dan
n9hfr@pgd.adp.wisc.edu

2505. Re: 5 by 5...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 02:11:12 UTC
From: alanb@sr.hp.com
Message-ID: <CM4BEp.lsq@srgenprp.sr.hp.com>
Source record: 270203

Joe Gregg (gregg@plains.nodak.edu) wrote:
: Ok, here's a trivial question that I don't know the answer to:

: Where did the phrase, "I read you five by five." come from and what does it
: mean. I know it means good copy, but what specifically does it mean? Does it
: come from the early days of radar, of ham radio, of military aviation or what?

I believe it comes from the old days before the RST system was invented.
The Q-signal QSA was a signal strength scale that went from 1-5 (versus
1-9 for the "S" in RST). So a signal report of 5x5 means you are very
readable and very loud.

AL N1AL

2506. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 02:28:53 UTC
From: jbloom@arrl.org
Message-ID: <1994Mar4.022853.3601@arrl.org>
Source record: 270204
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: That's right on, good mind reading. While I think the ARRL position is
: shaky at best here, I don't want to see tanks rumbling down Main St.
: in Newington either. The BATF and FBI death squads are already bad

I dunno. Might be entertaining.

: enough, let's not have the Copyright Office or the FCC start donning
: ninja suits and slaughtering Americans too.
--
Jon Bloom KE3Z jbloom@arrl.org

2507. Re: Help: Neighbor's CW interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 02:30:18 UTC
From: alanb@sr.hp.com
Message-ID: <CM4CAJ.JHo@srgenprp.sr.hp.com>
Source record: 270205

Sam Watson (watson@lobby.ti.com) wrote:
: I'm not a radio operator, just trying to get along with one. Need advice on
: how to eliminate neighbor's 100 watt 10 meter CW transmissions from my house
: intercom speakers. Only thing that works is turning down the volume at each
: speaker, then we can't hear the doorbell since it's part of the intercom/
: radio. We have put a hi-pass filter on the FM lead, disconnected the
: AM lead, soldered .01mf caps across the speaker terminals, and grounded his
: antenna to an 8' copper clad rod. Nothing works. I'm betting some of the
: ARRL guys on the net have the answer. Any ideas?

I wouldn't expect soldering capacitors across the speaker terminals to help because the interference is affecting the intercom electronics, not the speaker. (If you disconnected the speaker wires from the intercom, I bet the interference would go away.) Also grounding the antenna or transmitter is unlikely to do any good.

Not sure what you mean about the high-pass filter on the FM lead. Do you get interference in your FM stereo as well? Or is it a wireless intercom that uses an FM transmitter to send the signal? Either way, it sounds like the problem is the ham's signal getting picked up directly by the wiring connected to the intercom/stereo.

Be careful about placing bypass capacitors across the speaker leads (on either end) because some amplifiers don't "like" a capacitive load and can oscillate. A better solution is to use what's called a "common-mode choke." You can make one by wrapping the speaker wire many times around a ferrite rod (the loopstick antenna from an old AM table radio works well for this) or better yet, obtain a good-sized ferrite toroid core and wrap the speaker wire many times through that. The ferrite choke should be located as close to the amplifier/intercom as possible (i.e. at the opposite end from the speaker.)

If that doesn't work, then try the same trick with the AC power cord going to the intercom. If there are any other wires going to the intercom/stereo, you might have to do it to them as well. Don't give up -- you might have to "choke" all incoming wires simultaneously to get rid of the interference. A big advantage of the common-mode choke method is that it requires no modifications or connections to the electronic equipment.

Suitable ferrite devices and interference-reduction techniques are described in a book from ARRL called "Radio Frequency Interference". The ham should know how to obtain a copy.

The above should at least help, if not cure, the interference. If you still have a problem after that, perhaps the ham can experiment with

moving his antenna to the opposite side of his lot.

Alan Bloom N1AL

2508. Re: second letter

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 02:41:43 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CM4CtL.FKG@ucdavis.edu>
Source record: 270206

```
Conway Yee (yee@mipg.upenn.edu) wrote:
: I hope that this clarifies my last letter, and that there
: will not be any further misunderstanding proliferated on the
: Internet.
Misundertanding proliferating on the internet? NEVER! ;-]

(ps. I know this isn't the internet)

cheers,
Dan
--
*---------------------------------------------------------------------*
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
*---------------------------------------------------------------------*
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
*---------------------------------------------------------------------*
```

2509. Daily Summary of Solar Geophysical Activity for 03 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 04:34:21 UTC
From: oler@rho.uleth.ca
Message-ID: <9403040434.AA11538@rho.uleth.ca>
Source record: 270210
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

03 MARCH, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 062, 03/03/94
10.7 FLUX=100.9 90-AVG=106 SSN=122 BKI=3446 3222 BAI=023
BGND-XRAY=B1.5 FLU1=2.0E+06 FLU10=1.9E+04 PKI=3456 4122 PAI=027
BOU-DEV=023,058,048,165,038,018,011,015 DEV-AVG=047 NT SWF=00:000
XRAY-MAX= C6.4 @ 1310UT XRAY-MIN= A7.1 @ 0714UT XRAY-AVG= B4.4
NEUTN-MAX= +002% @ 0935UT NEUTN-MIN= -004% @ 1830UT NEUTN-AVG= -0.5%
PCA-MAX= +0.3DB @ 1425UT PCA-MIN= -0.3DB @ 0915UT PCA-AVG= +0.0DB
BOUTF-MAX=55343NT @ 0107UT BOUTF-MIN=55284NT @ 0945UT BOUTF-AVG=55327NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+062,+000,+000
GOES6-MAX=P:+124NT@ 2129UT GOES6-MIN=N:-110NT@ 0831UT G6-AVG=+083,+042,-042
FLUXFCST=STD:105,105,105;SESC:105,105,105 BAI/PAI-FCST=015,020,020/020,030,030
KFCST=3214 5122 3346 6433 27DAY-AP=008,024 27DAY-KP=1222 3232 3235 4434
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 02 MAR 94 is not available.
The Full Kp Indices for 02 MAR 94 are not available.
The 3-Hr Ap Indices for 02 MAR 94 are not available.
Greater than 2 MeV Electron Fluence for 03 MAR is: 1.5E+07

SYNOPSIS OF ACT

Solar activity was low. Region 7682 (S18W40) continued to
develop slowly. This region produced several small flares, the
largest being a C6/SF at 03/0210Z. Growth in Region 7680
(S12E13) has slowed. New Region 7684 (S08E25) was numbered.

Solar activity forecast: solar activity is expected to be
low. C-class flares are expected in Region 7682.

The geomagnetic field ranged from quiet to severe storm.
Major storm conditions were observed at middle latitudes

from 0900-1200Z. Major to severe conditions were observed
at high latitudes from 0600-1200Z. There is no obvious cause
for this short-lived disturbance.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled for the next several hours,
becoming active to storm due to a coronal hole.

Event probabilities 04 mar-06 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 04 mar-06 mar

A. Middle Latitudes
Active 15/20/20
Minor Storm 35/40/25
Major-Severe Storm 05/05/15

B. High Latitudes
Active 30/35/35
Minor Storm 25/15/15
Major-Severe Storm 05/15/15

HF propagation conditions were below-normal over the high
and latitude paths. Low and middle latitudes saw near-normal
propagation. Conditions are expected to deteriorate on 05 and
06 March due to effects from a well-placed coronal hole.
Transpolar and transauroral circuits could see moderate signal
degradation (to poor and occasionally very poor levels). Upper
middle latitude paths are also expected to see minor signal
degradation during this anticipated disturbance.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7678 S14W18 048 0020 HRX 02 003 ALPHA
7680 S12E13 017 0040 DRI 04 019 BET
7682 S18W40 070 0090 DRI 10 036 BET
7683 S18W60 090 0020 BXO 07 007 BET
7684 S08E25 005 0010 BXO 04 007 BET
7679 N02W56 086 PLAGE
7681 S13W70 100 PLAGE
REGIONS DUE TO RET
NMBR LAT
7668 N08 283
7673 N08 267

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LISTING OF SOLAR ENERGETIC EVENTS FOR 03 MARCH, 1994
-----------------------------------------------------
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 03 MARCH, 1994
-----------------------------------------------------------
BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 03/2400Z
-------------------------------------------------
ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY
------------------------------------------------

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
NO EVENTS OBSERVED.

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY
------------------------------------------------

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 000 ( 0.0)

Total Events: 000 optical and x-ray.

EVENTS WIT
---------------------------------------------------------------

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
```

Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2510. Ham Radio areas on Prodigy, CServe, etc?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 04:36:42 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCM4I57.At@netcom.com>
Source record: 270211

I am in search of the people in charge of the Ham Radio areas
(conferencing, files), on the popular commercial services:

CompuServe
Prodigy
America Online (I have this already)
GEnie
Delphi
any others I am missing

Any information people can provide would be most helpful.

Thanks much!

73,
Scott

--

==
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
the World - ftp.std.com pub/hamradio
==

2511. Adam Weiss, WA1WMZ, Silent Key

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 04:55:29 UTC
From: edinct@news.delphi.com
Message-ID: <2l6f01$fq5@news.delphi.com>
Source record: 270212

It is with great sadness that I must announce the passing of Adam Weiss, WA1WMZ, a longtime ham radio operator.

I had known Adam for over 20 years. I first met him when I was in highschool at a ham meeting of the Westchester Emergency Communications Association. Proving it was a small world, my brother married a woman he had previously been engaged to (both were hams). I later re-met him when joining Mensa, and he held a corner of the chupa and signed the Catuba
at my wedding.

The Funeral services will be held at Riverside Chapel in Mt. Vernon, NY, Sunday at 1:00. Shiva will be observed Monday, Tuesday, and Wednesday by his parents at his house.

-- Ed in CT,
AD2X
extract@rochgte.fidonet.org

| EXTRACT - V.FC 28,800 - 203-367-4005 (1:141/490)

2512. Daily Summary of Solar Geophysical Activity for 01 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 05:01:51 UTC
From: oler@rho.uleth.ca
Message-ID: <9403040501.AA13755@rho.uleth.ca>
Source record: 270213
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

01 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 060, 03/01/94
10.7 FLUX=094.1 90-AVG=107 SSN=061 BKI=3132 1222 BAI=008
BGND-XRAY=B1.2 FLU1=1.5E+07 FLU10=2.0E+04 PKI=3143 2223 PAI=010
BOU-DEV=031,009,032,014,009,012,010,011 DEV-AVG=016 NT SWF=00:000
XRAY-MAX= C3.6 @ 2230UT XRAY-MIN= A8.3 @ 1947UT XRAY-AVG= B1.7
NEUTN-MAX= +002% @ 2255UT NEUTN-MIN= -002% @ 2240UT NEUTN-AVG= -0.0%
PCA-MAX= +0.1DB @ 2355UT PCA-MIN= -0.3DB @ 1000UT PCA-AVG= +0.0DB
BOUTF-MAX=55346NT @ 1448UT BOUTF-MIN=55325NT @ 2007UT BOUTF-AVG=55336NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+069,+000,+000
GOES6-MAX=P:+131NT@ 1903UT GOES6-MIN=N:-076NT@ 0628UT G6-AVG=+091,+035,-027
FLUXFCST=STD:095,100,100;SESC:095,100,100 BAI/PAI-FCST=010,010,015/010,010,015
KFCST=2104 5011 2104 5011 27DAY-AP=015,010 27DAY-KP=1234 5421 1233 3321
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 28 FEB 94 is not available.
The Full Kp Indices for 28 FEB 94 are not available.
The 3-Hr Ap Indices for 28 FEB 94 are not available.
Greater than 2 MeV Electron Fluence for 01 MAR is not available.

SYNOPSIS OF ACT

BRIEF STD SYNOPTICAL INFORMATION FOLLOWS BELOW. THE SESC
DAT
THIS REPORT WAS COMPILED.

Solar activity was low. There were very few flares of
interest. The largest was a C3.6 event at 01/2230Z.

Solar activity forecast: solar activity is expected to be
generally low. Additional C-class flares are expected.

The geomagnetic field was quiet to unsettled over the last
24 hours. A few high-latitude regions saw periods of active
conditions during the local night hours.

Geophysical activity forecast: the geomagnetic field is
expected to be remain mostly quiet to occasionally unsettled
for the next 48 to 72 hours. A coronal-hole disturbance may
begin to elevate levels of activity on 03 or 04 March.

STD: Event probabilities 02 mar-04 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

STD: Geomagnetic activity probabilities 02 mar-04 mar

A. Middle Latitudes
Active 25/25/35
Minor Storm 10/10/15
Major-Severe Storm 01/01/05

B. High Latitudes
Active 30/30/35
Minor Storm 15/15/15
Major-Severe Storm 05/05/10

HF propagation conditions were normal over all regions.
Similar conditions should continue throughout the next 48 to 72
hours.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NO DAT

LISTING OF SOLAR ENERGETIC EVENTS FOR 01 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NO DAT

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 01 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO DAT

INFERRED CORONAL HOLES. LOCATIONS VALID AT 03/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
NO DAT

** End of Daily Report **

2513. Status of Online Repeater Directory Project....

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 05:24:07 UTC
From: jangus@skyld.grendel.com
Message-ID: <762758647snx@skyld.grendel.com>
Source record: 270214

Well Conway, it would appear that you have shot yourself in the dick on this project. Perhaps next time when you run into an obstacle, you give some thought as to what the obstacle is before you run to the net and cry rape.

After rereading your original messages and then reading the copies of the letter from the League counsel, it is my opinion that you mad a lot of fuss over nothing.

It is indeed unfortunate that that seems to be the standard method of operation on the rec.radio.amateur.* newsgroups.

Congratulations on one thing though, you did manage to distract from the CW is Trivial war over on r.r.a.p.

73 es GE from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2514. Re: first letter

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 05:57:26 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CM4Lvr.FIE@news.Hawaii.Edu>
Source record: 270215

In article <YEE.94Mar3190731@mipgsun.mipg.upenn.edu> yee@mipg.upenn.edu (Conway Yee) writes:
>This is a (hopefully accurate) transcription of the first letter that
>was sent to me. Any typographical errors not noted below are my own.
>These are not my words and are the words of the ARRL. The use of the
>symbol "$" is in lieu of a non printable symbol in the letter.
>
>Conway Yee, N2JWQ/AA
>
>=================== begin letter ================================
>
> January 28, 1994
>
>Mr. Conway Yee N2JWQ
>2144 East 21 Street
>Brooklyn, NY 11229
>
>Dear Mr. Yee:
>
> This office represents the American Radio Relay League,
>Incorporated. I have been referred an Internet message posted by you
>concerning the publication of a repeater database on line. While the
>League does not wish to be uncooperative, and is in fact supportive of
>volunteer efforts to provide information to radio amateurs, it is
>unfortunately obligated to enforce its copyrights, or lose the ability
>to do so. Your use of the Repeater Directory, and its format, as the
>basis for your on-line database is an infringement of the League's
>copyright. We are compelled to request that you cease any use of it
>in putting together any repeater database.

<remainder of thoughtful letter deleted>

Conway: Too bad you didn't post this a month ago; the long, drawout
thread concerning the ARRL wouldn't have been necessary. I see
no problem at all with the ARRL's stance in this matter.

73,
Jeff NH6IL

P.S. `cannot' was properly spelled and used correctly; `apologise'
is also correct (British) spelling (similar to the British spelling
of `realise').

2515. Re: Getting Coax Seal OFF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 06:51:50 UTC
From: paulg@madhaus.seastar.org
Message-ID: <49HNic1w165w@madhaus.seastar.org>
Source record: 270216
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

woodj@apollo.robins.af.mil writes:

> In article <ericr.762116748@access3>, ericr@access3.digex.net (Eric Rosenberg
> >
> > Can anyone suggest a decent method for taking Coax Seal *off* of a
> > connector? It's a mess, and I'm not sure how to do it.
> >
> > Please email your repsonses...
> >
> > Thanks --
> > Eric
> >
> >
> > --
> > Eric Rosenberg WD3Q, EI4VPS, ZL0ADG, J20BY, etc.
> > 338 14th Street, NE voice: +202-547-3441
> > Washington, DC 20002 USA fax: +202-547-3613
> > ericr@access.digex.com wd3q@amsat.org
> >
>
> I think WD40(tm) will cut it. I don't know know what would be a good cleaner
> to remove the WD40... Jim KA4GHX

Try Dawn diswashing detergent. THE ** BEST ** non-poluting degreaser
around. Rinse with plenty of tap water and allow to air dry.

2516. second letter

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 07:07:38 UTC
From: jangus@skyld.grendel.com
Message-ID: <762764858snx@skyld.grendel.com>
Source record: 270217

In article <CM4CtL.FKG@ucdavis.edu> ez006683@chip.ucdavis.edu writes:

>
> Conway Yee (yee@mipg.upenn.edu) wrote:

> : I hope that this clarifies my last letter, and that there
> : will not be any further misunderstanding proliferated on the
> : Internet.

The above snippet is a quote from the letter from the ARRL, not Conway.

> Misundertanding proliferating on the internet? NEVER! ;-]

It's starting already....

> (ps. I know this isn't the internet)

It's not?

> cheers,
> Dan
> --

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2517. Re: Help: Neighbor's CW interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 08:56:57 UTC
From: pfeuffer@comtch.iea.com
Message-ID: <2l6t4q$4lf@krel.iea.com>
Source record: 270218

Try adding a small ferite bead to each ire connecting the intercoms.

Rajiv Dewan (rdewan@casbah.acns.nwu.edu) wrote:
: In article <watson.7.000F6A2B@lobby.ti.com>,
: Sam Watson <watson@lobby.ti.com> wrote:
: >I'm not a radio operator, just trying to get along with one. Need advice on
: >how to eliminate neighbor's 100 watt 10 meter CW transmissions from my house
: >intercom speakers. Only thing that works is turning down the volume at each
: >speaker, then we can't hear the doorbell since it's part of the
: >intercom/radio. We have put a hi-pass filter on the FM lead, disconnected the
: >AM lead, soldered .01mf caps across the speaker terminals, and grounded his
: >antenna to an 8' copper clad rod. Nothing works. I'm betting some of the
: >ARRL guys on the net have the answer. Any ideas?

: I commend you for taking the initiative to reduce RFI. A few notes/questions:

: Fact: unplugging antenna/high pass filter did not help
: Probably the RFI is coming in through other wires.

: Fact: level of clicks are affected by volume control
: Q: Where is the volume control?

: if the vol control is at the console then the rfi is comming in from other
: wires such as from door mic to console. Try ferrite bead and/or
: capacitors.

: Fact: capacitor at speakers did not help
: i) common mode (capacitor would have helped differential mode) rfi
: i.e., rf voltage is present at both wires of the speaker
: Try ferrite beads. I think that Radio Shack carries them. Pass
: both the wires through them. If you can get a toroid then wrap a
: number of turns with both wires.
: ii) rfi is coming in from from other wires such as from door

: Other suggestions:

: One possibility is that the field strength at you house is so large
: that it would be tough to isolate long stretches of wire in you intercom
: system. Can the ham locate the antenna further away from you?

: Does the ham have a good rf ground?

: Rajiv
: aa9ch
: r-dewan@nwu.edu

2518. Re: Satellite progs on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 09:14:59 UTC
From: rickvg@cscns.com
Message-ID: <JmlTjSEHGIGK057yn@cscns.com>
Source record: 270220
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.misc

In article <762554227snz@isis.demon.co.uk>, Ian Smith wrote:
>Ah, but which version of STSPLUS is it ? The damned thing gets updated
>two or three times a year, or so it seems. The version numbering is pretty
>unusual as well. For what it's worth, the latest I've seen is 9353, which
>if I recall the method makes it the last week in '93. 9333 was the last
>*major* upgrade.
>

Yep, it is updated practically monthly. I have 9405 right now. A nice
program. Especially when the shuttle is up and running.

73 -- Rick

Rick von Glahn
rickvg@cscns.com -- Internet (preferred)
74620,637 -- Compuserve
N0KKZ@W0GVT.#NECO.CO.USA -- packet radio

2519. Calling Deleware Hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 09:55:32 UTC
From: pfeuffer@comtch.iea.com
Message-ID: <2l70ik$4vu@krel.iea.com>
Source record: 270221

Hi:

I'm desperate for a Deleware QSO for WAS. I know it exsits, I've been
there!

If you can help with a sked on 80. 40 or 20 drop me an Email.

Thanks & 73

--
Joe KW1K @WB7NNF.#EWA.WA.USA.NOAM
Spoakne. WA

2520. Re: Nude Radio Amateurs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 10:34:55 UTC
From: bote@access3.digex.net
Message-ID: <2l72sf$s35@access3.digex.net>
Source record: 270222

woodj@apollo.robins.af.mil writes:
>northup@hoop.sw.stratus.com (Bill Northup) writes:
>> julian@bongo.tele.com (Julian Macassey) writes:
>> : The Conservative radio amateurs always make sure they are
>> : properly attired before engaging in QSOs.
>> Does this mean that we have to start practicing safe QSOs ?
>Should the prophylactic go over the speaker or the key/microphone??

Well! It certainly doesn't take very much
to get you gentlemen overheated, does it!

At ease, boys.

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 30 days until Opening Day!

2521. Re: 5 by 5...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 11:46:27 UTC
From: tgm@netcom.com
Message-ID: <tgmCM521F.8D6@netcom.com>
Source record: 270223

John E. Taylor III (rohvm1.mah48d@rohmhaas.com) wrote:
: This appears to go back to military usage during WWII (maybe earlier, but
: _I_ wasn't around to verify that), and a radiotelephone signal-report scale
: that was 1 - 5 on both readability and strength. Thus "5 by 5" is a good
: as it gets.

I think there was a swing novelty tune from this era called "Mr 5 by 5"
(about a fat guy).

Thomas Ki4N

2522. Re: QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 11:58:01 UTC
From: tgm@netcom.com
Message-ID: <tgmCM52Kp.8s2@netcom.com>
Source record: 270224

Steve Popovich (popovich@prince.cs.columbia.edu) wrote:
: The problem here, of course, is that the aviation handhelds are type
: accepted for aviation use, and the TH-78A is not. It's against FCC
: regulations to use the TH-78A to transmit in the aircraft band. If I
: had one along in an airplane and there was an emergency requiring its
: use, then I'd use it, but I wouldn't expect the FCC to be pleased.

You know, I always thought that the FCC was easy going on the rules
in an emergency situation. But I just read in 73 magazine that the
FCC confiscated someone's HT for calling emergency help on the
sheriff's frequency when help could not be found in the ham bands
(very remote location). (this news snippet appeared in the Feb
or March '94 issue of 73)

Thomas Ki4N

2523. Re: Help: Neighbor's CW interference

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 12:20:59 UTC
From: tgm@netcom.com
Message-ID: <tgmCM53Mz.9It@netcom.com>
Source record: 270225

Alan Bloom (alanb@sr.hp.com) wrote:
: A better solution is to use what's called a "common-
: mode choke." You can make one by wrapping the speaker wire many times
: around a ferrite rod (the loopstick antenna from an old AM table radio
: works well for this) or better yet, obtain a good-sized ferrite toroid
: core and wrap the speaker wire many times through that.

AM table radios are getting pretty hard to find (even junk
ones). What I've used *very* successfully are the ferrite
torroids from old TV flyback transformers. Any TV repair shop
will be happy to give you a burned out flyback for free. The CW
op in question might even want to try wrapping a few turns of
the power cord to his transmitter through one of them. Some old junk
TVs also have huge ferrite "torroids" as part of their yoke assembly
too.

Thomas Ki4N

2524. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 13:26:50 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar4.132650.9466@ke4zv.atl.ga.us>
Source record: 270226

In article <1994Mar3.153014.6322@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
>BTW--how else does one improve a point to point link,
>besides using bigger antennas and more power?

Ah, the DXer mentality at work. That's what those guys
thought too. The only problem was, that wasn't why the
link was flakey. The real problem was that they had
established the world's worst exposed terminal in their
single frequency network, and the link was being killed
by all the DXer's with 160 watt amps and beams trying to
make it to their hubs and capturing the link node's receiver.
It would be held off for minutes at a time by the continous
collisions.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2525. ORBS$063.OSCAR.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 13:34:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8250.99.0C38A3CF@drig.com>
Source record: 270227

```
SB KEPS @ AMSAT $ORBS-063.O
Orbital Elements 063.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH,TX March 4, 1994
BID: $ORBS-063.O
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94059.96429348
Element set: 264
Inclination: 027.2018 deg
RA of node: 339.3804 deg
Eccentricity: 0.6027104
Arg of perigee: 158.3802 deg
Mean anomaly: 245.0891 deg
Mean motion: 02.05875835 rev/day
Decay rate: 2.64e-06 rev/day^2
Epoch rev: 8055
Checksum: 311

Satellite: UO-11
Catalog number: 14781
Epoch time: 94044.54889300
Element set: 664
Inclination: 97.7907 deg
RA of node: 65.0254 deg
Eccentricity: 0.0011279
Arg of perigee: 310.7761 deg
Mean anomaly: 49.2455 deg
Mean motion: 14.69144313 rev/day
Decay rate: 3.63e-06 rev/day^2
Epoch rev: 53215
Checksum: 306

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94061.03883249
Element set: 877
Inclination: 082.9217 deg
RA of node: 048.0362 deg
Eccentricity: 0.0011441
Arg of perigee: 326.6023 deg
Mean anomaly: 033.4997 deg
```

Mean motion: 13.72331967 rev/day
Decay rate: -6.0e-08 rev/day^2
Epoch rev: 33521
Checksum: 298

Satellite: AO-13
Catalog number: 19216
Epoch time: 94060.48894014
Element set: 888
Inclination: 057.8304 deg
RA of node: 265.6507 deg
Eccentricity: 0.7212956
Arg of perigee: 335.3196 deg
Mean anomaly: 002.8602 deg
Mean motion: 02.09730422 rev/day
Decay rate: 2.88e-06 rev/day^2
Epoch rev: 4375
Checksum: 318

Satellite: FO-20
Catalog number: 20480
Epoch time: 94046.42832899
Element set: 659
Inclination: 99.0216 deg
RA of node: 221.3367 deg
Eccentricity: 0.0539917
Arg of perigee: 255.4010 deg
Mean anomaly: 98.6634 deg
Mean motion: 12.83223845 rev/day
Decay rate: -1.4e-07 rev/day^2
Epoch rev: 18851
Checksum: 320

Satellite: AO-21
Catalog number: 21087
Epoch time: 94060.95526134
Element set: 439
Inclination: 082.9416 deg
RA of node: 222.0498 deg
Eccentricity: 0.0035939
Arg of perigee: 023.9104 deg
Mean anomaly: 336.4239 deg
Mean motion: 13.74533695 rev/day
Decay rate: -2.2e-07 rev/day^2
Epoch rev: 15485
Checksum: 311

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94044.66379265
Element set: 662

Inclination: 82.9220 deg
RA of node: 103.0678 deg
Eccentricity: 0.0030946
Arg of perigee: 91.8517 deg
Mean anomaly: 268.6203 deg
Mean motion: 13.74034946 rev/day
Decay rate: 4.3e-07 rev/day^2
Epoch rev: 15168
Checksum: 314

Satellite: ARSENE
Catalog number: 22654
Epoch time: 93338.80803910
Element set: 243
Inclination: 1.4104 deg
RA of node: 113.5274 deg
Eccentricity: 0.2936576
Arg of perigee: 161.9838 deg
Mean anomaly: 210.8642 deg
Mean motion: 1.42202044 rev/day
Decay rate: -8.7e-07 rev/day^2
Epoch rev: 299
Checksum: 278

/EX

2526. ORBS$063.MICRO.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 13:36:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8251.99.0C38A3D0@drig.com>
Source record: 270078

```
SB KEPS @ AMSAT $ORBS-063.D
Orbital Elements 063.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH,TX March 4, 1994
BID: $ORBS-063.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94046.18347456
Element set: 964
Inclination: 98.5953 deg
RA of node: 132.5942 deg
Eccentricity: 0.0010599
Arg of perigee: 186.2827 deg
Mean anomaly: 173.8225 deg
Mean motion: 14.29823413 rev/day
Decay rate: 6.0e-07 rev/day^2
Epoch rev: 21215
Checksum: 317

Satellite: AO-16
Catalog number: 20439
Epoch time: 94045.75388848
Element set: 764
Inclination: 98.6038 deg
RA of node: 133.2765 deg
Eccentricity: 0.0010934
Arg of perigee: 188.0238 deg
Mean anomaly: 172.0765 deg
Mean motion: 14.29879034 rev/day
Decay rate: 7.6e-07 rev/day^2
Epoch rev: 21210
Checksum: 328

Satellite: DO-17
Catalog number: 20440
Epoch time: 94045.23034447
Element set: 763
Inclination: 98.6058 deg
RA of node: 133.0443 deg
Eccentricity: 0.0010965
Arg of perigee: 189.4352 deg
Mean anomaly: 170.6623 deg
```

Mean motion: 14.30017107 rev/day
Decay rate: 7.0e-07 rev/day^2
Epoch rev: 21204
Checksum: 266

Satellite: WO-18
Catalog number: 20441
Epoch time: 94045.76328214
Element set: 765
Inclination: 98.6054 deg
RA of node: 133.5798 deg
Eccentricity: 0.0011505
Arg of perigee: 188.3662 deg
Mean anomaly: 171.7330 deg
Mean motion: 14.29993172 rev/day
Decay rate: 5.9e-07 rev/day^2
Epoch rev: 21212
Checksum: 309

Satellite: LO-19
Catalog number: 20442
Epoch time: 94045.74960276
Element set: 763
Inclination: 98.6048 deg
RA of node: 133.7927 deg
Eccentricity: 0.0011921
Arg of perigee: 187.6862 deg
Mean anomaly: 172.4137 deg
Mean motion: 14.30087334 rev/day
Decay rate: 6.4e-07 rev/day^2
Epoch rev: 21213
Checksum: 308

Satellite: UO-22
Catalog number: 21575
Epoch time: 94046.13690949
Element set: 465
Inclination: 98.4466 deg
RA of node: 123.0432 deg
Eccentricity: 0.0007219
Arg of perigee: 301.1937 deg
Mean anomaly: 58.8542 deg
Mean motion: 14.36890610 rev/day
Decay rate: 1.13e-06 rev/day^2
Epoch rev: 13555
Checksum: 302

Satellite: KO-23
Catalog number: 22077
Epoch time: 94046.40390865
Element set: 360

Inclination: 66.0810 deg
RA of node: 174.9628 deg
Eccentricity: 0.0009874
Arg of perigee: 317.5713 deg
Mean anomaly: 42.4539 deg
Mean motion: 12.86284764 rev/day
Decay rate: -3.7e-07 rev/day^2
Epoch rev: 7112
Checksum: 311

Satellite: AO-27
Catalog number: 22825
Epoch time: 94046.21545311
Element set: 261
Inclination: 98.6626 deg
RA of node: 123.1936 deg
Eccentricity: 0.0008062
Arg of perigee: 202.2052 deg
Mean anomaly: 157.8775 deg
Mean motion: 14.27607193 rev/day
Decay rate: 5.8e-07 rev/day^2
Epoch rev: 2028
Checksum: 289

Satellite: IO-26
Catalog number: 22826
Epoch time: 94042.21058899
Element set: 261
Inclination: 98.6649 deg
RA of node: 119.2441 deg
Eccentricity: 0.0008529
Arg of perigee: 216.1988 deg
Mean anomaly: 143.8612 deg
Mean motion: 14.27708814 rev/day
Decay rate: 5.3e-07 rev/day^2
Epoch rev: 1971
Checksum: 325

Satellite: KO-25
Catalog number: 22830
Epoch time: 94045.75293537
Element set: 264
Inclination: 98.5674 deg
RA of node: 121.3071 deg
Eccentricity: 0.0011406
Arg of perigee: 172.0390 deg
Mean anomaly: 188.0975 deg
Mean motion: 14.28033386 rev/day
Decay rate: 5.3e-07 rev/day^2
Epoch rev: 2022
Checksum: 286

/EX

2527. [Re:Yaesu FT530]

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 13:37:09 UTC
From: wstaub@random.ucs.mun.ca
Message-ID: <2l7di5$f8u@coranto.ucs.mun.ca>
Source record: 270079

[No readable article body recovered]

2528. ORBS$063.WEATH.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 13:41:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8252.99.0C38A3D1@drig.com>
Source record: 270080

```
SB KEPS @ AMSAT $ORBS-063.W
Orbital Elements 063.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX March 4, 1994
BID: $ORBS-063.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94061.01035146
Element set: 730
Inclination: 099.0595 deg
RA of node: 110.1740 deg
Eccentricity: 0.0015036
Arg of perigee: 161.5961 deg
Mean anomaly: 198.6262 deg
Mean motion: 14.13593205 rev/day
Decay rate: -1.0e-07 rev/day^2
Epoch rev: 47520
Checksum: 271

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94060.99970033
Element set: 628
Inclination: 098.5075 deg
RA of node: 073.2639 deg
Eccentricity: 0.0013002
Arg of perigee: 284.1537 deg
Mean anomaly: 075.8728 deg
Mean motion: 14.24869344 rev/day
Decay rate: 2.06e-06 rev/day^2
Epoch rev: 38734
Checksum: 332

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94046.33979358
Element set: 262
Inclination: 82.5401 deg
RA of node: 5.5070 deg
Eccentricity: 0.0016642
Arg of perigee: 157.5160 deg
Mean anomaly: 202.6730 deg
```

Mean motion: 13.84706663 rev/day
Decay rate: 3.0e-07 rev/day^2
Epoch rev: 30549
Checksum: 289

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94039.99790931
Element set: 262
Inclination: 82.5380 deg
RA of node: 54.3969 deg
Eccentricity: 0.0015730
Arg of perigee: 222.0779 deg
Mean anomaly: 137.9138 deg
Mean motion: 13.16964807 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 26638
Checksum: 335

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94061.00386846
Element set: 535
Inclination: 099.1626 deg
RA of node: 047.3332 deg
Eccentricity: 0.0012104
Arg of perigee: 074.4598 deg
Mean anomaly: 285.8484 deg
Mean motion: 14.12964394 rev/day
Decay rate: 3.54e-06 rev/day^2
Epoch rev: 28008
Checksum: 311

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94053.01405594
Element set: 263
Inclination: 082.5171 deg
RA of node: 235.7306 deg
Eccentricity: 0.0014002
Arg of perigee: 188.3029 deg
Mean anomaly: 171.8434 deg
Mean motion: 13.84356715 rev/day
Decay rate: -8.0e-08 rev/day^2
Epoch rev: 25175
Checksum: 295

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94052.02689974
Element set: 989

Inclination: 082.5516 deg
RA of node: 350.2887 deg
Eccentricity: 0.0006980
Arg of perigee: 212.2401 deg
Mean anomaly: 147.8826 deg
Mean motion: 13.04401818 rev/day
Decay rate: .00000000 rev/day^2
Epoch rev: 20775
Checksum: 292

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94040.79306496
Element set: 762
Inclination: 82.5504 deg
RA of node: 309.6649 deg
Eccentricity: 0.0016176
Arg of perigee: 139.0978 deg
Mean anomaly: 221.1403 deg
Mean motion: 13.84188455 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 18299
Checksum: 328

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94061.01586847
Element set: 907
Inclination: 098.8380 deg
RA of node: 084.5670 deg
Eccentricity: 0.0013935
Arg of perigee: 308.8594 deg
Mean anomaly: 051.1838 deg
Mean motion: 14.01322350 rev/day
Decay rate: 3.77e-06 rev/day^2
Epoch rev: 17869
Checksum: 332

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94060.99109242
Element set: 777
Inclination: 082.5222 deg
RA of node: 231.2554 deg
Eccentricity: 0.0013686
Arg of perigee: 351.3644 deg
Mean anomaly: 008.7815 deg
Mean motion: 13.83573202 rev/day
Decay rate: -6.0e-08 rev/day^2
Epoch rev: 17293
Checksum: 295

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94044.59202931
Element set: 670
Inclination: 82.5391 deg
RA of node: 256.9674 deg
Eccentricity: 0.0013673
Arg of perigee: 130.9218 deg
Mean anomaly: 229.3059 deg
Mean motion: 13.16460015 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 13509
Checksum: 285

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94061.06053707
Element set: 940
Inclination: 098.6272 deg
RA of node: 091.1459 deg
Eccentricity: 0.0012968
Arg of perigee: 186.5273 deg
Mean anomaly: 173.6274 deg
Mean motion: 14.22374247 rev/day
Decay rate: 2.14e-06 rev/day^2
Epoch rev: 14530
Checksum: 295

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94060.92535554
Element set: 682
Inclination: 082.5586 deg
RA of node: 192.4818 deg
Eccentricity: 0.0013979
Arg of perigee: 105.6381 deg
Mean anomaly: 254.6811 deg
Mean motion: 13.16827204 rev/day
Decay rate: -4.71e-06 rev/day^2
Epoch rev: 12234
Checksum: 316

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94061.07699856
Element set: 277
Inclination: 082.5414 deg
RA of node: 291.3236 deg
Eccentricity: 0.0022793
Arg of perigee: 163.8377 deg
Mean anomaly: 196.4020 deg
Mean motion: 13.83001482 rev/day

```
Decay rate: 7.5e-07 rev/day^2
Epoch rev: 02528
Checksum: 312

/EX
```

2529. ORBS$063.MISC.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 13:43:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8253.99.0C38A3D2@drig.com>
Source record: 270081

```
SB KEPS @ AMSAT $ORBS-063.M
Orbital Elements 063.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX March 4, 1994
BID: $ORBS-063.M
TO ALL RADIO AMATEURS BT

Satellite: POSAT
Catalog number: 22829
Epoch time: 94045.75585944
Element set: 254
Inclination: 98.6608 deg
RA of node: 122.7699 deg
Eccentricity: 0.0009759
Arg of perigee: 191.0097 deg
Mean anomaly: 169.0872 deg
Mean motion: 14.28003980 rev/day
Decay rate: 7.2e-07 rev/day^2
Epoch rev: 2022
Checksum: 326

Satellite: MIR
Catalog number: 16609
Epoch time: 94061.02012332
Element set: 154
Inclination: 051.6205 deg
RA of node: 003.6927 deg
Eccentricity: 0.0004649
Arg of perigee: 015.8866 deg
Mean anomaly: 344.2953 deg
Mean motion: 15.60576251 rev/day
Decay rate: 1.2762e-04 rev/day^2
Epoch rev: 45933
Checksum: 285

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94060.95287285
Element set: 452
Inclination: 028.4689 deg
RA of node: 204.7466 deg
Eccentricity: 0.0006400
Arg of perigee: 049.7311 deg
Mean anomaly: 310.4334 deg
```

Mean motion: 14.90500352 rev/day
Decay rate: 4.86e-06 rev/day^2
Epoch rev: 01337
Checksum: 280

Satellite: GRO
Catalog number: 21225
Epoch time: 94056.01798028
Element set: 67
Inclination: 028.4620 deg
RA of node: 290.4640 deg
Eccentricity: 0.0003856
Arg of perigee: 037.8429 deg
Mean anomaly: 322.2943 deg
Mean motion: 15.40194914 rev/day
Decay rate: 4.590e-05 rev/day^2
Epoch rev: 03962
Checksum: 295

Satellite: UARS
Catalog number: 21701
Epoch time: 94050.07315151
Element set: 479
Inclination: 056.9834 deg
RA of node: 272.3681 deg
Eccentricity: 0.0002165
Arg of perigee: 100.1172 deg
Mean anomaly: 260.0857 deg
Mean motion: 14.96377326 rev/day
Decay rate: 3.162e-05 rev/day^2
Epoch rev: 13325
Checksum: 272

/EX

2530. ORBS$063.2L.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 13:46:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8254.99.0C38A3D3@drig.com>
Source record: 270082

```
SB KEPS @ AMSAT $ORBS-063.N
2Line Orbital Elements 063.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX March 4, 1994
BID: $ORBS-063.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10
1 14129U 83058 B 94059.96429348 .00000264 00000-0 99999-4 0 2649
2 14129 027.2018 339.3804 6027104 158.3802 245.0891 02.05875835 80556
UO-11
1 14781U 84021B 94044.54889300 .00000363 00000-0 69607-4 0 6647
2 14781 97.7907 65.0254 0011279 310.7761 49.2455 14.69144313532150
RS-10/11
1 18129U 87054 A 94061.03883249 -.00000006 00000-0 00000 0 0 8773
2 18129 082.9217 048.0362 0011441 326.6023 033.4997 13.72331967335219
AO-13
1 19216U 88051 B 94060.48894014 .00000288 00000-0 14661-1 0 8882
2 19216 057.8304 265.6507 7212956 335.3196 002.8602 02.09730422 43757
FO-20
1 20480U 90013C 94046.42832899 -.00000014 00000-0 49346-4 0 6594
2 20480 99.0216 221.3367 0539917 255.4010 98.6634 12.83223845188515
AO-21
1 21087U 91006 A 94060.95526134 -.00000022 00000-0 00000 0 0 4391
2 21087 082.9416 222.0498 0035939 023.9104 336.4239 13.74533695154854
RS-12/13
1 21089U 91007A 94044.66379265 .00000043 00000-0 29527-4 0 6625
2 21089 82.9220 103.0678 0030946 91.8517 268.6203 13.74034946151682
ARSENE
1 22654U 93031B 93338.80803910 -.00000087 00000-0 00000 0 0 2437
2 22654 1.4104 113.5274 2936576 161.9838 210.8642 1.42202044 2990
UO-14
1 20437U 90005B 94046.18347456 .00000060 00000-0 40471-4 0 9649
2 20437 98.5953 132.5942 0010599 186.2827 173.8225 14.29823413212157
AO-16
1 20439U 90005D 94045.75388848 .00000076 00000-0 46533-4 0 7643
2 20439 98.6038 133.2765 0010934 188.0238 172.0765 14.29879034212109
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DO-17
1 20440U 90005E 94045.23034447 .00000070 00000-0 44132-4 0 7637
2 20440 98.6058 133.0443 0010965 189.4352 170.6623 14.30017107212047
WO-18
1 20441U 90005F 94045.76328214 .00000059 00000-0 39826-4 0 7657
2 20441 98.6054 133.5798 0011505 188.3662 171.7330 14.29993172212124
LO-19
1 20442U 90005G 94045.74960276 .00000064 00000-0 41740-4 0 7638
2 20442 98.6048 133.7927 0011921 187.6862 172.4137 14.30087334212130
UO-22
1 21575U 91050B 94046.13690949 .00000113 00000-0 52716-4 0 4657
2 21575 98.4466 123.0432 0007219 301.1937 58.8542 14.36890610135556
KO-23
1 22077U 92052B 94046.40390865 -.00000037 00000-0 10000-3 0 3601
2 22077 66.0810 174.9628 0009874 317.5713 42.4539 12.86284764 71129
AO-27
1 22825U 93061C 94046.21545311 .00000058 00000-0 41460-4 0 2617
2 22825 98.6626 123.1936 0008062 202.2052 157.8775 14.27607193 20284
IO-26
1 22826U 93061D 94042.21058899 .00000053 00000-0 39268-4 0 2612
2 22826 98.6649 119.2441 0008529 216.1988 143.8612 14.27708814 19710
KO-25
1 22830U 93061H 94045.75293537 .00000053 00000-0 38624-4 0 2647
2 22830 98.5674 121.3071 0011406 172.0390 188.0975 14.28033386 20227
NOAA-9
1 15427U 84123 A 94061.01035146 -.00000010 00000-0 00000 0 0 7301
2 15427 099.0595 110.1740 0015036 161.5961 198.6262 14.13593205475201
NOAA-10
1 16969U 86073 A 94060.99970033 .00000206 00000-0 88281-4 0 6282
2 16969 098.5075 073.2639 0013002 284.1537 075.8728 14.24869344387340
MET-2/17
1 18820U 88005A 94046.33979358 .00000030 00000-0 12997-4 0 2628
2 18820 82.5401 5.5070 0016642 157.5160 202.6730 13.84706663305497
MET-3/2
1 19336U 88064A 94039.99790931 .00000051 00000-0 10000-3 0 2623
2 19336 82.5380 54.3969 0015730 222.0779 137.9138 13.16964807266383
NOAA-11
1 19531U 88089 A 94061.00386846 .00000354 00000-0 19022-3 0 5352
2 19531 099.1626 047.3332 0012104 074.4598 285.8484 14.12964394280081
MET-2/18
1 19851U 89018 A 94053.01405594 -.00000008 00000-0 00000 0 0 2631
2 19851 082.5171 235.7306 0014002 188.3029 171.8434 13.84356715251755
MET-3/3
1 20305U 89086 A 94052.02689974 .00000000 00000-0 99999-4 0 9894
2 20305 082.5516 350.2887 0006980 212.2401 147.8826 13.04401818207754
MET-2/19
1 20670U 90057A 94040.79306496 .00000024 00000-0 79036-5 0 7621
2 20670 82.5504 309.6649 0016176 139.0978 221.1403 13.84188455182995
FY-1/2
1 20788U 90081 A 94061.01586847 .00000377 00000-0 25065-3 0 9079
```

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2 20788 098.8380 084.5670 0013935 308.8594 051.1838 14.01322350178699
MET-2/20
1 20826U 90086 A 94060.99109242 -.00000006 00000-0 00000 0 0 7776
2 20826 082.5222 231.2554 0013686 351.3644 008.7815 13.83573202172938
MET-3/4
1 21232U 91030A 94044.59202931 .00000051 00000-0 10000-3 0 6701
2 21232 82.5391 256.9674 0013673 130.9218 229.3059 13.16460015135098
NOAA-12
1 21263U 91032 A 94061.06053707 .00000214 00000-0 96445-4 0 9402
2 21263 098.6272 091.1459 0012968 186.5273 173.6274 14.22374247145306
MET-3/5
1 21655U 91056 A 94060.92535554 -.00000471 00000-0 99999-4 0 6828
2 21655 082.5586 192.4818 0013979 105.6381 254.6811 13.16827204122344
MET-2/21
1 22782U 93055 A 94061.07699856 .00000075 00000-0 68856-4 0 2771
2 22782 082.5414 291.3236 0022793 163.8377 196.4020 13.83001482025280
POSAT
1 22829U 93061G 94045.75585944 .00000072 00000-0 46760-4 0 2541
2 22829 98.6608 122.7699 0009759 191.0097 169.0872 14.28003980 20229
MIR
1 16609U 86017 A 94061.02012332 .00012762 00000-0 15107-3 0 1545
2 16609 051.6205 003.6927 0004649 015.8866 344.2953 15.60576251459339
HUBBLE
1 20580U 90037 B 94060.95287285 .00000486 00000-0 48620-4 0 4525
2 20580 028.4689 204.7466 0006400 049.7311 310.4334 14.90500352013379
GRO
1 21225U 91027 B 94056.01798028 .00004590 00000-0 11038-3 0 670
2 21225 028.4620 290.4640 0003856 037.8429 322.2943 15.40194914039629
UARS
1 21701U 91063 B 94050.07315151 .00003162 00000-0 27654-3 0 4793
2 21701 056.9834 272.3681 0002165 100.1172 260.0857 14.96377326133253
/EX
```

2531. Re: A transmission line loss question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 14:05:46 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar4.140546.9759@ke4zv.atl.ga.us>
Source record: 270083

In article <2l59fh$p83@hpscit.sc.hp.com> rkarlqu@scd.hp.com (Richard Karlquist) writes:
>In article <64660001@hpcss01.cup.hp.com>,
>Mark Butterworth <markb@hpcss01.cup.hp.com> wrote:
>>Cut the cable to the shortest length. That will reduce the loss the most.
>>There is no reason to have the transmission line any particular length.
>>THis is an old wives tale.
>
>Well, in general, it's an old wives tale, but in the specific case
>of using 75 ohm line to connect a 50 ohm load to a 50 ohm source,
>you get minimum mismatch loss with multiples of a half wavelength,
>so it is true for that unusual situation.

Well as usual, the answer is yes, no, and it depends. If the 75 ohm
cable is lossy enough, say RG-59 that's been out behind the barn for
a few years, then the extra loss of making it a halfwave long at some
low HF frequency could very well exceed the mismatch loss you'd have
if you made the cable as short as possible. For the more typical case
of 75 ohm CATV hardline being used at UHF, making it a multiple of
a halfwave is generally a win, but making it as short as possible
and using low loss matching networks at each end, like the ZF Engineering
1/4-wave transformers, would be an even better solution.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2532. Re: Status of Online Repeater Directory Project....

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 14:13:19 UTC
From: yee@mipg.upenn.edu
Message-ID: <YEE.94Mar4141319@mipgsun.mipg.upenn.edu>
Source record: 270103

Jeffrey D. Angus writes:
>Well Conway, it would appear that you have shot yourself in the dick on
>this project. Perhaps next time when you run into an obstacle, you give
>some thought as to what the obstacle is before you run to the net and
>cry rape.
>
>After rereading your original messages and then reading the copies of the
>letter from the League counsel, it is my opinion that you mad a lot of fuss
>over nothing.
>
>It is indeed unfortunate that that seems to be the standard method of
>operation on the rec.radio.amateur.* newsgroups.

This indeed can be one interpretation of the events and I am sure it will now be the predominant one. The entire argument stems from the belief that the original format violated ARRL copyright in two areas and that the material in the directory is shows sufficient "originality" to merit a copyright. On both points, I have heard arguments on both sides. Prior to the initial posting of the database, I checked on both things and was told I was in the clear. The ARRL disagrees.

In any case, I believe that there is a quote about hindsight and 20/20 might be appropriate.

I have been receiving sporadic flames (although far fewer than notes of encouragement) over this project ever since it began. At first it was about the attitudes toward possible inaccurate listings. Now it appears that the new flames will be over my interpretation of a letter from a lawyer. Since you are so omniscient of the wishes of others, would you care to take over the running of the project? I am getting a bit tired of it. I started this thing as a VOLUNTEER project that I thought would be a benefit to the community and it isn't all that much fun. I would be more than happy to turn over the reins to someone who says that they can do better.

"No good deed goes unpunished."

--
Medical Image Processing Group | Conway Yee, N2JWQ
411 Blockley Hall | EMAIL : yee@mipg.upenn.edu
418 Service Drive | VOICE : 1 (215) 662-6780
Philadelphia, PA 19104-6021 (USA) | FAX : 1 (215) 898-9145

2533. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 14:13:41 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar4.141341.9861@ke4zv.atl.ga.us>
Source record: 270084

In article <2l63bh$5k2@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:
>All I want to do is build a ham radio digital link between San Diego and
>Los Angeles that will get data there faster and cheaper than me driving.
>
>I don't think I'll live long enough to see it happen.

It's hard to beat a stationwagon full of mag tapes for throughput. :-)

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2534. Re: Edco TX-146 2m Intermod Filter for HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 14:16:31 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar4.141631.9947@ke4zv.atl.ga.us>
Source record: 270085

In article <1994Mar3.234318.4663@ringer.cs.utsa.edu> blake@lonestar.utsa.edu (M Blake Schreckenbach) writes:
>Does anyone know how well this device works? I saw it in my most recent catalog
>from Tucker Electronics and Computers. The description says it requires +12VDC,
>so I guess you would have to haul around an extra battery if you wanted to go
>pedestrian mobile! Has anyone tried it with the TH78a?

This unit is a passive helical cavity filter with an RF sensed DC operated
TR relay. The external power is just for the sensing transistor and relay
coil. The filter has enough insertion loss that you want to bypass it during
transmit, thus the TR relay.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2535. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 14:36:27 UTC
From: benjy@benjy.cc.vt.edu
Message-ID: <2l7h1b$d8u@solaris.cc.vt.edu>
Source record: 270086

In article <2l3nuj$pr@bigfoot.wustl.edu> jlw3@cec3.wustl.edu (Jesse L Wei) writes:

{stuff deleted}

> Now this is my question: do hams *ever* talk about anything besides what
> kind of rig (s)he's got, ham problems, ham equipment, etc? As a waiting
> (as in for my ticket) prospective, I've liistened to the local repeaters,
> and personally, the conversations seem pretty boring if that's all you
> ever talk about. Have I missed anything? or something? Is the purpose
> of ham radio to talk about the technicalities of it? I know that the
> whole nature of it requires technicality, but isn't there more to
> it than that?
>
> --jesse (still waiting)

In my area, most hams talk about their location. For example,

Ham1: "I'm sitting in the parking lot at work. Where are you?"
Ham2: "I'm in the drive-through at Wendy's."

So sometimes technical discussions are less boring than other topics :-).

Seriously, making small talk is an art. Some people do it well, while others never really get the hang of it. But there are many bright spots. There's a lot of diversity amoung hams. If you can get past the small talk, there are a lot of interesting stories to be told. That's one reason I like HF: It adds to the number of potential QSOs.

And some hams are happy to hide behind the small talk. That's their right. They may enjoy just using the radio. The actual exchange is secondary. Or they may really like the technical discussions. I fit both of these catagories to some degree. But there are others that enjoy discussing "less boring" topics. Sometimes you just have to wait for the right QSO to come along.

Hope your license comes soon and good luck with the hobby. I'm sure you'll find some really great QSOs amoung all those boring ones.

--
Benjy Cline, AC4XO
Virginia Tech Computing Center
benjy@benjy.cc.vt.edu

2536. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 14:37:56 UTC
From: kevin jessup <kevin.jessup@mixcom.mixcom.com>
Message-ID: <1994Mar4.143756.9544@mixcom.mixcom.com>
Source record: 270087
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

>>public about what is going on. The public will demand encrypted
>>cordless phones and the manufacturers will deliver. Then the radio
>>voyeurs have more challenges to liven up the sport :-). All the law is
>>going to do is damage the lives of the very few people who get caught and
>>damage the lives of the many who blab all sorts of confidential information
>>on their cordless phones.

I agree. I really have no interest in listening to cordless or cellular
conversations. As an amateur radio operator and EE, I either own or, if
the challenge arose, could build the equipment needed to monitor.

Once the government starts making the interception of certain signals
illegal, therein lies the challenge! Once you have somthing "cracked"
the fun is gone, IMHO. Same for digital encryption. The fun is in
cracking the code. Or at least getting to that point. Once the code
is cracked, it's time to move on. The only way to know if any
encryption method is secure is to ENCOURAGE people to crack it. As
with monitoring cellular and cordless phones, passing laws does
nothing. Same with digital encryption. If you have to pass a law
against breaking a code, how good is the code in the first place??

If you find such things intersting, check out sci.crypt, also on
the internet.

--
/`-_ kevin.jessup@mixcom.com
{ }/ Marquette Electronics, Inc
\ / N9SQB, ARRL, Amateur Radio
|__*| N9SQB @ WD9ANY.#MKE.WI.USA.NA

2537. Tandy Model 100 and Baycom/PMP

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 14:39:50 UTC
From: mam@cbnewsg.cb.att.com
Message-ID: <CM5A2G.LEt@cbfsb.cb.att.com>
Source record: 270088
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,comp.sys.tandy

Has anyone figured out how to connect a Baycom/Poor Mans Packet circuit
to a Tandy Model 100?

I just finished building a Baycom modem for packet, and I'd just love
to be able to use my portable, non-MSDOS compatible Model 100 as a terminal
to at least receive those packets.

Actually, we've been trying to get the Model 100 to decode the signals directly
through the cassette port. All we've been able to do is CW so far. RTTY
is next, unless someone has cracked that nut already ...

Thanks,

Mark KB2els
mccuistion@attmail.att.com

2538. QRP expedition

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 15:01:11 UTC
From: JMG@tntech.edu
Message-ID: <01H9KGYMM1AAEZEWHX@tntech.edu>
Source record: 270089

The Amateur Radio Club at Tennessee Technological University (TTARS) is going to be doing a QRP expedition (special events) on April 16, 17, 18.

The purpose of this expedition is to promote amateur radio, and in particular show how lower power is an effective mode of communications both for SSB and CW. I hope that this will really inspire the college students here (almost all are Technicians) to upgrade to General Class and to get them more interested in Ham radio in general.

We will be going to a state park that has some pretty good wilderness type areas with some great cliffs. If the weather permits we will be operating at some pretty spectacular locations. We plan on operating both SSB and CW with a possibility of 2 seperate stations. We will either have certificates or QSL cards with a picture of one of the locations. I hope to write the experience up for a magazine article.

I would like some input in setting up the schedule of operating bands/modes/frequencies. The only advertisement for this event will be via Internet and Packet (part of the concept). I think that we will probably operate between 15:00Z and 04:00Z daily. We will be setting up on the 15th and if things go well start operating in a test mode at that point. So what do suggest for example for CW from xx-xx on Y meters at ZZZZZ.ZZ freq-ZZZZZ.ZZ freq.

Due to the fact that most of the operators (99.9%) are not CW people (yet) much of the planned operating will be on SSB.. which I believe is good.. too many people have the concept that QRP is CW only and that turns some people off to start with..to get more people trying this... hopefully will be able to show them it works well on SSB also.

thanks

Jeff, AC4HF

2539. tax exempt 501 (c) status

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 15:04:28 UTC
From: taylor@tix.timeplex.COM
Message-ID: <9403041504.AA01572@tix.timeplex.com>
Source record: 270090

I remember that when our club attorney reviewed this question for the local club here, that a radio or hobby type club, even though not for profit is not tax exempt per the IRS definition. If the club has a seperate activity, e.g. a scholarship fund, or a purely charitible function separate from the regular radio club activities, this would qualify, but I would have an attorney structure the corporation to permit this seperate activity. A radio "club" that is incorporated has to file a report with the IRS if income is even zero if more than a certain $$ amount is handled in the club treasury, even if the net club profit is zero. Also when it comes to getting a cheaper rate at the PO for newsletters etc., only IRS defined 501 C3 (charitable organizations e.g. churches, temples, religious organizations, red cross disaster relief etc.) are eligible. A radio "club" per se is treated as a 501 C7 generally, and even though it is non profit, it is considered a "social club" and not in the charitable class. An example is the ARRL. They are probably a 501C7 however, if they have a schlor-ship fund that is administered and seperated legally it could get 501c3 status, but only for activity and expenses asssociated with that activity.

Seth KC2WE

2540. Re: Jerk on 20 mtrs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 16:33:18 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <CM5FBJ.Gq5@cscsun.rmc.edu>
Source record: 270091

Kenneth D Anderson (kenman@iastate.edu) wrote:

: Hi All,

: I upgraded from tech to advanced this last weekend and decided to listen in
: on 20 meters to get a feel for what goes on there. (I worked 15 mtrs since
: it was wide open to Europe!>.

: There was some JERK that was running up and down the band causing all kinds
: of intentional interference: from belching and whistling to calling people
: sh*theads to keying on a frequency to disrupt a QSO.

: He gave his call (obviously bogus) as W?OOQ. (don't remember what area he
: gave.)

: Is this guy a fixture on 20 meters, or did I just get lucky?

According to callsign.cs.buffalo.edu:2000, there are w*ooq's in callsign
regions 1,2, and 6. They are in NH, FL, and CA with Adv, Gen, Adv licenses,
respectively. You choose which one, and whether or not they were the real
culprit or if you were hearing a "Cheap Bavarian Knockoff."
--
David Tiller | Network Administrator | Voice: (804) 752-3710 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
"Drunk, [Beowulf] slew | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
no hearth companions." | Ashland, Va 23005 | 77d 31' 32.19" W |

2541. Announcement - ARRL Information Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 18:19:00 UTC
From: mtracy@arrl.org
Message-ID: <1994Mar4.181900.9219@arrl.org>
Source record: 270092

Announcement - ARRL Information Email Server (info@arrl.org)

The services that the ARRL provides via the internet include the
Email Information Server and the Technical Information Service.
The Information Server is an automated mail server that gives you
access to many of information files relating to various facets of
Amateur Radio. You can retrieve any or all of these files by
sending an email message to info@arrl.org here at ARRL HQ.
Each file you request is then mailed to you automatically.

To use it, mail messages to:

info@arrl.org

Each line of the message body should contain a command as shown below.
The subject of your message is not processed and may be omitted. You
may place as many commands in a message as you want. The files you
request will be sent to you in separate messages. Only ASCII text
files are supported.

Valid INFO commands:

reply <address> (may be needed - see below for explanation)
help
index
send FILENAME (example: send prospect.txt)
quit

In the above message example, "help" retrieves a brief set of
instructions for info, "index" retrieves a list of available files
and "prospect.txt" retrieves a text file containing information on
becoming a radio amateur.

Note to users with FTP capability: All of these files are also
available by anonymous ftp to ftp.std.com in the
/pub/hamradio/ARRL/Server-files/info area.

If you want to retrieve several text files with one message, use a
separate line for each "send filename" request.

Your From: field or Reply-to: field in your header should contain a
valid Internet address, including full domain name. If your From:
field does not contain a valid Internet address, the answer will not
reach you. If this is the case, then use the reply command as shown
above. When needed, this command should always be the first command
in your message.

IMPORTANT: Please use the quit command in your message. This will prevent processing errors from message signatures.

PLEASE NOTE!: This is an automated system not capable of handling written requests. Any questions on the info-server or the content of any of its files should be directed to mtracy@arrl.org.

ALSO NOTE!: Do *NOT* reply to messages sent from info@arrl.org - the reply address is redirected to keep bounced messages from endlessly looping. Write a new message to info@arrl.org instead.

The Technical Information Service gives League members on the internet better access to the knowledgeable technical staff here at ARRL HQ. Questions relating to Amateur Radio and related technical topics are welcome. To use this service, send a normal e-mail message to tis@arrl.org with your question spelled out in plain english. For best service, be as specific as possible and keep your line length in messages to a maximum of 80 characters. Due to personnel limitations, priority will be given to questions from League members.

Best Regards,

Michael Tracy, KC1SX, ARRL Technical Information Services Coordinator
(e-mail mtracy@arrl.org)

Sample of files available from INFO: (There are lots more!)

Note - If you are not yet an Amateur Radio operator retrieve the file prospect (send prospect) for information on how to easily get started in this fun hobby.

FILENAME SIZE DATE DESCRIPTION
--- --- --- ---
PROSPECT.TXT 2k 930514 How to get your Amateur Radio license
EXAMS.TXT 52k 930629 Current exam schedule info - updated bi-weekly
EXAMINFO.TXT 9k 921020 Examinations - what to bring - requirements
USERS.TXT 6k 930119 List of HQ Email addresses
ARRLCAT.TXT 39k 930709 Catalog of ARRL Publications - commercial content
JOIN.TXT 2k 930621 How become an ARRL member
SERVICES.TXT 5k 930621 A condensed list of ARRL membership services
TOUR.TXT 28k 930621 An electronic tour of ARRL Headquarters
DIR.HQ 5k 930310 Visiting ARRL HQ - diretions and tour information
HFBANDS 7k 921203 Breakdown of users of HF spectrum
Q-SIGS 1k 921203 ARRL list of Amateur Radio Q-signals
W1AW.SKD 2k 930120 W1AW schedule of transmissions and operation
PRODREV1.TXT 12k 930227 Which rig is best? Part 1 - QST Lab Notes
PRODREV2.TXT 22k 930227 Which rig is best? Part 2 - QST Lab Notes
!LIST.TXT 6k 931120 QST Bibliographies List
RFIGEN.TXT 37k 930120 How to solve an EMI/RFI problem - QST Lab Notes
RFISOURC.TXT 13k 930607 Where to buy filters - EMI-proof telephones etc.
ADDRESS.TXT 16k 930318 Lots and lots of ham/electonic company addresses
KITS.TXT 6k 930430 List of companies that sell kits
BBS.TXT 12k 930601 List of ham-radio land-line bulletin boards

FAQ1.TXT 25k 930707 Introduction to the FAQ and Amateur Radio
FAQ2.TXT 45k 930707 Amateur Radio Orgs, Services and Info Sources
FAQ3.TXT 32k 930707 Amateur Radio Advanced and Technical Questions

2542. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 18:51:04 UTC
From: randolph@est.enet.dec.com
Message-ID: <CM5Mnx.3ro@ryn.mro.dec.com>
Source record: 270093
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

In article <1994Mar2.175938.12119@alw.nih.gov>, weisen@alw.nih.gov (Neil Weisenfeld) writes...
>What I think we should do is write to our congresspeople and tell them why
>we feel the cellular and cordless privacy laws are so misguided. Even if
>they outlaw the manufacture of scanners that can receive cordless
>(and I haven't heard anyone say that that is what is up for debate --
>only outlawing *listening*, not manufacture), those radios are going to be
>around for a long, long time as used equipment.

Been there, done that. My Congressman ignored my letter. The law didn't pass on his watch, so, in the finest tradition of politicians, I guess he feels no obligation to deal with it.

Amen to the long, long time. I just tuned up my old BC220 table-top scanner. 15 years old, 20 channels, and no 800MHz, but still not a bad radio if your city hasn't gone to trunked public service.

>I'd be interested if other people agree.

Yup. These laws, if I'm not misinformed, are unique in recent history in that up until their enactment, it was legal to listen to any waves passing through your home, as long as you didn't act on or disclose what you heard. You are now a criminal if you choose to *tune in* to these particular band segments, regardless of what you do with what you hear. More such laws will follow, since government and regulations never shrink in size.
-Tom R. N1OOQ randolph@est.enet.dec.com

2543. Drake SW-8 comments solicited

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 19:30:06 UTC
From: lee@tosspot.sv.com
Message-ID: <VcHoic1w165w@tosspot.sv.com>
Source record: 270094
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave

A colleague is thinking of buying the new Drake semi-portable SW-8.

Would any new owners of this receiver care to provide any feedback on it? My colleague would be very grateful.

Please email your comments to me directly as well as posting to the group.

Thanks,
Lee <lee@tosspot.sv.com>

2544. Re: tax exempt 501 (c) status

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 19:41:07 UTC
From: alanb@sr.hp.com
Message-ID: <CM5o0L.6J0@srgenprp.sr.hp.com>
Source record: 270095

Seth Taylor (taylor@tix.timeplex.COM) wrote:
: I remember that when our club attorney reviewed this question for the
: local club here, that a radio or hobby type club, even though not for
: profit is not tax exempt per the IRS definition. ...

Most ham clubs who have qualified have done it in the "Educational"
category. If the club has regular classes, publishes a newsletter
with ham news and info, has informative programs at club meetings, etc.
it should be possible to qualify. It's not easy, but it can be done.
Definitely have an attorney look over your articles of incorporation
and bylaws before sending them in.

: Also when it comes to getting a cheaper rate at
: the PO for newsletters etc., only IRS defined 501 C3 (charitable
: organizations e.g. churches, temples, religious organizations, red cross
: disaster relief etc.) are eligible.

Not true. While the Postal Service requirements for the non-profit
bulk mail rate are nearly identical to IRS 501(c) requirements, one does
not automatically qualify you for the other.

AL N1AL

2545. SUBSCRIBE

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 19:42:58 UTC
From: REED@avoca.nwscc.SEa06.navy.MIL
Message-ID: <9403041946.AA12461@dice.nwscc.sea06.navy.mil>
Source record: 270096

Please add me to your mail list.
Thanks!
Tom KA8HUZ

2546. * SpaceNews 07-Mar-94 *

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 20:04:16 UTC
From: kd2bd@ka2qhd.DE.COM
Message-ID: <9403042004.AA07402@ka2qhd.de.com>
Source record: 270097

SB NEWS @ AMSAT $SPC0307
* SpaceNews 07-Mar-94 *

BID: $SPC0307

=========
SpaceNews
=========

MONDAY MARCH 7, 1994

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is
published every week and is made available for unlimited distribution.

* AO-13 MODE S REPORT *
======================
With its new operating schedule, AO-13 is now seeing increased activity
during its Mode BS and S periods from users of the 2.4 GHz transponder.
With 4 hours available per orbit, listeners to the S band transmitter are
enjoying strong signals and noise free reception.

Antennas are mainly small dishes from 0.6m to 1m diameter although some
stations are successfully using loop Yagis. With a 1m dish on receive and
a single 19 element yagi on 435, good results can be achieved with 10 to 20
watts.

Stations having good signals on 2.4 GHz last week included:

N2IQU G0ONA ZS6JT VE3GTF JA7EC PT9FH OE6DGV TI5RLI VK6BMD

[Info via David, G0MRF]

* RS SATELLITE NEWS *
=====================
The following information is supplied by Andy, RK3KPK, the operator of RS3A,
the RS satellite command station:

RS10: Operating normally in Mode A: 145.860 -145.900 MHz uplink
29.360 - 29.400 MHz downlink
Autotransponder "Robot" ....145.820 MHz uplink
29.403 MHz downlink
Very good activity CW from DL,YO,G, HB - (swl RK3KPK),
Also it is possible to use special channel...145.850 MHz uplink
... 29.350 MHz downlink

RS12: Operating normally in Mode K: 21.210 - 21.250 MHz uplink
29.410 - 29.450 MHz downlink
Autotransponder "Robot" ....21.130 MHz uplink

... 29.454 MHz downlink

Please send QSL cards for "Robot" contacts to RK3KPK direct (SAE + I.R.C.):
Andrey Mironow, ul. V-Voloshinoj, d.11, kv.72
station Perlovskaya, 141014, Russia, CIS

or via DF4XW.

RS15: We are waiting for the launch of this satallite this spring.
The main frequencies of RS15 are:
Mode A: 145.857 - 145.897 MHz Uplink
29.357 - 29.397 MHz Downlink
Beacon 1: 29.398 MHz
Beacon 2: 29.351 (???) MHz
Power beacons low/high..... 0.4 - 1.2 Watt
Output of transponder ..... about 5 Watts
Inclination..... about 67 degrees
Height of orbit..... 2,300 Km
Weight of satellite..... about 50 Kg
Antenna..... dipoles
Memory of RS..... about 2 Kb

RK3KPK would like to hear about your DX contacts via the RS satellites.
For example, Andy had a DX contact with YV3... via RS6 in 1982!!! A QSL is
fine. Has anyone had better DX?

Comments to Andy should be directed via his packet radio address:
RK3KPK@RK3KP.RUS.EU or RK3KPK@RS3A.RUS.EU.

* DOVE OSCAR-17 NEWS *
======================
The DOVE spacecraft continues to transmit satellite telemetry and news items
using an AX.25 packet radio format. Shlomo, 4X4LF, in Israel provided the
following beacon reception:

DOVE-1>BRAMST [02/20/94 19:33:28] <UI>:
19th Feb 1994

DOVE reports have been received from :

KB4CYC KB5YVF KB7QLY KC1WD KC2SF
KC3H KC4ZRH KC6ROL KB2BD KD4GAR
KD4GHQ KD4SHL KD4UPF KD6NEW KI0G
KM6JV KMA1JL KR5J KX7L LA5VX

This will change in 3 Days

[vk7zbx]

Too bad they got my callsign wrong. :-)

* FO-20 SCHEDULE *
==================
The FO-20 command station announced that a slight malfunction in the onboard

command system had been detected. As a result, analog mode operation arranged from 09-Feb-94 will be performed on schedule, but there is a possibility of interruption due to satellite ground station control.

The present schedule is as announced before:

Analog mode:
09-Mar-94 07:05 -to- 16-Mar-94 07:30 UTC
23-Mar-94 07:52 -to- 30-Mar-94 08:15 UTC

Digital mode: Unless otherwise noted above.

[Info via Kazu Sakamoto, JJ1WTK]

* THANKS! *
===========
Thanks to all those who sent QSL cards, letters, and messages of appreciation regarding SpaceNews, especially:

KC1CO N2SMP

* FEEDBACK/INPUT WELCOMED *
==========================
Mail to SpaceNews should be directed to the editor (John, KD2BD) via any of the following paths:

FAX : 1-908-747-7107
PACKET : KD2BD @ N2KZH.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College
Lincroft, New Jersey 07738
U.S.A.

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
John A. Magliacane, KD2BD * /\/\ * Voice : 1-908-224-2948
Advanced Technology Center |/\/\/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
Brookdale Community College |\/\/\/| Internet: kd2bd@ka2qhd.ocpt.ccur.com
Lincroft, NJ 07738 * \/\/ * Morse : -.- -.. ..--- -... -..

2547. Re: No more FCC Daily Digest postings to rec.radio.amateur.misc

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 20:18:46 UTC
From: landisj@drager.com
Message-ID: <1994Mar4.151846.33@drager.com>
Source record: 270098

In article <1994Feb28.171522.1547@pixar.com>, bruce@pixar.com (Bruce Perens) writes:
> Since the FCC Daily Digests are now available via anonymous FTP to
> FCC.GOV, I won't be posting any more of them to this newsgroup.
>
> I do hope that you will retrieve and read the digests often. It's critically
> important for us to follow and understand the FCC's operations.
>
> Thanks
>
> Bruce Perens
Bruce,
Myself, and many others I'm sure, do not have FTP available, and would
like to see your posts of the digests continue. Your right. It IS
critically important for all of us!

--
Joe Landis - System & Network Mgr. - North American Drager Co.
landisj@drager.com | uupsi5!main03!landisj | AA3GN @ WB3JOE

2548. Re: QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 20:21:29 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCM5pvv.3qF@netcom.com>
Source record: 270099

In article <1994Mar1.165710.2145@dtint.dtint.com> Allen Wallace <allen@dtint.dtint.com>
writes:
>In the last QST, they reviewed 4 different dual-band HTs. The question I
>have, is what is their extended TX / RX frequency range when modified?
>
>For example, I've heard a rumor that the TH-78A can transmit AM down in
>the aircraft band. I don't believe it, nor would I ever want to transmit
>down there!
>
>I've also heard that most receive well into the 800 MHZ range.
>
>Can anyone enlighten me?
>
>73,
>
>Allen Wallace
>--
>---
>Tom Kimpton(System Administrator) {root,tom}@dtint.dtint.com
>Digital Technology Int. (801)226-2984
>500 W. 1200 South, Orem UT, 84057 FAX (801) 226-8438

A single answer for all:

Check the mods archive on ftp.std.com:/pub/hamradio/mods

Directory structure from there catagorized by manufacturer.

Should tell you all you wanted to know.

73,
Scott

--
```
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
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2549. Examination Opportunities Scheduled 3/4/94 to 6/6/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 20:58:54 UTC
From: bjahnke@arrl.org
Message-ID: <2135@bjj>
Source record: 270100
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

AMATEUR RADIO EXAMINATION OPPORTUNITIES

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Special Note: Amateur Radio licenses usually arrive between 8 and 10 weeks after the test session. The FCC considers their processing time to be 90 days--from the date they receive the application. The FCC usually receives the application one to two weeks after the test session (once the VE Team and the coordinating VEC have completed their processing).

Note: Codeless Technician to Technician w/HF upgraders (who pass a Morse code test) will not receive a new license from the FCC. The existing Technician license plus the CSCE conveying the Morse code test credit is the only documentation issued for use of the additional HF privileges.

****

The following test session information is provided by the ARRL/VEC for the upcoming six to eight week period. For further information, please contact the test session CONTACT PERSON at the telephone number provided. If necessary, you may contact the ARRL/VEC at 203-666-1541 x282 for additional information. Electronic mail may be forwarded to the ARRL/VEC via USENET at "bjahnke@arrl.org" or via MCI Mail to MCI ID: 653-2312 or 215-5052.

Although the test session information presented here does not indicate whether walk-ins are accepted or not, most test sessions do allow walk-ins. We encourage you, however, to always contact the CONTACT PERSON at the telephone number provided so that the VE Team is aware that you be attending the test session.

STILL NEED TO PREPARE FOR YOUR EXAM?

If you would like information on how to become licensed; or how to locate Amateur Radio clubs, instructors, licensing classes and/or Novice examiners in your area; please contact the ARRL Educational Activities Department (EAD) at 203-666-1541 x219. The EAD can also provide information on recommended study materials. Electronic mail may be forwarded to the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to MCI ID: 215-5052.

EXAM LISTINGS - DEFINITION OF FIELDS

STATE
Test Date,VEC,City,,Contact Phone,Contact Person

The SECOND field in the following listing specifies the VEC
which is coordinating this examination. This single-character
designator denotes the VEC as defined below. An "A" (for example)
indicates that this examination is coordinated by the ARRL/VEC.

For further information on any examinations listed, or if you do not
find any examinations listed for your area, you may contact
any of the coordinating VECs below.

A = ARRL/VEC, 225 Main St, Newington, CT 06111; (d) 203-666-1541
The 1994 test fee is $5.75.

X = Anchorage ARC, 2628 Turnagain Parkway, Anchorage, AK 99517;
(d) 907-786-8121, (n) 907-243-2221 (or) 907-276-5121
(or) 907-274-5546

C = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
205-536-3904

N = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
704-596-2168

D = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
708-486-8019

E = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.

G = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
818-892-2068, 805-822-1473.

J = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368;
504-737-2315. Test fee for 1994 is $5.00.

K = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
808-235-4132

L = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
(d) 301-572-5124, 301-317-7819, (n) 301-588-3924

M = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
414-774-6999. Test fee for 1994 is $5.00.

H = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
301-724-0674

P = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313

R = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926

S = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
408-255-9000

T = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
919-841-7576

W = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
Knoxville, TN 37912-2500; 615-688-7771.
The 1994 test fee is $5.75.

5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
The 1994 test fee is $5.75.

EXAMINATION OPPORTUNITIES IN YOUR AREA:

AMATEUR RADIO EXAMINATION OPPORTUNITIES

****

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to the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to MCI ID: 215-5052.

AFTER THE EXAM - HOW LONG WILL IT BE BEFORE MY LICENSE ARRIVES?

If you've recently passed your initial examination for an Amateur Radio license, or if you've just upgraded, please accept our warmest congratulations! Now that you've passed the test, receiving your license in the mail is the next step.
The FCCs current license processing time is at 90 days. In addition, there will be extra time required within the volunteer examiner system of two weeks or so allowing your VE Team and VEC (if for Technician class or higher) time to process your application, your license might not arrive for up to 12 to 14 weeks.
To keep your wait for that new license or upgrade as short as possible, we are taking the following steps to give you the fastest possible service.
We have begun providing our VE Teams with express OVERNIGHT mailers for the return of applications from ARRL/VEC exam sessions to us at the VEC--and we at the VEC have begun sending our daily packages to the FCCs Licensing Facility via an express OVERNIGHT service.
We are also encouraging our VEs, and imposing the same emphasis upon ourselves, to process examination packages as quickly as possible to expedite your license.
Having implemented the above procedures, the ARRL/VEC wants your wait for your new license to be as short as possible.
If you have any other suggestions about the program, or services we provide, please feel free to contact us.
You can help keep the processing time as short as possible by ALWAYS bringing all ORIGINAL CSCEs (plus copies of them) and your ORIGINAL FCC license (and a copy), plus your identification documents (photo-ID emphasized), to every test session you attend.

THINGS TO BRING TO THE EXAMINATION

Be prepared to bring the following items with you to VEC examinations: Your original current FCC-issued Amateur Radio license (and a copy of it)--if you are licensed; Any original Written or Code Element credit documents (CSCEs) which are currently valid; Two forms of identification (e.g., a photo-ID or drivers license and another item indicating your current name and address); A calculator (if necessary); A pen and two pencils; and, the applicable examination test fee ($5.75 for 1994 test sessions).

TECHNICIAN CLASS GRANDFATHER CREDIT

If you hold a Technician class license which was issued prior to 3/21/87, you are not required to take the Element 3B (General class written) examination if you can provide a copy of your FCC-license dated before that date. If your licensed has since been renewed, and if you don't have a copy of the pre-3/21/87 license, you must seek a verification letter from the FCC.

To do so, write to FCC, 1270 Fairfield Rd, Gettysburg PA 17325-7245 and request a letter of "Verification of Technician License Held Prior to 3/21/87"--verifying that you were licensed as a Technician class licensee before that date (the date the Technician Question Pool was split off from the General class Question Pool -- March 21, 1987). After you receive that letter from the FCC, bring it to the test session with you in order to claim your deserved credit.

LOST LICENSES

If you have lost your license, be aware that VECs are not permitted to submit any upgrades to the FCC without a copy of your current license attached to the 610 form. In order to expedite your upgrade, you must write the FCC and request a replacement license. Since that can take several weeks to arrive, we recommend that you also request a Form 1010-B verification letter from the FCC which will arrive in a couple of weeks--and is legally binding license document. You may use that form as a license until your Form-660 license arrives. The original and a copy of Form 1010-B must be brought to the test session verifying that you are currently licensed--the copy of which will be attached to your upgrade application (in lieu of an actual Form-660 license copy). To request the Form 1010-B Verification Letter, write to: FCC, 1270 Fairfield Rd, Gettysburg PA 17325-7245; indicating that you lost your license and that you are requesting that a replacement license be issued to you--also be sure to request that they send you a Form 1010-B Verification Letter verifying that you are licensed.

ACCOMMODATIONS FOR THE HANDICAPPED OR DISABLED

The FCC requires that the administering VEs must accommodate an examinee whose physical disabilities require a special examination procedure. To do so, the administering VEs may require a physician's statement indicating the nature of the disability before determining which, if any, special accommodative procedures must be used.

The VEs may accommodate handicapped/disabled examinees by administering the examination at a place convenient and comfortable for the examinee--even at bedside; for the hearing impaired the Morse code may be sent using flashing lights or a vibrating surface; for the visually impaired,

VEs may read or write for the examinee; where warranted, the VEs may pause the Morse code message after each sentence/phrase, or each word, or even after each character to allow the examinee additional time to absorb and interpret what was sent--also the VEs may substitute a sending test for a receiving test where the examinee's handicap warrants.

VE Teams may need advanced notice in order to provide the necessary accommodations to examinees who require them. If you will require accommodations, please contact the VE Team in advance to advise them of your needs.

EXEMPTION OF THE 13/20 WPM MORSE CODE REQUIREMENTS

If you are a severely handicapped or disabled individual and have already passed at least a 5 WPM Morse code examination (or hold a license which meets that requirement), you may be eligible for exemption from the 13/20 WPM Morse code examination requirements. For information and applicable forms, send a SASE to the ARRL/VEC, 225 Main St, Newington CT 06111, and request our Handicapped Information Package.

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Test Date,VEC,City,,Contact Phone,Contact Person

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(or) 907-274-5546

C = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
205-536-3904

N = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
704-596-2168

D = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
708-486-8019

E = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.

G = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
818-892-2068, 805-822-1473.

J = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368;
504-737-2315. Test fee for 1994 is $5.00.

K = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
808-235-4132

L = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
(d) 301-572-5124, 301-317-7819, (n) 301-588-3924

M = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
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H = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
301-724-0674

P = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313

R = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926

S = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
408-255-9000

T = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
919-841-7576

W = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
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5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
The 1994 test fee is $5.75.

EXAMINATION OPPORTUNITIES IN YOUR AREA:

ALASKA
03/16/94,X,Eagle River,,907-243-2221,Roger Hansen
04/06/94,X,Anchorage,,907-243-2221,Roger Hansen
04/20/94,X,Eagle River,,907-243-2221,Roger Hansen
05/04/94,X,Anchorage,,907-243-2221,Roger Hansen
05/18/94,X,Eagle River,,907-243-2221,Roger Hansen
06/01/94,X,Anchorage,,907-243-2221,Roger Hansen

ALABAMA
03/05/94,A,Clanton,,205-646-2687,Bill Hamm
03/12/94,A,Fort Payne,,205-657-5204,Albert Bible
03/17/94,A,Decatur,,205-353-8266,Richard W Navarre
03/26/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
04/07/94,A,Pell City,,205-594-5687,Ernie Cone
04/09/94,A,Fort Payne,,205-657-5204,Albert Bible
04/30/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
05/05/94,A,Pell City,,205-594-5687,Ernie Cone
05/14/94,A,Fort Payne,,205-657-5204,Albert Bible
05/14/94,A,Talladega,,205-362-2377,Larry E Byrd

05/19/94,A,Decatur,,205-353-8266,Richard W Navarre
05/28/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
06/02/94,A,Pell City,,205-594-5687,Ernie Cone

ARKANSAS
03/05/94,A,Conway,,5013291451,Glenn A King
03/08/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
03/12/94,A,Little Rock,,501-753-2207,Dora Anna Graziani
03/12/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
03/19/94,A,Gasseville,,501-430-5123,Gerald Gaige
03/19/94,A,N Little Rock,,501-888-7517,Chuck Jamison
03/24/94,A,Ft Smith,,501-474-2309,Gary Yates
04/05/94,A,Crossett,,318-281-2900,Eugene S Winfree
04/05/94,W,Trumann,,501-483-6530,Al Fisher
04/09/94,A,Conway,,5013291451,Glenn A King
04/09/94,A,Little Rock,,501-666-6337,William L James
04/09/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
04/12/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
04/16/94,A,Gasseville,,501-430-5123,Gerald Gaige
04/23/94,A,N Little Rock,,501-888-7517,Chuck Jamison
05/10/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
05/14/94,A,Little Rock,,501-753-2207,Dora Anna Graziani
05/14/94,A,Russellville,,501-641-2022,Ben Hillis
05/14/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
05/17/94,A,Conway,,5013291451,Glenn A King
05/21/94,A,Gasseville,,501-430-5123,Gerald Gaige
05/21/94,A,N Little Rock,,501-888-7517,Chuck Jamison
06/04/94,A,Conway,,5013291451,Glenn A King

ARIZONA
03/05/94,A,Kingman,,602-565-4615,Evert B Skough
03/19/94,A,Apache Junction,,602-986-2298,Larry Kuck
03/19/94,A,Mesa,,602-380-5868,Robert Gordon
03/24/94,A,Mesa,,602-380-5868,Robert Gordon
04/02/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R
04/06/94,A,Tempe,,602-838-1215,Roger Hightower
04/16/94,A,Flagstaff,,602-774-8308,Bill Sinton
05/07/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R
05/21/94,A,Tempe,,602-838-1215,Roger Hightower
06/04/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R

CALIFORNIA
03/05/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
03/05/94,A,Novato,,415-883-9789,Logan Z Edwards
03/05/94,A,Ontario,,909-391-4254,Bob Malaby
03/08/94,A,Yuba City,,916-673-0868,Homer Oliver
03/09/94,A,Apple Valley,,619-244-4601,Walker Schofield
03/12/94,A,Clearlake,,707-994-9620,Chris Lutman
03/12/94,A,Jackson,,209-295-7947,Barbara Brown
03/12/94,A,Modesto,,209-883-2968,Chet Jensen
03/12/94,A,Oakhurst,,209-683-8772,Robert Tauxe, W6JTA

03/12/94,A,Redding,,916-243-6339,Kenna Pine
03/12/94,A,Roseville,,916-645-1663,Lyle Kraft
03/12/94,A,Stockton,,209-883-2968,Chet Jensen
03/16/94,A,San Diego,,619-222-4043,Rod McLennan
03/16/94,A,Vallejo,,707-648-4270,Ralph Davis
03/17/94,A,El Segundo,,310-336-0274,Richard D Pruitt
03/19/94,A,Corona,,909-735-0284,John Miller, NF6Y
03/19/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
03/19/94,A,Monterey,,408-663-0710,Michael C Marchini
03/19/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
03/20/94,A,Hercules,,415-467-2467,William C Eugenio
03/26/94,A,Fairfield,,916-662-0801,Gerald D Newton
03/26/94,A,Felton,,408-335-2892,Janea Drummond
03/26/94,A,Petaluma,,707-762-9414,Dale Westerterp WB6TMS
03/26/94,A,Ridgecrest,,619-375-7245,Lloyd Brubaker
03/27/94,A,Rialto,,909-883-4082,Bruce Scholes
04/02/94,A,Apple Valley,,619-240-4546,Raymond Key
04/02/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
04/02/94,A,Ontario,,909-391-4254,Bob Malaby
04/04/94,A,Lancaster,,805-948-1865,Adrienne J Sherwood
04/09/94,A,Camarillo,,805-388-2488,George Kreider
04/09/94,A,Fontana,,909-823-6818,Louis Johnson
04/09/94,A,Santa Rosa,,707-527-0981,Dave New
04/09/94,A,Sonora,,209-962-7146,Carl H Croci
04/10/94,A,Clearlake,,707-994-9620,Chris Lutman
04/16/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
04/16/94,A,Long Beach,,310-431-8998,Ken Newkirk
04/16/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
04/23/94,A,Weed,,916-926-2535,Irv Astmann
04/30/94,A,Culver City,,310-459-0337,Scott V Swanson
04/30/94,A,Fairfield,,916-662-0801,Gerald D Newton
05/07/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
05/07/94,A,Ontario,,909-391-4254,Bob Malaby
05/07/94,A,Yuba City,,916-673-0868,Homer Oliver
05/14/94,A,Atascadero,,805-238-2950,Laverne S Moore
05/14/94,A,Fontana,,909-823-6818,Louis Johnson, K6UMX
05/14/94,A,Petaluma,,707-762-9414,Dale Westerterp WB6TMS
05/14/94,A,Redding,,916-243-6339,Kenna Pine
05/14/94,A,Turlock,,209-883-2968,Chet Jensen
05/15/94,A,Hercules,,415-467-2467,William C Eugenio
05/15/94,A,Thousand Oaks,,805-375-1385,Marco Treganza, KC6WQR
05/21/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
05/21/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
05/28/94,A,Fairfield,,916-662-0801,Gerald D Newton
06/04/94,A,Apple Valley,,619-240-4546,Raymond Key
06/04/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
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06/04/94,A,Novato,,415-883-9789,Logan Z Edwards
06/04/94,A,Ontario,,909-391-4254,Bob Malaby
06/04/94,A,Ridgecrest,,619-375-7245,Lloyd Brubaker

COLORADO
03/12/94,A,Boulder,,303-460-3744,Skip Cubbedge
03/12/94,A,Denver,,303-360-7293,Glenn Schultz
03/12/94,A,Fort Collins,,303-484-8315,J Trenton Hays
03/12/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
03/14/94,A,Boulder,,303-530-2903,Barbara McClune
03/16/94,A,Windsor,,303-484-3989,Don St John
03/26/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
04/02/94,A,Boulder,,303-530-2903,Barbara McClune
04/09/94,A,Denver,,303-360-7293,Glenn Schultz
04/09/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
04/09/94,A,Greeley,,303-353-3577,Richard S Hubbard
04/11/94,A,Windsor,,303-484-3989,Don St John
04/23/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
05/07/94,A,Grand Junction,,303-245-2973,E.D. Percifield
05/09/94,A,Boulder,,303-530-2903,Barbara McClune
05/11/94,A,Windsor,,303-484-3989,Don St John
05/14/94,A,Denver,,303-360-7293,Glenn Schultz
05/14/94,A,Fort Collins,,303-484-8315,J Trenton Hays
05/14/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
05/28/94,A,Longmont,,303-651-1075,Randal or Jan Abbott

CONNECTICUT
03/05/94,A,Brookfield,,203-438-0218,Frank Sileo
03/05/94,A,Gales Ferry,,203-376-2216,Rick George, KD1LC
03/05/94,A,Norwalk,,203-847-2541,Ray Hilson WB1U
03/06/94,A,Milford,,203-933-5125,Gary Burlock, N1BM
03/08/94,A,Thomaston,,203-283-1044,Steven Dziadik
03/10/94,A,Farmington,,203-621-3222,John McLaughlin
03/12/94,A,Coventry,,203-742-5422,Mark Ireland
03/12/94,A,Portland,,203-635-5289,Wayne K Irwin
03/13/94,A,Bristol,,203-379-5708,Susan Fredrickson
03/17/94,A,Wallingford,,203-235-3676,Al Alvareztorres
03/17/94,A,West Hartford,,203-529-3743,Paul Lombardo
03/23/94,A,Shelton,,203-735-9476,Leroy Thomas
04/10/94,A,Milford,,203-933-5125,Gary Burlock, N1BM
04/12/94,A,Portland,,203-635-5289,Wayne K Irwin
04/12/94,A,Thomaston,,203-283-1044,Steven Dziadik
04/14/94,A,Farmington,,203-621-3222,John McLaughlin
04/16/94,A,Coventry,,203-742-5422,Mark Ireland
04/21/94,A,West Hartford,,203-529-3743,Paul Lombardo
04/27/94,A,Shelton,,203-735-9476,Leroy Thomas
05/01/94,A,Milford,,203-933-5125,Gary Burlock, N1BM
05/10/94,A,Thomaston,,203-283-1044,Steven Dziadik
05/12/94,A,Farmington,,203-621-3222,John McLaughlin
05/14/94,A,Brookfield,,203-790-7987,Ann Ross Elton
05/14/94,A,Coventry,,203-742-5422,Mark Ireland
05/14/94,A,Portland,,203-635-5289,Wayne K Irwin
05/19/94,A,West Hartford,,203-529-3743,Paul Lombardo
05/21/94,A,Gales Ferry,,203-376-2216,Rick George
05/25/94,A,Shelton,,203-735-9476,Leroy Thomas

06/04/94,A,Brookfield,,203-438-0218,Frank Sileo

DELAWARE
03/12/94,A,Dover,,302-697-6178,Robert W Baker
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04/10/94,A,Wilmington,,302-695-3344,Chet Thayer
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03/05/94,A,Plantation,,,Bruce A Burke
03/09/94,A,Hollywood,,305-920-6960,Russel Sweeten
03/11/94,A,Homestead,,305-255-1057,Joe Chwick AC4TV
03/12/94,A,Port Charlotte,,813-625-3915,Jim Hope
03/12/94,A,Valparaiso,,904-243-9720,Bill Hord
03/15/94,A,Zephyrhills,,813-782-4693,Orrin Brawn
03/17/94,A,Vero Beach,,407-567-3979,Roger K Snyder
03/19/94,A,Bradenton,,813-756-2823,Franklin F Morton
03/19/94,A,Englewood,,813-697-7946,John Fogle
03/19/94,A,Lake Worth,,407-582-7617,T Graf Buckenmaier
03/19/94,A,Lecanto,,904-489-6465,Larry Weaver
03/19/94,A,Melbourne,,407-724-6183,William Newkirk
03/24/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
03/26/94,A,Fort Pierce,,407-466-5648,Bill Shisler
03/31/94,A,Cape Coral,,813-574-3467,Phyllisian West
04/05/94,A,New Port Richey,,813-849-1224,Fred Marchman
04/05/94,A,Tallahassee,,904-875-2588,Jennifer Erdman
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03/08/94,A,Thomasville,,912-226-2785,Robert Rowan
03/12/94,W,Augusta,,404-798-1918,Ed Butorajac
03/13/94,A,Cartersville,,404-975-1309,Mark Swicord
03/15/94,A,Douglasville,,404-489-1021,Mike Flammia
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04/03/94,A,Lavonia,,706-356-1748,Barney M Barningham Sr
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04/30/94,W,Dalton,,706-259-5625,Bert Coker
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03/27/94,A,Davenport,,319-355-5517,Roger Franke
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04/06/94,A,Athol,,208-683-2094,Robert Swain
04/23/94,A,Pocatello,,208-237-4910,James Luderman
05/04/94,A,Athol,,208-683-2094,Robert Swain
06/01/94,A,Athol,,208-683-2094,Robert Swain

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03/06/94,A,Paris,,217-463-2213,Robert Nelson
03/09/94,A,Chicago,,312-465-0981,Michael Leibovitz
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03/12/94,A,Sandoval,,618-532-6606,Alva L King, Jr
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03/15/94,A,Burr Ridge,,708-325-3840,Roger Adams
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03/18/94,A,Highland,,219-923-8308,Charles Sufana
03/19/94,A,Franklin,,317-736-6320,Eugene McMarty
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04/20/94,A,Andover,,316-775-0300,Leanna R Gordon
05/18/94,A,Andover,,316-775-0300,Leanna R Gordon

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03/06/94,A,Westwood,,606-324-4763,Joseph Craycraft
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03/26/94,A,Elizabethtown,,502-351-2559,Willie M Lee, Jr
03/28/94,A,Maysville,,606-564-9838,Bob Drake N4VGI
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03/05/94,A,Minden,,318-377-2620,Frank C Morris
03/06/94,5,New Orleans,,,Angelo Glorioso
03/12/94,A,Lafayette,,318-984-5781,John R Myrick, Jr
03/12/94,A,West Monroe,,318-396-3507,Donald C Frantom, Sr
03/13/94,A,Lafayette,,318-984-5781,John R Myrick, Jr
03/14/94,A,Baton Rouge,,504-766-0200,Shirl E Cook
04/09/94,A,Lafayette,,318-984-5781,John R Myrick, Jr
04/17/94,A,Lacombe,,504-674-2563,Eulon T Passman, Jr
05/01/94,5,New Orleans,,,Angelo Glorioso
05/07/94,A,Lafayette,,318-984-5781,John R Myrick, Jr
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06/04/94,A,Lafayette,,318-984-5781,John R Myrick, Jr

MASSACHUSETTS
03/05/94,A,Pembroke,,617-860-1550,Thomas F Delano
03/06/94,A,Northampton,,413-245-3228,James Mullen
03/09/94,A,Billerica,,508-851-2886,Bruce Anderson
03/12/94,A,Marlboro,,508-485-7006,Robert Levine
03/12/94,A,Pittsfield,,413-458-8219,Adrian Sebborn
03/13/94,A,Fall River,,508-676-8641,Jesse Medeiros N1KBI
03/13/94,A,Gloucester,,508-922-3307,Albert Hamilton
03/16/94,A,Lunenburg,,508-534-9377,Tom Duffy
03/20/94,A,Westborough,,401-333-2129,Robert Beaudet W1YRC
03/23/94,5,Cambridge,,617-253-3776,Nick Alterndburnd

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03/30/94,A,Hinsdale,,413-443-0725,Len Bean
04/05/94,A,Lexington,,617-862-4880,William R Weiss
04/09/94,A,Marlboro,,508-485-7006,Robert Levine
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04/10/94,A,Gloucester,,508-922-3307,Albert Hamilton
04/13/94,A,Billerica,,508-851-2886,Bruce Anderson
04/16/94,A,Marion,,508-991-4291,David W Dextradeur
04/17/94,A,Southwick,,413-566-3010,Yorke Phillips
04/20/94,5,Cambridge,,617-253-3776,Nick Alterndburnd
04/22/94,A,Holyoke,,413-245-3228,Jim Mullen
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05/08/94,A,Gloucester,,508-922-3307,Albert Hamilton
05/11/94,A,Billerica,,508-851-2886,Bruce Anderson
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03/05/94,A,Harvey,,906-249-3837,Richard Schwenke
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03/05/94,A,Saginaw,,517-624-9094,Ed King
03/12/94,A,Dearborn,,313-676-6248,Motor City Radio Club
03/12/94,A,Flint,,810-743-3980,Tom Sanders N8DYN
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06/04/94,A,Wilmington,,919-791-0484,Sam Franklin

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03/12/94,A,West Fargo,,701-232-2749,Mike Beaton
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04/19/94,A,Minot,,701-839-6635,Gerald Cushing
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03/14/94,A,Grand Island,,308-381-8062,Jack L Bernard WY0F
03/18/94,A,Norfolk,,402-379-1961,John L Wilson
03/19/94,A,Norfolk,,402-379-1961,John L Wilson
03/29/94,A,Omaha,,402-553-2610,Brian Zdan
04/24/94,A,Lincoln,,402-486-1400,John Hauner

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03/26/94,A,Newport,,603-543-1389,Conrad Ekstrom
04/21/94,A,Salem,,603-434-4490,Denise Cabana
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03/05/94,A,Plainfield,,,Julian Clarke
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03/12/94,A,Floraham Park,,201-263-2837,
03/19/94,A,Bayonne,,201-435-5953,Robert Tarantula
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03/26/94,A,Altus,,405-477-3357,G James Clark
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05/09/94,W,Athens,,615-263-9300,Evan Ray
05/14/94,W,Paris,,901-247-5489,Mackie Gallimore
05/21/94,A,Columbia,,615-381-6814,Charles Miller
05/21/94,W,Greeneville,,615-638-7056,Jack Creed
05/21/94,W,Knoxville,,615-688-7771,Ray Adams
05/21/94,W,Memphis,,901-795-5923,Stan Moore

05/26/94,W,Memphis,,901-795-5923,John Hall
05/28/94,W,Memphis,,901-795-5923,Stan Moore
05/29/94,A,Sparta,,615-761-5007,Charles A Nielsen Sr
06/04/94,W,Knoxville,,615-688-7771,Ray Adams

TEXAS
03/05/94,A,Austin,,512-345-7281,Larry C Gunter
03/08/94,A,Houston,,713-682-6897,Cass Germany
03/11/94,A,Dallas,,214-525-8015,William E Reves Jr
03/12/94,A,Houston,,713-488-4426,James Heil
03/12/94,A,McGregor,,817-859-5374,James M Lang
03/12/94,A,Midland,,915-694-9450,Bill Anderson
03/17/94,A,San Antonio,,210-673-8852,Leslie Dale
03/18/94,A,Lake Jackson,,409-265-6439,Benton R Webb
03/19/94,5,Austin,,512-327-6184,Jim Greenwood
03/19/94,A,Midland,,915-694-9450,Bill Anderson
03/26/94,5,Dallas,,214-480-1903,Bill Warner
03/26/94,A,Tomball,,713-351-8930,Paul Frantz
04/02/94,A,El Paso,,915-544-5863,Gorden L Howard
04/03/94,A,McKinney,,903-455-2746,Charles Borneman
04/09/94,A,Houston,,713-488-4426,James Heil
04/09/94,A,Midland,,915-694-9450,Bill Anderson
04/12/94,A,Houston,,713-682-6897,Cass Germany
04/21/94,A,San Antonio,,210-673-8852,Leslie Dale
04/23/94,A,Abilene,,915-672-8889,Peggy Richard
04/23/94,5,Dallas,,214-480-1903,Bill Warner
04/23/94,A,Tomball,,713-351-8930,Paul Frantz
04/30/94,A,Waco,,817-859-5374,Alma P Lang
05/07/94,A,Austin,,512-345-7281,Larry C Gunter
05/07/94,A,McGregor,,817-859-5374,James M Lang
05/10/94,A,Houston,,713-682-6897,Cass Germany
05/14/94,A,Grangerland,,713-592-2257,Sam Neal
05/14/94,A,Houston,,713-488-4426,James Heil
05/14/94,A,McGregor,,817-859-5374,James M Lang
05/14/94,A,Midland,,915-694-9450,Bill Anderson
05/19/94,A,San Antonio,,210-673-8852,Leslie Dale
05/28/94,5,Dallas,,214-480-1903,Bill Warner
05/28/94,A,Tomball,,713-351-8930,Paul Frantz
06/04/94,A,El Paso,,915-544-5863,Gorden L Howard

UTAH
04/02/94,A,Salt Lake City,,801-582-2438,Gordon R Smith
05/28/94,A,St George,,801-628-9074,Clark Braten
06/04/94,A,Salt Lake City,,801-582-2438,Gordon R Smith

VIRGINIA
03/05/94,A,Yorktown,,804-898-8031,Ed Brummer, W4RTZ
03/12/94,L,Alexandria,,703-455-1510,Frank Mackey
03/12/94,A,Culpeper,,703-547-3089,Bill Brown
03/26/94,5,Gloucester,,804-484-2857,Fran Sterling
03/30/94,A,Lynchburg,,804-386-4653,William L Dail

04/09/94,L,Alexandria,,703-455-1510,Frank Mackey
04/09/94,A,Harrisonburg,,703-856-8012,Marshall Cooper
04/09/94,A,Richmond,,804-798-5048,Rick Cook
04/10/94,5,Virginia Beach,,804-424-4764,Bill Verebely
04/27/94,A,Lynchburg,,804-386-4653,William L Dail
04/30/94,A,Williamsburg,,804-253-2811,Andrew Swanson
05/07/94,A,Sterling,,703-450-2304,Michael Weber
05/14/94,L,Alexandria,,703-455-1510,Frank Mackey
05/14/94,A,Charlottesville,,804-973-1094,John D Gray
05/14/94,A,Culpeper,,703-547-3089,Bill Brown
05/14/94,A,Herndon,,703-450-2304,Michael E Weber
05/21/94,W,Roanoke,,703-366-6266,Fred L Horton
05/28/94,5,Gloucester,,804-484-2857,Fran Sterling
06/04/94,A,Virginia Beach,,804-468-9166,Judy Rogers

VERMONT
03/11/94,A,Burlington,,802-878-6454,Ralph T Stetson III
03/19/94,A,Rutland,,802-773-0775,Walt Deinzer
04/08/94,A,Burlington,,802-878-6454,Ralph T Stetson III
05/13/94,A,Burlington,,802-878-6454,Ralph T Stetson III
05/21/94,A,Montpelier,,802-433-6172,Bob McCorkle

WASHINGTON
03/05/94,A,Ephrata,,509-754-3847,W J Edwards
03/05/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr
03/08/94,A,Burley,,206-876-1399,David Brooks
03/08/94,A,Everett,,206-355-7759,L. R. Luchi
03/13/94,A,Tukwila,,206-523-9117,Harry Lewis
03/16/94,A,Chimacum,,206-437-9404,Charles J Herzer
03/19/94,A,Sultan,,206-793-0319,Ernie Allsop
03/23/94,A,Belfair,,206-895-4121,Jim Pitman
03/23/94,A,Everett,,206-542-0285,Dwayne E Broderson
03/23/94,A,Marysville,,206-335-5158,Loren Hole
03/26/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
03/26/94,A,Tacoma,,206-845-7652,Jerry Seligman
04/02/94,A,Ephrata,,509-754-3847,W J Edwards
04/02/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr
04/02/94,A,Vancouver,,206-892-7291,Wayne Schuler
04/10/94,A,Tukwila,,206-523-9117,Harry Lewis
04/12/94,A,Everett,,206-355-7759,L. R. Luchi
04/16/94,A,Sultan,,206-793-0319,Ernie Allsop
04/17/94,A,College Place,,509-525-7003,Mable Babbitt
04/23/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
04/23/94,A,Marysville,,206-335-5158,Loren Hole
04/27/94,A,Everett,,206-542-0285,Dwayne E Broderson
05/07/94,A,Ephrata,,509-754-3847,W J Edwards
05/07/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr
05/08/94,A,Tukwila,,206-523-9117,Harry Lewis
05/10/94,A,Everett,,206-355-7759,L. R. Luchi
05/21/94,A,Aberdeen,,206-249-6373,Nick Bender
05/21/94,A,Sultan,,206-793-0319,Ernie Allsop

05/25/94,A,Everett,,206-542-0285,Dwayne E Broderson
05/28/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
05/28/94,A,Marysville,,206-335-5158,Loren Hole
06/04/94,A,Ephrata,,509-754-3847,W J Edwards
06/04/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr

WISCONSIN
03/05/94,A,Racine,,414-658-8390,William Firchow
03/12/94,A,Madison,,608-832-6631,Mark Jenks
03/19/94,A,Appleton,,414-788-3823,Larry Siebers
03/26/94,A,Menomonie,,715-235-3998,James P Ley
04/09/94,A,Madison,,608-832-6631,Mark Jenks
05/07/94,A,Manitowoc,,414-788-3823,Larry Siebers
05/14/94,A,Madison,,608-832-6631,Mark Jenks

WEST VIRGINIA
03/06/94,A,Clarksburg,,304-624-5186,Joseph R Chiado
03/21/94,A,Morgantown,,304-366-0132,Robert Robinson
04/16/94,A,Martinsburg,,301-834-8831,Lester M. Reynolds
05/10/94,A,Fairmont,,304-366-0132,Robert Robinson

WYOMING
03/05/94,A,Cody,,307-568-2349,Jerry Pyle
04/30/94,A,Cheyenne,,307-637-8634,Wilson Sellner
05/28/94,A,Cody,,307-568-2349,Jerry Pyle

EXAMINATION OPPORTUNITIES OUTSIDE THE UNITED STATES:

03/20/94,A,Adelup,,627-646-7611,Harry Y Taguchi
03/12/94,A,Belgium,,32-11439164,Ronald A.L. Torfs
03/12/94,A,Columbia,,571-222-8855,Jeff App - B P Exploration
03/05/94,A,England,,0462-812571,Leland Vandervort
03/19/94,A,Germany,,06561-18202,George L Hoke
03/26/94,A,Papua New Guinea,,FAX-77-3504,Randall Pearson
04/17/94,A,Saipan,,670-234-6323,David Hardt

US VIRGIN ISLANDS
04/09/94,A,St Croix,,809-778-3156,Frank Jaeger
05/14/94,A,ST Thomas,,809-774-4740,Ronald A Hall Sr

03/26/94,A,Yokosuka Japan,,243-6092,Paul W Jackson USN
03/26/94,A,Yokosuka Japan,,243-6092,Paul W Jackson USN

2550. Dayton Hamfest Accommodations

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 21:25:01 UTC
From: ham@wam.umd.edu
Message-ID: <2l88vd$s30@cville-srv.wam.umd.edu>
Source record: 270101

Hi. This may seem like a weird post, but:

I've been checking into places to stay in Dayton for the Hamfest (April 29, 30, May 1) and EVERY hotel I've been able to locate in or near Dayton has been booked to the gills! What to do?

Is there any ham out there in netland who would be willing, for a few bucks, to open their home and rent a 25 year-old ham (me, NF3I) and his wife (Chris, N3MXZ) a room for a couple of days? I know that this is a scary concept, but I promise that we won't bite, and I hope you can say the same...

Or if anyone has knowledge of any lesser-known hotels...

Thanks much,
Scott NF3I

--
73, _____ _____ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 125 QSLed on dipoles _____| Dipoles! Antenna!

2551. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 21:42:00 UTC
From: 0006125879@mcimail.COM
Message-ID: <31940304214213.0006125879NA4EM@mcimail.com>
Source record: 270102

```
subscribe /
```

2552. Re: Chest Harness for HT?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 22:20:55 UTC
From: dts@world.std.com
Message-ID: <CM5vEx.K02@world.std.com>
Source record: 270104

In article <CM48Mr.B9C@world.std.com> dbr@world.std.com (Dan Reiner) writes:
>A few years ago, at a cross-country ski center, I saw an employee with a
>handheld radio attached to his chest with some sort of harness. It held
>the radio at a diagonal angle such that the antenna (VHF duck) pointed at
>his left shoulder and the base of the radio pointed at the right side of
>his waist.
>
>The harness seemed to be made out of neoprene or nylon and was black in
>color. I want one. It would be terrific for cross-country skiing,
>because if you fall, you don't fall on your radio. Even if you
>don't fall, it makes the radio easier to use because you can simply
>press the ptt switch without removing the radio from the harness.
>
>Does anyone have any information?
>
>-- Dan N2EDC

Call Antennas West. They carry a very nice one. Look for their small ads in
the back of most of the ham mags.

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

2553. Yaesu FT530 Mods

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-04 23:31:43 UTC
From: wstaub@random.ucs.mun.ca
Message-ID: <2l8gcv$ocb@coranto.ucs.mun.ca>
Source record: 270105

Looking for avaible Mods for Yaesu FT530.

2554. Re: frg-8800 stops operation after short time

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 00:31:16 UTC
From: jaevans@clark.net
Message-ID: <2l8jsk$43q@explorer.clark.net>
Source record: 270106

pbauer@rnivh.rni.sub.org (Peter Bauer) writes:

>My frg-8800 showed this problem a few months after I buyed it when
>I was using a MIF-90 to tune quite fast through the frequencies:
>At some time (30secs to few minutes) it stopped audio output. I then
>stopped this computerized tuning and used it as normal receiver. Now
>(lots of years later) the frq shows this behavior during normal operation:
>turn it on, tune throuhg a few frequencies, and autio output stops.
>The failure seems to be progressive: now I need to turn it of for a
>while, and then I'm able to use it for a short period of time (<2 min)
>and then the problem reoccurs...
>Any ideas?

No idea what the problem is, BUT I experienced similar problems with my
frg9600 receiver. It seems to be related to the control cpu in the unit
- audio output stops and the lcd display flashes. Sometime, fiddling
with the controls brings it back, at other times, simply disconnecting
the antenna tuner and connecting the antenna wire directly will fix it.

john

John A. Evans, Capt, USAF "My number one goal as a
VHDL/EDA Engineer runner is to live long enough
N3QOO Tech Plus !!! to place in my age group!!!"

jaevans@clark.net Linux - the OS of choice !!

Once data encryption is outlawed, only outlaws will have data encryption !!!

2555. Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 01:49:05 UTC
From: jangus@skyld.grendel.com
Message-ID: <762452539snx@skyld.grendel.com>
Source record: 270107

In article <2kqtae$cg5@news.delphi.com> mahjmac@news.delphi.com writes:

> It would seem to me that being alowed to use a keyboard doesn't conform
> to the whole reason CW is required. It is used on an international scale,
> and if you are ever in any type of emergency or spontaneous situation
> where you need to receive code with no keyboard, then you would be
> worthless.
>
> Mike

How about we change the test to laying on ones side in a crashed police car and be able to send with the wires hanging out of the broken mic?

Would that satisfy the "emergency" nature of the requirement?

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2556. Mail Order

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 02:28:40 UTC
From: bntyhntr@netcom.com
Message-ID: <bntyhntrCM66vx.90s@netcom.com>
Source record: 270108

Could anyone please refer me to any good ham radio establishments that do mail order. I would appreciate any info on where and whether you have had any good or bad experiences with such places. In particular I am interested in purchasing a Kenwood 641 in the upcoming months and would like to find out some info on mail ordering.

--

```
_______________________________________________________________________
Vincent Yan | 'Its 106 miles to Chicago, we got a full tank
KD6TGN | a gas, half a pack a cigarettes, its dark and
bntyhntr@netcom.com | were wearing sunglasses.' -- Elwood Blues
Tustin, CA | 'Hit it!' -- Joliet Jake Blues
```

2557. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 02:43:45 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403042140591.gilbaronw0mn.DLITE@delphi.com>
Source record: 270109

>
>In article <CLMqI7.Bvn@murdoch.acc.Virginia.EDU>,
clh6w@faraday.clas.Virginia.
>EDU (Carole L. Hamilton) writes:
>> I've got some bad interference on 80 through 10
>> meter bands from an electric fence about 500
>> feet away. The effect is very sharp clicks
>> about 3-4 per second. Analog noise blanker
>> works some but not 100%.
>>
>> Anyone have any cures?
>>
>> Tnx,
>> Ned Hamilton, AB6FI
>
>
>Ned,
>
>I had a similar problem about 15 years ago when I was still living on my
>dad's farm. The fence charger he had had a filter cap inside that had been
>destroyed by lightning. When I replaced the cap, the problem was gone.
>
>Do you own the electric fence charger in question, or does it belong to a
>neighbor? If it belong's to a neighbor, it might be a little more
difficult
>to deal with, but if you can pick up the interference with an AM radio or
>TV set, you can maybe persuade them that there is a problem.
>
>Anyway, a 10 - 50 microfarad capacitor (make sure it has a voltage rating
>of at least several hundred volts) hooked between the output terminal and
>ground should help the problem (assuming you can get access to the charger
>of course).
>
>
>Charlie Betz N0AKC
>
It certainly will make a difference if it is only several hundred volts. It
will be like a direct short soon. An electric fence puts out thousands of
volts.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

2558. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 02:47:44 UTC
From: dkrowlan@vela.acs.oakland.edu
Message-ID: <2l8rsg$nn6@oak.oakland.edu>
Source record: 270110
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

```
In article <2l41ds$ih6@crl.crl.com> dseitel@crl.com (David S Eitelbach) writes:
>
>Besides, the hobby has a stigma in the eyes of some who feel it is not a
>proper hobby for a gentleman. They see us as deviants, huddled in our
>closets, eating dogfood out of a can as we eavesdrop on our neighbors.
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

Hey, you've been peeking in my window!!! :D

(thanks for the colorful imagery...! ;) )
--
/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\
< dkrowlan@vela.acs.oakland.edu >
< -lies my employer makes me tell- >
\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/\/
```

2559. Re: personal communication Australia <-> USA

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 03:34:46 UTC
From: alh@postoffice.utas.edu.au
Message-ID: <alh-050394143621@twilight1h160.its.utas.edu.au>
Source record: 270111
Cross-posted to: aus.radio,rec.radio.amateur.misc

In article <5220@eram.esi.com.au>, dave@eram.esi.com.au (Dave Horsfall)
wrote:

> In article <gradyCLxxqM.IID@netcom.com>,
> grady@netcom.com (Grady Ward) writes:
>
> | But PGP key exchange by radio is perfectly OK.
>
> I guess that this would be a poor time to comment that if it were not for
> the headers that scream out "Look at me! I'm a PGP message!" it would be
> indistinguishable from 7PLUS, or R95, or UUENCODE, etc...

But you dont *have* to leave the header there, it can be deleted and then
added back again later.

Alan.
alh@postoffice.utas.edu.au

2560. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 03:54:51 UTC
From: tcj@netcom.com
Message-ID: <tcjCM6AvG.HB8@netcom.com>
Source record: 270112
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

David S Eitelbach (dseitel@crl.com) writes:

> [scanning] has a stigma in the eyes of some who feel it is not a
> proper hobby for a gentleman. They see us as deviants, huddled in
> our closets, eating dogfood out of a can as we eavesdrop on our
> neighbors.

This used to be my preferred mode of operation, but the damn dog drove me nuts scratching at the closet door....

Todd, KB6JXT

2561. Re: Getting Coax Seal OFF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 03:59:55 UTC
From: bobw@eskimo.com
Message-ID: <CM6B4o.16p@eskimo.com>
Source record: 270113
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc

Before I "coax-seal" a joint, I wrap the connector with one layer of
black electrical tape then cover that with Coax-seal taking care to extend
the coax-seal past the electrical tape. This way, if you use quality
electrical tape, the only coax-seal to remove is the bit on the coax and the
base of the connector as the rest is discarded with the tape. (Cheap tape
leaves a gooey residue).

-- Bob W.
N7UMU

2562. Re: On-line Repeater Directory

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 04:02:08 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CM6B7L.L6o@ucdavis.edu>
Source record: 270114
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Conway Yee (yee@mipg.upenn.edu) wrote:

: Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: : That's right on, good mind reading. While I think the ARRL position is
: : shaky at best here, I don't want to see tanks rumbling down Main St.
: : in Newington either. The BATF and FBI death squads are already bad

: Jon Bloom KE3Z (jbloom@arrl.org), a ARRL HQ staffer, follows up with:
: >I dunno. Might be entertaining.

: Well, if ARRL HQ wants to be the recipient of our federal goon squad's
: attentions and the taxpayer has no objections, I see absolutely no
: reason whatsoever why the ARRL's preference for entertainment can not
: be accomodated.
That's right it has two good side effects.
1) It keeps the collect mind of the nation off the health care and White
Water debaucles.
2) It might lead to Radio Control (tm) becoming one of the leading
national problems as shown in a future Gallop poll.

wish I could apply more than half a smiley.

cheers,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2563. Re: Status of Online Repeater Directory Project....

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 04:24:04 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CM6C85.LEr@ucdavis.edu>
Source record: 270115

Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:
: Well Conway, it would appear that you have shot yourself in the dick on
: this project. Perhaps next time when you run into an obstacle, you give
: some thought as to what the obstacle is before you run to the net and
: cry rape.
Actually, Jeff, Conway did acknowledge thed fact that he probably jumped
the gun a bit in his initial posting of the entire problem to the 'net.
I know he did so because he did it in e-mail between the two of us.
While I may be stepping a little over the bounds of proper netiquette by
disclosing this here (aplologies if that is the case, Conway) but it is
important to know what is really going on before accusing someone of
self-bobbitization (tm). FWIW Conway did, as is now clear, work with the
League along standard channels coincidentally with his post to the net.
If Conway had not posted his admittedly premature announcement to the net
he may have lost interest in theproject because he might not have ever
realized how many people were interested in the project. I think he has
also added a few new volunteers to his roster as a result of this whole
incident too.

: After rereading your original messages and then reading the copies of the
: letter from the League counsel, it is my opinion that you mad a lot of fuss
: over nothing.

: It is indeed unfortunate that that seems to be the standard method of
: operation on the rec.radio.amateur.* newsgroups.

: Congratulations on one thing though, you did manage to distract from the
: CW is Trivial war over on r.r.a.p.
Congratulations also on keeping the project alive.

73 es cheers,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2564. Re: Amateur Radio Newsline #863 25 Feb 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 04:26:51 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2l91mb$phf@network.ucsd.edu>
Source record: 270116

The only thing I find surprising about this is the tone in Newsline that implies that the authors and editors of that rag seemed to think that so-called 'open' repeaters were under some legal obligation to accept all comers.

It has *NEVER* been the case that a repeater licensee could not control who used his equipment. The letter from the FCC simply reinforces what has ALWAYS been the rule about this. It's not an issue of 'closed' vs. 'open', no matter how much Newsline would wish to cast it in that light.

Anyone who thought otherwise was simply ignorant of the Rules.

Must have been a slow week for news.
- Brian

2565. Daily Summary of Solar Geophysical Activity for 02 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 05:59:35 UTC
From: oler@rho.uleth.ca
Message-ID: <9403050559.AA18644@rho.uleth.ca>
Source record: 270117
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

02 MARCH, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 061, 03/02/94
10.7 FLUX=098 90-AVG=106 SSN=077 BKI=3123 3334 BAI=014
BGND-XRAY=A9.9 FLU1=2.8E+06 FLU10=2.1E+04 PKI=3123 3234 PAI=012
BOU-DEV=027,009,012,026,023,023,021,044 DEV-AVG=023 NT SWF=00:000
XRAY-MAX= C1.7 @ 2308UT XRAY-MIN= A7.8 @ 0809UT XRAY-AVG= B1.4
NEUTN-MAX= +002% @ 2035UT NEUTN-MIN= -003% @ 1510UT NEUTN-AVG= -0.1%
PCA-MAX= +0.1DB @ 2335UT PCA-MIN= -0.5DB @ 0845UT PCA-AVG= +0.0DB
BOUTF-MAX=55342NT @ 0946UT BOUTF-MIN=55317NT @ 2110UT BOUTF-AVG=55335NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+065,+000,+000
GOES6-MAX=P:+125NT@ 2100UT GOES6-MIN=N:-082NT@ 0635UT G6-AVG=+086,+034,-031
FLUXFCST=STD:100,105,105;SESC:100,105,105 BAI/PAI-FCST=010,015,020/010,015,020
KFCST=2104 5122 3214 5122 27DAY-AP=010,008 27DAY-KP=1233 3321 1222 3232
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 01 MAR 94 was 48.5.
The Full Kp Indices for 01 MAR 94 are: 3o 1- 4- 3- 2- 2- 2- 3-
The 3-Hr Ap Indices for 01 MAR 94 are: 14 3 21 11 7 7 6 12
Greater than 2 MeV Electron Fluence for 02 MAR is: 9.9E+06

SYNOPSIS OF ACT

Solar activity was low due to a C3/1F flare at 01/2229Z
in Region 7680 (S11E25). This region continues to develop
slowly. Sunspot polarity measurements suggest that a small
delta configuration may be forming in the southern portion of
the region. Region 7682 (S19W27) also grew since yesterday and
produced a few subflares. New Region 7683 (S18W48) emerged on
the disk.

Solar activity forecast: solar activity is expected to be
low. C-class flares are possible in Regions 7680 and 7682.
There is a remote chance of an M-class flare in 7680.

The geomagnetic field was quiet to unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled for the next 24 hours.
Unsettled to active conditions are possible by the end of the
forecast period due to a coronal hole.

Event probabilities 03 mar-05 mar

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 03 mar-05 mar

A. Middle Latitudes
Active 20/20/25
Minor Storm 10/10/15
Major-Severe Storm 01/05/05

B. High Latitudes
Active 25/30/30
Minor Storm 15/25/20
Major-Severe Storm 05/05/15

HF propagation conditions were normal over all regions.
Normal conditions should persist through most of 04 March
before effects of a well-placed coronal hole begin to elevate
levels of activity on 05 March. Minor signal degradation may
be observed on 05 March and for several days thereafter over
the middle latitude paths. Higher latitude paths could see
periods of stronger degradation, resulting in poor to
occasionally very poor transpolar and transauroral propagation.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7678 S14W05 049 0030 HAX 02 002 ALPHA
7680 S11E25 019 0080 DAO 05 016 BET
7682 S19W27 071 0060 DSO 08 013 BET
7683 S18W48 092 0030 CRO 06 006 BET
7679 N02W43 087 PLAGE
7681 S13W57 101 PLAGE
REGIONS DUE TO RET
NMBR LAT
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 02 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 02 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 02/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
01 Mar: 0139 0143 0145 B1.7
0200 0204 0207 B2.8
0755 0758 0802 B2.6
1439 1454 1510 B2.0
1559 1605 1610 B1.7
1757 1801 1805 B1.3
1947 1956 2004 B9.9 SF 7680 S13E41
2213 2229 2238 C3.6 1F 7680 S12E40

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7680: 1 0 0 1 1 0 0 0 002 (25.0)
Uncorrellated: 0 0 0 0 0 0 0 0 006 (75.0)

Total Events: 008 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2566. Daily Summary of Solar Geophysical Activity for 04 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 06:38:18 UTC
From: oler@rho.uleth.ca
Message-ID: <9403050638.AA20900@rho.uleth.ca>
Source record: 270118
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

04 MARCH, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 063, 03/04/94
10.7 FLUX=097.9 90-AVG=106 SSN=080 BKI=1110 0011 BAI=001
BGND-XRAY=B3.7 FLU1=1.7E+06 FLU10=2.1E+04 PKI=1112 1111 PAI=004
BOU-DEV=009,007,007,004,004,004,005,006 DEV-AVG=005 NT SWF=00:000
XRAY-MAX= C5.8 @ 0651UT XRAY-MIN= B1.5 @ 2328UT XRAY-AVG= B7.1
NEUTN-MAX= +003% @ 1730UT NEUTN-MIN= -002% @ 1610UT NEUTN-AVG= +0.4%
PCA-MAX= +0.1DB @ 2255UT PCA-MIN= -0.3DB @ 0940UT PCA-AVG= +0.0DB
BOUTF-MAX=55340NT @ 1615UT BOUTF-MIN=55323NT @ 1812UT BOUTF-AVG=55336NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+083,+000,+000
GOES6-MAX=P:+135NT@ 1812UT GOES6-MIN=N:-057NT@ 0753UT G6-AVG=+104,+039,-031
FLUXFCST=STD:100,100,100;SESC:100,100,100 BAI/PAI-FCST=020,020,020/025,035,030
KFCST=3346 6433 3346 6433 27DAY-AP=024,057 27DAY-KP=3235 4434 4436 6755
WARNINGS=*SWF;*GSTRM;*AURMIDWCH
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 03 MAR 94 was 50.0.
The Full Kp Indices for 03 MAR 94 are: 3o 4+ 5o 6o 4- 1+ 2o 2o
The 3-Hr Ap Indices for 03 MAR 94 are: 14 35 50 80 22 5 8 8
Greater than 2 MeV Electron Fluence for 04 MAR is: 1.6E+07

SYNOPSIS OF ACT

Solar activity was low. Region 7682 (S19W54) is the most
interesting region on the disk as a maturing E-type sunspot
group. It has produced several C-class subflares during the
past 24 hours.

Solar activity forecast: solar activity is expected to be
low with continued C-class activity in Region 7682. An isolated
M-class flare is possible.

The geomagnetic field was mostly quiet with an occassional
unsettled period at some high latitude stations.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled becoming active to storm
due to a coronal hole.

Event probabilities 05 mar-07 mar

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 05 mar-07 mar

A. Middle Latitudes
Active 20/20/20
Minor Storm 40/25/25
Major-Severe Storm 05/15/15

B. High Latitudes
Active 20/20/20
Minor Storm 15/15/15
Major-Severe Storm 30/30/30

HF propagation conditions continued normal over all
regions. Gradual degradation of high and polar latitude path
signals is anticipated over the next 24 to 36 hours due to
effects from a well-placed coronal hole. Minor signal
degradation over the lower middle latitude regions is also
possible if this recurrent disturbance is as geoeffective as
was observed last solar rotation.

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REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7678 S13W29 046 0010 BXO 14 003 BET
7680 S12W00 017 0010 BXO 04 006 BET
7682 S19W54 071 0180 EAI 11 017 BET
7683 S17W77 094 0000 AXX 00 001 ALPHA
7684 S09E12 005 0010 BXO 05 003 BET
7679 N02W69 086 PLAGE
REGIONS DUE TO RET
NMBR LAT
7668 N08 283
7673 N08 267

LISTING OF SOLAR ENERGETIC EVENTS FOR 04 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP

0339 0339 0339 120

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 04 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 04/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
67 S42E49 S60E24 S36W28 S22E15 018 EXT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
03 Mar: 0205 0210 0214 C6.2 SF 7682 S20W28
0334 0338 0346 C1.3 SF 7682 S19W29
0723 0728 0733 B2.6
0817 0821 0823 B3.9
0850 0854 0856 B3.3
0904 0911 0915 B2.7
0915 0924 0942 B5.1
1229 1235 1238 C3.2 SF 7682 S19W34
1200 1204 1206 B2.3
1241 1243 1245 C1.2
1301 1309 1311 C6.4 SF 7682 S19W36
1359 1416 1424 B8.7
1502 1506 1508 B5.9
1610 1615 1619 C1.5
1749 1749 1757 SF 7680 S13E17
1800 1801 1806 SF 7682 S19W38
1804 1816 1830 C1.6 SF 7682 S19W37
1905 1910 1917 C1.0
2012 2016 2019 C1.2
2101 2106 2109 C1.2 SF 7682 S18W42
2147 2155 2157 B9.1
2257 2306 2310 SF 7682 S18W41
2315 2319 2325 C1.2 SF 7682 S17W42

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7680: 0 0 0 1 0 0 0 0 001 (4.3)
Region 7682: 7 0 0 9 0 0 0 0 009 (39.1)
Uncorrellated: 4 0 0 0 0 0 0 0 013 (56.5)

Total Events: 023 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2567. Re: Body Parts by J. Herman

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 06:41:04 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CM6IKH.66M@news.Hawaii.Edu>
Source record: 270119

In article <rcrw90-020394085746@waters.corp.mot.com.corp.mot.com> rcrw90@email.mot.com (Mike Waters) writes:
>In article <762544765snx@skyld.grendel.com>, jangus@skyld.grendel.com
>(Jeffrey D. Angus) wrote:
>
>>
>> Waiting now for the headlines in the LA Times, Dateline Hawaii:
>>
>> "Deranged Professor detonates 5 pounds of plastic explosive in mens
>> room on campus. Police sifting through wreckage are puzzled by the
>> large quantity of black basket weave material. Several used condoms
>> and a radio were also found at the blast site."
>
>Best laugh I have had in weeks!
>
>To bad it is essentialy an "inside" joke for readers of
>rec.amateur.radio.xxx ^^^^^^
Oh yuck! Not you too, Mike!

73,
Jeff NH6IL

2568. Re: HamWindows

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 08:58:08 UTC
From: John Kent <jokent@delphi.com>
Message-ID: <BC5rXpI.jokent@delphi.com>
Source record: 270120

John Boyer <boyer@rd.eng.bbc.co.uk> writes:

>What is HamWindows and what is DX Desktop?

HamWindows is an integrated package of HF operating aid programs for Windows. It includes logging, award tracking, packet, prefix data and almanac data (CIA World Factbook), computer control of HF rig, SWL data, and more. I just rec'd the brochures on it yesterday, and it looks very impressive, but I have not talked with anyone that is using it. I am not familiar with DX Desktop. The company that makes HamWindows has just changed its name from California Software Inc to
HamWindows Inc.
2121 E. Pacific Coast Hwy #120C
Corona del Mar, CA 92625 USA
tel 714-729-4222
fax 714-644-6277

de John/AA2DY/jokent@delphi.com

2569. 4-1000A Chimney

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 10:38:00 UTC
From: don.turner@eabbs.com
Message-ID: <9251.73.uupcb@eabbs.com>
Source record: 270121

Hi Guys: I need a chimney for my 4-1000A tube. The Eimac part number is SK-506. If any of you are will to let go of one of these, leave a message. .....Don Turner WA6WRX

2570. Re: Transformer Failure Modes?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 10:39:29 UTC
From: M.Willis@ee.surrey.ac.uk
Message-ID: <1994Mar5.103929.5359@ee.surrey.ac.uk>
Source record: 270122

In article <CM2Htx.K42@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) writes:
|> Karl Beckman (CSLE87) wrote:
|> : In article <CLyA9E.Bzx@srgenprp.sr.hp.com>, alanb@sr.hp.com (Alan Bloom)
|> : wrote:
|>
|> : > Mark E. Bailey (mebly@eng.umd.edu) wrote:
|> : > : The proverbial friend of mine has two transformers. They are 110/220 VAC
|> : > : input, 50 VAC output and rated at 15 amps.
|> : >
|> : > : He needs 25 volts, not 50. The obvious solution is to feed 110 into the
|> : > : 220 input windings.
|> : >
|> : > : Question: Do we have to de-rate the output current to 7.5 amps?
|> : >
|> : > For a given secondary current, when you halve the primary voltage
|> : > (to 110V), the input current doubles.
|>
|> To answer the original question, it would work fine to run the transformer
|> at 1/2 the rated voltage. You would be able to get at least as much
|> output current (at 1/2 the voltage). The transformer would run nice and
|> cool, since it is only handling 1/2 the power.
|>
|> AL N1AL
|>
The total output current you may get will depend on the way the primary is wired, it is a centre tap vs 2 110V windings operated either in series or parallel. The centre tap type is unlikely, but would imply you can double the primary current. Secondary windings also have current limitations that should be checked.

Realistically, assuming all sorts of things, you can probably get 50% more output current at 25V, especially in intermittant use, maybe 20A is a reasonable rating.

2571. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 10:53:07 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Mar5.185307.1@ntuvax.ntu.ac.sg>
Source record: 270123

In article <2l3nuj$pr@bigfoot.wustl.edu>, jlw3@cec3.wustl.edu (Jesse L Wei) writes:
> Daniel D. Todd (ez006683@chip.ucdavis.edu) wrote:
> : Julian Macassey (julian@bongo.tele.com) wrote:
>
> : : Wheras real mortals will say: "Blew a fuse this morning". A
> : : true ham will spin it out with a desciption of what equipment was
> : : drawing current at the time, who was effected, the duration of the
> : : outage and the total milage driven to buy a new fuse. A skilled ham
> : : communicator can spin a simple event out so that the description of it
> : : takes three times longer than the duration of the actual event.
>
> : Nah,
> : A real Ham(tm) would have ten of the required fuses on hand but would
> : still manage to use teh wrong value the first three times. He (or she)
> : would then explain when and where they bought the fuse ten years ago.
> : The worst part is that many other Real Hams(tm) will actually be
> : interested and probably pump the first ham for more information. :-)
>
> Now this is my question: do hams *ever* talk about anything besides what
> kind of rig (s)he's got, ham problems, ham equipment, etc? As a waiting
> (as in for my ticket) prospective, I've liistened to the local repeaters,
> and personally, the conversations seem pretty boring if that's all you
> ever talk about. Have I missed anything? or something? Is the purpose
> of ham radio to talk about the technicalities of it? I know that the
> whole nature of it requires technicality, but isn't there more to
> it than that?
>
> --jesse (still waiting)

Its not just ANY technicalities we're talking about here, I mean
look at the specs of the antenna, sure beats the hell out of talking abt
what show to watch today. Of course hams talk at the wx, and clothes to
wear (for expeditions), hotels (like in Dayton), occasionnaly about XYL
or YLs, :)

Its more than just technicalities, its the TECHNICALITIES, ahhhh..
ham heaven...

73 de 9V1nn Daniel

2572. Ramsey SA-7 broadband preamp

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 11:08:38 UTC
From: eb795@cleveland.Freenet.Edu
Message-ID: <2l9p7m$8ns@usenet.INS.CWRU.Edu>
Source record: 270124

Hello.

I would like to know if any of you have had any experiance using
the Ramsey SA-7 preamp.
I am planning to buy a few to use for TV/FM DX. I plan on buying
one for each band-UHF/VHF-TV and FM.
I would like to know how easy it would be to limit the amp to th
e desired band, rejecting out of band signals.
The SA-7 is broadband from 100kHz to 1000mHz with a noise figure
of less than 4dB, and gain 20dB or greater. And at $14.95, seems
like a good price if the amp lives up to its specs.
I live in a very high RF area in Cleveland-I can see the massiv
e TV/Radio towers from my house. That is why I would like to ke
ep the amps on as narrow a freq range as possible.

Thank you.
--
Eric Matthews
eb795@cleveland.freenet.edu

2573. Re: Status of Online Repeater Directory Project....

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 11:19:30 UTC
From: cw645@cleveland.Freenet.Edu
Message-ID: <2l9ps3$bkm@usenet.INS.CWRU.Edu>
Source record: 270125

>What if.... everyone who is contributing to the discussion(??) of
>the ARRL and the online repeater database spent the time instead
>putting together an independent set of repeater info for their
>area?

>K7ITM

Exactly my sentiment, Tom! As a volunteer for the database,
I've entered data for a couple of states, and it doesn't take
long at all.

At least when you just have to create a simple text file with your
favorite ASCII editor or word processor. Then use my DOS based
program to *convert* the file to the colon delimited format. Also
entry of repetitive information is eliminated. Write a state name
once, and that's it. The program will do the rest.

Admittedly, this project is in a state of flux at the moment, and
changes in the format might arise, but the idea of the program
assisted entry is still valid, and format changes can be accomodated.

Why don't some of you guys think about "JUST DOING IT".

Email me if you're interested in doing some of the states that need
to be done still, and I'll tell you more about the program. It is
a total package with sample files and full docs (4 pages). I think
you'll find it real easy to use.

Hank Riley, N1LTV
au156@yfn.ysu.edu

or

cw645@cleveland.freenet.edu

2574. Re: Status of Online Repeater Directory Project....

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 14:20:27 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar5.142027.14820@ke4zv.atl.ga.us>
Source record: 270126

In article <CM5GJr.C4q@hpcvsnz.cv.hp.com> tomb@lsid.hp.com (Tom Bruhns) writes:
>What if.... everyone who is contributing to the discussion(??) of
>the ARRL and the online repeater database spent the time instead
>putting together an independent set of repeater info for their
>area? I'd bet that the effort that's been expended on the
>discussion would have gone a long way toward putting together
>the independent database.

I sent my repeater information to Conway way back when he announced
the project. Have you?

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2575. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 14:50:01 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar5.145001.15125@ke4zv.atl.ga.us>
Source record: 270127
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

In article <CM5Mnx.3ro@ryn.mro.dec.com> randolph@est.enet.dec.com (Tom Randolph) writes:
>In article <1994Mar2.175938.12119@alw.nih.gov>, weisen@alw.nih.gov (Neil Weisenfeld) writes...
>>What I think we should do is write to our congresspeople and tell them why
>>we feel the cellular and cordless privacy laws are so misguided. Even if

>Been there, done that. My Congressman ignored my letter. The law didn't pass on
>his watch, so, in the finest tradition of politicians, I guess he feels no
>obligation to deal with it.

Write another letter to your Congressman. Mark it "personal and confidential"
on the envelope. Inside, tell him that some member of his staff is discarding
constituent letters without reply. That's the only real firing offense for a
Congressional staffer. Constituent services are the life blood of any Congress
critter with hopes of re-election. He will pay attention, and you'll at least
get a form letter thanking you for your input in the future.

Never *ever* let a politician get away with not answering his mail.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2576. Northern IL Hamfest March 27

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 15:36:45 UTC
From: dalpert@merle.acns.nwu.edu
Message-ID: <dalpert-050394093645@aragorn30.acns.nwu.edu>
Source record: 270028

LAMARSFEST 1994 INFORMATION

State of Event: Illinois

City or Town: Lake County, IL Fairgrounds, Grayslake, IL

Date of Event: March 27, 1994

Name of Event: LAMARSFEST 1994

Sponsor: Libertyville & Mundelein Amateur Radio Society & North Shore Radio Club

Directions to Event: North & Southbound I-94 exit IL-120, West to US-45, continue West 1/3 mile to Fairgrounds entrance on right. Alternative entrance off US-45 2 blocks N of 120 on left.

Admission Fee: $4.00 by mail with SASE by March 18; $5.00 at door. Swapfest tables $10.00. Wall tables $15.00 Commercial tables $25.00 by advance reservation only. No additional charge for power.

Time of Event: Doors open at 8:00 AM, close at 2:00 PM. Setup at 6:00 AM. Advance commercial setup by reservation.

Talk-in: 147.945/.345 (North Shore Radio Club Repeater); 146.52 Simplex

Special Features: Large indoor radio, computer & electronic swapfest; Commercial exhibitors; Rest area; park free; public cafeteria. VE testing 9:00 - Noon

Info & Reservations:
Frank Avellone, W9GLO
LAMARSFEST
93 P.O. Box 437
Lake Bluff, IL 60044
Tel: 708-234-4124 until 10:00 PM

****

HAMFEST LISTING AS FOLLOWS

GRAYSLAKE, (LAKE COUNTY) ILLINOIS
March 27, 1994
LAMARSFEST

The Libertyville & Mundelein Amateur Radio Society (LAMARS), assisted by the North Shore Radio Club, will hold its annual LAMARSFEST 94 at the Lake County Fairgrounds, Routes IL-120 & US-45. Large all indoor electronic, radio & computer swapfest, commercial exhibitors. Rest area, free parking,

public cafeteria. VE testing 9:00 - Noon. General admission is $4 in advance with SASE, $5 at door. Swapfest tables $10; Wall tables $15; Commercial tables $25 by reservation only. Talk-in on 147.345+ NORTH SHORE RADIO CLUB repeater; 146.52 simplex. Doors open at 8:00 AM, setup from 6:00 AM. For information write LAMARSFEST 93, PO Box 437, Lake Bluff, IL 60044, or call Frank Avellone, W9GLO at 708-234-4124 before 10:00 PM.

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_____

| Dave Alpert, KB9CNU | Packet Radio:
| 440 No. Western Ave. | KB9CNU@W8LVN.IL.US.NOAM
| Lake Forest, IL | Direct packet through ILWIN(145.57)
| 708-295-1927 (voice) | CI$: 70416,124
| 708-295-6926 (MACropoedia BBS) | America Online: Dalpert
| 708-295-1927 (FAX) | GEnie: DAlpert
| MS-DOS, Just Say NO! |
|_____| Friends don't let friends do DOS!

2577. Re: IMPORTANT - June VHF QSO Party

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 16:58:57 UTC
From: sas@opus.xyplex.COM
Message-ID: <9403051658.AA07977@opus.xyplex.com>
Source record: 270029

Roger Keating KD6EFQ (keating@nosc.mil) said...

>Scott, I share your dissappointment that the date changed, but I'm not
>sure that it should be moved back to the other date for 1994. Some of
>us have already made our plans for this years contest for the date
>stated now.

I realize this, but in talking to many hams both locally and via email,
I have found that all but one or two are not even aware that the contest
is currently scheduled for the first and not the second weekend! I bet many
people have already made plans for the second weekend.

>It would have been better if the National Convention hadn't been
>scheduled when it was, but if one had to move, the contest probably was
>the easier don't you think? I intend to participate in both the
>convention and the contest.

I VEHEMENTLY DISAGREE!! Moving either event from dates known or expected
over two years ago doesn't come close to being "easy". The ARRL June VHF QSO
Party is traditionally held on the second weekend in June, just as Field Day,
November Sweepstakes, the CQ WW and ARRL DX contests have their traditional
weekends. Many groups travel to specific sites year after year for events
like these and reserve both the site and their schedules way in advance.
Conventions that are the size of an ARRL National Convention are also
planned and booked a couple of years in advance. Clearly, the convention date
is a "hard" date, but the second weekend in June is as much a "hard" date
for the June VHF QSO Party because of precedent. The best course of action
for the ARRL should have been to leave both events on the second weekend of
June. I know you and some others would like to participate in both the contest
and the national convention, but I have got to believe that there are far more
people who have an interest in one but not the other of these events.

I suspect that the ARRL signed a contract with the convention site in Texas
and they'd be in big financial trouble if they cancelled or moved its date.
I contend that the ARRL has implicitly formed a contract with the participants
in major operating events by always scheduling these events for the same time
every year. If the ARRL defaulted on the convention contract a mere six months
before the event, they'd pay big. This is exactly what happened to us VHF
contesters: six months before the event, the ARRL announced via its annual
calendar of events that it was "defaulting" on the date of the June VHF QSO
Party, except it's the participants that will suffer in this case. The 1994
ARRL National Convention date was approved 2 1/2 years prior to the event. I
bet if they'd cancelled/moved the date a little after that, say 2 years from
event, the cost of the change would have been minimal. Even if they didn't do
that, the ARRL had the opportunity 2 1/2 years ago to schedule, announce, and
remind the VHF/UHF community of whatever non-traditional date they chose for

the 1994 June VHF QSO Party. The impact of the date change would have been much easier to take with that much notice, just as the impact to the convention site in Texas would have been easier for them to take with two years notice.

Once again, I urge people to contact their division directors and Dave Sumner at ARRL headquarters and make their opinions known and ask that the 1994 June VHF QSO Party be placed back to the second weekend in June.

73,
Scott WO1G
==========
Scott Sminkey email: sasminkey@eng.xyplex.com
Software Sustaining Engineering voice: 508 952-4792
Xyplex, Inc. fax: 508 952-4887
295 Foster St. (Opinions, comments, etc. are mine,
Littleton, MA 01460 not Xyplex's...)

2578. Re: Chest Harness for HT?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 18:11:37 UTC
From: wmcfadde@oucsace.cs.ohiou.edu
Message-ID: <CM7EJD.FxH@oucsace.cs.ohiou.edu>
Source record: 270030

Antennas West carries a chest harness for HTs. They advertise in QST and 73, and their phone number is 1-800-926-7373.

I have no relationship with Antennas West, nor have I purchased any thing from them.

Eric WD8RIF

2579. VK2SG RTTY DX Notes, 4 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 19:12:24 UTC
From: bulletin@n8emr.cmhnet.org
Message-ID: <1994Mar05.191224.18743@n8emr.cmhnet.org>
Source record: 270031
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
============================================================
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
============================================================

SB DX @ WW $RTDX0304
VK2SG RTTY DX Notes, 4 March
VK2SG RTTY DX Notes for week ending 4 March 1994 (BID RTDX0304)

Our information this week came from 9X5LJ, DJ3IW and the Central
Europe DX Cluster node DB0SPC, HS0/G3NOM, I5FLN, IK5AAX and the IK5PWJ
Packetcluster, N8BJQ, OH2BH/VR2BH, WB2CJL, ZS5S and the NJ0M node of
the Twin Cities DX Packet Cluster Network. Thanks to all.

Bandpass:

Friday 25
1039-21086 ZD8M
1726-14087 J28JJ
1834-14083 4S7RM
1848-14089 ZS0X QSL DJ6JC
1916-14082 FG5FI
2118-14090 VK2KM
2254-14075 HI8BG Pactor
2335-14087 P43A

Saturday 26
0814-21084 ZS0X
0820-21082 5X1C
1002-21086 BY4RSA
1030-21086 9N1AA QSL Satish, Box 4292, Kathmandu, Nepal
1135-21083 KN4DG/KH0
1149-21090 4S7RM
1156-21080 UN8PFE
1158-21083 YL2KF
1345-21081 UN7GY
1347-21083 V31JU
1515-21088 ZS9A QSL via ZS1IS
1600-14084 UN7M
1706-21085 CN8NP
1735-21085 TL8NG
1750=14086 5R8DG
1805-21087 J28JJ
1910-14084 CN8NP
1937-21083 ZD7DP
```

1940-21089 HK5VMJ
2042-21086 TZ6FIC
2050-21080 CE3NDN
2101-14086 ZS0X
2339-14083 V31RM

Sunday 27
0813-15078 9X5HG Pactor
0832-21083 J28JJ
1357-14084 VP2EJA QSL JA1VPO
1442-21092 4X6UO
1616-21084 ZS0X
1626-14086 VU2DSD
1724-21085 S58AA
1726-14083 US8IWA
1738-21085 ZD7SM QSL P.O.Box 86, St. Helena Isl., So. Atl. Ocean
1806-21090 S51UF
1815-21087 KL7AFV
1826-21080 FG5KI
1912-21088 FM5DN
1924-14081 ZS9Z QSL ZS6EZ
1953-14091 CN8NP
2026-14085 V31RM
2210-14086 HK0DPA
2215-14086 VP2EJA
2321-14089 V31AR

Monday 28
0807-21087 9N1AA
1003-21083 BZ4RBX
1336-14080 A45XC
1436-21083 FR5ZU
1445-14086 S51GL
1530-14083 HI8BG
1531-21070 7Q7LA ARQ
1547-21070 EL2HJO ARQ
1618-21089 S57A
1623-21087 UX0KN Ukraine
1647-21089 ZD8M
1712-28081 ZS9Z
1721-21081 ZS9Z
1800-21082 HA5NY
1835-14083 UU9JWB
1923-21083 ZD7SM

Tuesday 1
0220-14085 FH/DJ2BW QRV until 9 March. QSL to home '94 CBA.
0251-14089 PS9KW
1409-14087 YB3AQF
1534-21042 YL2KF
1535-21090 UU9JWB

1627-14084 ER1PE Moldova
1720-14084 FH/DJ2BW QSX up 5
1914-14081 VP2EJA
2134-14083 VP5JM

Wedmesday 2
1526-21083 YL1ZE
1600-21084 OK1AJN
1632-28079 IS0XYB
1853 21083 ZD7DP
1938-21082 ZD7SM
2019-14081 V31RM

Thursday 3
1550-14070 W4AVP/C6A FEC
2005-21081 ZD7SM
2305-14070 S92ZM FEC

Notes of Interest:

Pratas Island - Preparations are proceeding for a 10 day expedition, starting 16 March, with 14 operators. It is not known if RTTY will be used. Details are expected to be released this week. Since this is not a DXCC country, WFWL.

A group from the radio amateur society of Thailand (RAST), led by Chamlong, HS1AAM, will operate as E28DX from Kho Samui Island (AS-101) from 8-10 April 1994. The island is 600 km south of Bangkok. They will operate RTTY, CW, SSB, FM, AMTOR, and Packet. Bands will be 2-160 meters (no WARC). Other operators will be HS1CDX, HS0/G3NOM, and HS0/G4UAV. Foreign licensed amateurs with DXpedition experience, especially in the IOTA field, are invited to participate in the expedition. Contact Ray, HS0/G3NOM at tel/fax +66 2 253 4864. QSL route to be announced later.

For next week's bulletin, send your Bandpass and notes of Interest to Luciano, I5FLN @ ZS5S.ZAF.AF or I5FLN @ 9X5LJ.#KGL.RWA.AF.

73 and Good Hunting DE JULES W2JGR @ W2TKU.#SRQFL.FL.USA.NA.
/EX
SP KT7H @ N7DUO.WA.USA.NA

2580. Re: No more FCC Daily Digest postings to rec.radio.amateur.misc

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 19:23:14 UTC
From: rwilkins@ccnet.com
Message-ID: <2lam72$qme@ccnet.ccnet.com>
Source record: 270032

Joe Landis - System & Network Mgr (landisj@drager.com) wrote:
: In article <1994Feb28.171522.1547@pixar.com>, bruce@pixar.com (Bruce Perens) writes:
: > Since the FCC Daily Digests are now available via anonymous FTP to
: > FCC.GOV, I won't be posting any more of them to this newsgroup.
: >
: > I do hope that you will retrieve and read the digests often. It's critically
: > important for us to follow and understand the FCC's operations.
: >
: > Thanks
: >
: > Bruce Perens
: Bruce,
: Myself, and many others I'm sure, do not have FTP available, and would
: like to see your posts of the digests continue. Your right. It IS
: critically important for all of us!

: --
: Joe Landis - System & Network Mgr. - North American Drager Co.
: landisj@drager.com | uupsi5!main03!landisj | AA3GN @ WB3JOE

You may be able to use GOPHER to get to the site at gopher.fcc.gov

Bob n6fri

--
Bob Wilkins bwilkins@cave.org

2581. Icom Package For Sale

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 20:57:12 UTC
From: dsring@equinox.unr.edu
Message-ID: <1994Mar5.205712.20053@news.unr.edu>
Source record: 270033

I have the following Icom equipment for sale which I wish to seel
only as a package!!!! The radio has a clean bill of health from Icom
service, dated 12/28/93. The radio and all of it's accessories are in
excellent condition and have been well cared for.

IC W2A (2m/440 Handheld Transciever)
HM 65 (Speaker Mic. W/earphone jack)
BC 72 (Rapid Charger)
2-BP 84 (Battery Pack, Provides 2 watts)
2-BP 85 (Battery Pack, Provides 5 watts)
AD 20 (Charging Adapter, Used with BP 84)
LC 73 (Radio Case)
BC 77 (Standard Charger {Comes With Radio})

$$$$$$$$$$$ This would normally run around $1000.00 NEW $$$$$$$$$

I am asking $600.00 for everything or best offer.

Please contact me at:

--

Douglas S. Ring Amateur Radio Operator
University Of Nevada, Reno KB7QMD-Advanced Class
Electrical Engineering Major HZ1AB-Operating Member
email: dsring@equinox.unr.edu V.Chair-UNR Radio Club
Telephone: (702) 626-5516
Fax: (702) 626-3840
Assalamu Aleikum
(May peace be upon you)

2582. Re: Alpha Bravo Charlie Delta

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 21:01:02 UTC
From: Brian.Kelk@cl.cam.ac.uk
Message-ID: <2larue$8il@lyra.csx.cam.ac.uk>
Source record: 270034

In article <21377.553.uupcb@brent.uucp>,
Steve Allen <steve.allen@brent.uucp> wrote:
>Brian.Kelk@cl.cam.ac.uk writes:
>
>>Used by New York police:
>>Adam Boston Chicago Denver Edward Frank George Henry Ida
>>John King Lincoln Mary Nancy Ocean Peter Queen Robert Sam
>>Thomas Union Victor William X-ray Young Zebra
>
>Current NYPD usage is:
>Adam Boy Charlie David Eddie Frank George Henry Ida John King
>Larry Mary Nancy O Peter Queen Robert Sam Thomas Union Victor
>Queen Robert Sam Thomas Union Victor William X-ray Yankee Zebra

Is 'O' what they really say or is it just a place marker?

Here is some further detail about the Adam Boston alphabet from
my original source:

> From: foxx@netcom.com (Dave Haber)
> Date: Tue, 16 Nov 1993 21:02:00 GMT
. . .
> On Long Island, New York, the Nassau County Police use (or atleast USED
> in the seventies):
>
> Adam
> Boston
> Chicago
. . .

Brian Kelk
Cambridge
U.K.
bck1@cl.cam.ac.uk

2583. Wanted: info on TOKYO HY-POWER 2M amp

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 22:49:08 UTC
From: gregm@hpcvra.cv.hp.com
Message-ID: <275570002@hpcvra.cv.hp.com>
Source record: 270035

WANTED: Schematic or info on TOKYO HY-POWER 2M amp

I have a need to tune up this newly acquired amp without
the documentation. Anyone out there with paperwork of
any kind?

I do have some gain, but it is below spec -- would like
to see a schematic to do the final tuneup.

Any help would be appreciated.

transistor is Motorola MRF247
Amp is model HL-82V
2-10W in
35-80W out
(I put in 5 and get 20)

Apparently, they quit importing these things in the mid 80's.
does have preamp and supports FM, SSB, CW

THanks in advance.

Greg May
KB4OX
(503) 752-9040 eve
(503) 750-3092 day
gregm@cv.hp.com

2584. Re: Status of Online Repeater Directory Project....

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 23:06:56 UTC
From: tcj@netcom.com
Message-ID: <tcjCM7s7L.96t@netcom.com>
Source record: 270036

Daniel D. Todd (ez006683@chip.ucdavis.edu) writes:

> Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:
>
> > Well Conway, it would appear that you have shot yourself in
> > the dick on this project. Perhaps next time when you run
> > into an obstacle, you give some thought as to what the
> > obstacle is before you run to the net and cry rape.
>
> Actually, Jeff, Conway did acknowledge the fact that he probably
> jumped the gun a bit in his initial posting of the entire problem to
> the 'net. I know he did so because he did it in e-mail between the
> two of us....If Conway had not posted his admittedly premature
> announcement to the net he may have lost interest in the project
> because he might not have ever realized how many people were
> interested in the project.

In Conway's defense, I have to agree with Daniel. I had been sitting quietly in the woodwork waiting for Conway to post his completed database, but when this thread started I decided to take a more active role. I've been in contact with Conway since the middle of last week, and have found is response to me much more measured and reasonable than mine probably would have been had I been in his shoes.

Also, just for the record, I'd like to recognize Jim Maxwell, W6CF, Vice Director for the Pacific Division, for the interest he expressed in this issue and for his timely response to my intitial request for support. I sent e-mail to my division director (who happened to be out of town and wasn't reading his e-mail), and less than twelve hours later received a phone call from Jim in reply. He demonstated a genuine interest in understanding the issues, and requested that I FAX him a copy of Chris Imlay's letter, which Conway had sent FAXed to me at my request. The following morning I received a second call from Jim, asking if I would provide him with copies of the articles posted to "rec.radio.amateur.misc" on this subject.

While I don't know what specific actions Jim may have taken on this matter or whether they contributed to Conway's reply from HQ, I must say that I was impressed and pleased with the prompt support I received from Jim. I certainly hope that the ARRL members in other divisions are fortunate enough to have the kind of active, concerned representation that we do here in the Pacific Division.

Now that this little tempest in a teapot seems to be over and it looks like I'll have some data to work with, I guess it would be best if I got back to work on my Perl program rather than spewing opinions on this forum....

Todd, KB6JXT

2585. Dayton QRP/Days Inn

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 23:12:57 UTC
From: cxn2624@u.cc.utah.edu
Message-ID: <2lb3lp$lce@u.cc.utah.edu>
Source record: 270037

Hi anyone out there staying at the Days Inn in Dayton?
I understand that it will be the place for the QRP
hangout hotel. Maybe we will see you there
Jon

respond to
kg7te@uugate.wa7slg.ampr.org

this is my friends account

2586. Wanted: ICOM IC-24AT Service manual!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 23:23:33 UTC
From: lakki@krksun.krk.fi
Message-ID: <1994Mar5.232333.9852@krk.fi>
Source record: 270038

Wanted!

The technical service manual for ICOM V/UHF HT radio IC-24AT.
If you borrow and let me zerox it, I will pay the posting fees!

/Erik
--
E R I K F I N S K A S OH2LAK
---------------------------------- R A
InterNet: Lakki@krk.fi RADIO AMATEUR
Lakki@muncca.fi D HAM A
Amateur Packet: OH2LAK@OH2RBJ.FIN.EU I T D
---------------------------------- O E I
H A M R A D I O U O
T H E R E A L T H I N G R

2587. IPS Daily Report 05 03 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 23:25:13 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar5.232513.13959@ips.oz.au>
Source record: 270039
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 5 March 1994
Summary for 5 March and Forecast up to 8 March
IPS Warning 7 was issued on 02 March and is still current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 096/043

1B. SOLAR FORECAST
06 March 07 March 08 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 095/041

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : quiet until last period when active
levels were observed.

Estimated Indices : A K Observed A Index 4 March
Learmonth 09 3222 1124
Fredericksburg 05 03
Planetary 08 04

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
06 Mar 30 Active to minor storm.
07 Mar 30 Active to minor storm.
08 Mar 20 Active.

2C. MAGNETIC COMMENT
The forecast increase in activity did not occurr, however
an increase in activity is still expected over the next few days.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH

05 Mar normal normal normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
06 Mar fair poor poor
07 Mar fair poor poor
08 Mar normal fair poor
3C. GLOBAL HF PROPAGATION COMMENT
Forecast degradations did not eventuate, However
degraded HF comms are still expected over the next few days.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were about 15% above predicted monthly values

T index: 76

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
06 Mar 60 About 15% above predicted monthly values.
07 Mar 30 Near predicted monthly values.
08 Mar 30 Near predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
Expected degraded HF comms did not eventuate, however
it is still expected that conditions will become
degraded over the next few days.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2588. [FWD] Email address for ARRL?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 23:48:41 UTC
From: jdelancy@tecnet1.jcte.jcs.mil
Message-ID: <9403052348.AA18303@tecnet1.jcte.jcs.mil>
Source record: 270040

```
>
>If your system is for some strange reason unable to deal with
>standard mail addressing via DNS (i.e., MX records), you can
>use @mgate.arrl.org instead. Presumably you system can resolve
>that!
>--
>Jon Bloom KE3Z jbloom@arrl.org
>

......and if that does not work, try rewriting the address as
follows: jbloom%arrl.org@vm1.nodak.edu
(I use Jon's address as an example, but whatever userid you
have will be put in there).

This will route it to one of the biggest gateways in the
nation and should "fly all the way".

jd
```

2589. Body Parts by J. Herman

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-05 23:50:10 UTC
From: jangus@skyld.grendel.com
Message-ID: <762477092snx@skyld.grendel.com>
Source record: 270041

Funny, you've followed up on almost all of my postings now trying to point out some alledged "fascination" with body parts.

Not trying to avert some attention to your own fascination are you?

--

I've used various body parts in previous postings because of their relevance to the article. For example:

Sitting down wrong on one's scrotum. This can really mess up your outlook on life for the day if it is the first thing you do to yourself in the morning.

Real men pound brass. I won't vouch for the validity of this, but from some of the commentary on this news group, anyone that doesn't know (and use) Morse Code on the air is something less than human.

So far Jeff Herman has been the only one to (a) try and link them as a "fixation" and (b) get noticably upset about it. Such being the case, I believe my postings were a success.

I'll make you a deal Jeff, if you want to discuss technical topics in a rational manner, I'd be more than pleased to do so. However, if you insist on acting like a buffoon on the net, don't forget to wear you're blue plastic helmet. (Like the one Corky wears on the TV show "Life goes on".) You'll need it when you get slapped around.

Quote for the day: "Come, let us peel back the foreskin of ignorance and apply the wirebrush of enlightenment." Geoff Miller

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2590. Yaesu FT-2400 Recs (Thanks)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 02:07:08 UTC
From: cuti@jumbo.Read.TASC.COM
Message-ID: <9403060207.AA19725@jumbo.Read.TASC.COM>
Source record: 270042

```
>> I've been using a HT as my all around 2M rig, but
>> have been itching to get a mobile rig. I've been
>> eyeing the Yaesu 2400H and now that it is $50 off
>> ($299.95) it seems like it may be time to scratch
>> that itch.
>
>> I would appreciate feedback from those who have
>> the 2400 as to what they like or dislike about the
>> rig. I'm also open to any other suggestions on the
>> choice of a 2M mobile rig. Thanks.
>
>> -- Rich N1QVT

I want to thank everyone for their recommendations.
In summary, except for a few very minor complaints
(ex. somewhat flimsy "less used" button door, rig
bigger than most, VFO knob a bit sensitive) the Yaesu
FT-2400 was highly recommended by all who replied
(ex. very well built, very tight front-end (intermod?
what intermod?), really gets out, sounds great).
I really appreciated the kind responses.
Thanks again.

73
Rich N1QVT
(Proud owner of a new FT-2400)

--
+---------------------------------------------------------------------+
| Richard A. Cuti Voice: 617-942-2000 x3309 |
| TASC Internet: racuti@tasc.com |
| 55 Walkers Brook Drive Compu$erve: 76170,420 |
| Reading, MA 01867 Amateur Radio: N1QVT |
| |
| (Opinions are strictly those of me, myself and I) |
+---------------------------------------------------------------------+
```

2591. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 02:21:17 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199403060226.SAA02059@ucsd.edu>
Source record: 270043

>It's hard to beat a stationwagon full of mag tapes for throughput. :-)
>Gary

i'll see your station wagon and raise you a van full of DATs or MDs...

bill wb9ivr

2592. FCC Exec fired for incompetance?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 02:53:45 UTC
From: keating@nosc.mil
Message-ID: <1994Mar6.025345.250@nosc.mil>
Source record: 270044

I heard second hand (this is how rumors start!) a report about an FCC official being fired because of incompetance. Here is what I was told:

National Public Radio reported Friday 4 Mar, that:
The executive at the FCC whose responsibility included the computers systems used at the commission, was fired due to his incompetance.

I did not hear this report; I was asked if I had heard it and if I knew anything more about it. I had no information about it, but was curious.

Is this report close to correct? What has anyone else heard or read concerning this topic? Please indicate sources.

Roger Keating - KD6EFQ
keating@nosc.mil

2593. Re: personal communication Australia <-> USA

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 04:08:23 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CM865z.3Mt@ucdavis.edu>
Source record: 270045
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <gradyCLxxqM.IID@netcom.com>,
: grady@netcom.com (Grady Ward) writes:
:
: But PGP key exchange by radio is perfectly OK.
One of the most important uses of PGP (for me anyway) is to
authenticate a signature this should be legal since the intention is
clearly not to hide the meaning or content of a message. Might have to
send the public key with every message though.

cheers,
Dan

ps. I've cross posted to r.r.a.policy in case anyone there is interested
in adding their thoughts to this.
--
---
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
---
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *

2594. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 04:14:06 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CM86FI.3un@ucdavis.edu>
Source record: 270046

William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:
: >It's hard to beat a stationwagon full of mag tapes for throughput. :-)
: >Gary

: i'll see your station wagon and raise you a van full of DATs or MDs...
I'll see your station wagon and van combined and lick ya' both with a
little minivan carrying 8mm tapes.

Dan 'wish I could afford an 8mm deck' Todd
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2595. Re: Body Parts by J. Herman

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 04:18:14 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CM86ME.3zK@ucdavis.edu>
Source record: 270047

Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:

: Quote for the day: "Come, let us peel back the foreskin of ignorance and
: apply the wirebrush of enlightenment." Geoff Miller
Ouch!! I'd rather be unenlightened.

cheers,
Dan 'better dumb than numb' Todd
--
---
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
---
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *

2596. 2m/70cm stub duck wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 05:19:26 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCM89GE.3p3@netcom.com>
Source record: 270048
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

I am looking for a stubby duck antenna for use with my Yeasu FT530.

I've only been able to find stubbies for 2m, 1.25m, or 70cm, but nothing
for two bands.

Can anyone help?

Thanks much in advance.

Scott

--

```
==============================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|----------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
==============================================================================
```

2597. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 05:33:17 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.003317.939685394@mailstop.telesat.ca>
Source record: 270049

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The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
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2598. NUDE RADIO AMATEURS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 05:52:44 UTC
From: steven.rosenberg@support.com
Message-ID: <9403052152.A2829wk@support.com>
Source record: 270050

northup@hoop.sw.stratus.com (Bill Northup) writes:

>Is it time to get into ATV ?

But wouldn't SSTV be more forgiving?

2599. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 06:04:12 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.010412.1141478433@mailstop.telesat.ca>
Source record: 270051

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
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(This file must be converted with BinHex 4.0)
:$NePFh0KCf8J5'9KC'9b!&4&@&4dG(Kd!!!!!!*h!!!!!%J38Q9MC@PfC@3k)'C
bEfdJE'pMB@aSEh0d)'*j)(9MFf3ZC@4e1b"TC#"138%b1$%h03d*Ff9ZC'eKD@`
J1#if,M3[98064#db,M)YFh9Z$3P'FQNX)$3J6@&b)$%j163J-6-k0$!k-c-J,6!
i-$!JCQpb)'PZCQmYD'&YFbeXDA0d$89bFQpbFbe8EcSJD@jQEbeSB@ec,A*PE'&
j3&9$8d3Z4849$90PEQ4PFMSJD@jQEbeSB@ec,A*PE'&j3&9$8d3Z4849$9"bC@0
PC'9ZBf8k)%aTFh308Q9MC@PfC@3k)'CbEfdJE'pMB@aSEh0d)'*j)(9MFf3ZC@4
e1b"TC#"138%b1$%c-`d*Ff9ZC'eKD@`J1#if,M3[98064#db,M)YFh9Z$3P'FQN
X)$3J6@&b)$%j163J-6-k0$!k-M-J,6!i-$!JCQpb)'PZCQmYD'&YFbeNC'PcG!e
0CA0cB@GP,8PN1L!m-6Nj0$!c-$3b-63`,Nj"36)i-6-c3(9MFf3ZC@4e2Je%BA4
P1L"'FQNX)#!d)%eKFL!j0#!a-cSd-$Sb-5"38e304R*[E6SJ5@jQEbe)B@ec)%e
KD@aTEQFJ6'PcG#"KEQ3J6Q9hFfGbEh9`)$aTEQC[,@KKEA0!98064#j&4&8q$89
bFQpbFbe8EcSJ5@jQEbe)B@ec,89bFQpbFd"93e0%,N9%93e5CA"XH5e8EcSJ5@j
QEbe)B@ec3&9$8d3Z4849$9"bC@0PC'9ZBf8k)%*eE'X08h9LDQ9MG$SJ5@jQEbe
)B@ec)%4TCf9cG#"@163J)c)c0`e8EcSJ5@jQEbe)B@ec3&9$8d3Z4849$4cY!!!
!:
```

2600. Re: 5 by 5...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 06:16:31 UTC
From: tcj@netcom.com
Message-ID: <tcjCM8C3K.Kpq@netcom.com>
Source record: 270052

Joe Gregg (gregg@plains.nodak.edu) writes:

> Where did the phrase, "I read you five by five." come from

Alan Bloom (alanb@sr.hp.com) replies:

> I believe it comes from the old days before the RST system was
> invented.

Does anyone know when the RST system came into use or how its predecessor worked?

As an avid SWL as a kid, I remember including a SINPO report in my QSL requests to shortwave broadcasters. In retrospect, it seems to me that the five point rating scale used in a SINPO report (signal, interference, noise, propagation, and overall rating) would actually be more valuable on phone than an RS(T) report, especially in these times of modern technology, when the "S" rating is all too often the essentially meaningless reading from the respondent's S-meter.

Todd, KB6JXT

2601. Daily Summary of Solar Geophysical Activity for 05 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 06:24:57 UTC
From: oler@rho.uleth.ca
Message-ID: <9403060625.AA28364@rho.uleth.ca>
Source record: 270053
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

05 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 064, 03/05/94
10.7 FLUX=095.7 90-AVG=106 SSN=086 BKI=1111 1112 BAI=003
BGND-XRAY=B1.1 FLU1=1.7E+06 FLU10=2.0E+04 PKI=1112 1123 PAI=005
BOU-DEV=009,006,005,006,009,009,009,015 DEV-AVG=008 NT SWF=00:000
XRAY-MAX= B5.7 @ 0750UT XRAY-MIN= A9.6 @ 1807UT XRAY-AVG= B1.7
NEUTN-MAX= +002% @ 2355UT NEUTN-MIN= -002% @ 1620UT NEUTN-AVG= -0.2%
PCA-MAX= +0.1DB @ 1815UT PCA-MIN= -0.4DB @ 1010UT PCA-AVG= -0.0DB
BOUTF-MAX=55340NT @ 0133UT BOUTF-MIN=55310NT @ 1935UT BOUTF-AVG=55333NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+085,+000,+000
GOES6-MAX=P:+142NT@ 1850UT GOES6-MIN=N:-058NT@ 0707UT G6-AVG=+101,+033,-027
FLUXFCST=STD:095,095,095;SESC:095,095,095 BAI/PAI-FCST=020,020,020/025,030,025
KFCST=3346 6433 3346 6433 27DAY-AP=057,054 27DAY-KP=4436 6755 4647 6543
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 04 MAR 94 was 48.0.
The Full Kp Indices for 04 MAR 94 are: 1+ 1- 1o 2o 1+ 1o 1o 1o
The 3-Hr Ap Indices for 04 MAR 94 are: 5 3 4 7 5 4 4 4
Greater than 2 MeV Electron Fluence for 05 MAR is: 2.3E+07

SYNOPSIS OF ACT

Solar activity was very low. Region 7682 (S19W68) remains
the most significant sunspot group on the disk but has only
produced a few subflares (all below C-class) since yesterday.
New Region 7685 (S07E23) emerged on the disk.

Solar activity forecast: solar activity is expected to be
very low to low. Small C-class flares are possible in 7682.

The geomagnetic field was mostly quiet. Unsettled conditions
were observed at some high latitude stations from 05/09-15Z.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled becoming active to storm due
to a coronal hole.

Event probabilities 06 mar-08 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 06 mar-08 mar

A. Middle Latitudes
Active 20/20/20
Minor Storm 15/15/25
Major-Severe Storm 15/15/05

B. High Latitudes
Active 20/20/20
Minor Storm 15/15/25
Major-Severe Storm 15/15/05

HF propagation conditions were normal over all regions.
Conditions are expected to deteriorate over the next several
days due to effects from a coronal hole. High and polar
latitude paths should see the strongest signal degradation with
poor to occasionally very poor conditions existing during the
local night hours. Middle latitudes should see good to fair
propagation with occasional poor propagation during the local
night sectors. Low latitudes should see generally good
propagation with periods of fair propagation possible during
the local night hours.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7678 S11W39 043 0010 BXO 03 005 BET
7680 S10W15 019 0010 BXO 06 005 BET
7682 S19W68 072 0150 CAO 11 016 BET
7684 S09W05 009 0000 AXX 01 003 ALPHA
7685 S07E23 341 0010 BXO 05 007 BET
REGIONS DUE TO RET
NMBR LAT
7673 N08 267

LISTING OF SOLAR ENERGETIC EVENTS FOR 05 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 05 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 05/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
67 S34E36 S63E08 S35W39 S21E13 018 EXT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
04 Mar: 0135 0148 0201 C1.5
0203 0208 0213 C1.8 SF 7682 S18W41
0235 0240 0244 C1.3 SF 7682 S18W42
0258 0302 0306 C1.6 1F 7682 S18W42
0313 0321 0324 C3.6
0343 0346 0348 B9.7
0358 0406 0419 B9.3
0424 0432 0436 C1.1 SF 7682 S18W45
0504 0504 0507 SF 7680 S12E11
0516 0519 0521 B8.0
0540 0543 0545 B6.4
0605 0612 0618 C1.1 SF 7682 S18W47
0642 0650 0655 C5.8 1F 7682 S18W46
0738 0742 0745 B8.0
0749 0800 0803 C1.3
0829 0834 0839 B9.8
0904 0907 0909 B7.7
0914 0924 0948 C3.6
1048 1054 1106 C2.3 SF 7682 S19W47
1220 1247 1255 C1.2 SF 7682 S18W50
1402 1424 1426 B9.1 SF 7682 S19W51
1502 1507 1509 B6.4
1616 1620 1622 B4.4
1624 1627 1629 C1.1 SF 7682 S19W52
1634 1637 1639 B6.1 SF 7682 S19W53
1717 1723 1732 B4.7
1748 1752 1754 B4.0
1816 1819 1821 B2.5
B1842 U1843 1846 SF 7682 S18W52
1853 1856 1858 B5.0
1859 1903 1905 C1.3 SF 7682 S19W56
2003 2003 2006 SF 7682 S19W55
2043 2046 2048 B9.5
2049 2052 2054 C1.7 SF 7682 S17W55
2111 2121 2125 B6.2 SF 7682 S18W54
2241 2243 2245 SF 7682 S18W57

2251 2255 2257 B5.9
2333 2343 2348 B4.8

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7680: 0 0 0 1 0 0 0 0 001 (2.6)
Region 7682: 11 0 0 15 2 0 0 0 017 (44.7)
Uncorrellated: 4 0 0 0 0 0 0 0 020 (52.6)

Total Events: 038 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2602. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 06:34:55 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.013455.406900062@mailstop.telesat.ca>
Source record: 270054

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
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2603. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 06:34:58 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.013458.1015390564@mailstop.telesat.ca>
Source record: 270055

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
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2604. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 06:35:01 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.013501.858545954@mailstop.telesat.ca>
Source record: 270056

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
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2605. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 06:35:06 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.013506.1986862364@mailstop.telesat.ca>
Source record: 270057

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
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(This file must be converted with BinHex 4.0)
:$80[EA"XCA4P)&4PH(3!9%9B9(4dH(3!!!!!SBF!!!!!*D`05@jQEbe)B@ec)%4
TCf9cG#!J)#!J)#!J)#!J)&4eC5`J)$%J6@&b)$Nd)#!J)#!J)&C[E(9YC5!j0#!
k)%PcFh9P)#!b-M80$94[C'&j*h-J9'p`D@0c1JdJ)#!J)#!J)#!J)#!J)#!J3@e
KG'9eFL"5B@4TEb"1CAGcE'PZC5!M1$Bc)#!b05"'C@)J1630)#!J)#!J)#!J)#!
J)#!J)#!J39*56#dY,6j2EQaTEQ8J8Q9`C@&dCA)JC'PbC@0dEh*j$5!J)#!J4'&
TE(NJ8h9YE@&bH5"[CL"6EfaKFL"(C@p`D(PcD@0KE#""Bh4TGQPdH5"QEh)J-MF
J4Q9LFR9KFRN0)#!J)#!J)#!J)#!J)#!J)#!J)%9bFQpbFb"TEL"86N-b)'C
TFQehBA*P2cmr$5!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)%TPFQXJEfiJ-M!
JEA4bF`dJ)#!J)#!J)#!J)#!J)#!J)#!J)#!J6@&M)(0[CR4hBA*P,#"KCf&
TEL%0)#!J)#!J)#!J)#!J)#"0C@4TG@dJFQ&ZCf8JF'pTER3YG'mYF'pTER3JC'P
RDA4KE#"XD@jVF`dJ)#!J)#!J)#!J)#!J)#!J)#!J)#"06d46)&*&899&8e3
k)%P$,6)c-c!J$5!J)#!J)#!J)#!J)#!J)#!J)#!J)#"5GA0cD@&Z)%P29%%
J4&JJD@jQE`dJ)#!J)#!J)#!J)#!J)#!J)#!J)&0`C@0TB@`J4ACPER3J,5"0BA*
MD#!a-L`J-6Nj0!d08f9ZC#"5CA"XD@9c)'pb)'j[G'9c)'C[FL"`G@*XD@0KG'P
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JH@pe)'0KELGd)(0[E(CP)'pdD'9bGfPcC5"dEb"LFQPKEN"eBh0N,Q9NG5i0$8&
bBfKTGQ9c)'pQ)("KFh3JDA0cG@9c)'pQ)(4SC5"*EQC[,8KKEA-J4'PRCA0d)'&
bC5"KGQ&TE'&LE'8J$5KLH5"'9&!JEfjXH5NJCR*[E5"93e0%,N9NG5"TEL"NDA*
PBh4[FRNJ)QeKD@aKFQ0SDACPFbpTEQC[,@KKEA-L,Jd09f8JG(*eFh3JG'KKG#"
bC@&NCA*c)'&bC5"TER4PE'aTCf9ZG#"PEQpeCfJJG'mJFQ9KE'PkC5"dD'&d)'&
XE#"dCAKd$@KPFQ9TEL"MEfjcDA0dFb"[CL"`CA*cEfjKE#"MEfeYC@jdFb"KEQ3
JC'pPFb"ZEh3JFQ9`FQ9cC@jd)(4SC5"[CQCTBfPKE!e`EfaTBfPPFb"[FL"`Eh0
TG'P[ER-JEfBJB@jj)("KFR4j,L!J@@peFL"YD@aPB@GP)'eKH5"fBA*j,L!J8fm
JG'KPFQ8Z$5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d0$84KG'8k)%e[EL`J-MJJ4Q9
L)$%j163J-$8k06Fk-$8J6908$8CbEfdk)'PSER!d,R9MFf3ZC@4e)A0hFQPZC'8
KCf&dC@0S)@jPGh0iCQ9b,QPdC#jeE@PMD#jPC(8KEQjdF#jMFbjeBQ-ZBf%KB@a
LCA*dB5&KC'9M-M-KGQ8fE@Gc)A9cC@jPG%"ZCA4hEh*V,R9MFf3ZC@4e$90eBQT
PBh3k)%&YBA4PGA)J8Q&ND@mJ6Q9hFfaTEQ8J)cJf-b!J-M8J4Q9L)$Nd$94[1L"
TEQC[,@KKEA0!G@0cC#jPC(80$94SC5"PE'9MG(*[EQPM)("eBQaTBf&dD@pZ)'p
Q)(4SC5""E@&dCA9b)&*KC'P[)%jPGh0XD@jP)'Pc)'4TFh4bD@*eG'9N$AGTG'J
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a-6-J,5"36e08483J-$)[-MF[1630$5!U+LSU+LSU+LSU+LSU+LSU+LSU+LSU+LS
U+LSU+LSU+LSU+LSU+LSU+LSU+LSU+LSU+LSU+LSU+LSU+LSU+JdJ+L!J)#!
J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!
J)#!J)#!J)#!J)#S0)#SJ)#!J)#!J+L!J)#SJ+LSU+LSJ+L!J)#!U)#!U+LSU)#S
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J)#!J)#SJ)#!J+L!U)#!J)#!U)#!J)#!J)#SJ)#!U+L!J+L!U)#!J)#!J)#!J)#!
J+JdJ+L!J)#!J)#!U)#SJ+L!U+LSJ)#!U)#SU)#SJ)#SU+L!J+L!J)#!J)#!U)#!
J+L!U)#SJ+LSU)#!J)#!J)#!J)#S0)#SJ)#!J)#!J+L!J+LSJ+L!J)#!J+L!U+L!
U)#!J)#!U)#SJ)#!J)#!J+L!J)#SJ)#SU)#SJ)#!J)#!J)#!J)#!U$5!U)#!J)#!
J)#SJ)#!U)#SU+LSU)#!U)#!U)#!U+LSU)#!U+LSU+L!U+LSU+L!U)#!J+L!U+LS
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J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#S0)#SJ)#!J)#!J)#!J)#!J)#!
J)#SU+LSJ)#!J+L!J)#SU+LSJ)#SU+LSU)#!U+LSJ)#!J)#!J)#!J)#!J)#!J)#!
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J)#SU+LSU)#!U+LSJ)#!J)#!J)#!J)#!J)#!J)#!U$5!U)#!J)#!J)#!J)#!J)#!
J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!
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J)#"")%3J9L"*)&-J6b"5)&NJ)#!U)#SJ+L!U$5!U)#!J)#!J)#!J)#!J)#!J)#!
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U)#SJ+L!U)#SJ+L!U)#SJ+L!U)#SJ+L!U)#SJ+L!U)#SJ+L!U)#SJ+L!U)#S0$5!
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MG#"hD@aX)'*P)(4[)'PZGQ9cG'PRBA4P)'K[Gb"cCA*fD@0PFb"dEb"YC@eLCA*
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b,#",08C99L"dEb"bCA"XB@0P)!dJ5'pRCA*dH5"KFb"%@%0$)%eKEQ&RCA)Z)#"
,C@jZB@ePFL"hD'mJBfpZC(9MG(-J8908$5"MEfaeE@iJDQpTEQ9N)(4SC5"XC@&
RG@9c)(0dB@CQ)'PZ)%TeEQ8JEfBJ-6Nj-Li0$5!U+LSU+JdJ)#!J)#!J)#!J)#!
J)#!J)#!J)#!J)#!J)#!J)&*"8N%0$5!J)#"8D'8J0M"dD#"KEQjeB@`J8QpMD'9
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P)%&dE'&ZG'PM)%4TGQPcD@pZ)%jPGb"CEh*V)&0dBA4P)%&58N`J3fpZGQ9ZG'P
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1,PNZ)$%d0M)c,Jd0)#SU+LSU$5!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#"%@#!
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d)&"PG'9b)%pZC5"*FfaKEQ30)'p`CA*KG'P[ELiJ)&4SC5"%@("PC'PdD@pZ)(4
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J)#!J6Q9fCA)JG'KP)'aPFh-JG'KP)'GbEh9`)'4PBfPNC@3JG'mJD@eYC@4TBA4
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c)'&ZC#"dD'9TFL"REf&X)(GKFb"dEb"YB@YP)$%`-#``-$!J8902F`dJCR*[E5"
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0)#SU+LSU$5!J)#!J)#!J)#!J)#!J)#!J)#!J4%p23L")48a349*6)%0)38a-48j
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Z)%*KDf9b)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#"`D'pZC6SJ)#J
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J)#!J)#!J)#!J)#!J)#!Y,LdJ,5iZ)#iY,5dY)#iY,5iJ,LiY,Jdq9fpbBf9cG'9
b,#"035!`-6Be03d0$5dY)!dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d04'&ZD@9X)&0PEQPP)#!
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[A#pF,e`[A#pF,e`[A#pF,e`[A#pF,e`[A#pF$3dJ)#!J)#!J)#!J)#!J)%4
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J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)$)h)%C&3P*939*C,#!a16Nd$3dJ)#!J)#!
J)#!J)#!J)#!J,e`[A#pF,e`[A#pF,e`[A#pF,e`[A#pF,e`[A#pF,e`[A#pF,e`
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63b"2BR0PFRCKG'P[EQ&X)%4KG'%T$3d08dp-39)J38j%)%G&6e")@90*3d&-)%&
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Y,5dY,5dY,5dY,5dY,5d0$5%K3N9(58iK)5!S-5i`+5"6,P3Z4#iJ8fpXBA)J4f9
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`,MFJ4Na9@$d`168J)#!J16!Y39C(26%`0b!J)#!J)#!J8e0126!f15!J)#!J)%*
,56da-M)d)$)a-$!J)%*"56d`-$B03NG14#eB8N&C28)a,M3J)#!J)%C-96%p-Li
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8)#!J)&K539NY68P125""15ii)#!J3#!`0c)a993J)#"B8N&C,8&@4cdJ3c%Z03e
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J-63a0998)#"149986Le"9NFp)#X`,M!P$5!J8%0",8e"@$dJ+c!Z-84#)%!J-M-

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j6P3J3#!b-$!c993J)%*2994',8&@4cde06-c0Nj8$8G249-h,8e"@$e31LX`-$"
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-99K'3e0829084$S`168X-$Ne,$!j-$Y6490$1M!j05``168X-$N`)%*"55p338N
Y4N069$d`-$JX-$%`,$!a-#m`-6!X-$%`,$!a-!dJ)#!J5dC$8e3p-M)c0#!b-M-
b)$)b-c-J0$-b-L!J-MG%39NY39!p-$!h,$!`0L!J)$)h4%&C,8Y326)a-c)J-M)
b-b!b-6)c)$)a-6%0)&G"8Nj*6NG623dJ)#""6%959&-p+LT058j'6&)k66)Z1%!
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b)$)f)%C&3L!j0#"KFQ8k)$)V)$%Y)$)Y)$)Y)#!J-LXJ-5XJ-5XJ-5dJ$5!J)#!
J)&4SC5!c,8Kb)%&`)%PZC'PMCA-JCQpb)$)f)%C&3L!j0#"KFQ8k)#!J15!J)$-
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28&0*8b"24L""3e30,5dY,5dY,5dY,5dY,5dY,5dY,5d0$5!J)#!J)#!J)#!J)#"
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MEh*bC@aKG'9N,L"")'*eFR0d)'pQ)$%b-#"cCR80)#!J)#!J)(GKFb"[BR0PFRC
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J-MB[-M-c-PSJB@jN)$)f,c)c0$KD,L""$5!J)#!J)#!a05"NC@GbC@8JCQPXB@e
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0)#!J)#!J)$)h,c%e0$"D,L"")'jPGb"bC@GTEfiJGf&c)'&cFfPREQ9N)'aKG'8
JH@9cG'9bC'&j)'&c)&*PCfP[EJdJ)#!J)#!J0cBi-5!S8c%c9c%i+5i0$5!J)#!
J)#!J)#!J)&0[E'&b)'&MG'PfDA4j)'C[FQ9MBA0d1L!JFfpXBA)JB@0dDACTG(N
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[-$%[-$%0)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#"33d&')#!J)#!J)%G
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J)#!J)#!J)#!J)#!J)#"#,L!J5'PRD#"-BA4TG(9NCA-0)#!J)#!J)#!J)#!J)#!
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```

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J)(0eEQaTG#"`BA4SFbiJ)%&QCQ9MG'9N)'&bC@&c)'eKH5"SBACP)'PZBfaeC'9
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Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d06Ne#8L"-6d0"9%P
26L!J6%mJ)%&548%J)&SJ)#"-6#!J)%j1)%e"4b"8@9"&$6Ff0cFJ)%ia-9Fh-b!
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e)#"6-6&A-MBJ)$%`15!J)#!J)#!J)#!J)#!J)#!J)#!J8%a"4d800cBh0L!J6M!
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2)&*&9!e168*5)%a"9!dh0MBf)%ia1#!J)$-e-!d0$8a*8e4*6NFJ6dBJ8dp-39)
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Y,5dY,3d0)%4KG'8J)#"#C@GTEL!J6@&i)#!J4@jN)#"BFQ&j)#"2F#"5C@GTEfi
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Y,5dJ)#dY,5dJ)#dY,5dJ)#dY,5dJ)#dY)#dY,5dY,5!Y,5dY,5dJ)#dY,5dY,5d
Y,5!Y,5dY,5dY,5dJ,5dY,5dY,5dY$6)f)%CPBMSJ-$-a0b!J-$-c05!J-$-e-b!
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J)#!J)#!J)#!J)#!J)#!J)#!J)#!J$3d08N9(58p1)%C-39*&)&08394*8e4*3e-
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Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,3d0)#!J)#!J)#!J)#!J)#!J)%-J)#"
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J)#dY,5dY,3dJ)&*PCfP[EL!h0MFe1L!J-#!J)$!J)#!`)#!J)#!a)#!J-#!J)$!
J)#!`)#!J-#!J)#!`-$%J)#Jb05i`+3e9EQ0[FR*PE'aKG'9N1L!`)#!J-#!J)$!
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Y,5dY,5dY,5dY$3dJ4'&dC5!J)%*PCfPZ)#"0BAJJ)#"&EQ3J)&KbBANJ)%p`)&*
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Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY$6)f)%CPBMSJ-M-b0#!J-M-c0L!J-M-
d15!J3M8Z05!J8dBJ)$Ff0c8J)&-a-PFa-#!J)%P*,%P*55a@$3e16e4&8cS0)#!
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X)'pLFf9bGQ&dD@pZFb"dEb"NCA4PFQeTEQ8JG'KP)'*PCfPZ,#"YBAJX)'&ZC#"
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J)#!J)#"6F(*KH5!J)#!J25"-D@eL)&0`FQ&j,!dJ)#!J)#!J)#!J8h9bCf8J)#!
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TF#"G$6iJ)$i02Jdq)#"CGA!X)(P[G5GbC5"cG'&bG'PZCb"dEb"REb"dDA3YCQp
b,A4KG#"KEQ3JCh*KFh"TEQFJBA3JFh4bBAGc,L""E(0[,#"*$5!J)#!J)#!J)#!
J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)&jHAL!J)#!J)#!J)#!J)#"HAPjHAPjHAJeAC@a
X)5""G#"XC@&cG#"hC5"VEQph)(GSBA3RFb"[EL"C6e95)'eTEQ3Z)%ej)'CKDA4
S)'PZ)(P[GA)JE@&cBh9XD@jTG(N0D'&c)'*PC@iJFQ9cG'pbC@3Z$3e*)(G[G@a
N)'jPGQ9b)'GbBA0`)'&d)(0dFQ&hFb"ED'9P)'KPC5"SC@9G,Jd02L!JEQpdC5"
dD'&d)(P[GA)JFQ9`E(NJGQ9bBQPKCf8JFQ&dD@mJD'&c)'G[EQ8JGA!Z)%NRC#"
cBANJH@peFL"KCfPdBA4PC#i0$8j[)'j[)'j[,L"ABA0SD@jR)'eKBfKTEQ9c)'&
RDA4KG'8Z)%NRE5"JFQ9cF'pZC'PZCbFZ$3dq$6iJ)&4SB@jV)(P[G5"QEh)JF'a
KH@PZCbiJ4Qpb)'&ZEh4SCA)JCQaKE@8X)("XC@&cC5"TER0PFR3J-M8JBf9ZG(-
Z$6i0$90[G@jNFb"XD@YP)(P[G5GbC5"QD@jKE'aj)(GTEQ4TEQFJC'phELiJ55G
N)(0KH5"dD'Pc)'Pc)'%JCfp[C#"dD@eP$A4[)'GPG#"LB@0V)(4[)(4SC5"MEf4
P)'4PBQ&dC5"[EL!ZF'pXD@0j,L"6C@8JH@%X)%TPCQCj,Jd05Q9QCL"15$C*6!d
q$6iJ3@eKG'9eFMSJ9d%f4PG*3&G"0NCA55iM8dp$35j$35j98d%Z6N%J)(`J)#*
CEh8JD'&fC5"K)'CXB@Pb)'C[FL"KC'4TEQF02NPZG'9bEQ9d1L"UB@jRGA0!FfY
jE'3ZCh*PEQ4PE#jMEfdJ)#!J)#!JI#!J)'%JCQ&ZBfPQG@`JC'PYC@jcD@pZ)(4
[)'&ZH3dq)&96)%eKD@`k)&"2)%*[H#!d0$)e)%0KFR0[EL`J3d%J16!h0$NJ)#"
m)#!JFh4[FRNZ)Jdq)#!J8'K[EQ8k)$%J+$-a-#NJ-c)d,6B`1$!J)#!J)#!J)#!
J)#!J)#"m)#!J)#!J)#!J)#!J8'9VD@jR)%j[Ef4XC5"$Ebi02Jd0,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY$3e%BA4P1L"0EfiX)$)i)%CPBL!a16Nd)$!
d1M)f1M%f)#d`0c!`$8CbEfdk)'PSER!d,R9MFf3ZC@4e)A0hFQPZC'8KCf&dC@0
S)@jPGh0iCQ9b,QPdC#jeE@PMD#jPC(8KEQjdF#jMFbjeBQ-ZBf%KB@aLCA*dB5&
KC'9M-M-KGQ8fE@Gc)A9cC@jPG%"ZCA4hEh*V,R9MFf3ZC@4e$90eBQTPBh3k)&*
eFh0TB@iJ58p835"%@#"TEQC[$94[1L"TEQC[,@KKEA0!G@0cC#jPC(80$8G[Ef3
J4'&j)3e@CA*j)'GXB@3J)(4[)(0PEQ3JG'mJH@pe)(4SCA0P)'PZCQmJCR*[E5"
5GA0cD@%XD@BJH@pe)(G[ER3JD5"KE(GKHA-JGfPXE#"LC3ecC@jN)'C[FL"%@#"
1CAGc)'PZG'9bCA0d)'PZCQmJB@*[GA3J8R9cFfPKEL"*6e4")#aLC@0[GA0P)'P
Z)$Nd)#*58N-L)(9cC@30Bf&XE(0TCfjc1L!d5c*58N-X0%Xc8P*$,$4,0&*53b`
d5c958N-X0%Xc4eFX0%Xc9e%X0%Xd4&BJB@jN)(0[E@8J0%Xc,fJZBbi0$5SJ8N%
```

b4LaDC@aPERNJDA0XB@jN,%*KE(4TBb"6C@%J3fpKFh3J4h*[GA!S063X08iJ)$%
j,$9&+3e8C@&Y)#*5GA0cD@&Z)&*[BQPZFfpZ)%0XG@)L)(GTE'`JBQ8JB@0dDAC
KG'8JCR*[E5"SCA*P)'PZ)'aKG'803A"bD@`JB@*[GA3JB5"hC@9V,Je*G#"XEfp
VFb"XD@YP)(4SDA-JGfPXE#"LC5"1CAFJ6fjP)'&MBfpbC'PZCb"dEb"*6e4")("
bEfGbB@dZ$94SC5"dC@&Y1L"3D@j[,dNi59PA,#"*Cfpb,d95-N04,#"-BA*bH5p
59c0(95`J6'&bFRN[8PFc4eFX$90PFQGP,e*D-8p0,#"-BA*bH5p536CC8Li03@0
dDACTG(NJGfPXE#"LC5"[EL!d-#da-#"YCA4PFL"[EL"$9ba68d)JB@jN)'eKH5"
LC5"59&4C,%&09%p5,Je$EfjdB@0d)&*53b"`E'9KFf8JGQPK)%PZG'9b)%jPG#"
0B@PX)(4[1L"bGM0RGd"XG(4cBfmZE'P`CA4cDbjcG3dJ+L"1CAFJF(*PCQPi)'P
Z)&*eFh0TB@iJG'9bFQPdEh*j,Je0,PBZ55iJ+'9i)$4+-5NJEQ9h)&)a69C",9)
a69CD)'pb)'JZBbi[69C*$8BZ5Lj-,L!SCAJJ0%Xb+5"ZCAFJ8M&'5N%Y8M&'5PS
JEh)JD#jM,Lp'5N`038j8)#!J)#KPH#!d5c%T)'jPGb"5-8&135e5-8&1@L"[FL"
S,Q-Z,d&19!d0,5d0)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)%&XBQ9bG#!
S)&*@-dGA)#N0)#!J)#!J)#!J)#!J2#!U+LSU+L"5GA0cD@&Z)&*[BQPZHQpZ)%0
XG@)J,b"YC@eLCA)J)c-d)#SU+LSU)$iJ)#!J$5!J)#!J)#!J)#!J)#!J)#!J)#!
J)("SEfjP1L!S)$!h0#db)#NJ0$-Y0$-h1#!SFh8T$3dY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5d0$84KG'8k)%e[EL`J-MJJ4Q9L)$%j163J-6Nk-6Jk-cB
J,6!e-$!04R*[E6SJG'PdB@iZDh0M,QjKFf%ZCfpf)@XdC'PT,QYcBbjZBA0K,QG
[GL&eFf9b3'&YCA-ZBA*`B3e6G@*UC@0d1L"6F'9MD@&X)%9fC@jd)#dJ6@&bBfJ
J-6)X)$%j16309'mk)'PZCQmYD'&YFd"eBh0N,Q9NG3d0-MJZ-c-c)%e28e&9594
2)%j&9!d06@9YBQ9bFb"[CL"dD'8J9'PdGA0fD@aXC5""E@&dCA9b)&*KC'P[)%0
XG@)JGfPXE#"[F'9bBA4P)$%d-$!Y-M-`-&SX)%eKFQ0S$6%b,#!a16Nd,#"dEb"
MEfeYC@e[FQ&dC5"dD'8J-68`G'JJB@jZDACPFR0KFRNJEfBJ3R*PGQ&bC#"$Eh9
ZG(NX)%CXEh*TC'%X$@&ZC#"dD'8J-h*N)'&ZEQPfCA*cBA*j)'pQ)(4SC5"839*
$)%e[Fh&eDA4[)%jPG#i0$80A)#dJEQ9KFL"dD'8JBQpdG'pY)'pQ)(4SC5"1EhC
TBf8J-6!X)$%e,#"KEQ3J0$!JFh9L,@*KEQ4c$3e@EfPMC5!Y)$)i,M-c-b!S6@p
cFA9TG'mJ6Q9d)'CbCA&eC@jMH5NX)'&ZC#"ZC@&b)(4SC5"LEh4dEfdJEfBJG'K
P)%GPEQ9bB@`0-68JB@jN)$3`)(0eBLeLB@jNF`d04Qpb)'%JBf9bG'PQD@0KG'8
X)'eKDf8JBfpZG'&MG#"KEQ3JFf9ZC#"jEh9b)&&66#"hDA4S)'%J15)J@#!a-L)
0Ff9XCLeKC'4bCA0cC@3X)(0dB@e`C@3JC@jfC@a[F'8JG'mk$3e839*$$9"[Fh3
J6fCQD@0P)%*[H#!h-`e8DA4eFhCTE'aP,#"'E'pbD@4K)$-b0cJa$3eAC5GXE#"
LC5"XDA0dC@jTEQFJCQpb)(P[G5%0$8Y$0&C*6L`J3f&bEfaP)%&ZEJe6G'PZCf9
b)#-a,#"1CA3J6@&ZB@GPFJdS9%&53b"0Eh0aG@PdEb"ZCA3JEh"PFQ&dCA-J9f9
NEQ9cC'&jFb`J0e"0)%9KFh4PFQiJEfiJ-MJZ-c-c)%e)HLN0$5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,3d04'&dC6SJ-MJJ4Q9L)$%j163J-M-k0$)k0$F
J4de8$8CbEfdk)'PSER!d,R9MFf3ZC@4e)@aTBR*KFRNZG@0XB5jPC(8KCA9bEh"
K,Q9ZCbjRG'9QFf3ZBfpY)@K[GfaKEQ3ZFQ9cG'pZ,Q&ZFbjZCA3KE@&dD#j[D'P
[,A0dBA4P,Q9NG5&ZCAGc,Q&MER-ZERGe,Q9NG5&MBA0LB@JZB@0ZFbjZGh8ZC@4
e)A*NCAGKEN"ZCA4hEh*V,R9MFf3ZC@4e$94[1L"TEQC[,@KKEA0!G@0cC#jPC(8
0$9*PCQ9bC@jMCA-J2$*VE'3j-b4[GQY!C'&ZBf9b,Q0M,Q*PE'aMEh*P,Q0[E6i
X)$`bDfabCQBNBc!a3'0fD@aXC5ecFRBZGf&Y,R9YC#jPC(8q,#!m-QYZDfaU*'3
dE8"NB@jMCA)ZBf-ZBQ9XE'0[FQ8ZBfpY2QJZB@0Z$90eBQTPBh3J1L"5C6SJ6fi
YE'PZC5"5CA"PBA4PFL"%DA*PBh4[FRN0$8PZ)'&bG'PME'8J2$*VEQYXDL4N0'e
!C'&ZBf9b,Q0M,Q*PE'aMEh*P,Q0[E6iX$A0[D'`XGfPXE'PKE5"S)$ahD(-h-%"
NB@jMCA)ZBf-ZBQ9XE'0[FQ8ZBfpY2L"hFQpdC6S02NPZ)'&bG'PME'8J2$*VE(*
QCL4M-$&!BhCTE'aP,A0bGLjhB@dZG@eN,Q9NG6iX$6j6BfpdG#"5D@0SBA*N)&*
[Ff9ZCQ9XC#!mD'&Y3(GKE5jeE@3ZC@4e2L"hFQpdC6S02Mj+GA0d)'*PBf&eFf8
JG'KPFQ8RFb"KEL"[EQaTEQ8JFQ9`C@&dCA)JC'PbC@0dEh*j)'peG#"dD'9bC5"
NEf9cELGd)'ePB@i02MjdD'&d)(4SCA*P*h-JEQmJE@&bDf9d)'C[FL"dD'8J39*
56#"5CA"PBA4PFL"%DA*PBh4[FRNZ)#""Fb"cG'&dC@3JF(*PGLd02MjTEh9cE(N

```
X)(GSEb"bC@&XE(NJGf&ZG(-JG'mJBf&bFRNJBA*[G@jN)'%JBR9ZBfJJEfBJ1#d
a,c)JH#!a-5"TEQ0S)!dq2R0SC@9dFb"[CL"`BA"PFL`JB@jjGf&j2`dq2Jdq2N&
XE#"[CL"jEh8JF'9[F'aP)'peG#"dD'9bC5!Y)'KKGQ8JH@pe)(0PC@iJG'KKG#"
TEQ0bC@4TBQaj)'jPBA3JFQ9`C@&dCA)02Mj039!JBQp[Db"[GA3JG'KPFQ8r)#"
*G#"cD'phFb"eF#"KG#"SB@eQCA0dFb"KE'`JG'KP)(4TE@8X)'&ZC#"038jC)(4
TE@9c$6iqD'&fC5"*)'0[ER0TC'9bC@3JCf9dG'PZCb"K)'0[F(NX)'*PBf&eFf8
JDA3RFb"K)'a[G#"PBA0TCA)JG'mJE'p[Db"KG#!02MjK)'eKF#`JBfpYF'&bC5"
TG#"dEb"jEh9b)(*[B@3JE@&`,#"KEQ3J8d9&)(GSBA3JFQ9`C@&dCA*c)'eKH5"
LC5"hDA4SD@i02MjbB@jRC5iJ)&4SC5""8P*-)(0PC@ec)(4[)'j[G#"LC5"dEfm
JGfpbFQPPC#"KBQpeG#"dD'&d)'pZC5`JB@jN)'Pd)!dq2R"bEf*KBQaj)'PcELG
d)'0eG(4TEQFJD@jdEb"dD'8JE'9KCh9P*h-JF(*[CQPdFb"dEfmJEA9MD#i02Jd
q9'KKG#!L68&3)%4TFQ9MG'pbH5)JDA-JB@acEb"KC(CPFR4TFf9N)'PZ)(4SC5"
0BA*MD#"*Fh0eC5"[CL"$4b"YB@GKHQPZC3dqEfiJF'&RC5!h-#iJ)&4SC5"0BA!
JC'PbC@0dEh*j)'Pc)'&NGQ9bG'PcC@3JBA-JBQ9TEQFJ-6Fe)("KCf9c,!dqDA3
JD@jME(9NCA-JE'pMBA4TEfiX)'KTCfKhBAPc,#"`E(9c)'pdD'9b)'KPE("QG@`
JD@jQEbi02Jd055"[GfjPC#"K)(*PF'9KG'9b)%eKF#"LEfpV)'*j)%&bG&0MD5"
QEh)JB5"QCAFJC'&jFb"dD@aX)%NJFfpXC#"TG#"dEb!0FfpYC@pZC5"hD'mJGQ&
XG@9N)'Pd)'e[FQ8JG'KKEL"*)'4TC#iJ)%ej)'p`D@jTEfik)'0bG@4P)'eKF(-
X)(GTG'JJB3efCA*j)(0YB@aX)'CbB@0dD@pZ)'pQ)(*PF'9KG'9bFb"[EL"TG#i
J)%NJCQpeEQ3JG'KP)%&58N`J$@*[EfXX)'C[FL"KE'`JDA4c)'CXBAGc,#"dEb"
LC5"cD@GZD@CTBf&ZG'aj)'*PG(4PFLiJ)!d0$9*KDQPf$@&K1@0S$A)YC'9hB@j
!ERGe,Q9NG3d0,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY$3e&EQ3JEfB
J5@jQEbe)B@ec)%4TCf9cG#"@163J)c)b03dU+LSU+LSU+LSU+LSU+LSU+LSU+LS
U+LSU+LSU+LS0$AM%!!!!:
```

```
(This file must be converted with BinHex 4.0)
:$NePFh0KCf8J5'9KC'9b!&4&@&4dG(Kd!!!!!!*h!!!!!%J38Q9MC@PfC@3k)'C
bEfdJE'pMB@aSEh0d)'*j)(9MFf3ZC@4e1b"TC#"@38%a0c)d13d*Ff9ZC'eKD@`
J1#if,M3[98064#db,M)YFh9Z$3P8G@8X)$%J6@&b)$%j163J-M%k-cNk-M-J,6!
i-$!JCQpb)'PZCQmYD'&YFbeXDA0d$89bFQpbFbe8EcSJD@jQEbeSB@ec,A*PE'&
j3&9$8d3Z4849$90PEQ4PFMSJD@jQEbeSB@ec,A*PE'&j3&9$8d3Z4849$9"bC@0
PC'9ZBf8k)%aTFh308Q9MC@PfC@3k)'CbEfdJE'pMB@aSEh0d)'*j)(9MFf3ZC@4
e1b"TC#"@38%a0c)a-3d*Ff9ZC'eKD@`J1#if,M3[98064#db,M)YFh9Z$3P8G@8
X)$%J6@&b)$%j163J-M%k-cNk-6!J,6!i-$!JCQpb)'PZCQmYD'&YFbeNC'PcG!e
0CA0cB@GP,8PN1L!m-6Nj0$!c-$)`06-j,PC"36%h-M%a3(9MFf3ZC@4e2Je%BA4
P1L"8G@8X)#!a)%eKFL!j0#!b-6Sc16S`0b"38e304R*[E6SJ5@jQEbe)B@ec)%e
KD@aTEQFJ6'PcG#"KEQ3J6Q9hFfGbEh9`)$aTEQC[,@KKEA0!98064#j&4&8q$89
bFQpbFbe8EcSJ5@jQEbe)B@ec,89bFQpbFd"93e0%,N9%93e5CA"XH5e8EcSJ5@j
QEbe)B@ec3&9$8d3Z4849$9"bC@0PC'9ZBf8k)%*eE'X08h9LDQ9MG$SJ5@jQEbe
)B@ec)%4TCf9cG#"@163J)c)b03e8EcSJ5@jQEbe)B@ec3&9$8d3Z4849$6Ri!!!
!:
```

2606. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 06:35:12 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.013512.1289637007@mailstop.telesat.ca>
Source record: 270058

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
---------------------------------

(This file must be converted with BinHex 4.0)
:$80[EA"XCA4P)&4PH(3!9%9B9(4dH(3!!!!!IY8!!!!!&DS05@jQEbe)B@ec)%4
TCf9cG#!J)#!J)#!J)#!J)&4eC5`J)$%J6@&b)$Nd)#!J)#!J)&C[E(9YC5!j0#!
k)%PcFh9P)#!b-M-0$94[C'&j*h-J9'p`D@0c1JdJ)#!J)#!J)%&XF'KK)%*bBAC
[)%0SBA*XD@8J4'9XG'%k)("SEfjPG'PM)'&XF'KKBQ9dFb!SFQ9`Eh0d+3dJ)#!
J)#!J)#"#GAPTEQFJ@A9`DA4PFR8J69C8,6Fa-$!J+'CbEfdJ380&)%0[E@eeEQP
MBA4TEfjc2bN0)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#"$B@aX)&0TCfiJ8Q8
YDA0cG@80)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J5N&54dp1)#Jb)'ecCh-
T$5!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)%TPFQXJEfiJ-M!JEA4bF`dJ)#!
J)#!J)#!J)#!J)#!J)#!J)%YPH@*[BA*NFb"KG#"dCA0dD@jR)(0PFh0TEfjc$5!
J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#"-EhFJF'phCA)J3QPbC#"cE(9RF`dJ)#!
J)#!J)#!J)%eKFQPdD@eP)%0A)'CbCA&c)#KhBA-k)&*"690&@5"'@#"88N&18d0
&59C&8L!T$5!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)%eTBh*[8feTG'J
0)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)%jeC'8J8Q&ND@mJ3@eKG'9eFR-0)#!
J)#!J)#!J)#!J)#!J)#!J)#!J8Q9`C@&dCA)JCQpb)&0%)(4[)%&ZB@KPD@dr$5!
J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)&0MB@jZCA*c)'pZ)'&TFQ0bB@Cd)3dJ)#!
J)#!J)#!J)#!J)#!J)#!J)#!J9(*KER0QEh*YCA)J4Q&TE(9bC5"0Ef4PFcm0$90
PEQ3J8Q9`E'PPFb"[FL"ZEh4PFb"QEh)JF(9LE'PMBA4TEfiJG'mk)$a*EQC[,8K
KEA0!98064#j&C(8q$90PEQ3JFh9LFf0bDA"dD@pZ)(*PFA9PFh4c)(4[1L!m5@j
QEbe)B@ec,9*&899&8e4!98064#j&C(8q$9"bEf*XC@ec)(P[G5"MB@iRG#"cEfa
fC5"[G'KPFRGTFf8JG'mJBR*TB@j!G@0cC#jPC(8Z$3e"FQ0SDACPFb"[CL"`BA0
d)'PcFh9PFb"[CL"dD'8J5@jQEbe)B@ec)%4TCf9cG#"KFQ8JBACKD@aKBQaP)!d
SBRNJ4P43)'pZE(NT)'CbEfdJ98064#j&C(8JD@iJC'PbC@0dEh*j)#*YB@PXBA*
MD'PfCA-[D@jQEbeSB@ec)Li0$9GP)(4bGA0d)(4SBA3JFQ9KC'9bFb"KFQ8JD@j
dC@aXD@GPER3JC@j[G@GS)(4[)(*PB@aTHQ8JG'KKG#"KE'`JG'9iG!eSCA*PD@i
JBfpZFfPcG(-JEfBJF'9bFfpZB@`JBfpYE@9ZG(-JB@jN)'4[CA-JEQpd)(*PF(*
PFf9ZG#"dD'8JEfCQD@0TB@`0F'pXD@0TCA-JEh)JF'pcDA4TEfjc)'pQ)'&ZH5"
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Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY$3e%BA4P1L"0EfiX)$)i)%CPBL!a16Nd)$)a1M)`1M)
j)%G09!e'FQpY1L"TD'j`0#jeBh0N,Q9NG5&KCf&dC5&SEhGXB@jN,R*PFh4[ELj
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eC'9c)'&XF'KKBQ9dFb"QEh)JG'KP)'C[E'a[GfPZCb"XB@jRG@&RCA-k$3dJ)#!
```

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h0#!h-c)a0BT8CKH#!J)$!b0c3J0c)b0M)h)#K'FQpY)&8Z8biJ)#!`-6%J0$3
J-MFd)$Fb-MBb0bN0Bfa[G@GS3'TKGQPKG'pZ,Q4PE@pZ,Q0[,R9V$3dJ)#dYEQ9
TE#"[FQe[Fb!JGf3iBQ4`)#"dD(0cEQp!D@PdE@&i,Q&MBbjTDA3ZC@4e$3dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d0$84KG'8k)%e[EL`J-MJJ4Q9L)$%
j163J-6Fk0$)k-63J4de8$8CbEfdk)'PSER!d,R9MFf3ZC@4e)A0NC#jSF#jMEfd
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Y,3d04'&dC6SJ-MJJ4Q9L)$%j163J-63k-$8k06BJ,6!e-$!04R*[E6SJD@KZF$3
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bE'&L,Q0cBbjMEfd0$8&ZBfpZB5`J3QpXEfGZB5`J3fpYEb`J4'pYEf4[Fh0[E'%
X)%9YF'pXD5`J4QPbC@jkC5`J4f9ZEhCK,!e)B@0MB5`J5@e[E'%X)%T[E'aj,#"
,BA"`B5`J6'PfEh*ZEb`J6@PXB@j[,#"1BA"[E'NX$8pdFQ&ZG'mX)&"TFf%[8'&
XCA*YEb`J8A9KFR4[E@PRE'P[,#"5EfeK,#"6BAC[EQ%[8fPPEQ%X$94[FQPZEb`
J9@4TEQ8X)&CPEQ9kD@%X)&GKCfjPFL`J@'PXEfC[EQmX)&P[FQXX)&TKFQ%0$3e
$EfjdFQPLGA4[FMSJ8R9NEfaQ)%aKDA-J2'0SD@*Y0@K`3'PLE@eKD@`ZBfpY2Jd
0+&0hDA0c)(4PE'9`D'pZC5"NDA*PBh4[FRNT$3e"EQjK)%*KG(4TFh4K)%0KFQp
X)%4KGQPNC5"&FQjPFh4[)%CPC'9bD@0[)%GTEhCKEQjT)'&MBf%05A0TC'pbEb"
TAfaeEQG[)'0KF("K)%aeD@GT)%eKFQPK)%jTBfpXB5"2E'GK)&"TCA4bE`e4G@P
ZG'PZEb"5Ef4[E'C[)&0eFf&ZEQ%J9'9bCA0K)&9YBQ9bG'mJ9QPdG'pbD@mJGR9
IC'p`F'PK$@PMFb"TF(0TE'pZ)&TeFQPRE`d0$5SU+LSU)&*968&19&0$5#!U+LS
U+Jd03fpZG(*TBR9dEh)k)&*eC'pXCL"-B@Pc)$aMD'PLE69SF%"TBQeYB@PX,Q0
[E6i0$5K6GfPcFb"dC@aPF'K[EQ8JC'PbC@0dEh*j+3d03@jZB5"#CA*dB5"$BA*
XB5"%Eh*K)%9YD@`J4QaeFQPZ)%GeD@4[)%KeCfmJ5@4K)%TeC'Pd)%YTE'm06(9
TFf%J6@&bD@%J6Q9cB5"2G(4[)&"KG@aK)&&eDA*TEL"5DA4K)&0TE(CTB5"8Efj
T)&9bFfPZ$9CTBh4[FL"AD@aXD5"BBACPFL"CGQpZEQ8J@QPdB3d0$5SU+LSU)&0
-6eC"5b!U+LSU+Jd03fpZG(*TBR9dEh)k)%eKFR4TEL"@Eh4bG@*K)$afEh4bG@*
K+d"`DA4d,Q9NG6i0$5KdC@aPF'K[EQ8JC'PbC@0dEh*j+3d03@4KE5`J3QpkIQ9
ZB5`J3hPbD@`X)%0qB@4MB5`J4'%RGQPN,#"%IR9YBQPPFL`J4@eTE#`04R*KER4
TFhjPDb`J4h9cG'%RGL`J5'9XC@jK,#"$5(*eC'PY,#"*GQ&Z,#",BA*[E#`J6(9
NGQNRDb`06(jeBQpMD'jqB5`J6@%RFQPK,#"1Eh*LCA*d,#"1IL!Y)%jTG(*K,#"
2G'mX)&"PG'9b,#"4G@PNEb`08R9NEfaQ,#"6GQ%LG'p`E(9V,#"6IQPYEfiX)&4
[E@%RFhiX)&4q)#dJ9'9`E'%R,#"9FQ*KEL`09Q%RBfaKGL`J9b!Y)'4fEfTTG'8
R)(CP*b`J@'&fCA)X)&P`FfPXEfiX)&TeHQ&ZB5`J@Rj[CQPK$3d0+LSU+LSJ8%p
-590))#SU+LSU$3e$EfjdFQPLGA4[FMSJ6@PMD'&X)%TKEQY[Gh0VD5!mE@PMD'&
XDN"QGAFZC@4e,R"X2Jd0+&GKFR0KGb"dC@aPF'K[EQ8JC'PbC@0dEh*j+3d03@4

```
KE5"#BA*LBA*K)%0PE'PZB5"%B@jeG'%J4AGK)%CbB@jMDA0kC@XJ4f9ZEhGPCQ%
J5'9ZFRPV$8PbC@jK)%TKC(GTCf%J5f&bEf`J6'9[EL"-,h9VBA0k)%eKFQPK)%j
KG'&XD@%J6faRB5"3BAGPE#m08QpYB@iJ8h4KEQPcE#pKGb"8B@4PGA0k)&9bFhT
eE'%J9f`[B@4jFf`[BAFJ@'&ZG(P`B5"CCh*PD`eDH@GYG@jd$3d0+LSU+LSJ5&9
14d&558&1)#SU+LSU$3dSG'9XCA"SEfjP)'4TFQ9MG'pbH5N0$8&ZC(*K*h-J3Q8
RE'%J3f9MD@`J4'mRFQ%J4@aPE@8RFL"'CA*PEQ-J4fPkC@aXB5")B@TZB@aVB3e
*Fh4fB5GZ)%TK*fj[Fb",BA4KE'PZ)%aeBf%J6@%RG(PK*h-J6Q%REQ4[FL"2E'G
K)&"TFQpcDf%08A9PC@iJ8QmRBQ9bG#"6BA*[E(4K)&4T*fePB5"9BR9X)&CTE'e
[Fb"AB@adCA)J@'8REQPK$9P`FfPXEfiJ@QpXG'%REJd0$5SU+LSU)&0A484*8dJ
J+LSU+LS0$80[ER4bD@*eG'pbFcSJFfPYEfj!C(*[ER3ZEQ&NB5jVG'JZFf8J+&0
TE@pZ)&4KFQ4PE'`T$5!J)#!J)#!J)#!J)#!J5QpZBA-J9f&XE'GbC@iJ2'ThBd"
TC'%ZE'Pe,R0P2Jd03@4KE5`J3Q9bG'PX,#"$CA0KFL`J4'&fD@3X)%9bD@XX)%C
TE'P`,#"(GA0dBABX)%KPE'GP,!e*GQ&b,#"+EfKKEL`J5f&XE'8X)%aeC(CTCb`
J6@&bG'PZ,#"1D@YXBA-X)%pXEfBX)&"PG(4PFL`08A9TER4eFb`J8R9NEfaQ,#"
6D@GeFQ3X)&4[FQ8X)&9bBQ&Z,#"@D@YdEh)X)&GTE'KPE'dX$9KPFRKPFb`J@@j
RGQ8X)&TlG'%X)&eVC5`J@h*XD@FX)&acG'9Z$3ehD'9bC5"l)'Pc)'%JGfPdD#"
NEh4c$5!J)#!J)&dJ)#!J35"hDA4S)(*TEQF0)#!J)#!J@b!J)#"")(GTG'JJC'p
dF`dJ)#!J)#"F)#!J)%mJGfPdD#"NEh4c$3e13L"dD'&d)&FJC'pPFb"ZEh3JBQ9
XEfjR)(4[)(4SC5"6Gf9NDA0S)'&XF'KKBQ9d$5KTG#"TFb"YCA*PE(NJBfpZFfP
NCA*PC#"K)'GbBA"SD@0KE#"fBA*TB@jd)'pQ)&BT,Jd0$5SU+LSU)%C*6Nj*8dJ
J+LSU+LS0$80[ER4bD@*eG'pb1L"+G@YVB5"5B@KVEfjPEL!mDR*KD'Y[EQ9!GQP
TDfYT,QKPE(0TEQYT,QCT2Jd03@&bEQ8J3Q9bG(4K)%0PE(0TGA-J4'&KGQPN)%9
PE@9XD5"'B@&bB@mJ4fPNC@pZ)%KPD@YVD3e*DACKFQNJ5R9cFfNJ5f&XE'8J6'&
eFQNJ6@&dG'NJ6QPTE'mJ6h4dEb"3B@&fEb",GA8J8QPcG'm08f&VBA*T)&4jH@j
P)&9bD'mJ9QPXE'8J9QPcDfNJ@fYcHb"CFQTm)&4cCA4K)&eVC5"EDA4T)&aXDRN
0$99`F'9bBf&cC5!J)%a[Gf9bBf&cC3dJ)#!J)#!JA5!J)#!J)#!J)#!JI5!J)#!
JB5"hDA4S)'0TFQ0XC5!S8hGPC'PcD#N0)#!J)#!J)&XJ)#!J)#!J)#!J)(XJ)#!
J)'%JGfPdD#"NEh4c$5!J)#!J)#"F)#!J)#!J)#!J)#"m)#!J)#"[)(GTG'JJC'p
dF`d0$5SU+LSU)&*98e0*38iJ+LSU+LS0$80[ER4bD@*eG'pb1L"dEfe!FhPcG'9
YG'9MD'jTDbjdG5eTE'ePEQ&e,Q4P)#K8D'pYBA-J8'aKEQYP+3d03@aPDh0PDL"
#Eh*TFb"@BA0TE'PU)%GbD@G[FQPU)%4YDA4bD@SJ4@aPEQ%J@QKPEQTK)&T[H@%
05ACKEL"*GQ&ZAdYbBA4VD@SJ5fPXEhGKG(3J6'9[EQPN)%eKFQPK)%jTDfpXB@N
J6faRB5"3BACPE!e5EfeKEL"6CA*RC@SJ9'&dDQ&ZB5"9E'TKEQ%J4QT[C'pb)%K
KFQPdEfiJ@Q&`E'TK)%0SC@a[GQ9V$90SGA*K)&0MD(9VB5"8GQP[FQ4TH9pDEQ&
V)%PRFQ9V)%eTB@GVDAPI@QjKDb"&E@PXD@TK)&PeFQN05Q&VEhF0$5SU+LSU)%9
14#!U+LSU+Jd0$8*bD@&Z)%YPE'X03f&YBR*TC'GP$98Z5bi0BQ0V-8"ME#jMB@d
ZB@-ZG@X0$5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,3d04@jN)'pQ)%P
ZCQmY5'&YFb"%D@GPFh3J9MNd)#-b-M-0+LSU+LSU+LSU+LSU+LSU+LSU+LS
U+LSU+LSU$3f#9!!!:

(This file must be converted with BinHex 4.0)
:$NePFh0KCf8J5'9KC'9b!&4&@&4dG(Kd!!!!!!,E!!!!!1PI8Q9MC@PfC@3k)'C
bEfdJG@0cC#jPC(8JBRNJB@jTDbjdC@aPFf&d,Q0K)#Je,MBd,d%[99JY-bi`-5N
0#@PN)%&"-$%h06-l)&0KG#`J05"0BA)J163J-$%k-6Nk-cFJ8&08$9*PBf9TGQ9
N1L"QFQpY)'a[Bf&XD'pcG#"LH5"eBh0N,Q9NG6XJD@3J8d&"-MBa0cJ0#A0PEQ4
YB@PX)$JZ0Lid,e9$8d3Y-Lib,A0eEJd*9(9P,#!a)%eKFL!a16Nd)$%i1M!j1M)
c)#d`1$!`)'C[FL"TEQC[,@KKEA-YE'PcG!e&FR*[FR-Y9'mk)'PZCQmYD'&YFbe
bC@aKH8"93e0%,N9%93e6C@jNCA)k)'PZCQmYD'&YFbebC@aKH8"93e0%,N9%93e
3FQ9MC@4PEQ0P1L"-DA0d$9*PBf9TGQ9N1L"QFQpY)'a[Bf&XD'pcG#"LH5"eBh0
N,Q9NG6XJD@3J8d&"-MBa-$-0#A0PEQ4YB@PX)$JZ0Lid,e9$8d3Y-Lib,A0eEJd
```

```
*9(9P,#!a)%eKFL!a16Nd)$%i1M!i1M8h)#d`1$!`)'C[FL"TEQC[,@KKEA-YC'4
TFh306@9cFf&RC5e*C$SJ2$%j163`-c!b-$)`1#j638%b0M%`-d"eBh0N,Q9NG6i
04'&dC6SJ9(9P,#!J-5"0BA)J163J-6Jk-$Jk06BJ8&08$8CbEfdk)%PZCQmY5'&
YFb"0B@PXD@jR)%aTFh3JB@jN)%jPGh0RFQpeF#!mD@jQEbeSB@ec3&9$8d3Z484
92Je&FR*[FR-Y9'mk)%PZCQmY5'&YFbe&FR*[FR0!98064#j&4&808Q9`E(NY9'm
k)%PZCQmY5'&YFd"93e0%,N9%93e3FQ9MC@4PEQ0P1L"#G@aV$90eBQTPBh3k)%P
ZCQmY5'&YFb"%D@GPFh3J9MNd)#-b-M-09'mk)%PZCQmY5'&YFd"93e0%,N9%93f
d(!!!:
```

2607. This Week on Spectrum 03/12/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 07:18:47 UTC
From: spectrum@starcomm.overleaf.com
Message-ID: <2lc04n$sid@starcomm.overleaf.com>
Source record: 270059
Cross-posted to:
rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.scanner,rec.video.satellite,rec.radio.cb,alt.radio.scanner,alt.radio.pirate

This week Spectrum takes to the road. We will be broadcasting live from
the Winter Swl Fest in Kulpsville Pennsylvania. Everyone who is anyone
in the communications hobbyist community will be on hand. If you can
make it we would love to shake your hand. If you can't join in on the
fun in person, you can listen to our live broadcast at the usual times
and frequencies. See you at the Winter Swl Fest '94.
--
Spectrum airs live Sunday at 0300 UTC (2200 EST Saturday) on:

WWCR, 5810 KHz, Nashville, TN (World Wide)
WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
KHNC, 1360 AM, Denver, CO (Denver Area)
Omega Radio Network, Galaxy III, X17, 5.8 MHz WIDE audio. (Satellite)

Spectrum is rebroadcast:

Sunday at 1500 EST, on WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Monday at 0400 UTC (2300 EST Sunday),
on WWCR, 7435 KHz, Nashville, TN (World Wide)

--
Spectrum, "The Communications Magazine You Read With Your Ears."
Box 722, Holmdel, NJ, 07733-0722, USA
spectrum@overleaf.com, askspectrum@attmail.com, spectrumshow@genie.geis.com
+1 800-787-SPECTRUM, +1 908-671-4209

2608. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 07:36:14 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.023614.1806003740@mailstop.telesat.ca>
Source record: 270060

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
---------------------------------
```

2609. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 07:36:18 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.023618.1186078089@mailstop.telesat.ca>
Source record: 270061

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
---------------------------------
```

2610. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 07:36:23 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.023623.1235610680@mailstop.telesat.ca>
Source record: 270062

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
---------------------------------

(This file must be converted with BinHex 4.0)
:$80[EA"XCA4P)&4PH(3!9%9B9(4dH(3!!!!!F#8!!!!!UPm05@jQEbe)B@ec)%4
TCf9cG#!J)#!J)#!J)#!J)%CbD5`J)$3J6@&b)$Nd)#!J)#!J)&C[E(9YC5!j0#!
k)%PcFh9P)#!b-cB0$94[C'&j*h-J9'p`D@0c1JdJ)#!J)#!J)#!J)#!J)#!J)#!
J)#!J)%&ZH@pZC5"eFfPZCb"+8&-J6NP5)$%`2`dJ)#!J)#!J)#!J)#!J)#!J)#!
J3eFJG(*KD@jPFL"QEh)J8h9Z)(G[FQYcG'&dD@pZ2`dJ)#!J)#!J)#!J)#!J)#!
J)#!J)#!J)#!J)%9XC@0dFQPM)%CPEQ0P)&*'53dJ)#!J)#!J)#!J)#!J)#!J)#!
J)#!J)#"'9&!JB@4NFQ9cFb"QEh)J9fpbE'30)#!J)#!J)#!J)#!J)#")C@a`1L"
1C@PRD'*[FLGc)%0A)'PZG'9bCQ9bC@jMC5!S-L"YFfGc+3dJ)#!J)#!J)#!J)#!
J)#!J)#!J)#!J)#!J)#"+CA*V)'pZ)$)`)'edFR-0)#!J)#!J)#!J)#!J)#"0C@4
TG@dJFQ&ZCf8JF'pTER3YG'mYF'pTER3JC'PRDA4KE#"XD@jVF`dJ)#!J)#!J)#!
J)#!J)#!J)#!J)#!J6fKTEbp3C@jZ)%4B)%*eE'aPG'PZ)#-a0$N0)#!J)#!J)&"
bEf*KBQaP)'4PE@PcC5"[CL"dD'8JEfjXD@jP)(*PF'9KG'9b)'4TFQ9MG'pbH5"
`FQpUC@0d$5!J)#!J)#!J)#!J)#!J)#!J)#!J)#"dBAJJCAKPEA"d)$8`-5!SBbN
JFh4KG(9c$3e6C@jN)&*PF'aTCA-JEh)JEQpdCA-JCQpb)("eBQaTBf&dD@pZ)(4
[1L!m5@jQEbe)B@ec3&9$8d3Z4@4e2Je6C@jN)(0eBR0MFQP`G'P[EL"bCA&eCA0
dFb"dEcSJ2%PZCQmY5'&YFbe549&949083&9$8d3Z4@4e2Je3FQpLE'9YFb"jEh8
JBf&Z*h3JFfpXGQ8JEh4SCA*hDA0P)(4[)'*bD@&Z3(9MFf3ZC@4e,Jd03A*MD'P
fCA-JEfBJF'&cG#"TFh0eCA-JEfBJG'KP)%PZCQmY5'&YFb"%D@GPFh3JBA*P)'&
fB@PXB@*XC5!0+'*j)%C88#"[EQaj+5"QFQpY)&9$8d3Z4@4e)'PZ)'4TFQ9MG'p
bH5!LE@&TE'&bBfKTGQ9c,fPZCQmYD'&YFb)Z$3eAC5"dFR9cG#"dD'&d)(*PB@4
PFR-JBA*P)'PZG'9XE'PRC@jd)'9ZEh9RD#"dEb"bC@&XDATP)(4SBA3JB@aX)(4
PH(30D'9bC@PZ)'0[ER0TFh4c)'pQ)("PFR0[EQ&X)'0[E@ePER4c)'&ZC#"NEf9
c)'j[G#"bCA"bCA0PER3JG'KP)'pQCQPMD@&X$A"[E'PMD@9c)'pb)("[FfPdD@p
ZFb"[CL"KERNJF'&bG(NZ)#"CEh9b)'eTE'9KCf8JE@&j)(CKFRNZ)#"6Eb"dD'9
bC5i0,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,3d04'&dC6SJ9'Ke,#!c)%eKFL!a16N
d)$)c1M%c1M%h)%G09!e'FQpY1L"ZCAGc,Q&MER-ZERGe,Q9NG5&YBA4S,QpSD@m
YFh4KG'8ZC@4e)@K[GfaKEQ3ZFQ9cG'pZ,Q&ZFbjZCA3KCf&dC@0S)A0hFQPZC'8
KD@KZF$3ZG@0cC#jPC(8KE'PLFQ&bH5jeBfaK,Q9NG5&MFh9XBLjPC(8KBh0eFbj
PC(8KEQ9dBfpY,Q0[E5&YBA*VC@JZFfaTF#jZCA4MEfdZBfpY)A9cCA*!EQ9dGfp
bDbjeBh0N,Q9NG3e6G@*UC@0d1L""ERP[EQ8JGA0TEQFJ5P"6)%j*8L!a-$m09'm
k)'PZCQmYD'&YFd"eBh0N,Q9NG3d055"SBACP)'*[G'JJB5"159)Y-6!X)'aKG'9
cG#"56ddX)'&ZC#"K)&Fj4e)J4&03)%P*)#KMEfeYCA*MD@&X,#"ZEfiYDfPd$AC
PFR0TEfiT,L"8D'9j)'&bC5"SEfpVC@3JGA!JGfPdD#"K)(0hDA4MD#"dEb"XCA3
JE@8JFA9TBfYXH5"MD'&ZCf8JBQ9dGf9PEJedD'8JG(G[,L!0$8pfCA*KE'`X)%N
JD'&fC5!d)(*PB@0dD@pZFbi0$6%Z)%j&594)49)JE@&VCA-JB5"cD@GZB@`JBA9
ND@*XC5"dD'&d)(G[G@aN)'pdD'9bGfPcC5"LC5"eEQ0[F(PKBQaP)#K68$mT,Je
8D'9j)(0TEA"XH5"YB@YP)'Pd)(0[E@9hD'&d)'e[FQ8JF'aPFf&ZG#"dEb"XDA0
dC@iJG'mZ$3db,L"*)("bC@CPFL"dD'8J6NP5,6%`,L"*68mX)(4SC5"cD@GZB@`
```

```
JFA9KE'PdH5"TFb"LCA4dCA)X)'*eG#"dD'Pc)'Pc$A"bEf*KBQaj)'%JE@&dG'9
b)'pQ)'p`D@jTEfiZ)%K[Gf9fCA)X)(4SC5"159)Y-6!JB@acEb"SBA-JB5"NC@a
KH5"TEJe`BA0cD@jR)(4SC5"cEh9ZC#"dD(*[G@GS,#"cEb"TG#"ZC@9NFb"dEb"
LH5"LHA"KFh0PC#"hD'9Z)'e[EQPdEh*TEQFJEfi0H'eTG#!Y)(4SCA*P)'Pc)'0
TFQ0eDA4bH5"TER0TC'8JG'KP)%j*8Lda-#"dEb"NEb"dD'Pc,Jd0-biJ3Np85#"
eEQPdFb"RC@jPFQ&dC5"PEQpeCfKd)'KTCfJYF'PdBfKPC#"KG@4TEb"hD'PZC5"
dD'&d)(4SCANJFQ9aG@PbC5"K$@KTCfJYBh9d)'CTE(4PFL"QEfaXEhGTEQFJG'K
PE5iJ55"dD'PZDb"dD'&d)%NJB@dJFQ9XBA4TGQ9XH5"cC@jcDA4TGQ8JG'm0D'P
RD#"`DA4MD'9N)'j[DA0P,#"LGA3J55"cG'PXE#"dD'PZDb"dD'&d)(4SDA-JFfK
[G@aNELGd)'KKF("PELi0$3dd,L"*)'&Y)'j[G#"eFfPZCb"dD'9Y)'PZ)'%JE@p
LD@aP)'&`F'aTBf&dD@pZ,#"cEb"*)'KKGQ8JEQmJEh"TEQP[EL"[EJeTCfjTG'P
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f,M%d-5ib-M!Z-cNq,#!mG'0U3ddbENYf,M)i3d"ZCA4MEfdZBfpY2L`J2%&ZG'K
[ERPI8'9XE'PMBfP[,6!c-$-j0$%d-M)e0d!a-cJZ-6BZ0M3Z0$Nq+3e6G@*UC@0
d)$SJ8Q8k)&4SC5""8P*-)'Pc)'%JBR9cD@jPFh-J+(GKFb!L8Q8k)%&58N`Y,5d
q6fjXD@jP)&*PF'9KG'9b)'4TFQ9MG'pbH5)T$3e8Efjj)&"PE'aTBf0TEb!S3@j
dD'pZH9p3C@aXD@0MD@p!BR*[GfiZC@4e+5"hFQpdC6S0$6SJ5A3JDA-JF(*[CQP
dB@*XC5"QEh)JG'KP)'9iC@0eG'PfCA-JEfBJG'KP)'0[FR"[FQ&dD@pZ,L"8D'&
d*h-JFQPRD(3X)(GSH3dk)'4[)(P[G5"dD'PZDb"cEfeP)'pQ)(4SCA0P)'GeHA-
JD'&fC5"YB@4P)'%JBf&bC@9b)'peG#"[CL"dD'8J39*56$mJ6Qpd$6SJBQ9MBA9
cC5"[CL"dD'9TFL"XEhCP)'pQ)'&YBA4PGA)JFQ&ND@mJBR9d)'*PBf&eFf8JEfB
JG'KPDA)JE'pfC5"[CL"`EhGPFJdk)'&ZC#"YEfjPH5iJ9Q9bH5"cD@e`E'8Z)!e
8D'Pc)(0SEh9XC#"LC5"PBA0j)(4[)'0XC@&b)(9`)'PYE@9ND@&dC@aj,L"&C#"
`E'9KC5"`Eh0d)(4SC5"cB@aKFQPPFb!0EfBJG'KP)%&58N`JCAKPBh-Z)%NJBQ9
XD@9fC5"dD'Pc)'Pc)("eBQaTBb"TEQC[FQeKG'P[EL"NG@8JG'mJG'KP)!eZEfi
YF(*[CQPd)(0dBA4eFb"[CL"dD'8J6'9KCh9P,L!J4%mJH@pe)(*PB@aXH5"dD'P
ZDb"dD'&d)(0[E@9[EQ8JGfK[)!eNEf9cELGd)'a[GQ8JB@eKG'9eFL"bB@4TEb"
bC@&XE(NJGf&ZG(-J*h"[Gf9b*b"[GQ9b)'%JBR9ZBfJJEfBJ$A4PBfKZEbehC@9
ZD@9c)'aTDf8JGA-r)#!0$6SJ3@0dG@&XE(NJH@pe*h*P)("bCA4dH5"YG@0S)'0
[FR*PBh3JBR9d)(P[G5"MB@iJFQpXE#"cEfeP)'pQ)(P[GA)01L"ZEfiYF(*[CQP
d)'4[E'aKFR-JD@jdEb"[G'KPFL"dBAJJF'9bD@pNFbiJ$9PPF#`JDR9cG#"MB@i
RG#"NDA0dFQPLGA4P)#GPE5"dEb"dD'8JBfaeBL"YC@eLCA*c,Jd0BfKPCA*c,!e
%B@i0,5d0+LdY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5S0+L"%B@jTC@`J4#iJ9'pNC#!
J)#!J)&"KBfYPG$SJ5d-f999%3%Y&0NaA,L0ZEf0KE#jMB5jeFf%J)#!J)#!J)#!
J)#!J)#S0+L!J)#!J)#!J)#!J)#!J)#!J)#"*ER4PFQjPG$SJC'4dEf4N3(9MC'&
fDA-ZC@4e)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#S0+L!J)#!J)#!J)#!J)#!J)#!
J8fjKD@`J6@&TE$SJ-6Fe-#")B@j[GQ9b)#-a-$)J)#!J)#!J)#!J)#!J)#!J)#!
J)#!J)#S0+L!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J4'&fDA-J3d%J168
f-6BJ)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#S0+LdY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d
Y,5dY,5S0+L!J3@aX)'p`D@jTEfjc)'9iF(*PFh0PC#"SCA*PD@iJBA*P)'0[EA"
XCA4PE(NJCQPMG'PMD@peFb"KERNJ)#!J)#!J)#S0+L!JFQ9cC@eLE'9ZBf8JG'm
JB@0dG@&X)'p`D@jTEfjc)'pQ)("PFR0[ER-JE'PfD@jR)'pb)'4PB@3JDA-J)#!
J)#!J)#S0+L!JBfpYF'aPG'9XH5"MEfPZBfPNC@jdB@`Z)#!J)#!J)#!J)#!J)#!
J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#SJ$5SY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dU$5!J)#!J)!d0,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY$3e
%BA4P1L"8D(8X)$-J6@&b)$Nd)$)a1M%a1M!e)%G09!e'FQpY1L"ZCAGc,Q&MER-
ZERGe,Q9NG5&YBA4S,QpSD@mYFh4KG'8ZC@4e)@K[GfaKEQ3ZFQ9cG'pZ,Q&ZFbj
ZCA3KCf&dC@0S)@jPGh0iCQ9b,QPdC#jeE@PMD#jPC(8KEQjdF#jMFbjeBQ-ZBf%

KB@aLCA*dB5&KC'9M-M-KE@&bDd"ZCA4hEh*V,R9MFf3ZC@4e$94[1L"TEQC[,@K
KEA0!G@0cC#jPC(80$9*PCQ9bC@jMCA-J2&P&45ij0%CPBM%i-63c1$-f3'eTF'G
cG@iZE@P`CbjeF'9ZELjPC(8q,#!m-MFc-d"TEQ4PF$%ZBfKT,QPX,R9c2L`J2(*
[D(CY-5jYB@Jd1'3Y-M)`-MNd-6!`-$-e3$%c0Lia0$%Z-M)`,M-j2R4`,Q0c,R9
L$90eBQTPBh3J1L"5C6SJ8(*[BQ&LE'8JC'9YDA0P)'pQ)(4SC5"[EQaTEQ8JFQ9
`C@&dCA)JC'PbC@0dEh*j)("bEfTPBh30$A*[D(CY-5jYB@Jd1'4!FQpSE@KKBA-
ZBfpY)#K+EfKZ)%8Z)&4KH@a[FL"*58NT)(GbDA4PFcS0$6jCEh8JFfK[G@aN)'0
SC@0V)(GTG'JJB5"XBAGjCA)JEfiJG'KTFb`JBR9d)'Pd*h-JEANJG@jNCA*cG'&
ZC'PZCb"dD'&d)'PQ$6jjEh8JC'mJG'KP)'*KFfPM)(*PFf9KFQ0S)(4[)'0[EA"
TE'8JB@aX)(4SC5"NBA4K)&pjEh9bFf9XCPmX)'&ZC#"MD'p[Ff8JB3dqCQpbE@&
d)(4SBA3JDA-JC'PcFfPYD@aKFL"dEb"dD'8JCAKTFh4TEQFX)'0[F(PbD@GSG'9
N)(G[FQXX)(P[G5"`FQpLB@*XH3dqC'pZ*h3JD@jQFQPZCf8JDA3Z$3eAD(NJEA9
cG#"SC5"NEb"TG#"SD@ecC@aQ2b"*CL"SC5"RCA4c)(0eBQeTFh0TEfjc)'CbEfd
JCACPFRNJGA0PFL"[EL"dD'80EQ9dGfpbDb"TEQ4TBf&dD@jR)'PZC'9`C@jNB@j
d)(*PF'9KG'9b)(0dBA4eFb`JCACPEL"TCL"TG#"TFb"TEL"dD'8JFf&YC3eQEh*
YBA3X)'KP)'Pc)'j[G#"fD@pXBA4TEQFJB@jj)'0[F(PbD@GSG#iJ9'KP)(*PF'9
KG'9b)'4TFQ9MG'pbH5`JE'PVC5"dD'80F'K[EQ8JBQp[Db"KEQ3JG'KP)'0KE'`
JBQp[Db`JBA*P)(0TEA"XH5"MEfe`D@aKG'P[ER-JEfBJC'&dB5i0$9GSH5"YGA0
d)'KP)'KTFQ8JB5"XBAGjCA)r$3e*CL"SC5!SEh)JB5"cG@*YDA4dCA)T)(9cC@3
JG'KP)%&58N`JFQ9`C@&dCA)JC'PbC@0dEh*j)(4[)'GPEQ9bBA4P)(4SC3eNBA4
K,#"dD'9Z)(4SC5""8P*-)'0KEL"LC5"YD@CQC@3JD@BJDA3JGf&ZG(-Z)%K[Gf9
fCA)X)(4SC5"5CA"PBA4PFL"3FQpUC@0d$A4SBA3JGf&c)'*PD@jR)'0[E'aPBh4
PC#"hBA-JD@jdC@jNC@3JG'mJBQ8JB@iJD@jNCA"PEQ4KER4XH5"RC@jPFQ&dC@3
0C'pMG@ePER3Z$3e&H("XB@PZ)(4[)'eP)(GSH5"$B@aX3Qp[Db"&ER4PFR"bDA0
PFb"TFb"ZEh3JFh9TEQFJ4'9fEfiJ+'C[FL"YB@PZG'&TEQPZCb"dD'80BR9QCQ&
XEbjPC(8JBA*MD'PfC5NJEh)J4R*PC#!SEhCPFL"SDA-JGfpbDb"TEL"dD'8J89*
D)%0%8Np0+6mJ,LiZ$3e$D@&[)#dY)$Fc)'4P)&C&0Ne(8bp0BA*V)#ecDbd0$5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,3d04'&dC6SJ-MJJ4Q9L)$Nd)$%
d1M)f1M3`)%G09!e'FQpY1L"ZF(*NBb&TD'j`0#jeBh0N,Q9NG5&cGh*TEQ4P)@G
KG'9MD#&hB64YC@NZF'PZCbjMEfdKDf8dHRBKCf&bH8"ZCA4hEh*V,R9MFf3ZC@4
e$94[1L"TEQC[,@KKEA0!G@0cC#jPC(80$9*PCQ9bC@jMCA-J2%0-6$K`ELj-38e
!Bh0MFh9Z,R*YBbjPC(8q,#!m3dac58Xi,NC$-N"`B@0TCQPPFLjbB@PZ,Q0[E6i
X)$`bDh&dB@8NBfFe3'jPGh-ZC'9XF'KT,Q0[E6i08Q9`E(NY9'mJ1L"RBA*j3'Y
P0(Tf,Q&dE#jRB5jeFb!S4f&bH5"$EfCQE@&Z+3e6G@*UC@0d)$SJ8Q8k)%YPH@*
[BA*NFb"KG#"dCA0dD@jR)(0PFh0TEfjc$3e*EL"KFR4TBfaP)$`bDh&dB@8NBfF
e3'jPGh-ZC'9XF'KT,Q0[E6iJE@&SDQeKBd"ZCAGc,Q4PE("SD5jMEfdJ+%e"5%T
0380!4%9-8%K*,N0265NJGh*TG'9c1Jdq5A3JGfpeE'3JFf9PE5"dEb"YC5"dD'&
d)'*PD@jR)'&XEhGPC#"dEb"eFf8JB5"VCAPLEf&bC#"NEf9cELGd)'0[EQC[FQd
02R4[)(4SC5"hD'pXC5"bC@&cEfiJ3eFJDA-JFQ9aG@PbC@3Z)#"*G#"TFb"eFf9
N)'pZ)'&Z)'PZG'9bEQ&dD@pZB@`JFf0KE'8X)'&ZC!dqD@BJH@pe)'&bC5"PGQ9
b)'PZ)'&ZH5"dHA"P)'pQ)'9YCA*RC@jMH5"[FL"cF'pZG'&ZC@peFb"cDA4eBA4
TEfiJGfKPFQ8JH@pe$6jZC@9N)(4[)(*PBf9TGQ8JBfpNC5"hDA4S)'j[)'YPH@*
[BA*N,#"dD'9Z)(P[G5"hEh9XC#"LC5"hEh*dD'aPFh-Z$3eAC@aX)(4SC5"`GA*
`Eh0P)'pQ)(4SC5"0Eh*cC5"dCA0d)'Pc)(4[)'KKGQ8JB5"`EfpX)'pQ)(4bB@P
ZC@3JEh"PFQ&dEh*c$@PZ)'0KFf8JEfBJ6Q&dD@pZB@`J4@ePFQGPEQ0j)#K*45"
NFQ&QG'9P)(*KC'P[)'p`CA*KG'pbFb"TEL"MBA0P)'pQ)(GKFLNZ$90TEQ0P)(4
SC5""FQej)(4[C'&j)'pZE(NJG(*KD@jc)(4SEh0P)(*KC'P[)'p`CA*KG'pbFb"
TEL"0Eh*cC5"hD'mJGfPXE#"LC3eNEfPZCb"cD@GZB@ac)'PZG'9bBf9`G#"hEh*
V)#K*45"TER4PE'aTCf9ZBf8JCf&dD'9bD@jR+5`JB@jN)(0TEQ0P)(4SC5!03A*
YH5"dFQ&TER-JG'KPFf8JEh"PFQ&dEh*c)(4[)'0[F(NJBRNJDf9jBQpKFQ3X)'P

```
d)(0PC@ec)(4[)'eP)(4SBA3JDf9jBQpKFQ3J$@0[F(PTEQFJBA3JG'9cG#"cCA0
cD@pZFb"hEh9XC#"LC5"dD'8JF(*PCQ9bFQ9N)'e[C'8Z$3e(BA*j$5dY)!e(BA*
j)%0[CQCYB@iJ5d8d@PBJ)#!J)#!J)#!JI#!J)#"CEh8JE@&VC5"TG#`J)#!J)(`
JCf&dC@0S)AGK0'ePD5&VC64kGL&RBA*j$84PFh4bG@0dDACP)&4PFh4TEQFJ8hP
cG'9YFb"m)#!J)(GP)'*bC@&V)'Pd,L!J)#!JI#"eG@jPG#&bFfPKG'`KDf8dHRB
KCf&bH3de-c3J8fKKEQj[EL"ABANJ)#!J)#!J)#!J)#!JI#!J)#"(G@&bB@jdC@9
N)5!J)#!J)(`JC@e[FRNKDf3dEQ-KDf8dHRBKCf&bH5!06'&hFQ9ZBf9fD@aXC5`
J4d%J-c!b0$3J)#!J)(`J)#!J)#!J)#!J)#!J)#!J)#!J)#"m)!d0,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY$3e&EQ3JEfBJ5@jQEbe)B@ec)%4TCf9cG#"
@163J)c)c0JdU+LSU+LSU+LSU+LSU+LSU+LSU+LSU+LSU+LS0$AQ0!!!!:
```

```
(This file must be converted with BinHex 4.0)
:$NePFh0KCf8J5'9KC'9b!&4&@&4dG(Kd!!!!!!*h!!!!!%J38Q9MC@PfC@3k)'C
bEfdJE'pMB@aSEh0d)'*j)(9MFf3ZC@4e1b"TC#"*38%a16)h0`d*Ff9ZC'eKD@`
J1#if,M3[98064#db,M)YFh9Z$3P'FQNX)$3J6@&b)$%j163J-$Jk-6!k-M3J,6!
i-$!JCQpb)'PZCQmYD'&YFbeXDA0d$89bFQpbFbe8EcSJD@jQEbeSB@ec,A*PE'&
j3&9$8d3Z4849$90PEQ4PFMSJD@jQEbeSB@ec,A*PE'&j3&9$8d3Z4849$9"bC@0
PC'9ZBf8k)%aTFh308Q9MC@PfC@3k)'CbEfdJE'pMB@aSEh0d)'*j)(9MFf3ZC@4
e1b"TC#"*38%a16)c-3d*Ff9ZC'eKD@`J1#if,M3[98064#db,M)YFh9Z$3P'FQN
X)$3J6@&b)$%j163J-$Jk-6!k-6-J,6!i-$!JCQpb)'PZCQmYD'&YFbeNC'PcG!e
0CA0cB@GP,8PN1L!m-6Nj0$!c-$3a0M%`,NP"36%j-M-a3(9MFf3ZC@4e2Je%BA4
P1L"'FQNX)#!d)%eKFL!j0#!`1$Sa-$Sa-#"38e304R*[E6SJ5@jQEbe)B@ec)%e
KD@aTEQFJ6'PcG#"KEQ3J6Q9hFfGbEh9`)$aTEQC[,@KKEA0!98064#j&4&8q$89
bFQpbFbe8EcSJ5@jQEbe)B@ec,89bFQpbFd"93e0%,N9%93e5CA"XH5e8EcSJ5@j
QEbe)B@ec3&9$8d3Z4849$9"bC@0PC'9ZBf8k)%*eE'X08h9LDQ9MG$SJ5@jQEbe
)B@ec)%4TCf9cG#"@163J)c)c0Je8EcSJ5@jQEbe)B@ec3&9$8d3Z4849$B-r!!!
!:
```

2611. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 11:09:42 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.060942.125850186@mailstop.telesat.ca>
Source record: 270063

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
---------------------------------
```

2612. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 11:40:07 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.064007.719398742@mailstop.telesat.ca>
Source record: 270064

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
---------------------------------
```

2613. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 12:10:33 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.071033.151337509@mailstop.telesat.ca>
Source record: 270065

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
---------------------------------

(This file must be converted with BinHex 4.0)
:$80[EA"XCA4P)&4PH(3!9%9B9(4dH(3!!!!!FRX!!!!!qi805@jQEbe)B@ec)%4
TCf9cG#!J)#!J)#!J)#!J)%CbD5`J)$3J6@&b)$Nd)#!J)#!J)&C[E(9YC5!j0#!
k)%PcFh9P)#!b-cN0$94[C'&j*h-J9'p`D@0c1JdJ)#!J)#!J)#""E@&dCA9b)&*
KC'P[1L"$D'&ZCf9c)(4[)%9XE@9bFb"5CA0[GA*MC5"%DA*PBh4[FRN0)#!J)#!
J)#!J)%&YBA4PGA)J8Q&ND@mk)%9XE@9bFb"-DA0d)%PZCQmJB@jN)%&NE@PZDA0
dFQPfD@%0)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#"28N*6*$!f-bib6#j"690
"9!dJ)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J6e*#8b3`0M-Z68P$8NmZ38e6393
0)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)%p53P-N-$Bc,PG&394),N&08d&8$5!
J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#!J)#"cC@0[EQ3JE'9dG'9b)!d08f9ZC#"
5CA"XD@9c)'pb)'j[G'9c)'C[FL"`G@*XD@0KG'P[EL"dEcSJ2%PZCQmY5'&YFd"
93e0%,N9NG6i08f9ZC#"cG@*cBh*TF(4TEfiJFQ9aG@9cG(-JG'mk)$a*EQC[,8K
KEA-Y8N9498969%"93e0%,N9NG6i08(*[BQaPEA-JH@pe)'0KELGd)(0[E(CP)'p
dD'9bGfPcC5"dEb"LFQPKEN"eBh0N,Q9NG5i0$8&bBfKTGQ9c)'pQ)("KFh3JDA0
cG@9c)'pQ)(4SC5"*EQC[,8KKEA-J4'PRCA0d)'&bC5"KGQ&TE'&LE'8J$5KLH5"
'9&!JEfjXH5NJCR*[E5"93e0%,N9NG5"TEL"NDA*PBh4[FRNJ)QeKD@aKFQ0SDAC
PFbpTEQC[,@KKEA-L,Jd09f8JG(*eFh3JG'KKG#"bC@&NCA*c)'&bC5"TER4PE'a
TCf9ZG#"PEQpeCfJJG'mJFQ9KE'PkC5"dD'&d)'&XE#"dCAKd$@KPFQ9TEL"MEfj
cDA0dFb"[CL"`CA*cEfjKE#"MEfeYC@jdFb"KEQ3JC'pPFb"ZEh3JFQ9`FQ9cC@j
d)(4SC5"[CQCTBfPKE!e`EfaTBfPPFb"[FL"`Eh0TG'P[ER-JEfBJB@jj)("KFR4
j,L!J@@peFL"YD@aPB@GP)'eKH5"fBA*j,L!J8fmJG'KPFQ8Z$5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d
Y,5dY,5dY,5dY,5d0$84KG'8k)$%J6@&b)$Nd)$%b1M!j1M%h)%G09!e'FQpY1L"
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```
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XE'phD@jR)%G[F'KPFL"cDA4PFb`JB@aX)'&d)(0dB@jNBA*N)("[FR3J0c!k$3d
J)#!JBf-a,QYeE'9eGQ9Z,Q&M,Q*P$5!J)#"UGA"TG'9b,R0eELjMFf3ZG@jL,Q0
K$5!J)#"REh"SCA)ZG@jTGLeXH@pZ-5jQFJdJ)#!JCR4`,RGTELjdG@8ZEQ`0)#!
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ZGf&TF`d05'ph)'eKH5"*)'0[ER4bD@*eG'8JG'mJG'KP)%9XE@9bFb"-DA0d2`d
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XB@jKG'P[EL"dD'&d)%K"65"YGA0d)(0dB@jN)'C[FL!L5'&bC'aj)!e"ERNJ6@p
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P)%&YCA*TBf&Z)&*KC'P[)&*PE'&j)%aPB@GeC5!S39*56#NX)!eKEQ3JEh4SCA)
```

```
JFQ&ND@mJD'PcG'pbD@&ZFb`JFf9PE5"dEb"KCh*PC5"dD'&d)(4SC5"dCA*YFb!
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XC#`J6MCD68)X)(GbEh4P)(4[)("[D@jd)'peG#"KEQpdD'9b)("XBA9cD@*XC5"
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TGQ9N)'CbEfdJ)QKKE5eQDA0dC@3L)'pb)#*SB@dYD'&ZC'9N)L"dEb"NCA0MFQP
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[)!eVEQphFcmT$3dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5d0$84KG'8
k)$3J6@&b)$Nd)$%c1M3f1M!`)%G09!e'FQpY1L"ZCAGc,@eKD@`YCf&dCAGKH8"
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&6P46)%C28L""68&84995)&0"9%9-6%P849-J58iJ6N&635"'6e*039304P*265"
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c,Ni0$84&3dp%45!b,8a*6N8J48a64946)&G*9%JJ9%K&)%C26%a29dP14b",49N
k$6%J38&"38&9)$!`)#!`)#!`)%*#3N*#,N*#3N*#3N*#)#!Z3d0$3d0$3d-J)$!
`-$!`,6!J)$!`-$!`,6!J-#!J4%4%@Jdb)%&"38&")%9&45j&489&)%C'4Lj'4NC
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-)&*"4%P2)%&0394&99*6)%*8$3e"6bda-!da)$%d-6)j95!i-c!e1#!J3L!j0$!
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0-L!a0$%b15!`-MFZ-M!a1#!c-cNZ-cJ`0#!f-$)h-6!d)$%e1#ic1$!b)$)d05i
`1$Na)$!b,M!e1$Fe1$-e)$J`068f$992,6%a$6%J-63h1$&9)$Jd-$)a3L!J)$N
d-$3d,M8d1$Jj-c!`)#!Z-$!`-$!c0M-J)$!`-$!`,6!J)$Bj0M!h,63J-#!J0MB
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J)%%J163`0M%Z-$-i1$-b0$NJ,5i`-$!`-$!`0L!J-$!`-$!Y-#!J-$!`-$!J-#!
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a)$!J)$Ji1$)0-L!a16)a0L!`06FZ1$-`0#!b0M8Z0M8`0b!h-M%b168f)$-c05i
c-6Nf)$!`-Lii0M!b)$!b,M!j0c-`0$)b)$3c0c8h$8C2,6)`$6%J-M!d1$"9)$N
`-$%c3b!J)$Nd-$3f,M3b1$-b1$Nj)#dZ-$!`-$!`-63J)$!`-$!`,6!J)$3j-c3
f,63J-#!J0M8j0!db)$)`0$J`)#!j15i`-M%f)$)b-5ic-cBh)$!e-cNj-6FJ-M8
e,M3`-6!J)$Ni,MBf-c3J-6)Z1$-b-M-i0$8a1$Je-68038mY-M%0-5!b-6!i0e8
```

```
J16%`-$BJ)%%J163`0M!Z168e-MBa-c3J,5i`-$!`-$!b-L!J-$!`-$!Y-#!J-$!
`-$!J-#!`)#!d-cNa$6)J-M%`1$FJ-$Jb,MNd-6BJ-M)b,M!d16JJ-$!c06Nc15!
`-M-Z16%`0#!c-cBZ0$)c15!a-bih0$8c-cBj06%e0$Je0!e58bda-Lma-`da)$)
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`163f)#!j-5ii06%h)$)f1#if-M!c)$%c,MFd-$-d163f-68a0MJb$8&58d9143d
a)$)b0M8d95!j-c!c-8)J)#!j-c-c1#ii-$J`-cNa-#!Y,M!`-$!`-$Jh)#!`-$!
`-#d`)#!`-$!`-#!`)$!J)$)d-cF0-L!b-MBe0#!J)$%Z0$%`0#!a-6-Z06)h0#!
b16-f06Ff)$%f-5ij1$-i)$)a-#ii0M3b)#!a,M3b-M!b-$3d)#!b16N`$992,6%
d$6%J-M!d-cG9)$N`-$!e3L!J)$Nd-$3f,M%i-c3h0$8f)#!Z-$!`-$!`0M!J)$!
`-$!`,6!J)$3`0$Fa,63J-#!J16Bd13db)$)`0$-h)#!j1#ie168c)$%c-Lie163
b)$!`-6!e16NJ-6Jf,M)i-MFJ-6Fc,MJb-M8J-63Z-MNi-M-d-6-b-6)a06F038m
Y-6B0-5!b-$3c198J16!`-$9%)#!J163`0$8Z0c8c1$Ji0$JJ)#i`-$!`-$!h0L!
J-$!`-$!Y-#!J0$Be-c-Y0#!`)#!h0M3c$6)J-M!d-cNJ)$Ni,MB`-cJJ-6-c,M)
h0M8J-$!a-$Nc0#!a1$JZ-$)c1#!a0c)Z-$Ff05!a0#ib16Jh16!c0$)a-M%`13e
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`)#!`-$!`-#d`)#!d0$%c-Ldd)$!J)$Ff-cF0-L!b-$3d-#!J16JZ0M!e1#!a-c-
Z-$3d-b!`-$%`16Be)$%i15id-c8b)$%h-#if0M)c)$%d,M-`-$%h-6!h-M%b-$3
h$9G2,6%i$6%J-M!d0$&9)$N`-$!e4L!J)$Nd-$3e,MFf-c)i-M%d)#!Z-$!`-$!
`06NJ)$!`-$!`,6!J)$-j1$)f,63J-#!J0cBe0`db)$)`0$3a)#!j1#if-$8d)$%
c-bie0cNi)$!`-6%e-$8J-6Ji,M-f0M)J-6Fa,MFc-c!J-63Z-MNj16-a0c)b-6)
a-M306%mY-6N0-5!b-$3d-P8J16!`-$9()#!J163`0$8Z0c3j0M!b0cBJ)#i`-$!
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J-6-c,MFj-MFJ-$!a-6Nb-5!a1$FZ0MJf-L!a0c)Z0$%c0b!a0#ic-$!i0c-c0$)
a-M%c-!e96bdb-Jda)$)a06Fe95!j-6!e-%)J)#!j0$!d0Lia-cBj-$Nd15!J,M!
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f0L!a-M-Z-$3c-L!`-$!h-M%j)$-`-5ia16-h)#!e1#ii063b)$%d,M-f1$N`0M%
`-6-e068f$8Y2,6)c$6%J-M)`0cG9)$Nb-$8b3L!J)$Nd-$3f,M3`-cN`1$Be)#d
Z-$!`-$!`-cFJ)$!`-$!`,6!J)$%`-$!`,6-J-#!J-cB`-3db)$)b-$Fh)#!f0Li
`1$%`)$%h0#ij0M)i)$!`-$Ni0c3J-c%h,M8h-6-J)$3b,M3e-cNJ-6)Z1$Bb1$3
h0M3J0c%a-MN038mY-MF0-5!b-MJb098J16-`0M&$)#!J163`0$BZ-M%e0$8c-6%
J)#i`-$!`-$!e1#!J-$!`-$!Y-#!J0$%d0M!Y0#!`)#!b0M%h$6)J-M)i-M8J)$N
i,MBf-MBJ-6)c,M%j-cBJ-$!`1$!f-L!b-$)Z-M!e-L!a06FZ1$Fh05!a0#ib0cB
`0c%j-b!b-$)i0!e*6bdb0Jda)$)b1$)f95!j-c!f-83J)#!j0$!d-Lib-6!e1$J
j15!J,M!`-$!`-$8c)#!`-$!`-#d`)#!c16)f1#dd)$!J)$)f-6)0-L!b-MJb0L!
J16JZ0MBd15!a-6NZ-M3d-5!`-$!i06)j)$)a0Lia16Ji)$%d-bii0M%b)$%d,M)
h0c!i1$%d)$%j0c%`$8Y2,6)e$6%J-M)i-c"9)$Nc-$Ba5#!J)$Nd-$3e,MFe-MN
c06-h)#!Z-$!`-$!`06-J)$!`-$!`,6!J)$-i0M)d,63J-#!J-MBd0`db)$)b1$-
`)#!j1#ie0MFd)$%b-5ic-$Fa)$!`-6%d-$BJ-6Fb,M!c16!J-6Ji,M!j0c8J-63
Z-MJ`-c-c1$BJ-M!b-MF06Np"35dj$6%J-68d-MG9)$Jd-6)c)#"")$Nd-$Ba,M!
a-$-e-63f)#dZ-$!`-$!`-6!J)$!`-$!`,6!J)$!`-$!`)$!J-#!J0c-`-3db)$%
e0$)h)$!j15i`06Ne)$%a-#ia0c3`)$!`-68`-cBJ-6Ba,M8j0M%J-6Ni,MBb0M)
J-63Z-6-e16-b-$8d0c8b-$%06Np"35da-!da)$%f16Bj95!i0M!h-b!J35!j0$!
f-#ij16Nh-$!c-b!J,M!`-$!`-M!f)#!`-$!`-#d`)#!i1$)i-5dd)$!J)$Bb1$)
0-L!a0MNf15!`16JZ06!h05!`0c-Z-MBc15!`-$%c-$!b)$)i0#ia06-h)$!h05i
i0c)i)$%d,M)d1$Bj-c3d-cJh-c3`$8e&9#db,c%h$6%J-6Ji-M"9)$Ji-$!e35!
J)$Nd-$3f,M-c16Fj-c8i)#!Z-$!`-$!`-c!J)$!`-$!`,6!J)$%b16Nh,63J-#!
J-MBb1!db)$%i1$)`)#!i-Lie0$!a)#!J05ie-$F`)$!`-6Bf0$)J-68h,M8a0M!
J-M!b,MBh-c!J-6-Z1$3h-$Bf0M-c-$8d16F06898,6-[-Jda)$%j-c-f95!i1$!
f0%%J)#!j0$!c15ij16Fj-$Nc-5!J,M!`-$!`-$8a)#!`-$!`-#d`)#!a-$!`-#d
```

```
c)$!J)$)f-M-0-L!a16-c0L!J1$)Z06-i-#!J063Z-cNf15!`-$%e0c-`)$)b-Li
`0cFj)$%c0bij-6-i)$%c,M%f16Bd1$!h-MBf-cJc$8j238%Y-6%0-5!a168c-98
J1$J`1$NJ)%%J163`0M%Z-$!c1$Bi0$BJ)#i`-$!`-$-e0#!J-$!`-$!Y-#!J-6N
`-M)Y-b!`)#!e-c8b$6)J-6Ne-c%J-$Nj,M%f-MBJ-$3h,M-c-c)J-$!a-M%`0#!
`0c3Z0$8j1#!b1$8Z1$3i0#!a0#ia-MNf0$-j0$)i-$!i-3e0493Y-Lma1!da)$%
j1$8a95!i16!a1#!J35!j0$!e-bi`-63`068j0#!Y,M!`-$!`-$!i)#!`-$!`-#d
`)#!`-$!`-#!`)$!J)$)f-c%0-L!a16Je-5!`1$)Z06%h-5!b-c8Z0c-`0L!`-$%
d-$!b)$%i1#ic-$)j)$%h-5ii0$-d)$%c,MJd-c8f0c%e-M8a0c8e$8e&9#dc,c-
0-5!b-$-`098J1$N`1$BJ)%%J163`06)Z-$)f1$Nj0c3J)#i`-$!`-$!`-#!J-$!
`-$!Y-#!J16Nj16NY0#!`)#!j1$Nd$6)J-M!c-$8J-$Jb,M8e-6BJ-c8`,M)i1$F
J-$!`0MNi-#!b-6)Z-M3`-5!a0$FZ1$Jb0L!a-bi`0$3`-6Ja1$)`0cFe0!e0493
Y-Lma13da)$)`0MF`95!j-$!e0d%J)#!j0$!d-#ih16-`0M3j0L!J,M!`-$!`-$)
d)#!`-$!`-#d`)#!h16!c0Lde)$!J)$Ff-M%0-L!b-$Bh-#!J1$)Z068`0#!c-$N
Z0MBd15!`-$%f-6Ff)$%c15i`16Fi)$)b-5ia0$!c)$%c,MJd-6Ji0$8e-6Jb16N
e$8CC,6%[-Jda)$)`0cJi95!j-$!i-5!J35!j0$!f-5i`-68i0MJd0b!J,M!`-$!
`-cFh)#!`-$!`-#d`)#!b06!f05dc)$!J)$N`0cN0-L!b-$Fi1#!`16JZ1$-i-#!
`1$3Z06Bh-#!`-$%c16-e)$-`1#ii06Nd)$!e-5ia1$-i)$%d,M!a-c)b-c8`-6F
i0MNj$8e&9#db,c)`$6%J-M!i-MC9)$N`-$Jf)#"")$Nd-$B`,MNj-6!j-M3b)#d
Z-$!`-$!`-$BJ)$!`-$!`,6!J)$!`-$!`)$!J-#!J0cFh0Jdb)$)`1$)f)$!i-Li
e-M)b)$)c-5ib068d)$!`-6-f1$BJ-c8a,M-f0$3J-$!i,MFi-68J-6-Z1$-e0c-
b-$)a0c)j-cJ06898,6-[0!da)$)a-M-b95!j-6!c-%%J)#!j0$!d0#ie16)`-MN
c-5!J,M!`-$!`-$8a)#!`-$!`-#d`)#!a-$!`-#dc)$!J)$Bh-$%0-L!b-6)c-L!
J1$)Z06-j-5!b06BZ16Bh0#!`-$%c0MFc)$%c-#ij-M%i)$)b15ic-$8j)$%c,M%
f0$B`-$%e-6-e-$Ni$8j238%Y-6)0-5!b-6)f-e8J16%`-c)J)%%J163`0M%Z-$B
`06-h-$FJ)#i`-$!`-$)a0#!J-$!`-$!Y-#!J16Bd0$8Y0#!`)#!j0$!b$6)J-M%
b0M-J-$Ni,MBb0c)J-$Na,M%d06NJ-$!a-MNf1#!a1$BZ06)h-b!a0c-Z0M)h0#!
a0#ib-M-h0$)d0c%d06-`0Je0493Y-bme$6%J-M%f0699)$Na-$8f)#"")$Nd-$B
`,MNb06-e068d)#dZ-$!`-$!d0c%J)$!`-$!`,6!J)$Nj16Nj,63J-#!J0MJb1!d
b)$)a0M8e)$!i-Lie06Jf)$%j-Lid1$%i)$!`-6-j0cNJ-6!e,MBc1$%J-M8d,MB
i-6%J-6-Z-6Bi-MFb-$3a-M)c0$306898,6)[-M%0-5!b-MFi-P8J16-`068J)%%
J163`0M%Z-$Ff16Ni06BJ)#i`-$!`-$!h05!J-$!`-$!Y-#!J0MJi06BY0#!`)#!
b0cFa$6)J-M)h1$)J-$Jb,M8d-63J-MNa,M-b-cBJ-$!b-MFj-b!a0M-Z1$-h0b!
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h)$%f15i`1$Fb)$%d,M)i-$!c16J`)$)`-M)j$8e*8Jda)$%f0M!j95!i0M!a0b!
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Z-6%h-L!b0M!Z-$Je0b!a0#ij0M-h0c-b0M%c-c)e-`d[49J0$5dY,5dY,5dY,5d
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```

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J+$-a-#NJ-c)d,6B`1$!J)#!J)#!J)#!J)#!J)#"m)#!J)#!J)#!J)#!J8'9VD@j
R)%j[Ef4XC5"$Ebi0$5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,5dY,3d04@j
N)'pQ)%PZCQmY5'&YFb"%D@GPFh3J9MNd)#-b-cN0+LSU+LSU+LSU+LSU+LSU+LS
U+LSU+LSU+LSU+LSU$3hac!!!:
```

```
(This file must be converted with BinHex 4.0)
:$NePFh0KCf8J5'9KC'9b!&4&@&4dG(Kd!!!!!!*h!!!!!%J38Q9MC@PfC@3k)'C
bEfdJE'pMB@aSEh0d)'*j)(9MFf3ZC@4e1b"TC#"838%a-M3f-`d*Ff9ZC'eKD@`
J1#if,M3[98064#db,M)YFh9Z$3P'FQNX)$3J6@&b)$%j163J-6Nk-6)k-cBJ,6!
i-$!JCQpb)'PZCQmYD'&YFbeXDA0d$89bFQpbFbe8EcSJD@jQEbeSB@ec,A*PE'&
j3&9$8d3Z4849$90PEQ4PFMSJD@jQEbeSB@ec,A*PE'&j3&9$8d3Z4849$9"bC@0
PC'9ZBf8k)%aTFh308Q9MC@PfC@3k)'CbEfdJE'pMB@aSEh0d)'*j)(9MFf3ZC@4
e1b"TC#"838%a-M%c0!d*Ff9ZC'eKD@`J1#if,M3[98064#db,M)YFh9Z$3P'FQN
X)$3J6@&b)$%j163J-6Nk-6%k-6%J,6!i-$!JCQpb)'PZCQmYD'&YFbeNC'PcG!e
0CA0cB@GP,8PN1L!m-6Nj0$!c-$8`-c%a,P4"36%b-6-d3(9MFf3ZC@4e2Je%BA4
P1L"'FQNX)#!d)%eKFL!j0#!a16Sa-6S`15"38e304R*[E6SJ5@jQEbe)B@ec)%e
KD@aTEQFJ6'PcG#"KEQ3J6Q9hFfGbEh9`)$aTEQC[,@KKEA0!98064#j&4&8q$89
bFQpbFbe8EcSJ5@jQEbe)B@ec,89bFQpbFd"93e0%,N9%93e5CA"XH5e8EcSJ5@j
QEbe)B@ec3&9$8d3Z4849$9"bC@0PC'9ZBf8k)%*eE'X08h9LDQ9MG$SJ5@jQEbe
)B@ec)%4TCf9cG#"@163J)c)c13e8EcSJ5@jQEbe)B@ec3&9$8d3Z4849$6i"!!!
!:
```

2614. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 12:40:58 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.074058.141893799@mailstop.telesat.ca>
Source record: 270066

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
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```

2615. BAYCOM <-> KA9Q/NOS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 13:16:06 UTC
From: acornwal@fox.nstn.ns.CA
Message-ID: <33379.acornwal@fox.nstn.ns.ca>
Source record: 270067

Hello. If you have been able to use a Baycom (Baypac) type
modem with KA9Q/NOS (for example, JNOSX150) I would like to know
how it is done. Also, have you encountered any problems or
idiosyncrasies?
Thank you.

--- Andy / VE1COR
acornwal@fox.nstn.ns.ca
Andrew Cornwall
Nova Scotia Department of Education
Nova Scotia, Canada

2616. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 13:41:54 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.084154.237347648@mailstop.telesat.ca>
Source record: 270068

```
The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
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```

2617. Libelous Remarks re: Steve Woodard KD2KQ

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 15:38:30 UTC
From: <>
Message-ID: <jjc.762968310@wyvern.wyvern.com>
Source record: 270069

Note: This is a cross post from rec.radio.swap. I felt it deserved the
widest possible disemination due to the nature of the original post.

Jeffrey A. Kruth
4862 Montgomery Road
Ellicott City, MD 21043
(410) 750-7744

February 23, 1994

To Whom It May Concern;

If anyone actually cares about the libelous remarks put on INTERNET
by Steve Woodward, KD2KQ, I would like to set the record straight. Consider
the following:

1.) I dealt only with Dave Hallidy, KD5RO. All correspondence, money,
material, etc. was handled by and through him.

I HAVE ALL THE ORIGINAL LETTERS FROM HIM, WITH DATES, QUANTITIES AND SO ON.

2.) The first letter I received concerning this business was dated July 27,
1992 and the last letter received was dated November 19, 1992.

3.) Per the last letter received, out of a total of 15 TWTs and 15 TWT power
supplies, only one TWT was "damaged" (had a bent connector) and one power
supply had failed. All units were tested here at K-MEC prior to shipment
by myself and Don Davis, WB3AXQ. At that time I was trying to get another
power supply for Dave Hallidy to give out, but all the ones I had were dead.
I gave Dave several dead ones thinking that a "board swap" might fix one or
more of them.

4.) Further, due to the VERY LOW PRICE I was asking, (125.00 for tube
& supply, 25.00 more for X-band), I sold out before the end of summer. The
only complaint I received was from Rochester, out of the entire country,
Canada, England and Australia!
I did not have an infinite supply to keep sending replacements
FOR THOSE DAMGED BY THE END USER.

5.) Dave Hallidy was responsible for dispersement of the goods. He told
in a 'phone conversation that Steve, KD2KQ, had attempted to
"get more power" out of his TWTA and had "blown it up" while adjusting it.
DAVE HAD GIVEN STEVE A REPLACEMENT TUBE AND SUPPLY OUT OF THE YET
UN-DISTRIBUTED SUPPLY THAT I HAD SHIPPED TO DAVE, BECAUSE "STEVE SAYS HE HAD
JUST SLIGHTLY ADJUSTED THE POWER AND THE SUPPLY QUIT".

6.) No one offered to return any of the shipped material, at any time, for
credit against the time when I would get more tubes & supplies.

There are only two people who complained from Rochester. One is Steve, probably one of the most despicable, underhanded, lying cheats I have ever known, which considering some of the people you meet at Hamfests is quite a statement. Hey, Steve, remember how you guys cheated me on the waveguide deal, getting me to drive hundreds of pounds of X-band Waveguide from Baltimore to Rochester, then refusing to pay the AGREED upon price, telling me to "take it or leave it".

The second guy to complain is George Anderson, because Dave Hallidy admittied to me that he gave Georges's TWT supply to Steve. When I told George that he would have to see Dave to remedy the situation, George told me that Dave had "moved to another town, and I don't see him anymore", and "Dave and I aren't on great terms, anyway".

I did not ship any material that I knew to be bad and I believe that Steve blew his supply up and blames me. Only 1 power supply caused trouble out of 14 ordered, which is about 7% and that due to idiot operator mal-adjustment. Other than the described problem, Dave Hallidy wrote me that "All the other tubes and supplies work very well and the people who have gotten them are pleased".
Plus, I gave them more good tubes and dead supplies, free of charge.
Even if the one power supply had failed of old age, what the HELL do you expect from USED SURPLUS. These tubes & supplies are multi-kilobuck items. Therefore if you want an absolute guarantee, buy new ones!

Further, Steve lies when he says this took "well over a year" when it took only 4 months from start to finish.

His true nature as a despicable person is evident by the way he "wants to pay Jeff back" by lying on the INTERNET.

I was actively working with these clowns, trying to help them out and see that everything was made good on. After the waveguide deal, the LIES that followed the tube deal and the whole general atmosphere of the "Rochester Group", I had enough. Hey Steve, go ahead, go elsewhere, because I REFUSE TO DO BUSINESS WITH YOU.

The paltry sum that I get from selling to people like this is not, in anyway, compensation for the crap I have to take from lying bozos like this guy. (Bozo - yes, read his e-mail, he can't spell OR compose.)
One thing is certain, I will always find neat stuff for people who deal with me honestly and I won't miss the business of the jerks like this who don't. They will lose instead. I feel that Steve and his "friends" were trying to pull a fast one on me and get free stuff.
I am ready to support my side of the matter with the mail and the shipping records with anyone who really cares. I am considering legal action for libel in response to the untrue and unjust claims made by Steve Woodard.

Signed,
Jeff Kruth

Note: This message was posted by Jim Conrad as a favor for Jeff Kruth. He currently has no access to any of the e-mail services or to the internet directly. It does not reflect the opinion nor the views of Jim Conrad

in anyway. However I have done business with Jeff for many years and have
found him to be one of the most reputable people I have ever dealt with.
I have no doubt that he is the innocent party to this incident.

Text of original post(s) follow:

> Subject: Re: Any used TWT's to be had?
> Newsgroups: rec.radio.swap
> In-Reply-To: <CKGCMI.6st@newsserver.pixel.kodak.com>
> References: <Jan.26.16.05.06.1994.12882@romulus.rutgers.edu> <CKAMLo.8w6@ncifcrf.gov>
> Organization: Netcom Online Communications Services (408-241-9760 login: guest)
>
>
> seen on rec.radio.swap
>
>
> >In article <CKAMLo.8w6@ncifcrf.gov> mack@ncifcrf.gov (Joe Mack) writes:
> >>In article <Jan.26.16.05.06.1994.12882@romulus.rutgers.edu>
jcborkow@romulus.rutgers.edu (Jason Borkowsky) writes:
> >>>
> >>>
> >>> A group of students at the engineering college here are looking for
> >>>a used Travelling Wave Tube for a communications project. The operating
> >>>range of the tube should preferably be in the 7GHz to 12GHz range.
> >>
> >>Try Jeff Kruth. He runs a microwave business and trades in microwave stuff
> >>on the side. He is active in the ham community here trying to cultivate
> >>people's interest in microwave. (he's a ham).
> >> You can say I put you onto him if you like. I think he has 20W TWTs
> >>at 5Ghz for about (don't quote me on this) $200 with power supplies etc and
> >>he'll guarantee that they won't be DOA.
> >>
> >> Jeff Kruth
> >> K-MEC (Kruth Microwave and Electical something I think)
> >> Ellicot City, MD,
> >> (410)-768-6666
****
> >A word to the wise. . . Members of our club (The Rochester VHF Group) have
> >bought a lot of TWT's from Jeff in the past. But we place a large order
> >(something over a grand) and took well over a year to get our parts from him
> >after he got our money. He finally sent us broke units (plus a couple extra
> >broke power supplies to make up for sending broken ones in the first place)
> >a deal we didn't agree to, but had no choice in. We wanted our money back,
> >but figured broke supplies are better than nothing which was what we had for
> >our money up to that point! The broken supplies by the way cost on average
> >$150 to get repaired and we (RVHFG) can't get Seimens to give up schematics
> >so we can fix them ourselves.
> >
> >I've been waiting a long time to pay Jeff back for the dirty deal he gave us,
> >and I guess you will have to decide for yourselves who's telling the straight
> >story, but I feel better now that I've repaid the good dead he did us!

> >
> >Steve Woodard KD2KQ
> >Not an official statement by the RVHFG, but a view shared by many stung
> >members
> >
> >
> >--
> >_____________________________
> >Steve Woodard KD2KQ
> >kd2kq@ektools.kodak.com
> >_____________________________
****

--
<><><>

2618. Libelous Remarks re: Steve Woodard KD2KQ (previous Post)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 15:58:41 UTC
From: jjc@infi.NET
Message-ID: <Pine.3.89.9403061034.A20282-0100000@larry>
Source record: 270070

Note: This is being cross posted for the widest possible disemination due to the nature of the original post from KD2KQ.

Jeffrey A. Kruth
4862 Montgomery Road
Ellicott City, MD 21043
(410) 750-7744

February 23, 1994

To Whom It May Concern;

If anyone actually cares about the libelous remarks put on INTERNET by Steve Woodward, KD2KQ, I would like to set the record straight. Consider the following:

1.) I dealt only with Dave Hallidy, KD5RO. All correspondence, money, material, etc. was handled by and through him.

I HAVE ALL THE ORIGINAL LETTERS FROM HIM, WITH DATES, QUANTITIES AND SO ON.

2.) The first letter I received concerning this business was dated July 27, 1992 and the last letter received was dated November 19, 1992.

3.) Per the last letter received, out of a total of 15 TWTs and 15 TWT power supplies, only one TWT was "damaged" (had a bent connector) and one power supply had failed. All units were tested here at K-MEC prior to shipment by myself and Don Davis, WB3AXQ. At that time I was trying to get another power supply for Dave Hallidy to give out, but all the ones I had were dead. I gave Dave several dead ones thinking that a "board swap" might fix one or more of them.

4.) Further, due to the VERY LOW PRICE I was asking, (125.00 for tube & supply, 25.00 more for X-band), I sold out before the end of summer. The only complaint I received was from Rochester, out of the entire country, Canada, England and Australia!
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5.) Dave Hallidy was responsible for dispersement of the goods. He told in a 'phone conversation that Steve, KD2KQ, had attempted to "get more power" out of his TWTA and had "blown it up" while adjusting it. DAVE HAD GIVEN STEVE A REPLACEMENT TUBE AND SUPPLY OUT OF THE YET UN-DISTRIBUTED SUPPLY THAT I HAD SHIPPED TO DAVE, BECAUSE "STEVE SAYS HE HAD JUST SLIGHTLY ADJUSTED THE POWER AND THE SUPPLY QUIT".

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Plus, I gave them more good tubes and dead supplies, free of charge.
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Further, Steve lies when he says this took "well over a year" when it took only 4 months from start to finish.

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One thing is certain, I will always find neat stuff for people who deal with me honestly and I won't miss the business of the jerks like this who don't. They will lose instead. I feel that Steve and his "friends" were trying to pull a fast one on me and get free stuff.
I am ready to support my side of the matter with the mail and the shipping records with anyone who really cares. I am considering legal action for libel in response to the untrue and unjust claims made by Steve Woodard.

Signed,
Jeff Kruth

Note: This message was posted by Jim Conrad as a favor for Jeff Kruth. He currently has no access to any of the e-mail services or to the internet directly. It does not reflect the opinion nor the views of Jim Conrad

in anyway. However I have done business with Jeff for many years and have
found him to be one of the most reputable people I have ever dealt with. I have
no doubt that he is the innocent party to this incident.

Text of original post(s) follow:

> Subject: Re: Any used TWT's to be had?
> Newsgroups: rec.radio.swap
> In-Reply-To: <CKGCMI.6st@newsserver.pixel.kodak.com>
> References: <Jan.26.16.05.06.1994.12882@romulus.rutgers.edu> <CKAMLo.8w6@ncifcrf.gov>
> Organization: Netcom Online Communications Services (408-241-9760 login: guest)
>
>
> seen on rec.radio.swap
>
>
> >In article <CKAMLo.8w6@ncifcrf.gov> mack@ncifcrf.gov (Joe Mack) writes:
> >>In article <Jan.26.16.05.06.1994.12882@romulus.rutgers.edu>
jcborkow@romulus.rutgers.edu (Jason Borkowsky) writes:
> >>>
> >>>
> >>> A group of students at the engineering college here are looking for
> >>>a used Travelling Wave Tube for a communications project. The operating
> >>>range of the tube should preferably be in the 7GHz to 12GHz range.
> >>
> >>Try Jeff Kruth. He runs a microwave business and trades in microwave stuff
> >>on the side. He is active in the ham community here trying to cultivate
> >>people's interest in microwave. (he's a ham).
> >> You can say I put you onto him if you like. I think he has 20W TWTs
> >>at 5Ghz for about (don't quote me on this) $200 with power supplies etc and
> >>he'll guarantee that they won't be DOA.
> >>
> >> Jeff Kruth
> >> K-MEC (Kruth Microwave and Electical something I think)
> >> Ellicot City, MD,
> >> (410)-768-6666
****
> >A word to the wise. . . Members of our club (The Rochester VHF Group) have
> >bought a lot of TWT's from Jeff in the past. But we place a large order
> >(something over a grand) and took well over a year to get our parts from him
> >after he got our money. He finally sent us broke units (plus a couple extra
> >broke power supplies to make up for sending broken ones in the first place)
> >a deal we didn't agree to, but had no choice in. We wanted our money back,
> >but figured broke supplies are better than nothing which was what we had for
> >our money up to that point! The broken supplies by the way cost on average
> >$150 to get repaired and we (RVHFG) can't get Seimens to give up schematics
> >so we can fix them ourselves.
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> >I've been waiting a long time to pay Jeff back for the dirty deal he gave us,
> >and I guess you will have to decide for yourselves who's telling the straight
> >story, but I feel better now that I've repaid the good dead he did us!

> >
> >Steve Woodard KD2KQ
> >Not an official statement by the RVHFG, but a view shared by many stung
> >members
> >
> >
> >--
> >_____________________________
> >Steve Woodard KD2KQ
> >kd2kq@ektools.kodak.com
> >_____________________________
****

<><><>

2619. Undeliverable Mail

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 17:10:19 UTC
From: Internet_Gateway@mailstop.telesat.CA
Message-ID: <1994Mar06.121019.213839022@mailstop.telesat.ca>
Source record: 270071

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The Microsoft Mail Form used contained fields that are unknown to
PostalUnion. This mail contains the content of the mail body ONLY.
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2620. NEC 3D MultiSync

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 17:30:29 UTC
From: destree@equinox.unr.edu
Message-ID: <1994Mar6.173029.4718@news.unr.edu>
Source record: 270072

I have a NEC MultiSync 3D monitor from a few years back. Several months ago it lost video. I took it to a local tech who "played" with it, and was able to get video back part way. It is extremely distorted in the horizontal direction, and the front panel controls don't work now. I sent the monitor to NEC. They could fix it, but I feel their $270 flat rate is unfair, and not viable for a several year old monitor. After all, new ones are available for near that price.

So, I had a few ideas I thought I'd try. If there is a tech who is familiar with the NEC 3D or has encountered and sucessfully repaired this problem before, I would be intrested in having it fixed. I would be willing to pay a fair price, but not the outrageous $270 NEC wants. Or if someone has a 3D that is dead for reasons other than what I have described, I would consider buying it to scavenge. Lastly, if someone would be interested in buying my monitor for parts or a project, I am open to offers.

This monitor was (and really still is) a very good unit. I hate to throw it away, but in these disposable times we live in I may have no other cost effective choice.

Thanks!
Louis
--
Louis A. Destree University of Nevada, Reno
destree@unr.edu <> destree@equinox.bitnet Electrical Engineering
Amateur Radio: N7XNX (General Class) Bike: 1980 Honda CB750C
"Of all the things I've lost in life, I miss my mind the most!"

2621. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 17:34:14 UTC
From: zlau@arrl.org
Message-ID: <1994Mar6.173414.5886@arrl.org>
Source record: 270073

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <1994Mar3.153014.6322@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
: >BTW--how else does one improve a point to point link,
: >besides using bigger antennas and more power?

: Ah, the DXer mentality at work. That's what those guys
: thought too. The only problem was, that wasn't why the
: link was flakey. The real problem was that they had
: established the world's worst exposed terminal in their
: single frequency network, and the link was being killed
: by all the DXer's with 160 watt amps and beams trying to
: make it to their hubs and capturing the link node's receiver.
: It would be held off for minutes at a time by the continous
: collisions.

Actually, if you are forced to do it all on a single
frequency, bigger antennas and more power *is*
just about the only solution (to improve the link).
The more directive antennas would reduce chance of
collisions, while more power would reduce the effect
of a collision. Admittedly, an *ugly* situation. But,
politics makes it difficult to find other frequencies
that are those compatible with radios already in use.

Yes, I know you could modify all the TNCs for some sort
of optimized slotted Aloha protocol, but I doubt this
is really practical.

Getting links on clear frequencies is where microwaves
show their superiority. Not only is it more difficult
to fill the wider bands with wall to wall signals, but
highly directive antennas make frequency reuse more of a
possibility. All that money spent on VHF bricks
might be put to better use on microwave transverters.

I'm pretty sure an analysis of the phone calls I've
recorded would show that its not just DXers who run
beams and amplifiers into their local BBS. I usually
end up spending an extra few minutes explaining that
while a beam results in stronger signals, this advantage
is often eliminated by the extra collisions that result.

I've found that an open wire fed *HF* dipole, even
though it is cross polarized, works a lot better than
an indoor yagi for packet work, because it hears more
stations than the yagi.

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

2622. Re: IRS 501(c) tax-exempt status for our club - How?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 19:17:03 UTC
From: jgd@dixie.com
Message-ID: <lb44_yl@dixie.com>
Source record: 270074

Scott W. Binder <swbinder@delphi.com> writes:

>Hello - I was wondering if anyone was a member of a club that has Federal
>501(c) tax-exempt status? We would like to know how to do so ourselves.
>
>We are Humboldt Amateur Radio Club, Inc., and are a state non-profit
>organization. We have three chapters, each independantly governed
>and maintaining their own identity. We have been working with a local
>attorney who took our three page Constitution and By-Laws and turned it
>into twelve pages of legalese and left out many important parts, such as
>the identification of our chapters.
>
>There has to be a relatively pain-free way to do this. Does anyone
>have any advice on how to proceed from here?

No, there is no easy way. My father is a CPA. I've had him set up
3 tax exempt club charters now, one a ham club. The filings to do it
properly are volumnous and the penalties of doing it wrong are severe,
assuming you actually use your tax exempt status to raise money. What
you need to do is to find someone in your club who is a CPA or a
tax attorney and get him to do it. Maybe even pay him something.

If you do this, your club should also incorporate. That is, unless each
member wants to be exposed individually to delinquent tax liability
in the event the club missteps.

John

--
John De Armond, WD4OQC, Marietta, GA jgd@dixie.com
Performance Engineering Magazine. Email to me published at my sole discretion

Tonight, suppose Washington were nuked to atoms. Ask yourself, would you
be better or worse off. This graphically frames the role of the federal
government in destroying the American way of life.

2623. RST reports

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 19:28:16 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2ldasg$9ip@geraldo.cc.utexas.edu>
Source record: 270005

tcj@netcom.com (Todd Jonz) says:

>>It seems to me that the five point rating scale used in a SINPO
>>report (signal, interference, noise, propagation, and overall
>>rating) would actually be more valuable on phone than an RS(T)
>>report, especially in these times of modern technology, when the "S"
>>rating is all too often the essentially meaningless reading from
>>the respondent's S-meter.

I can't see this catching on - giving 5 numbers for a signal report,
ack! And you mean people actually look at their S-meters to give
a signal report? Weird! I don't think I have once done this.

599 means "you're loud", "this is a contest", or "I need your QSL card",
579 means "you're pretty strong but I'm not giving you a routine 599",
and 559 means "you're weak". Anything else is just pretentious.

Derek "ur 599, pse call/name/qth agn?" Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

2624. Re: INTERNET -- PACKET gateway!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 20:16:08 UTC
From: dsring@equinox.unr.edu
Message-ID: <1994Mar6.201608.8023@news.unr.edu>
Source record: 270075

Yvan Dupont (ydupont@Qc.Bell.CA) wrote:

: I'm new to PACKET and I would like to know if it's possible to exchange
: mail between INTERNET and PACKET. Is there a gateway doing that? What's
: the procedure?

: Please forgive me, if my question is stupid but I wanted to know!

: Thanks.

: Yvan Dupont, (VE2YDU)

: Bell SYGMA, Telecom Solutions
: 30 Renaud, Loretteville (Qc) CANADA G2A 2K7
: TEL: 418-843-7564 FAX: 418-842-9559
: Internet: ydupont@Qc.bell.CA HAM: VE2YDU
: --
: Disclaimer: The opinions expressed here are mine and not my employer's.

--
Yvan,
I know that we have a gateway on our system. You might refer your
questions to healy@moriah.ee.unr.edu (Bill).

Later and Good Luck

Douglas S. Ring Amateur Radio Operator
University Of Nevada, Reno KB7QMD-Advanced Class
Electrical Engineering Major HZ1AB-Operating Member
dsring@equinox.unr.edu V.Chair-UNR Radio Club
dsring@moriah.ee.unr.edu
Telephone: (702) 626-5516
Fax: (702) 626-3840
Assalamu Aleikum
(May peace be upon you)

2625. ANS-064 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 20:22:35 UTC
From: cowdin@pogo.DEn.mmc.COM
Message-ID: <199403062025.MAA03607@AMSAT.Org>
Source record: 270076

SB SAT @ AMSAT $ANS-064.01
UOSAT-2 TURNS 10 YEARS OLD

HR AMSAT NEWS SERVICE BULLETIN 064.01 FROM AMSAT HQ
SILVER SPRING, MD MARCH 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-064.01

UOSAT-2 (UO-11) Celebrates 10 Years Of On-Orbit Service

At 17:59 UTC on March 1st, 1984, the second satellite designed and built by the University of Surrey, UoSAT-2 (UO-11) was launched on a Delta rocket from the Western Test Range at Vandenberg Air Force Base, California.

Among its many experiments, UoSAT-2 carried the Digital Communications Experiment, which was one of the first (if not THE first!) non-military use of store-and-forward techniques with Low Earth Orbiting satellites. UoSAT-2 was an early test-bed for many of the technologies that have since been incorporated into a number of other packet radio satellites.

For all those who wonder how long these satellites last, it should be noted that UoSAT-2 is still operational, ten years after launch!

Happy Birthday UoSAT-2 !!!

[The AMSAT News Service (ANS) would like to thank Eric Rosenberg (WD3Q) for the information contained in this bulletin item. Eric can be contacted at his INTERNET address of ericr@vita.org]

/EX
SB SAT @ AMSAT $ANS-064.02
SAMPLE RS-15 KEPS

HR AMSAT NEWS SERVICE BULLETIN 064.02 FROM AMSAT HQ
SILVER SPRING, MD MARCH 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-064.02

KE3HP Presents A "Sample" Keplerian Element Set For RS-15

Based on information about RS-15's orbital paramaeters in last week's ANS bulletins, KE3HP has generated a set of predicted elements for this satellite. KE3HP assumed that the launch would be from Plesetsk at 12:00 UTC on 01-MAY-94. He generated these elements using OrbiTrack, an excellent MacIntosh shareware program by Bill Bard.

Satellite RS-15 predicted
Catalog Number 99999
Epoch 94 121.57362967 05/01/94 13:46:02 UTC
Drag2 0.00000000 Rev/Day^2
Inclination 67.0000 Deg
RAAN 22.8163 Deg
Eccentricity 0.0001152
Argument of Perigee 360.0000 Deg
Mean Anomaly 0.0000 Deg
Mean Motion 10.73887722 Rev/Day
Epoch Revolution 0

Semimajor Axis 8678.14 km
Precession 1.3232 Deg West/Day
Period 134.09 Min
Apogee 2301.00 KM 1429.77 SM 1242.44 NM
Perigee 2299.00 KM 1428.53 SM 1241.36 NM

The only element strongly influenced by the launch date and time will be RAAN. The primary difference is that these predicted elements will show the satellite passing over your QTH at a different time than when the real bird will. If you take these elements and "plug" them into your satellite tracking programs, one of the facinating features that you will discover about this orbit is that even on a low elevation pass (10 degs or less) RS-15 is visable for up to 20 minutes! This will make RS-15 an excellent satellite for Mode A operations. Please stay tuned to the AMSAT News Service (ANS) bulletins for further information about the launch of RS-15.

[The AMSAT News Service (ANS) would like to thank KE3HP for the information contained in this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-064.03
AO-13 OPERATIONS NET SCHEDS

HR AMSAT NEWS SERVICE BULLETIN 064.03 FROM AMSAT HQ
SILVER SPRING, MD MARCH 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-064.03

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date UTC Mode Phs NCS Alt NCS

13-Mar-94 0130 B 075 VE2LVC W9ODI
19-Mar-94 1730 B 073 W5IU WA5ZIB
26-Mar-94 2130 B 084 WA5ZIB W5IU

Any stations with information on current events would be most welcome. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. If neither of the Net Control Stations show up, any participant is invited to act as the NCS.

AO-13 ZRO Tests For March 1994

The following schedule of Mode "B" tests were chosen for convenient operating times and favorable squint angles. The tests can be heard on 145.840 MHz. Andy McAlister (WA5ZIB) will conduct all the tests. Mode "JL" tests will no longer occur due to the failure of AO-13's 70CM transmitter.

Day Date (UTC) Time Areas covered

Saturday Mar. 19, 1994 1930 UTC NA, SA, Europe, Africa
Saturday Mar. 26, 1994 2315 UTC NA, SA

Note that the dates and days are shown in "UTC". Any changes will be announced as soon as possible via the AMSAT HF and AO-13 Operations Nets.

All listener reports with date of test and numbers copied should be sent to Andy MacAllister (WA5ZIB), AMSAT V.P. User Operations, 14714 Knights Way Drive, Houston, TX 77083-5640. A report will be returned verifying the level of accurate reception. An S.A.S.E. is appreciated but not required.

/EX
SB SAT @ AMSAT $ANS-064.04
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 064.04 FROM AMSAT HQ
SILVER SPRING, MD MARCH 6, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-064.04

Weekly OSCAR Status Reports: 06-MAR-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Jan 31-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 145 |<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 240/0, Apr 04
[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current schedule for transponder operations:
ANALOG MODE:
09-MAR-94 7:05 -TO- 16-MAR-94 7:30 UTC
23-MAR-94 7:52 -TO- 30-MAR-94 8:15 UTC
DIGITAL MODE: Unless otherwise noted above.

[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

2626. Keyboards at testing

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 21:02:58 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199403062111.NAA27221@ucsd.edu>
Source record: 270077

>The entire morse test is multiple-guess! There is *no* relation
>to anything real in the morse test. No smoke, no fire, no screaming
>sailors, nothing.

Ok, so if he just guesses, the odds of coming up with the right answer on 7 of 10 is the odds of picking the right answer at random (1/4) 7 times (1/4 ** 7). or about 1 in 16384.

>Seriously, I was astounded at the low level of comprehension
>required in the 13-wpm test I took. I had slaved for a month to be
>sure I could tell "FT-100" from "FT-101" in the middle of a qso.
>Then I take the test and the questions are "Rig is: A: Yaesu B:
>Icom C: Kenwood D: Heathkit."

if you really copied the text, you breezed through it and were out of there. the folks that didn't copy so well are spending minutes trying to decide if they copied Kenwood or Collins or was that Heathkit or Hallicrafters?

>Of course you should be allowed to use your keyboard. Sheesh.
>-Steve N2WSA

and you certainly can. but best to contact the VE group in advance to let them know you are coming. in our case here, the rooms we usually have to use have desk chairs, not separate tables and chairs or other furniture that keyboarding would be a comfort on.

73, bill wb9ivr

2627. Dayton Hamfest Acomodations

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 21:11:58 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199403062116.NAA27659@ucsd.edu>
Source record: 269978

>Or if anyone has knowledge of any lesser-known hotels...
>Thanks much,
>Scott NF3I

if push comes to shove, i'd suggest Indianapolis for a "sure thing", try also Richmond, Indiana (just across the boarder to the west)...and some other towns along I-70/US-40 as well.

might even get a better deal flying into IND too.

bill wb9ivr

2628. Information needed on Tandy 4000 computer

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 22:03:31 UTC
From: twright@freenet2.scri.fsu.edu
Message-ID: <2ldjvj$7f9@freenet3.scri.fsu.edu>
Source record: 269979

Well first off it has a 3 1/2 and a 5 1/4 floppies and the min of
a 40 meg HD with a EGA monitor. I paid $25.00 for it. Heck the case
is worth $50.00 just to build one.

I powered it up and it booted perfectly. The monitor has full rapture
on it before the CPU was powered. After the CPU booted using DOS 5.0
the monitor was showing three boot up listings along with 3 C> promts.
These 3 columns (sp) are over lapping and 2 of the 3 promts were fuzzy
and only one was clear but it all still over lapped.

I installed Super Morse off of a 3 1/2 and then again off of a 5 1/4.
both floppies work perfectly as well as the Hard Drive. The SM program
did like the boot up all overlapping. I then installed a game called
Space Quest II and the monitor cleared right up and the system ran
perfectly. I reinstalled SM and the Monitor went back into the over
lapping letters. I connected the monitor to another CPU and it worked
perfectly again. So this rules out the monitor.
I am suspecting that the problem lies in the video driver cmds in the
DOS 5.0 system program. What brings me to think this is that a game
has its own program to run the game which carries its own video driver
commands.

If some of you computer experts out there either agree or disagree
PLEASE let me know. I want to get this machine up and running on
Packet A.S.A.P.

Thanks a bunch

Tim Wright KD4OVM
.
--
Tim Wright KD4OVM | T.Wright@msuacad.morehead.edu | Morehead State University
| TWright@freenet.fsu.edu | Tallahassie Freenet Service
| AR098@yfn.ysu.edu | Youngstown Ohio Freenet Service
| KD4OVM@WSU.N8FOW.AMPR.ORG | Try one, I'll get it.

2629. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 22:19:23 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403061710593.gilbaronw0mn.DLITE@delphi.com>
Source record: 269980
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

>
>In article <1994Mar2.175938.12119@alw.nih.gov>, weisen@alw.nih.gov (Neil
Weisenfeld) writes...
>>What I think we should do is write to our congresspeople and tell them why
>>we feel the cellular and cordless privacy laws are so misguided. Even if
>>they outlaw the manufacture of scanners that can receive cordless
>>(and I haven't heard anyone say that that is what is up for debate --
>>only outlawing *listening*, not manufacture), those radios are going to be

>>around for a long, long time as used equipment.
>
>Been there, done that. My Congressman ignored my letter. The law didn't
pass on
>his watch, so, in the finest tradition of politicians, I guess he feels no
>obligation to deal with it.
>
>Amen to the long, long time. I just tuned up my old BC220 table-top
scanner.
>15 years old, 20 channels, and no 800MHz, but still not a bad radio if your
>city hasn't gone to trunked public service.
>
>>I'd be interested if other people agree.
>
>Yup. These laws, if I'm not misinformed, are unique in recent history in
that
>up until their enactment, it was legal to listen to any waves passing
through
>your home, as long as you didn't act on or disclose what you heard. You are
>now a criminal if you choose to *tune in* to these particular band
segments,
>regardless of what you do with what you hear. More such laws will follow,
>since government and regulations never shrink in size.
>-Tom R. N1OOQ randolph@est.enet.dec.com
>
Sad, very sad. And it does not really protect anyone. In fact it gives too
many people a false sense of security. Digital technology with encryption
will protect people and that is what we should have. Of course the
government is trying to get its dirty summy rotten hands intot hat too. Can
you say Clipper. They will pry my key out of my cokld dead hands and no
other way.
Get PGP and be safe.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"

PGP2.3 key at key servers or upon request

2630. FCC Exec fired for incompetance?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-06 23:27:25 UTC
From: keating@nosc.mil
Message-ID: <1994Mar6.232725.14061@nosc.mil>
Source record: 269981

Hello.

My original source read this posting and contacted me; one of us misunderstood. The agency involved was not the FCC, but the FAA.

Read the actual story about the FAA in: clari.news.aviation or your newspaper.

PS, some folks responded by email indicating that they had not heard it but didn't find it surprising given the degree to which the FCC is out of date with its computers. :)

Roger Keating
keating@nosc.mil

2631. SB316 Semantics 6/7 The ACS.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 00:18:04 UTC
From: Roy Engehausen <enge@almaden.ibm.com>
Message-ID: <$racesbul.316.1994@ampr.org>
Source record: 269982
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Bid: $RACESBUL.316

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.316 RELEASE DATE: March 7, 1994

Subject: MGT - Semantics, 6 of 7. The ACS.

AUXILIARY COMMUNICATIONS SERVICE: The name adopted by those jurisdictions who have chosen to use a wide spectrum of volunteer telecommunication experts and other workers in government service. This might include commercial radio technicians and engineers, the RACES, Civil Air Patrol communicators and other unpaid professionals. In some jurisdictions it includes public safety and government communications as well as liaison with any agency that has a bearing on emergency response.

An ACS has four elements in which interested volunteers serve according to their skills and interests: administrative, clerical, operations, and technical. In our State ACS we have radio operators, heavy equipment operators, tower climbers, computer disk message writers, messengers, photographers, pilots, electricians, generator mechanics, computer programmers, plan writers, instructors, EBS specialists and radio announcers, personnel records management, clerical help, managers, shift supervisors, installers as well as communications and electronics technicians. Again, the RACES is but one part of the Auxiliary Communications Service. The ACS is a broad spectrum service to government supplementing all aspects of emergency response communications, not just operating radios in the field or at an EOC which has been considered by some to be the only role of the RACES.

(This is part of a series originally titled "From My Lookout" in seven parts, by Stanly E. Harter. It was renamed Semantics for these bulletins. Continued)

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

2632. SB316 Semantics 6/7 The ACS.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 00:18:04 UTC
From: enge@almaden.ibm.COM
Message-ID: <199403070019.QAA10239@ucsd.edu>
Source record: 269983

Bid: $RACESBUL.316

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.316 RELEASE DATE: March 7, 1994

Subject: MGT - Semantics, 6 of 7. The ACS.

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An ACS has four elements in which interested volunteers serve according to their skills and interests: administrative, clerical, operations, and technical. In our State ACS we have radio operators, heavy equipment operators, tower climbers, computer disk message writers, messengers, photographers, pilots, electricians, generator mechanics, computer programmers, plan writers, instructors, EBS specialists and radio announcers, personnel records management, clerical help, managers, shift supervisors, installers as well as communications and electronics technicians. Again, the RACES is but one part of the Auxiliary Communications Service. The ACS is a broad spectrum service to government supplementing all aspects of emergency response communications, not just operating radios in the field or at an EOC which has been considered by some to be the only role of the RACES.

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RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

2633. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 00:32:07 UTC
From: tcj@netcom.com
Message-ID: <tcjCM9qtJ.6Bq@netcom.com>
Source record: 269984
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

Neil Weisenfeld (weisen@alw.nih.gov) writes:

> What I think we should do is write to our congresspeople and tell
> them why we feel the cellular and cordless privacy laws are so
> misguided.

Gilbert Baron (gilbaronw0mn@delphi.com) replies:

> And it does not really protect anyone. In fact it gives too many
> people a false sense of security.

In light of the current Clipper initiative, it occurs to me that this may, in fact, be their very intention....

Todd, KB6JXT

2634. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 00:41:09 UTC
From: slay@netcom.com
Message-ID: <slayCM9r8M.G0o@netcom.com>
Source record: 269985

Sue Gundersen (ez014553@othello.ucdavis.edu) wrote:
: I need a little help with an English paper I am writing. The topic I am
: writing about is jargon used by amateur radio operators. I am already
: using ham, lids and an abbreviation. What I need is one more word that
: has an interesting etymology.

: Does any have any good suggestions? I am stuck and would like another term.
: Please send me Email

A Japanese friend and fellow DXer recently wrote the following to me:

> 1. What does "SASE" stand for? Is that "Self Addressed & Stamped Envelop"?
> I sometimes see "SAE" as well, but I'm not sure the difference. And how
> do you pronounce "SASE"? Is that "eS-eI-eS-eE" or "Sa-Se" (like
> Roma-JI)?
> 2. Why do they call $1 note "green stamp"? I think it's because of its
> color. But I find one side of the $1 not is not really green,
> though the other side is. {Try it - one side black, the other green}
> 3. Are "SASE" and "Green Stamp" words only for ham world?
> 73 de TOMO - JH2PDS/1 jh2pds@media.cst.nihon-u.ad.jp

Well - I am not sure if others do use SASE although I often here the
expression self-addressed stamped envelope - primarily on TV or something.
Green Stamps of course go back to the old Blue Chip and S&H Green Stamps
given out at grocery stores and other markets which could later be traded
in for various items in an S&H Green Stamp *department store* or whatever
they were. I presume those outfits are all out of business by now.
Hmmmm - maybe Hams are the only ones using these espressions.

73 de Sandy WA6BXH/7J1ABV slay@netcom.com

2635. Reply to: Info-Hams Digest V94 #235

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 00:59:26 UTC
From: Steve_Egert@FDC300.CEO.DG.COM
Message-ID: <79.004918@adam.DG.COM>
Source record: 269986

From: Steve Egert:FDC300
Date: ## 03/06/94 20:59 ##

2636. Re: RST reports

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 01:05:36 UTC
From: tcj@netcom.com
Message-ID: <tcjCM9sDD.9EA@netcom.com>
Source record: 269987

I wrote:

> It seems to me that the five point rating scale used in a SINPO
> report (signal, interference, noise, propagation, and overall
> rating) would actually be more valuable on phone than an RS(T)
> report

Derek Wills (oo7@astro.as.utexas.edu) replies:

> I can't see this catching on - giving 5 numbers for a signal report,
> ack!

Agreed, especially if the report is merely an adminstrative formality required for your contest log or DXCC application. Every once in a while I wonder how my signal is *really* getting out, however, and I simply intended to comment that I'd find a SINPO report much more informative than an RS(T) report under these circumstances.

> 599 means "you're loud", "this is a contest", or "I need your QSL
> card", 579 means "you're pretty strong but I'm not giving you a
> routine 599", and 559 means "you're weak". Anything else is just
> pretentious.

You may be onto something, Derek. Maybe the county hunters are on the right track, and what we *really* need for most purposes is a 1 by 3 scale. ;-)

BTW, under 599 you left out, "We're up to our knees in penguin guano, freezing our butts off on a frigid little rock in the Antarctic circle, and have neither the time nor inclination to even *think* about the quality of your signal. In fact, our computerized logging system doesn't even have a place to enter a report, since the software we'll use to generate your QSL will insert a 599 report automatically."

Todd, KB6JXT

2637. 400 Hz xtal ladder filter, help.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 02:51:55 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Mar7.105155.1@ntuvax.ntu.ac.sg>
Source record: 269988
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hi,

My homemade QRP xcvr has a 600 Hz BW xtal ladder filter consisting of 4 12.0000 MHz xtals. However I still find it hard to work pile-ups due to insufficient selectivity. I am planning to change it to 400 Hz. Does anyone know how much improvement I can expect to see? Also, how can this be done in the easiest way? Do I need to add xtal stages or just change to capacitor values?

72 es 73,
Daniel

2638. Repost:ACN5-3/4.4:Letters to The Editor Ham Radio, CBI

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 03:21:49 UTC
From: jrh@umcc.umcc.umich.edu
Message-ID: <2le6kd$600@umcc.umcc.umich.edu>
Source record: 269989
Cross-posted to: alt.amateur-comp,rec.radio.amateur.misc

Article 4:
Letters To The Editor

From: Larry Kollar
E-mail: larryk@computone.com

Pretty good newsletter this issue! (vol 5 no 1/2 -ed.) It was particularly interesting since I was just trying to remember when the child labor/factory hours laws were passed (I was thinking 1820s, not late 1840s).
One piece, however, jumped out as being not quite right:

"In the tradition of Amateur Radio and Citizen's Band Radio, Usenet News is the product of the users' ideas and will. Unlike Amateur Radio and CB, however, Usenet is owned and controlled solely by the participants."

I made that connection as well a few years ago, thinking that computer networks might be this generation's amateur radio. But I'm not sure that one can say that Usenet is "owned and controlled solely by the participants," while amateur radio and CB are not. In the sense that government and international bodies determine what portions of the radio spectrum the medium of communication are allocated to the two services, that's true. However, the Usenet participants that own the computers, modems, disk drives, and so on do not own the medium of communication (leased lines and telephone networks) either.
In both radio and computer networks, one need only buy the equipment needed to connect. In the case of amateur radio, however, one must also pass a series of exams designed to test the participant's knowledge of theory and regulations. In return for passing these exams, the amateur radio operator (or "ham") may:

- Use higher power levels (up to 1000 watts) if needed for reliable communications.

- Operate in modes unavailable to CB (or many commercial) users. For example, the amateur packet radio network uses TCP/IP and is available worldwide; there are several e-mail gateways between ampr.org (the packet network) and the "normal" Internet. Some segments of the packet radio network use Internet "wormholes" and amateur radio satellites (or OSCARs) to move traffic around the world.

- Use a wider range of frequencies for local or international communications. Some amateurs are experimenting with high-speed data links (as fast as T-1, or 1.5 million bits per second!) on the microwave frequencies, for example.

- Build and operate equipment that is not FCC type-accepted. The same homebrewing spirit extolled in ACN remains strong in the amateur radio population.

Amateur packet radio is a godsend for me. I live outside the Atlanta direct-dial area, and accessing BBSs from home means running up long-distance phone charges. Using packet radio, I bypass the traditional "landline" BBSs and connect directly to a packet BBS over the air. (I get on Internet at work.)
As amateurs are expressly forbidden to use their frequencies for commercial traffic, the packet radio network is even more grass-roots than Internet! As the equipment becomes available to more users, the packet visionaries are talking about many of the same things as the Internet visionaries, such as digital voice (and video) links. The two networks will continue to develop in parallel for some time but if commercial interests kill further Internet development (unlikely IMHO), the amateur packet network will continue forward.
The person you mentioned in ACN who is sending e-mail to the MIR space station is using amateur radio; most of MIR's cosmonauts are hams and occasionally make voice contacts with people on the ground in addition to running the packet mailbox almost constantly. The USA's Space Shuttle often flies a mission, called SAREX for Shuttle Amateur Radio Experiment, that connects Shuttle astronauts to school children (among others) via voice and packet radio links. MIR and Shuttle missions have both used their amateur gear for reliable backup communications when normal mission communications channels went down temporarily. CB, on the other hand, provides the security of millions of users. Any commercial interest trying to take over the CB frequencies would be jammed to death. :-) Amateur radio's highest frequencies are used only lightly (so far) and there is a good bit of commercial pressure to reallocate those bands. It has already happened in one case, but that's another story.
I've rambled on long enough. Keep up the good work!

Larry Kollar
Senior Technical Writer
Computone Inc, Roswell, GA
Amateur Radio KC4WZK

From Charles Babbage Institute

Thank you kindly for your gift in May of The Amateur Computerist.... It is in our collection and cataloged on both the local University catalog and the Research Libraries Information

Network.... I would like to maintain a full set particularly
since so few libraries seem to hold the title.

Sincerely,
Bruce H. Bruemmer, Archivist
Charles Babbage Institute
Center For The History Of
Information Processing

Reprinted from The Amateur Computerist Vol 5 No 3/4 Summer/Fall 1993

2639. Dentron GLA1000B Manual needed

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 03:35:44 UTC
From: piper@netcom.com
Message-ID: <piperCM9zBL.9pw@netcom.com>
Source record: 269990

```
--
Mike Betz
piper@netcom.com
```

2640. Dentron GLA1000B Manual needed

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 04:07:40 UTC
From: piper@netcom.com
Message-ID: <piperCMA0ss.D5u@netcom.com>
Source record: 269991

Last post didn't make it. I am in search of a manual for the Dentron GLA 1000 B. I will pay postage, copying costs and a few bucks for your time. Most of all, I'll be very grateful. Please Email Replies to:

piper@netcom.com

Thanks.

Mike KM4QN

--
Mike Betz
piper@netcom.com

2641. Re: personal communication Australia <-> USA

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 04:16:42 UTC
From: dave@eram.esi.com.au
Message-ID: <5378@eram.esi.com.au>
Source record: 269992
Cross-posted to: aus.radio,rec.radio.amateur.misc

In article <alh-050394143621@twilight1h160.its.utas.edu.au>,
alh@postoffice.utas.edu.au (Alan Hughes) writes:

| But you dont *have* to leave the header there, it can be deleted and then
| added back again later.

True. I guess you could always leave the file un-armoured, and 7PLUS it
fot transport; all of which makes the anti-encryption laws silly, since
they're so easily circumvented. Not that I've ever done it, of course :-)

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

2642. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 04:24:37 UTC
From: henniger@crl.com
Message-ID: <2leaa5$o87@crl.crl.com>
Source record: 269993
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

gilbaronw0mn@delphi.com (Gilbert Baron) writes:

>>
>>In article <1994Mar2.175938.12119@alw.nih.gov>, weisen@alw.nih.gov (Neil
>Weisenfeld) writes...
>>>What I think we should do is write to our congresspeople and tell them why
>>>we feel the cellular and cordless privacy laws are so misguided. Even if
[...stuff deleted...]
>>your home, as long as you didn't act on or disclose what you heard. You are
>>now a criminal if you choose to *tune in* to these particular band
>segments,
[...stuff deleted...]
>>regardless of what you do with what you hear. More such laws will follow,
>>since government and regulations never shrink in size.
>>-Tom R. N1OOQ randolph@est.enet.dec.com
>>
>Sad, very sad. And it does not really protect anyone. In fact it gives too
>many people a false sense of security. Digital technology with encryption
>will protect people and that is what we should have. Of course the
>government is trying to get its dirty summy rotten hands intot hat too. Can
>you say Clipper. They will pry my key out of my cokld dead hands and no
>other way.
>Get PGP and be safe.
^^^^^^^^^^^^^^^^^^^
> Gil Baron, El Baron Rojo, W0MN Rochester,MN
> "Bailar es Vivir"
> PGP2.3 key at key servers or upon request

Getting PGP will not solve the problem. I feel our government intends to:

1. provide a somewhat viable encryption standard with a govt backdoor.

2. pass laws which make it illegal to use non-govt sanctioned encryption.
(after all, if you are innocent, what do you have to hide?)

The problem cannot be resolved by getting a backing for PGP (or your favorite
encryption algorithm), but by supporting the idea that (real) encryption
should not be an illegal activity.
The government has the ability to get virtually every piece of private info
you have (via wiretap, access to financial data, warrants, lock picking
abilities, etc.) but with the advent of cheap processing, anyone can now
lock information and the Government can't pick the lock.

The standard argument has always been '...in the national interest...'
The question becomes:

"Do we really want to give up the last sanction of privacy left to us?"

This is where I believe the real issue lies.

Mick

2643. Re: Electric Fence RFI

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 06:39:53 UTC
From: drew@trl.oz.au
Message-ID: <drew.112.0@trl.oz.au>
Source record: 269994

In article <2l3360$4jr@news.acns.nwu.edu> lapin@casbah.acns.nwu.edu (Gregory Lapin) writes:
>From: lapin@casbah.acns.nwu.edu (Gregory Lapin)
>Subject: Re: Electric Fence RFI
>Date: 2 Mar 1994 22:15:28 GMT
>In article <9402271401591.gilbaronw0mn.DLITE@delphi.com>,
>Gilbert Baron <gilbaronw0mn@delphi.com> wrote:
>>>I've got some bad interference on 80 through 10
>>>meter bands from an electric fence about 500
>>>feet away. The effect is very sharp clicks
>>>about 3-4 per second. Analog noise blanker
>>>works some but not 100%.
>>>
>>>Anyone have any cures?
>>>
>>>Tnx,
>>>Ned Hamilton, AB6FI
>>>
>>
>>Well, if you ground the fence, case closed.
>>
>> Gil Baron, El Baron Rojo, W0MN Rochester,MN
>> "Bailar es Vivir"
>> PGP2.3 key at key servers or upon request
>>
>
>Just my curiousity about the fence: Are we talking about a real
>electrified fence or is this what is commonly called an "invisible fence"
>that send out a weak rf signal, received by a pet's collar to create a
>shock when the pet tries to cross the "fence"?
>
>Greg KD9AZ

Grounding the fence may not help. An electric fence (of the conventional kind) can be thought of as a capacitor which must be kept charged. The "pop" noise (about every second) that we sometimes hear is the harmonic energy in the steep waveform needed to charge the capacitance of the fence wire. If there is a fault (such as grass or other material touching the wire) the thing will radiate the more effectively.

"Rural" hams know about this problem.

73, Drew, VK3XU

2644. Re: Travelling to Egypt

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 06:41:27 UTC
From: armond@delphi.com
Message-ID: <ZAzKXDf.armond@delphi.com>
Source record: 269995

Be careful!!!A German tourist got shot two days ago while on the Nile Cruiser...Tourist bus got shot uppretty bad abt two weeks ago.
No stretching....it is arare night that an Egyptian policeman isn't killed.

2645. Daily Summary of Solar Geophysical Activity for 06 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 07:01:57 UTC
From: oler@rho.uleth.ca
Message-ID: <9403070701.AA02923@rho.uleth.ca>
Source record: 269996
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

06 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 065, 03/06/94
10.7 FLUX=095.5 90-AVG=106 SSN=101 BKI=2222 1223 BAI=007
BGND-XRAY=B1.2 FLU1=4.3E+06 FLU10=1.9E+04 PKI=2233 1223 PAI=009
BOU-DEV=015,017,016,013,006,012,015,033 DEV-AVG=015 NT SWF=00:000
XRAY-MAX= C2.3 @ 1237UT XRAY-MIN= A8.9 @ 0710UT XRAY-AVG= B1.7
NEUTN-MAX= +002% @ 1845UT NEUTN-MIN= -002% @ 2355UT NEUTN-AVG= -0.2%
PCA-MAX= +0.1DB @ 2320UT PCA-MIN= -0.4DB @ 0850UT PCA-AVG= -0.0DB
BOUTF-MAX=55342NT @ 2352UT BOUTF-MIN=55315NT @ 1858UT BOUTF-AVG=55324NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+072,+000,+000
GOES6-MAX=P:+141NT@ 1820UT GOES6-MIN=N:-083NT@ 0357UT G6-AVG=+092,+033,-032
FLUXFCST=STD:098,100,101;SESC:098,100,101 BAI/PAI-FCST=020,025,025/025,030,030
KFCST=3454 4433 4454 4444 27DAY-AP=054,056 27DAY-KP=4647 65*3 6566 6455
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 05 MAR 94 is not available.
The Full Kp Indices for 05 MAR 94 are: 1+ 1- 1+ 2- 1o 1- 2- 3-
The 3-Hr Ap Indices for 05 MAR 94 are: 5 3 5 6 4 3 6 11
Greater than 2 MeV Electron Fluence for 06 MAR is: 7.5E+06

SYNOPSIS OF ACT

SUMMARY COVERS THE PERIOD FROM 05/2100Z TO 06/2100Z:

Solar activity was low. An optically uncorrelated C2
x-ray event was recorded at 06/1237Z. Region 7682 (S19W81) has
declined in area and spot number and produced no activity this
period. Regions 7680 (S11W29) and 7685 (S08E09) were the most
active producing numerous B-class/SF flares. Two new regions
were numbered this period: Region 7686 (N08W46) and Region
7687 (N18E16). Since appearing on the disk, both new regions

have shown white light growth. All other regions are quiet and stable.

Solar activity forecast: solar activity is expected to be very low to low. Regions 7685,7686, and 7687 all have the potential for producing C-class activity.

The geomagnetic field has been at mostly quiet to unsettled levels the past 24 hours.

Geophysical activity forecast: the geomagnetic field is expected to be mostly unsettled to active for the next three days with minor storm conditions expected at high latitudes on days two and three.

STD: Levels of geomagnetic activity have increased to active levels just prior to the release of this report (early on 07 March). It would appear that the coronal-hole related disturbance has arrived. Minor storming has been observed over many high latitude sites over the last 3 hours (07/00Z to 03Z). Levels of auroral activity have likewise increased with only a slight equatorward migration of the northern oval apparent at the present time. Local night-sector substorming should produce moderate levels of auroral activity over the next several days.

Event probabilities 07 mar-09 mar

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 07 mar-09 mar

A. Middle Latitudes
Active 20/25/25
Minor Storm 15/25/30
Major-Severe Storm 10/15/15

B. High Latitudes
Active 25/30/35
Minor Storm 20/30/35
Major-Severe Storm 10/20/20

HF propagation conditions were normal over all regions. Some regions experienced notable enhancements in both signal quality and MUF. Conditions are presently (early on 07 March) beginning to wane, with poor propagation being observed over some high latitude sites. Poor to very poor propagation is expected over the next 48 to 72 hours on transpolar and transauroral circuits. Middle latitudes should see good to fair propagation with occasional night-sector poor propagation.

No improvements are expected for at least the next 48 to 72
hours.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7680 S11W29 020 0000 BXO 02 002 BET
7682 S19W81 073 0100 CAO 11 007 BET
7684 S08W16 007 0010 BXO 03 003 BET
7685 S08E09 342 0100 DAO 07 014 BET
7686 N08W46 037 0030 CRO 04 005 BET
7687 N18E16 335 0040 BXO 04 010 BET
7678 S11W52 043 PLAGE
REGIONS DUE TO RET
NMBR LAT
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 06 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 06 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
06/ 1752 B1818 N17E23 DSF B2.9 24

INFERRED CORONAL HOLES. LOCATIONS VALID AT 06/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NONE VISIBLE

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
05 Mar: 0000 0003 0006 B4.3
0348 0352 0354 B2.5
1211 1223 1241 B3.7 SF 7682 S17W66
1350 1351 1354 B1.6 SF 7680 S13W08
1848 1851 1853 B2.7
2229 2230 2235 SF 7680 S11W14
2301 2304 2306 B2.4

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

```
C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7680: 0 0 0 2 0 0 0 0 002 (28.6)
Region 7682: 0 0 0 1 0 0 0 0 001 (14.3)
Uncorrellated: 0 0 0 0 0 0 0 0 004 (57.1)

Total Events: 007 optical and x-ray.

EVENTS WIT
------------------------------------------------------------

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **
```

2646. Travel to Egypt

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 07:08:13 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2lejst$t4h@geraldo.cc.utexas.edu>
Source record: 269997

armond@delphi.com says:

>>Be careful!!!A German tourist got shot two days ago while
>>on the Nile Cruiser...Tourist bus got shot uppretty bad abt
>>two weeks ago. No stretching....it is arare night that an
>>Egyptian policeman isn't killed.

That sounds no more dangerious to me than staying in the US...

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

2647. Shuttle Retransmissions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 11:42:00 UTC
From: stocker@nssdca.gsfc.nasa.gov
Message-ID: <7MAR199407425270@nssdca.gsfc.nasa.gov>
Source record: 269829

As you may know GARC volunteers undertake to retransmit Shuttle Ground transmissions. Please note the following:

INTERESTED IN SHUTTLE TRANSMISSIONS
The Goddard Amateur Radio Club (GARC)invites interested people to tune in to Shuttle transmissions. As a public service to the Amateur radio community, the GARC retransmits space shuttle air-to-ground communications. During the STS-62 mission, Amateur radio operators, shortwave listeners, and those individuals with scanners can listen to these communications on the following HF (single side band) and VHF frequencies:

3.860 MHz (lower sideband)
7.185 MHz (lower sideband)
14.295 MHz (upper sideband)
21.395 Mhz (upper sideband)
28.650 Mhz (upper sideband)

and

147.45 Mhz (FM) Local DC Metro Area

73 de N3OXM
Erich
GARC Public Info Coord

2648. TS830M + CW narrow. Possible?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 11:58:59 UTC
From: fax%sparc4@Olivetti.COM
Message-ID: <9403071159.AA07706@sparc4.ICO.OLIVETTI.COM>
Source record: 270025

Hello,
I'm wondering if anybody can help me. I'd like to install a CW narrow filter
on a Kenwood TS830M although the factory says that it's not possible.
I don't care doing it in the hard way even putting a switch in the rear
panel or doing some mods on the board itself but I want to hear from
someone who attempted this before to be sure that it's feasible since I
still have to buy the rig.
The more info you guys can give me the better it is.

Thank you!
Marco
aa1iu/ix1iiy

--

Marco Fassiotto | Voice : +39-125-524650 | ham : ix1iiy/aa1iu
System Software Engineer | Fax : +39-125-524294 | pkt : ix1iiy@ik1brm
Laser Printers | Data: +39-125-524374 ------------------------
Olivetti | Internet : fax@sparc4.ico.olivetti.com
| fax%sparc4@olivetti.com

2649. ANARTS RTTY NEWS BULLETIN 799 06/03/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 12:12:44 UTC
From: dave@eram.esi.com.au
Message-ID: <5395@eram.esi.com.au>
Source record: 269998
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS NEWS BULLETIN 799 06/03/94

SUNDAY TRANSMISSION DETAILS.
3.545 MHz 0930 UTC This relay is in
recess until 3rd April.
7.045 MHz -3 0030 UTC VK2CTD (Col)
14.070 MHz (amtor/fec) 0030 UTC VK2DPM (Alan)
14.091 MHz 0030 UTC VK2BQS (JIM)
146.675 MHz 0030/0930 UTC VK2JPA (PAT)
144.850 MHz (ax25 bbs) VK2JPA AT VK2RWI
146.675 MHz (rtty mmbbs/repeater) VK2RTY

Views expressed in this news bulletin are not necessarily those of the Broadcast Officer, the Relay Officers, or of the Society.

Well, did you see us at the Central Coast Field Day? We were on the top floor of the stand if you could not find us. I believe this happened to other clubs whose displays were on a lower floor last year. Shall suggest to the host club that a location board be displayed outside the stand main entrance so that all club stands can be found more easily next year. It is a great location, spacious outlook, but I suppose it is a bit hard to get past the refreshment floor, hi hi.

The winner of the Morse Contest held on the ANARTS Stand at Wyong last Sunday was VK2IC (he sounds more like a computer specialist than a practitioner of the Ancient Art of Morse Code). He had two errors in sending and one in receiving. He was the proud and pleased recipient of the prizes : the President's Bottle(s).

All in all, the day appeared to be a great success -- did you meet the IPS team ? There were four on deck during the day. I am looking forward to seeing the attendance figures for the day. With this new venue, the attendance seems to be spread out more, or is it just because there are more places to look for people and stands.

We look forward to next year and seeing you all again.

BARTG Contest

Date: March 19-21 1994, sponsored by the British Amateur Radio Teledata Group.

Exchange: Send: RST + QSO number + time in UTC.

Multipliers: Each DXCC country, including first QSO with W, VE and VK, counts as a multiplier on each band. Each call district in W, VE and VK will count as an additional on each band. Also, each continent (6) will count once, not once per band.

QSO Points: Count 1 (one) point per QSO.

Final score: Total QSOs x total multipliers x number of continents (max 6).

Logs: Use separate logsheets for each band. Logs must show: BAND, DATE and TIME (UTC), CALLSIGN, MESSAGE Sent and Received, COUNTRIES and POINTS claimed.

Summary sheet must show full scoring, times of operation, and address for correspondence.

Logsheets, summary sheets and multiplier and dupesheets are all available for copying from the RTTY Contester's Guide, published by RTTY Journal.

Deadline: Logs must be received by May 25 to qualify.

Mail logs to:
BARTG c/o John Barber, G4SKA
32 Wellbrook Street
Tiverton, Devon
EX165JW, England

Have fun!

IPS weekly report
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24 FEBRUARY - 3 MARCH 1994
Issue No 09
Date of issue: 4 March, 1994

INDICES:
Date 25 26 27 28 01 02 03
10cm 097 094 095 093 094 098 101
A 12 06 06 09 10 17 (17 estimated)
T 71 27 55 57 47 73 64

SUMMARY OF ACTIVITY

Solar activity was very low 25th-26th and 28th February-1st March, moderate on 27th, and low on 2nd-3rd March. There was an M2 flare on 27th february.

The geomagnetic field at Learmonth (WA) was quiet on 27th, quiet to unsettled 26th, 28th-3rd March, apart for a period of minor storm activity on 3rd.

Ionospheric F2 critical frequencies at Sydney were uo to 20 per cent above predicted monthly values on 25th, near predicted levels on 26th, near predicted with enhancement periods of up to 30 per cent on 27th-1st, and enhanced 10 t0 15 per cent on 2nd-3rd March. Sporadic E may have degraded F layer communications at times on 1st March.

FORECAST FOR THE NEXT WEEK (4 -10 MARCH)

SOLAR: low

GEOMAGNETIC: active-minor storm periods expected March 4-9, due to a solar coronal hole.

IONOSPHERIC: degraded HF comms expected March 4-9. Depressions of up to 20% may be experienced at times during this interval.

Updated IPS Monthly Predicted Smoothed T-indices
Prepared on Mon Feb 28 12:58:20 1994
YEAR JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
==========
1993 42
1994 39 37 36 35 34 31 29 27 24 22 21 19
1995 19 18 17 16 15 14 14 13 12 11 11 10
1996 10 9 9 8 8 7 8 8 9 10 11 12
1997 13 14 16 18 20 22 25 28 32 35 40 46

Courtesy of IPS Radio and Space Services

VK2SG RTTY DX NOTES 25 FEB 94

VK2SG RTTY DXNOTES WEEKENDING 25 FEBRUARY 1994 (BID RTDX0225)

OUR INFORMATION THIS WEEK CAME FROM: 9X5LJ, DJ3IW AND THE CENTRAL-EUROPE DX CLUSTER NODE DB0SPC, I5FLN, IK5AAX AND THE IK5PWJ PACKET CLUSTER, W2JGR AND THE NJ0M NODE THE TWIN-CITIES DX PACKET CLUSTER, W5KSI AND ZS5S. THANK YOU ALL FOR YOUR ASSISTANCE.

BANDPASS

FRIDAY 18
DX NOT SLEEPIN, JUST RESTIN

SATURDAY 19
0114-14088 S92ZM 0707-14082 UN7LR

1110-21073 5Z4FO FEC 1516-14085 ZS9A
1520-21083 8ZD7DP 1527-14088 ER3ED
1529-21088 V50CM 1537-14085 5R8DG
1542-14087 EX2U 1706-14087 5B4VX

SUNDAY 20
0843-21086 9N1AA 0843-21089 9M1AA
1045-21086 FR5ZU 1052-21083 TZ6FIC
1129-21085 ZD8M 1253-21083 ZD7DP
1355-21086 9H1ET 1358-21091 HJ4SAN
1401-14086 UT5DX 1407-14084 5B4VX
1421-14084 XU7VK 1448-14088 UN7LR
1450-14089 YL3FW 1455-21086 5R8DS
1627-14084 S59F 1633-14090 5B4ABU
1835-14087 ZS1CU 2230-14064 TY1PS CLOVER

MONDAY 21
1317-14086 EA8/ON8RI 1720-14083 V31WW
2044-14085 V31DV 2044-14090 J88BS
2052-14083 ZD7DP 2135-14086 V31EN
2209-14085 S92ZM 2156-14085 CO2JJ
2330-14085 V31DV

TUESDAY 22
0113-14086 V31II 1634-14086 V31WW
1814-14087 V31EO QSL KF8NN 1954-14083 J88BS
2012-14085 V32GM 2017-14086 CO2KG
2019-14082 V31GM 2139-14085 V31MV
2339-14083 V31JU

WEDNESDAY 23
1620-14088 HK1LAQ

THURSDAY 24
0021-14086 CX7BF 2006-14084 ZS0X QSL DJ6JC

NOTES OF INTEREST.

PENGUIN ISLANDS, ZS0 AND WALVIS BAY, ZS9. THE GOVERNMENT OF SOUTH AFRICA, AGREED TO HAND OVER THE THIRTEEN PENGUIN ISLANDS AND WALVIS BAY, TO THE REPUBLIC OF NAMIBIA ON 28 FEBRUARY. DJ6JC, DJ6SI AND V51BI, USING THE CALL ZS0X, SHOULD HAVE BEEN ACTIVE ON 23-28 FEBRUARY FROM PENGUIN ISLANDS AND ZS6EZ AND G3XTT WITH THE CALL, ZS9Z, FROM WALVIS BAY. THEY BOTH BECAME PART OF NAMIBIA BEGINNING 1 MARCH AND MORE THAN LIKELY WILL BE DELETED AS DXCC COUNTRIES.

DESECHEO, KP5. THE PLANNED DXPEDITION BY A GROUP OF OPERATORS FOR 1-7 MARCH, HAS BEEN CANCELLED. PERMISSION TO LAND HAS BEEN DENIED BECAUSE A GROUP OF HAITIAN SQUATTERS. UNTIL THIS CAN BE RESOLVED, NO LANDING PERMISSION CAN BE GIVEN.

REVILLA GIGEDO, XF4. THIS OPERATION WAS ON UNTIL 4 MARCH.
QSL HECTOR, XE1BEF.

MAYOTTE, FH. HERMANN, DJ2BW SHOULD BE SIGNING FH/DJ2BW FOR A
MUCH NEEDED ONE IN RTTY FROM 1-9 MARCH. KYFC

FOR NEXT WEEK'S BULLETIN, SEND YOUR BANDPASS AND NOTES OF
INTEREST TO JULES, W2JGR AT W2TKU.#SRQ.FL.USA.NA

REMEMBER, DX DON'T SLEEP.
GL DE BOB, WB2CJL AT W5KSI.NOLA.LA.USA.NA

Coming events

1994
March 19th-20th BARTG WW RTTY Contest

April 16th-17th SARTG WW AMTOR Contest

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065
Australia, for such matters as membership and general
enquiries. Enquiries can also be made by packet to the
President (Col) VK2CTD, or the Secretary (Pat) VK2JPA @ VK2OP.

News items may be sent to Broadcast Officer PO Box 60
Blacktown 2148 Australia, or by packet to VK2JPA @ VK2OP.

Email addresses for the Broadcast Officer are :

patl@extro.ucc.su.oz.au or VK2JPA@VK2OP nsw.aus.oc

The Society welcomes news items on any digital subjects from
anywhere in the broadcast footprint. We know we reach ZL and many
South Pacific islands. We are looking forward to news from your
areas to let other amateurs know what you are doing in the hobby.
Hope to hear from you.
73s de Pat VK2JPA Broadcast Officer
That concludes ANARTS NEWS BULLETIN 799 06/03/94.
INSERTED BY VK2BQS (Jim) Vice-President ANARTS.

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2OP.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

2650. Amateur Radio Newsline #864 4 Mar 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 12:38:55 UTC
From: bigsteve@d2.dorsai.org
Message-ID: <V1oUjGG8yPg1057yn@dorsai.dorsai.org>
Source record: 269999
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text is transcribed from the audio service by Dale Cary, ND0AKO, and is first published on Genie.

Editorial comment or news items should be E-mailed to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. Voice or FAX to +1 805-296-7180.

All other information and disclaimers are in the text header below.

- - - - -
NEWSLINE RADIO - CBBS EDITION #114 - POSTED 03/07/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newsline is posted on this CBBS twice monthly. For current information updates, please call

```
Los Angeles..................... (213) 462-0008
Los Angeles (Instant Update Line)...... (805) 296-2407
Seattle.......................... (206) 368-3969
Seattle.......................... (206) 281-8455
Tacoma........................... (206) 927-7373
Louisville....................... (502) 894-8559
Dayton........................... (513) 275-9991
Chicago.......................... (708) 289-0423
New York City.................... (718) 353-2801
Melbourne, FL.................... (407) 259-4479
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For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

Articles may be reproduced if printed in their entirety and credit is given to AMATEUR RADIO NEWSLINE as being the source.

For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

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Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[864]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* Newsline report number 864 for release on Friday, March *
* 3, 1994 to follow. *
* *
* *

The following is a QST

The FCC takes another step toward the electronic filing of license applications.

*****
PRB SIGNATURE

The FCC's has taken another step toward an eventual start-up of an all electronic filing system for radio licenses. This, with an announcement by its Private Radio Bureau of the adoption of procedures to govern the signing of electronically filed private radio service applications.
Last April, the commission amended its rules to permit the electronic filing of applications for PRB governed services but the agency also continued the requirement that handwritten signatures accompany all applications until the Private Radio Bureau establishes guidelines for accepting the electronic filing of applications. The bureau is currently developing these

procedural requirements with some already in place. So far on an experimental basis at least 7000 licenses applications already filed by electronic means.
The signature procedure that the Private Radio Bureau has now adopted is quite simple. It states that if the applicant is an individual then the signature on an electronically filed must consist of the electronic equivalent of an individuals typed name. In a partnership, it will be the electronic substitute of both partners names while for a corporate entity the signature must be the electronic equivalent of the typed signature of an officer, director or duly authorized employee.
An electronic signature submitted according to these new guidelines will designate the individual authorized to bind the applicant who is certifying to the accuracy of the information contained in a given application. By signing electronically, all applicants agree to comply with the terms of the Communications Act and the rules governing a particular radio service in the same way as if they has submitted a hand written signature on a printed application form.
What does this mean for ham radio? Simply that the legal framework is now in place for electronic signatures to be accepted by the Private Radio Bureau. It also means that the start-up of electronic filing of Amateur Radio applications and a shortening of an applicants waiting time for an applicant to get on the air can't be all that far away.

*****
CMRS

The FCC has established a new procedure whereby license holders in the private land mobile radio service who are subject to reclassification into the commercial radio service can file for a waiver to retain existing foreign ownership. Under the framework of the 1983 Omnibus Budget Reconciliation Act, certain private land mobile radio license holders were re-categorized as common carriers and are now subject to foreign ownership restrictions as outlined under section 310 B of the Communications Act. Section 310 B prohibits the granting of common carrier authorization to any alien or representative of an alien or to any corporation that has been organized under the laws of a foreign government. It also bars any corporation where any officer or director is an alien or which has more than 20% of its capital stock own by non-citizens or their representatives. The budget act does allow those affected by the change in status to petition the FCC for a waiver of Section 310 B as long as the foreign ownership interest lawfully existed prior to May 24, 1993. If a foreign ownership waiver is granted, the FCC says that it will recognize only the particular person or entity that held the foreign ownership interest as of the May 24th 1993 cutoff date. Subsequent transfers of these grandfathered foreign ownership interests will be limited to domestic persons or

entities so as to keep the waiver valid and in effect.

*****
VOICE MAIL HACKERS

Pacific Bell Telephone in San Ramon, California says some of its voice mail customers are getting an unpleasant surprise. The company is admitting that electronic hackers are breaking in to the voice-mail system that it runs for business and residential customers. The hackers have altered message greetings and changed pass words. One recent incident happened earlier this week when a woman found a stranger was using her voice-mail box. Pacific Bell's corporate security and various San Francisco area law enforcement agency are investigating these incidents. In California, breaking into and tampering with a voice-mail system violates state law.

*****
CUBA AND THE ARRL

Cuban American hams are angrily denouncing ARRL acceptance of an invitation for United States hams to join their Cuban counterparts in future operating events. They are making their displeasure known on voice, on CW and on packet.
The crisis began after the league issued an official bulletin saying that the Cuban national society had invited American amateurs to participate in a joint operation in the 1994 ARRL June VHF QSO Party. It said that ARRL Oklahoma Section Manager Joe Lynch, N6CL, received the invitation to lead the group during his visit to Cuba the week of February 7th.
Lynch, who is also the VHF editor of CQ Magazine was in Cuba as a member of a Methodist Church work team. While there, he extended greetings from ARRL officials and presented Federacion Radioaficionados de Cuba President Pedro Rodriguez, CO2RP, with a certificate of participation for the June 1993 ARRL VHF QSO Party. Joe also presented an author's certificate to Arnie Coro, CO2KK, for his article in December 1993 issue of the League's QST magazine.
But many Cuban expatriate hams living in south Florida say that Rodriguez is nothing more than a puppet of Cuban Dictator Fidel Castro. They claim that Rodriguez is a member of the Cuban military who was given a ham call sign and a new political job. The job of keeping Cuban hams following the Castro party line. This they say at the risk of loosing their ham radio privileges and possibly going to jail.
The Cubans hams living in the United States say that hams outside Cuba should not be holding hands with the FRC. Instead they should be pressuring their national societies to force the FRC to loosen the reign that dictator Castro has placed on the Cuban ham community.
If it does take place, the joint VHF operation will place

from Bellomonte, Cuba. Officials of the FRC say they have also taken under consideration a proposal from an American group for a joint operation from Cuba on the High Frequency bands in 1995.

*****
DAYTON BANQUET

On a lighter note, the planners of the 1994 Dayton Hamvention have announced that a broadcasting pioneer will serve as this years featured banquet speaker.
The 1994 Dayton Hamvention Committee has selected the featured speaker for this years grand banquet. Joseph M. Costello III, WA5HSI, President and CEO of WRNO International will present the main address at this years banquet. Mr Costello is best known for promoting the licensing and establishment of a US commercial shortwave station. Mr. Costellos perseverance has thrust radio station WRNO into fore front of shortwave broadcasting. The grand banquet will be held Saturday evening April 30th at the Dayton Convention Center.

*****
QSO PARTY

In the contest corner, the 1994 Wisconsin QSO Party is scheduled for 18:00 UTC on March 13th. It runs until 01:00 UTC on March 14th. Send your entries and logs to WARAC, P.O. Box 1072, Milwaukee, Wisconsin 53201.

*****
MALTA

In DX, you may have noticed that the 1A0KM, Sovereign Military Order of Malta DXpedition scheduled for February was postponed. According to word from I0JBL, the scheduled activity from the area was put on hold because of some serious problems that occurred to two of the four operators. There were no details given but it is assumed that most DXers were focusing most of their attention on the Peter I Island DXpedition. The 1A0KM operations are now scheduled to begin shortly. In fact, the group may be on as we go to air.

*****
RS-15

Also from overseas comes word that there has been a delay in the setting of a launch date for Russia's new RS-15 ham radio satellite. Sources close to the project now say that the official technical presentation before the Russian Space Agency has been delayed until at least March 20th.

*****
WARD

Congratulations to the new DOCTOR Jeff Ward, K8KA/G0 who recently earned his Doctorate degree. Jeff has been instrumental in the design of not only OSCAR satellite hardware, but also the ground station software that is used for Pacsat type communications. His work has had a great impact on the emerging micro satellite and digital communications technologies as well.

*****
SPACENEWS

Word that KB2DB's "SpaceNews" is now available by satellite! The distribution of John Magliacanes' "SpaceNews" ham radio newsletter via Amateur Packet Radio networks has been improved recently with the help of high-speed "Pacsat" satellites. These polar orbiting satellites now make SpaceNews available to every inch of the planet several times daily at 9600 bps. W3QNS uploads copies of SpaceNews to the KITSAT OSCAR-23 satellite and is making them available for all KO-23 users.

*****
HELP FIND MARTY

We have a special request from our producer Bill Pasternak, WA6ITF to try and help him to locate a boyhood friend who he says is trying to find him. The person that Bill is trying to contact is Martin Schiff, the former K2TRU. Bill says he learned that Marty was looking for him when he ran into a non ham cousin at a recent family gathering.

"I was more than a little surprised when I was in New York not long ago I ran into a cousin, who I haven't seen in 32 years, who told me that a friend of mine, who I haven't seen in about 34 years, has called him, surprisingly, and asked to get in touch with me. My cousin did not know where I was at the time and had no way of contacting me, so he threw the piece of paper away. He really doesn't remember where Marty Schiff, ex-K2TRU is living." Bill Pasternak, WA6ITF, Editor of Newsline.

According to Bill, he and Marty Schiff palled together in the late 1950's and into the early 1960's. He says they lost contact after Marty went off to college somewhere in the north-east. Possibly to MIT.

"Well the last time I saw Marty was a couple weeks before he went of to college. He went off to an engineering school as I remember some place in the northeast. It could have been MIT. I am not a hundred percent sure. This would have been back in 1960 I guess, 59 to 60 something like that. I did try to contact MIT, both the Registrars Office and the Alumni Association, but I have had very little luck.
Also tried the radio club and some friends of mine in the Boston area and other states and nobody seems to know Marty. But I've got a feeling if he is still around electronics, he's around

radio people and even though he is not listed as holding a call
sign right now. There is a good chance he has got some friends
who are hams.
I have exhausted every other method of trying to find him
short of flying back east and starting a house to house search,
so it occurred to me possibly one of our listeners here on
Newsline might know him and might put me in touch with him."
Bill Pasternak, WA6ITF, Editor of Newsline.

If you happen to know someone named Marty or Martin Schiff
and if he is originally from West 8th Street in Brooklyn, New
York, let him know that Bill Pasternak, the former WA2HVK is now
WA6ITF, that he is living in California and can be reached at
area code (805) 296-7180 on voice or fax, 24 hours a day.

*****
And for this week, that's all from the Amateur Radio Newsline.
You can write to us at Post Office Box 463 in Pasadena, CA 91102.

* * * Newsline Copyright 1994 all rights are reserved. * * *
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< ^^^

2651. Mini antenna response summary

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 13:47:49 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCMArnp.6Fv@netcom.com>
Source record: 270000

Thanks for all the suggestions.

The overwelming response was to get the Comet CH-32 Mini antenna (1.75 ").

Price is ~$34

My check went into the mail this morning to HRO.

Again, thanks.

Scott

--
```
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
================================================================================
```

2652. Re: 400 Hz xtal ladder filter, help.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 14:02:33 UTC
From: zlau@arrl.org
Message-ID: <1994Mar7.140233.4914@arrl.org>
Source record: 270001
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

asirene@ntuvax.ntu.ac.sg wrote:
: Hi,

: My homemade QRP xcvr has a 600 Hz BW xtal ladder filter
: consisting of 4 12.0000 MHz xtals. However I still find it hard to
: work pile-ups due to insufficient selectivity. I am planning to
: change it to 400 Hz. Does anyone know how much improvement I can
: expect to see? Also, how can this be done in the easiest way? Do
: I need to add xtal stages or just change to capacitor values?

You probably won't see any improvement in the pileups. I am assuming that lots of stations want to work Singapore (9V1 for DX types). Problem is, most are probably calling on the same frequency (within 100 Hz), so a tighter filter won't help.

What will help is to have an RIT control and continually vary your frequency receive frequency over a narrow frequency range, perhaps a kHz or two.

However, 12 MHz ECS clock crystals sold by Digi-Key do make nice Cohn filters. Use 3 crystals and 470 pF capacitors. The input inpedance and output impedance just happen to be close to 50 ohms. (Some people just get lucky). Cascading two of them, I got a 3 dB BW of 379 Hz and a 6 dB BW of 427 Hz.

Finally, since you asked, adding more filters will improve the skirt selectivity, making stations out of the passband weaker. 4 crystals is probably OK for a CW rig, though I use 6 in one rig and 7 in another. Increasing the capacitor values will decrease the bandwidth, but will also decrease the impedance. Impedance matching is important to maintain the proper filter shape.

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

2653. PY0FM and 6Y5IC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 14:25:48 UTC
From: ham@wam.umd.edu
Message-ID: <2lfdhc$27j@cville-srv.wam.umd.edu>
Source record: 269831

Worked PY0FM and 6Y5IC yesterday during ARRL SSB DX contest. Anyone
know:

1) PY0FM - which island group, and how to get a card?
2) 6Y5IC - any special route to get a card?

Thanks everybody!

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 125 QSLed on dipoles __________| Dipoles! Antenna!

2654. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 15:09:55 UTC
From: levine@mc.com
Message-ID: <2lfg43$pek@jericho.mc.com>
Source record: 270002

In article As4@cbnewsm.cb.att.com, hellman@cbnewsm.cb.att.com (eric.s.hellman) writes:
-->In article <2MAR199408091550@nssdca.gsfc.nasa.gov>, stocker@nssdca.gsfc.nasa.gov (ERICH FRANZ STOCKER) writes:

-->At our VE sessions we always check the copy whenever the applicant fails
-->to answer 7 questions correctly. We once has a case where someone got only
-->6 correct but had sufficient copy to pass and had correctly copied the
-->answer to one of the questions not answered! There is nothing about this
-->test which implies _______ (fill in the blank).
-->Now don't get me started about the multiple guess test.
-->
-->Shel Darack WA2UBK dara@physics.att.com
-->

We do the same, however in all fairness we believe that if the
applicant wants to submit for 1 minute solid copy, he must do
so *before* getting the multiple choice test. This is because
many words in the exam answers are in the text (obviously).
The candidate can then back-fill his copy sheet. Then he
really did not *copy* that stuff from the cw qso.

Once he gets the multiple choice test sheet, I feel that the
candidate should not be allowed to submit his sheet for 1
minute copy. In the case of 5wpm, there are only 25 words
in the 5 min QSO.(+/-) When you give him the test sheet, you
just gave him at least 10 of the words!

Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599

2655. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 15:12:20 UTC
From: RONALD.E.REDER@OFFICE.WANG.COM
Message-ID: <199403071612.AA16405@tuna.wang.com>
Source record: 270003

baxter@kuhub.cc.ukans.edu (Kirk Baxter) writes:

>I had this recall work done on my car a couple of weeks ago, and now have
>terrible ignition noise on 2 meters and 440.

My condolences. As the owner of a fuel-injected 89 Accord, I've been living with
this same problem for 5 years. Your posting was a big help because it points the
finger at the igniter. I've tried ferrites on cables and grounding the hood to the
body with little effect. Now I have something else to work on :-).

According to my shop manual and electrical manual, the igniter is a
solid-state module, mounted on the distributor, which acts to control current
in the primary of the ignition coil. In other words, it is the solid-state
equivalent of breaker points.

I can only assume that your new module has sharper switching edges or a higher
breakdown voltage than the old one and is creating more RFI because of this.
There is a suppression capacitor in the circuit, but it has quite long leads.
In fact
the coil primary circuit on my car runs from the coil to the distributor and is
separated by about 2 feet of cable. Probably makes a fine antenna. Ferrites on
the cable didn't seem to help, but I'll probably try it again. This is not a
piece of
circuit I want to mess with very much. Placing additional capacitors and such
in the circuit might lead to poor ignition performance or igniter failure.

One piece of good news is that the interference is awful just after a major
tune-up and fades gradually over the next month to a much lower level.
Perhaps they replaced the igniter as part of some of my tune-ups.
I'll have to pull my service slips and check them.
My guess is the igniter degrades with time either from the high temperatures
or the high voltages. With any luck you will also encounter this phenomenon.

Ron

2656. Macintosh Ham Radio Software 1.0.6 - 3/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 16:01:58 UTC
From: Terry Stader <p00489@psilink.com>
Message-ID: <9403071601.AA22053@worldlink.worldlink.com>
Source record: 270004
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.shortwave,rec.radio.info,rec.radio.scanner,rec.radio.shortwave

Macintosh Amateur Radio Software - March 1994
Version 1.06

Please feel free to distribute this list as widely as possible. Many of you have asked if it is OK to cross-post this list? I don't mind, but I would like to know where it is going. If you think it should be cross-posted to other USENET groups, please let me know so I can try and manage these. We don't want to have any duplication or our welcome will be wore out! I will also try and honor individual requests for this list... but I do not always catch all of the newsgroups postings... so please DO NOT reply/ask there! If I am a little slow in getting the list back to you... hang in there!

Those of you that can tell me about ANY of these programs compatibility with System 7 would be appreciated! I am going to be adding a System 7 compatability section to EACH description in future releases. If the application is KNOWN to execute properly under System 7, the System 7 anotation will be placed as the last line of the product description. More clarification on levels of System 7 compatibility in the future editions... but this is a start!

Some of the information in this list was gleaned from flyers supplied by the software vendors, or in some cases from reviews in amateur radio publications or the README files included with the archive. Some of the information has not been verified for a long time; please check with the vendors/authors for the latest product specs, pricing, etc.

NEW/CHANGES: A new group has been added... that of WEFAX. Although some of the software currently available supports this mode, RadFax is the first to be listed as the only function of receiving waether facsimille.

I've started adding more version numbers so that our users will know if they have the most current release. Thanks to those that have already sent them in... I'll accept all corrections!

This list contains info on updated for several applications: updated information on Kantronic's Host Master(thanks John-WD1V) and Lar's newest release of Morse Trainer 1.1.1. Ivo-ON1XK and Adam-PA2AGA both contnue to be busy with new releases of IM/Mac and NET/Mac repsectively. I know that Adam made changes to support the multiport serial boards... and now we can have up to 16 TNCs connected!

Thanks Adam, Ivo and Lars for some great products!

A reminder that The World Software Tool and Dye, is one of the newest site carrying the Mac Ham Radio Software. Scott-WY1Z is maintaining these file as the Librarian of the Boston Amateur Radio Club. Look in the following path at ftp.std.com: /pub/hamradio/mac.

Check at the bottom of this list for more information on ftp'able sites carrying Amateur Radio software.

The ARRL ListServer is also carrying the latest version of this list... in case you loose this one!

*** Collections ***
<MacNet v5.31>
Join MacNet and get included in the latest version of "Macnet Roster", a HyperCard 2.x stack that now has > 400 members and is the proverbial "Who's Who" of hams using Macs. You'll find "Macnet Roster" a great tool for finding out who, what and how other hams are using their Macs with their ham stations. It even includes this file!
Send $30.00($40.00 DX) check or money order to: WD1V, John Seney, 144 Pepperidge Drive Manchester, NH 03103 USA.
All disks shipped First Class Mail PPd. Get the COMPLETE Macnet Software Collection ppd. on 10 disks!
Based on your interests, you'll also receive public domain shareware received by our members.
System 7

<Project Mac>
Contest logging, antenna design, satellite tracking, clip art, etc. Microsoft BASIC required for many of the programs. Most of this software is now available in the MacNet collection. Send three formatted 800K Macintosh disks with stamped, self-addressed disk mailer to Stan Horzepa, WA1LOU, One Glen Ave., Wolcott, CT 06716-1442. Stan can be reached at horzepa@gdc.com
NOTE: Stan has indicated much of this software is "old" and may not work on some newer Macs. Also he notes that most of his collection is available in the MacNet collection above. He will send anyone what he has if you send him the disks and SAS mailer.

<Amateur Radio Software for Macintosh>
Extensive catalog including logging, Morse code, gray line, test preparation, satellite tracking, contesting, and packet radio programs.
ZCo Corporation, P.O. Box 3720, Nashua, NH 03061. NOTE: This company has been rumored to be out of business!

<Amateur Radio #1>
Contains satellite tracking, Morse code, attenuator design, and Ohm's law calculator programs. Kinetic Designs, P.O. Box 1646, Orange Park, FL 32067.

*** Test preparation ***
<Ham Test Stacks>
HyperCard stacks containing the entire question pool for each license class. Can be used for preparation or generating actual tests. The current releases are: Novice v4.1(new questions eff. 7/1/93), Technician v4.0(new questions effective 7/1/93), General v2.4, Advanced v2.4, Extra v2.4 If you wish to receive these PUBLIC DOMAIN stacks, please send a SASE (self addressed STAMPED envelope - 2 ounces postage = .52) and 800K diskette to the author: Diana L. Carlson, 3 Spruce Street, Hudson, NH 03051. Diana will no longer send out the stacks unless the envelope has sufficient postage for return mail (in general, that means .52-.98, depending on size of envelope) and for those who send a standard business envelope, she takes no responsibility for the condition of the diskette through US mail. Available via anonymous FTP from various sites, including uxc.cso.uiuc.edu (/pub/ham-radio). NOTE: The newest releases of Novice and Technician stacks are available at uxc.cso.uiuc.edu (5/6/93) Author is available via Internet: dls@genrad.com
System 7 savy with HyperCard 2.1

<MacHam>
Test generators and study aids for the Technician, General, Advanced, and Extra class written elements. Includes the complete question pool for each license. Hypercard based.
Coyne Co., P.O. Box 2000-200, Mission Viejo, CA 92692.
System 7 with HyperCard 2.1

*** Morse code practice ***
<N6MZV Morse Trainer>
Lets you practice any combination of letters, numbers, and/or punctuation characters. Can send user-created text files.
RT Martin, N6MZV, 10382 Orange Avenue, Cupertino, CA 95014. Also available via anonymous FTP from ftp.apple.com (/pub/ham-radio).
Shareware.

<Morse Code Tutor v1.6> - used to be called Morse Tutor
Sends random groups of letters, numbers, and/or punctuation characters. Available via anonymous FTP from ftp.apple.com (/pub/ham-radio). Or send formatted 800K Macintosh disk with stamped, self-addressed return disk mailer to Jack Brindle, WA4FIB, 726-175th Street SW, Bothell, WA 98012; Compuserve: 73365,606.

<MorseMania V1.0>
Designed for those already familiar with Morse code who want to improve their speed. Allows code practice at various speeds and audio pitches. Can generate random sequences or play the contents of user-created text files. Freeware. Available via anonymous FTP from whirlwind.stanford.edu (/pub). Contact Edward Plumer, KM6IQ, for more information; Internet: plumer@isl.stanford.edu.

<MacMorse>
Randomly sends chosen characters. Lets you create your own practice

files. David A. Kall, 700 Marine Parkway #314, New Port Richey, FL 34652.

<MacMorse v1.3>
MacMorse is designed to help you learn Morse code and improve your receiving speed. It has several ways that it can send letters and punctuation. Shareware. Doug Havenhill, Dynamics and Control, 7143 West Sunnyside Drive, Peoria, AZ 85345.

<MacSamuel>
Sends random words, random character groups, and user-created text files. Can also create simulated QSOs with randomly generated text and callsigns. Avant Systems, P.O. Box 5437, Pittsburgh, PA 15206.

<Zihua Morse>
Designed to teach Morse code to beginners and to improve the accuracy and speed of advanced users. Responses can be typed into the computer; the program will calculate accuracy and timing statistics for each session. Optional speech synthesizer reads the characters out loud for an accuracy check. Zihua, P.O. Box 51601, Pacific Grove, CA 93950.

<Sparks-II v2.0.5>
More Code training program. Available for anonymous ftp at rahul.net /pub/davidj/radio

<Morse Master v1.0>
The newest of the morse code training programs. MM calculates the real speed as follows: Real speed = Number of Words/end time - start time. And the lengh of word is generating randomly, so if you set even 5WPM, sometimes another value will appear. However you should believe the slidebutton's value. If you repeat many times, the average speed should be 5WPM (if not... anyway, believe the slidebutton's value). Archive is available mac.archive.umich.edu, path: mac/util/organization/morsemaster1.0.sit.hqx The author can be reached thru the following e-mail addresses: h79261a@kyu-cc.cc.kyushu-u.ac.jp. (Eiji AOL account is no longer valid - moved back to Japan after his studies.)

<Morse Trainer-US v1.1.1>
MorseTrainer is a powerful tool for learning and training Morse code. Features: Three different training modes: user text, random text, library text; Arbitrary signal pitch and timbre; Arbitrary speed and tempo; Multi-alphabet support; Random text generator; Text library editor; On-line alphabet; On-line manual; Help Balloons; And a lot more. New features in 1.1: Enhanced sound generator, volume control and risetime control. The pitch is set in steps of 10Hz instead of using MIDI frequencies; Speed and tempo limits increased to 80 words/minute as a result of the enhanced sound generator; User-selectable font in the Misc settings dialog. FREEWARE!
This version uses TrueType fonts instead on bitmaps fonts so that

the user can distinguish 0(zero) from O(character). Furthermore speed and tempo can be given in either characters/minute or words/minute. Archive is available mac.archive.umich.edu, path: mac/util/organization/ Author is available via internet: sund@tde.lth.se
System 7 savy

<CW Speed Builder v3.0>
This program is for improving Morse Code (CW) reception skill. The major difference between this and other Morse Code training programs is that this one will not continue sending until you provide the correct answer. Major changes which have been suggested and implemented since last version include: after three incorrect responses the program shows the correct character; the list of characters at the end which will show those you know and those you need more practice on; the frequency of the tone has been changed; volume of the tone has been reduced; the character " - " has been added (dah dit dit dit dah) Comments can be sent as follows: America Online:K7UPJ, Internet:k7upj@aol.com, Packet radio:K7UPJ@KA3T, Compu$erv:70521,2356, Mail:Box 84, Cascade, MD 21719

*** Packet and other digital modes ***
<NET/Mac 2.3.38>
Allows simultaneous TCP/IP, AX.25, and NET/ROM connections. Requires a TNC with KISS mode. Copyright, but free for noncommercial use. The latest releases have added the ability to cut and paste from the console window and support of multi-port serial boards like AE's QuadraLink. It is now possible to have up to 16 TNCs connected up to a Nubus Mac!
Adam van Gaalen, PA2AGA, (Internet: adam@IGG.TNO.NL) has been making the modifications to NET/Mac. This version (and others) is available via anonymous FTP from ucsd.edu (/hamradio/packet/tcpip/incoming), mac.archive.umich.edu and
System 7

++##NOTE##++
Adam recently sent oout a note to the distribution list about moving NET/Mac to Systerm 7 Pro. If you are contemplating this upgrade, Adam would like to know this... he would like to know about any particular features that System 7 Pro supports that you think should be added to NET/Mac. Please e-mail him at the address show above.

<Domain-to-Hosts Converter 1.0r3>
This application will create a hosts.net file from the domain.txt file that PC owners use with NOS. Created by Ken-NS1C is available on many TCP/IP packet switches in New England.program.
System 7

<IM/Mac 1.0b27y>
Mailer program for use with the SMTP protocol. Alternative to the

BM program that comes with NET/Mac. Written by Ivo van Ursel, ON1XK. Ivo is continuosly updating his mailer program. His newest release supports built-in BinHex support, selectable sound chimes for incoming mail, "quoting" of forwarded messages and lots more. If you are not using this program... why not? Check for the latest release in the directory before "blind" ftp'ing. This software supports System 7's Ballon Help and is System 7 savy! Available via anonymous FTP from ucsd.edu (/hamradio/packet/tcpip/incoming). Author is available via internet: on1xk@igg.tno.nl <<-- new address for Ivo
System 7 savy

<SoftKiss 1.8>
Control panel device that emulates a TNC running in KISS mode. For use with packet-radio modems such as the Baycom kit and PacketMac Modem. Version 1.8 July 9 1993 update since 1.6. KD6PAG found a bug in quoting recieved escape and end characters is sofktiss 1.6. The bug and the fix and patch are all correct, thanks for some great detective work. Lots of doc files and drawings included in this archive! Requires the Serial Tool from Apple's Communications Toolbox! Available on the HAMNET forum of Compuserve, America Online and via anonymous FTP from akutaktak.andrew.cmu.edu (/aw0g).
System 7

<PacketMac Modem>
PacketMac Modem kits can be obtained from: Sigma Design Associates, P.O. Box 49085, Colorado Springs, CO 80919, (719) 260-5513 (after 1/94). Dexter Francis can be reached at FRANCIS4@AppleLink.Apple.COM

<Savant 1.0.1>
A new packet terminal front-end by the author of Virtuoso. Savant has a split window interface, but it's also a multi-window, multi-connection interface and will work with almost any TNC, unlike MacRatt or HostMaster. Savant also is compatiple with SoftKISS and the PacketMac Modem.
A demo version of the product is available at cpre1.ee.iastate.edu (pub/ke0ph) or via US Mail, send a SAS disk mailer and disk to CM Technologies, Inc., RR#1, Box 83A, Kelley, IA 50134 (515) 597-2051.
System 7, 32-bit, '040 cache clean and it supports the required AppleEvents.

<MacRatt with FAX>
Terminal program for use with AEA's PK-232 multimode controller. Supports packet, CW, RTTY, AMTOR, and facsimile. Includes cable. Advanced Electronic Applications, P.O. Box C-2160, Lynnwood, WA 98036.

<Host Master 1.2>
The Kantronics Host Master software provides an easy to use, multifunctional terminal program for the TNC. Host Master Mac is a simultaneous multi-mode terminal program for the Mac written by Kevin Krueger, N0IOS and marketed by Kantronics. It is a commercial

product available from most of the ham radio stores and supports single and multiple packet connects, packet monitoring, and HF operation (with KAM) each on a separate window, all at the same time. This package retails for $69.95 in the US and is intuitive, friendly, and well supported by Kantronics. Current version as of 10/20/93 is 1.2. It is hoped that a future version will support FAX but currently Hostmaster supports PACKET, AMTOR, RTTY, PACTOR (KAM ver. 6.0), CW, and NAVTEX. Features: text and binary file transfer; packet conferencing; color or B&W windows; cut, copy, paste between windows; call exchange and data/time stamp; auto startup/shutdown commands; transmit buffers for each mode; simultaneous dual port, multiple connects; supports KPC-2, KPC-2400, KPC-4, KAM and Data Engine. Requires: Macintosh Plus w/ System 6.05 or better. Current Kantronics firmware.
System 7 compatible, with baloon help

<PacketTracker 1.05>
PacketTracker ver 1.05 is a program that monitors packet activity and keeps track of what is going on. It draws a graphical map showing who is talking to who and displays statistics of all current stations and keeps a running tally of activity. PacketTracker was written for both the casual packet user and the network manager or BBS operator. The casual packet user will be able to learn a great deal about what is happening in packet around him; which stations are generating the most data and what some of them are. he will be able to see graphically what stations he can hitdirectly and which ones he cannot. For the network manager and BBS operator, PacketTracker provides extensive insight to the operation of the local network and problems such as excessive retries on a path. It also allows for extensive logging of channel utilization and other pertinate information.
NOTE: This application requires the Apple's Serial Tool from the Communications Toolbox.
System 7

*** RTTY ***
<MacTTY>
Decodes Baudot or ASCII transmissions. Can also be used for packet radio and other digital modes (including landline data communications). Includes split screen, a 15,000-character type-ahead buffer, and canned messages. Summit Concepts, Suite 102-190, 1840 41st Ave., Capitola, CA 95010.

<MacMultiCom 1.0>
MFJ sells MacMultiCom 1.0 for their 1278 multimode controller. MacMultiCom supports all of the modes of the 1278: packet, rtty, ascii, pactor, amtor, gray scale faxes, and many different formats of color sstv. The program requires a minimum of a MacPlus and a hard disk. Requires a color Macintosh and System 7 for best results.
System 7

*** Logging *** <Ham Radio Station Logbook>
HyperCard stack that stores and displays radio contact information. Automatically stamps entries with time and date. Contacts can be sorted by frequency, call sign, or date of contact. Includes report formats, a "Q-code" reference list, and on-line help. SanSoft, 892 E. Quail Place, Highlands Ranch, CO 80126. (The same program appears to be available from Heizer Software, 1941 Oak Park Blvd., Suite 30, Pleasant Hill, CA 94523.)

<FDLog!>
Contact logging and duping program. Can transmit any of ten programmable CW messages. Generates real-time statistics on QSO rates. System One Control, 3900 85th Ave N, Suite 200, Brooklyn Park, MN 55443.

<MacContest 4.0>
The ultimate contest logging program for the Macintosh (System 7 proof). Covers CW/SSB/RTTY modes and all bands from 1.8 MHz to 5.7 GHz. Allows real-time or post contest logging for a wide variety of contests (30 contest include, new ones can be added). Checks for dupes, figures scores instantly. Offers various printouts (sorts per band, alpabetically, labels etc.) Interfaces to TNCs (KAM, PK-232) for CW, RTTY and packet modes. Built in terminal mode and packet DXcluster interface. Interface to Kenwood transceivers for automatic band/mode logging. MacinTalk voice output for real-time logging as well as to ease post-contest entry. Option to capture log in realtime to printer. Option to simultaneously create a save copy of the log to a different file/drive. Timetable showing actual grayline on a world map.
MacContest is free but must be personalized to each user (otherwis it's limited to 50 contacts). To get a copy send a 3.5" diskette and a SASE to Gerald Eberle, HB9CEY, PO Box 13, CH-4417 Ziefen, Switzerland.
Moritz (HB9BLZ) can act as a message forwarder for Gerald. Moritz' e-mail address is: gysslerm@saturn.kau.roche.com

<LOGic>
(Macintosh version scheduled.) Lets you define the rules determining dupes (such as once per band or once per contest). Displays heading, distance, and other information about the country being worked. Automatically enters contact time; if interfaced directly to a radio, also enters the frequency, band, and mode. Shows status toward earning amateur-radio awards. User-definable database fields. Exchanges data with other programs. Personal Database Applications, 2634 Meadow Bend Court, Duluth, GA 30136.

<HF Logger 1.2>
A real fine HyperCard logging program! (hey... thats all I got!)
N0QGQ

<Simple Log .2b>
This little utility is a handy way to create a logging file that you can later import into any data base for analysis, etc. It also

shows you that just about anyone can use Think C and create something on the Mac! Let me know if you'd like the source code. WD1V @ WA1WOK.NH.USA.NA Author is John Seney - WD1V, e-mail address is jseney@aol.com. For a copy of this program, mail a SASE disk mailer and 800K disk to: John D. Seney, WD1V, 144 Pepperidge Dr., Manchester, NH 03103
System 7

<Marathon>
Contesting/logging- Have seen references to (March 92 CQ magazine) and heard good things about MARATHON by N 0 IOS. I believe a demo was available for $8. Last address known is: Kevin Krueger, N0IOS, 1780 Ruth St., St.Paul, MN 551O9

*** Propagation, gray line, DX headings *** <DX Map v1.1>
Displays a map of the world with the terminator. Gives location, prefixes, zone numbers, distance, and heading for any country you select. Freeware. Requires HyperCard 2.0. Available via anonymous FTP from joker.optics.rochester.edu (in the /ham/dxmap directory). Or send a formatted 800K Macintosh disk with a stamped, self-addressed disk mailer to Len Saaf, NV2Z, 52 Raleigh Street, Rochester, NY 14620 (Internet: saaf@joker.optics.rochester.edu).

<SatTrak>
Primarily a satellite tracking program, but also calculates beam headings, Maidenhead grid locations, MUF plots, and band openings. Shareware. Available via anonymous FTP from sumex-aim.stanford.edu (/info-mac/app). Or send a formatted 800K or 14.MB Macintosh disk with stamped, self-addressed disk mailer to Mike Pflueger, WD8KPZ, 6207 W. Beverly Lane, Glendale, AZ 85306.

<Sun Clock>
Desk accessory. Displays a color map of the world, including the terminator. Indicates current time for any location. MLT Software, Inc., P.O. Box 368, Portland, OR 97207.

<DX Window>
Draws a great-circle world map centered on your QTH, with day/night terminator indicated. Displays over 400 DX locations with prefixes and beam headings. Engineering Systems, Inc., P.O. Box 939, Vienna, VA 22183.

<Skycom 1.1>
Enter solar flux and get propagation predictions to desired areas of the world. Engineering Systems, Inc., P.O. Box 939, Vienna, VA 22183.

<Skycom 1.5>
Provides sunlight status at both ends of a path; MUF, F0F2, and FOT frequencies; S/N ratio of the link; and other information. Engineering Systems, Inc., P.O. Box 939, Vienna, VA 22183.

<DX Helper v1.57B>
Displays beam heading, distance, gray line, and propagation information. Generates great-circle maps. Identifies prefixes, zones, and oblasts. Includes code practice. MacTrak Software, P.O. Box 1590, Port Orchard, WA 98336.

<Mac MiniMUF v5.1>
A greyline and propagation predictor based on the PC version of MiniMUF by K4CFV. It is available directly from him for the price of a formatted disk and SASE (disk mailer). His address in callbook or: Bob Stamper K4CFV, 12510 Shadowrun Blvd., Riverview, FL 33569

<Mac ShortWave v1.2>
A program called Mac Shortwave that figures MUF and LUF. BXA Research in Plano, Texas

*** WEFAX ***
<RadFax 0.9>
RadFax 0.9 is somewhat incomplete and may have bugs, it is capable of receive weather faximile messages via the sound input port of Macintosh computers. Basically you connect your Mac to a shortwave radio and tune in to weather fax station. You set the reception speed and desired resolution and start receiving.
I'm not sure if I'm going to add the features that I still feel are missing, but if I get enough shareware payments, I will do so. In any case, anyone who send me a shareware payment of $25 (cash prefered, but I guess there might be a way for me to cash checks too) will receive a disk with the full source code for the program. You will need at least Think C 5.0 and TCL to compile the program. Shareware payments should be sent to: Juri Munkki, Ehrensv 20B8, SF00150 Helsinki, Finland

<WeFaxWorks>
Weather facsimile terminal program for use with Kantronics TNCs. Kantronics rfconcepts, 1202 E. 23rd Street, Lawrence, KS 66046.

*** Satellite tracking ***
<SatTrack v1.02>
Tracks one satellite across a world map as it moves, displays the instantaneous position of several satellites, or generates tables of all satellites visible from a certain location at a given time. Also calculates beam headings, Maidenhead grid locations, and MUFs. Shareware. Available via anonymous FTP from sumex-aim.stanford.edu (/info-mac/app). Or send a formatted 800K Macintosh disk with stamped, self-addressed disk mailer to Mike Pflueger, WD8KPZ, 6207 W. Beverly Lane, Glendale, AZ 85306.

<MacSat v3.1>
Tracks up to 21 satellites simultaneously, either in simulation or real-time mode. Text screen displays ground-track coordinates, range, mean anomaly, visibility (azimuth and elevation) and Doppler shift frequency information for all satellites being tracked. Graphical screen portrays the satellite ground tracks superimposed

on a world map. Polar plot displays graphically the precise location of each visible satellite above the observer's horizon. Developed by the Geodetic Research Laboratory of the University of New Brunswick. Available from Richard B. Langley, R.R. 12, Fredericton, N.B. E3B 6H7, Canada (Internet: lang@unb.ca). A demo version of MacSat may be ftp'ed from directory PUB.CANSPACE on unbmvs1.csd.unb.ca.
System 7

<OrbiTrack> <OrbiTrackFPU v2.1.4>
Calculates look angles to selected satellites, plots current satellite positions on a world map, and displays the visible passage of a satellite against background stars (either within the program itself or via a data file that can be read into the Voyager astronomy program). Please note that one version requires an FPU to operate! BEK Developers, P.O. Box 47114, St. Petersburg, FL 33743. (Bill Bard, CompuServe: 75366,2557) (Note: This replaces BEK's previous MacSat program, which was not related to the program of the same name from UNB.)

<QuikMac>
Macintosh version of N4HY's QuikTrak program. Requires Microsoft BASIC. AMSAT, P.O. Box 27, Washington, DC 20044.

<Satellite Orbit Prediction Program>
Macintosh conversion of W3IWI program. Requires Microsoft BASIC. Send formatted 800K Macintosh disk with stamped, self-addressed disk mailer to Earl Skelton, N3ES, 6311 29th Place NW, Washington, DC 20015. Or send self-addressed stamped envelope for source listing.

<Satellite Pro>
Uses world maps and tables to indicate rising and setting schedules, current locations, mutual visibility opportunities, and footprints. Includes Mercator, polar, and great-circle displays. Optional antenna control. MacTrak Software, P.O. Box 1590, Port Orchard, WA 98366.

<Macintosh Spacecraft Personal Orbit Computations (MacSPOC)>
Software used aboard the Space Shuttle and in Mission Control to track the Shuttle. Models engine burns, orbit perturbations, and the Shuttle's orientation. Free online data uploads during Shuttle missions.
Commercial v1.5 available from Daniel R. Adamo, 4203 Moonlight Shadow Ct., Houston, TX 77059; telephone 713-480-9631; AppleLink: D3176; America Online: AdamoD. Test drive v1.1 available on AppleLink (path "K-12 Education: Education Resources: Science Resources: MacSPOC: Space Shuttle Orbit Software"). Author is on AOL and can be reached as adamod@aol.com via the internet.

*** Antenna design ***
<MacMiniNEC>
Chris Smolinski, N3JLY, 40 South Lake Way, Reisterstown, MD 21136.

*** Radio control ***
<ICOM Radio Control>
Provides a Macintosh interface for controlling ICOM transceivers that use the CI-V remote-control system. Lets you quickly change frequencies and modes. Also does logging and duping. Requires a CI-V to RS-422 converter (schematic included with program).
KE6FG Software, 9763 Pali Avenue, Tujunga, CA 91042.

<FreqValet>
Provides frequencies and DX program info for shortwave radio listeners. The program databases update automatically at 15, 30, or 60 minute intervals, thus providing a continuous display of broadcasts on-the-air at any given time in a spreadsheet like format. Features include sorting of data, scanning, and on-screen changing of databases. The program will convert Tom Sundstrom's dBase shorwave broadcast listing to FreqValet format and will do the same for Shorwave Navigator users. Separate cards are provided for DX Programs, Ship to Shore, and Utility broadcasts. Computer control modules are available at extra cost for the Drake R8, Kenwood R-5000, JRC NRD-525, and NRD-535 receivers.
DX Computing, 232 Squaw Creek Road, Willow Park, TX 76087.
Telephone (817) 441-9188 or (817) 441-5555 (fax). Author is available via internet: dxcomp@aol.com System 7 with HyperCard 2.1

*** Ham radio BBSs ***
<Digikron Systems BBS>
Various ham-related applications, including logging, propagation, Morse code, and packet. (408) 253-1309.

<N8EMR BBS>
Various ham-related files, including packet, DXing, and contesting software; AMSAT bulletins; and several ham newsletters. (614) 895-2553. Also available via FTP on AMPRnet at 44.70.0.1.

<WB3FFV BBS>
Various ham-related software, including packet, contesting, and Morse code applications. (410) 661-2475, 661-2598, and 661-2648.

<ChowdaNet BBS>
(more info at a later date)

*** Online Services carrying Ham Radio software ***
<America Online>
Supports Macintosh, PC's DOS & Windows versions, PS/1, Apple //s, Casio Zoomer. Ham Radio Club (keyword = ham radio) supports all computer types. Software for amateur radio, scanners, swl'ers and general electronics. For 10 FREE hours of trial time send your snail mail address to tstader@aol.com or call 1-800-827-6364 Ext. 6285. This site NOT ftb'able (yet). Internet e-mail.

<CompuServe>
Supports any communications software on most computers Ham Radio area (go hamnet) supports all types of communications formats. Call

1-800-848-8199 for information. This site NOT ftb'able.Internet
e-mail.

<Delphi>
(more info at a later date) Internet e-mail

<GEnie>
(more info at a later date) Internet e-mail

<Prodigy>
Has ham radio message areas, no downloadable software. Limited
internet e-mail.

==========
Misc. Internet FTP sites for
Amateur Radio Macintosh software

joker.optics.rochester.edu (/ham)
sumex-aim.stanford.edu (/info-mac/app)
mac.archive.umich.edu various locations
vixen.cso.uiuc.edu (/pub/ham-radio)
ucsd.edu (/hamradio) many different subdirectories
(/hamradio/packet/tcp/incoming) newest
files temp holding area
(/hamradio/packet/tcpip/pa2aga)
NET/Mac & IM/Mac area
ftp.apple.com (/pub/ham-radio)
akutaktak.andrew.cmu.edu (/aw0g)
softkiss-mac nic.switch.ch (/software/mac/ham-radio)
ftp.std.com (/pub/hamradio/mac)

If you know of any other sites, please e-mail me info so I may keep
this list as up to date as possible!

- Terry

Thanks for all of the notes and updates! Keep them coming. Did I
get all of the versions right?

==========
NOTE: Much of this work was done by Patty-N6BIS as she collected
information from many vendors. I would like to keep this list as up
to date as possible. Please feel free to drop me a note if you have
any additional software to this list.

DISCLAIMER: The software listed is not endorsed by Apple Computer,
Inc.(c) nor has it all been tested by the author/providers of this
information.

****
* Recompiled by Terry Stader - KA8SCP (tstader@aol.com) *
* Original list compiled by Patty Winter - N6BIS *
* New information last added 1/94 *
* some information not rechecked since early 1991. *

****

2657. Re: Further criminalization of scanning

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 16:46:03 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CMAzws.A8E@ucdavis.edu>
Source record: 270006
Cross-posted to: rec.radio.scanner,rec.radio.amateur.misc

Mickey R Henniger (henniger@crl.com) wrote:

: Getting PGP will not solve the problem. I feel our government intends to:

: 1. provide a somewhat viable encryption standard with a govt backdoor.
This is unnecessary, why create a backdoor when you have the key? All
clipper keys are in the posession of our government with no LAWS to
protect them. Clipper is probably secure except for the fact that the
keys are all in "their" hands. see sci.crypt or alt.security.pgp

: 2. pass laws which make it illegal to use non-govt sanctioned encryption.
: (after all, if you are innocent, what do you have to hide?)
This is a possibility. A scary one.

: The standard argument has always been '...in the national interest...'
: The question becomes:
: "Do we really want to give up the last sanction of privacy left to us?"
No!

OBradio: I mentioned it before but got no responses, is the use of PGP
verification acceptable on packet?

cheers,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
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2658. Re: IRS 501(c) tax-exempt status for our club - How?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 16:51:13 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CMB05H.AF3@ucdavis.edu>
Source record: 270007

The easiest way to solve this problem, or atleast get an answer, is to run down to the local library or bookstore and look for NOLO press they publish a whole series of books about the law, and unlike most of us, they ARE lawyers. They have a book out for tex exempt organizations it includes who is/isn't tax exempt and the various forms of tax exempt status.

Good luck and let us know what NOLO has to say,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
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2659. Re: Looking for QSL routes

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 17:22:50 UTC
From: kchen@apple.com
Message-ID: <2lfnta$j8u@apple.com>
Source record: 270008

n1ist@netcom.com (Michael L. Ardai) writes:

>I am trying to catch up on my QSLing, and was wondering if anyone has any
>QSL info for any of the following. Thanks in advance.
>/mike

>HI8OMA

During this weekend's Phone contest, he gave out Box 3272, Santo Domingo.

73

Kok "59 CAL" Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

2660. Kep data and INFO

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 17:55:18 UTC
From: carrl@gordon-tsd1.army.mil
Message-ID: <9403071755.AA04487@gordon-tsd1.army.mil>
Source record: 270009

Haven't seen any Keperlerian (?) data and information on current
Shuttle flight. Could someone provide to the net?
Tks,
Larry Carr
carrl@gordon-tsd1.army.mil

2661. PK232->mac software

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 17:55:34 UTC
From: JMG@tntech.edu
Message-ID: <01H9OUAATBF6F4EF8D@tntech.edu>
Source record: 270010

HI,

A new ham here just bought an older 232 and wants me to set it up. Is there any decent packett of multimode shareware/freeware for the Mac and the 232?

thanks

Jeff, AC4HF

2662. Re: FCC Exec fired for incompetance?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 18:32:29 UTC
From: RWH@CCCS.UMN.EDU
Message-ID: <RWH.103.000C8AED@CCCS.UMN.EDU>
Source record: 270011

In article <1994Mar6.025345.250@nosc.mil> keating@nosc.mil (Roger Keating) writes:
>From: keating@nosc.mil (Roger Keating)
>Subject: FCC Exec fired for incompetance?
>Date: Sun, 6 Mar 1994 02:53:45 GMT

>I heard second hand (this is how rumors start!) a report about an FCC
>official being fired because of incompetance. Here is what I was
>told:

>National Public Radio reported Friday 4 Mar, that:
>The executive at the FCC whose responsibility included the computers
>systems used at the commission, was fired due to his incompetance.

>I did not hear this report; I was asked if I had heard it and if I knew
>anything more about it. I had no information about it, but was
>curious.

>Is this report close to correct? What has anyone else heard or read
>concerning this topic? Please indicate sources.

There were some managers at the FAA that were let go last week because of the
sad state of affairs with the new ATC software.

--rick

+--+
| Richard Hoffbeck, Sr Analyst e-mail: rwh@cccs.umn.edu |
| Prostate, Lung, Colorectal & Ovarian cis: 72406,521 |
| Cancer Screening Trial voice: (612) 627-4151 |
| University of Minnesota fax: (612) 627-4158 |
| 212 Ontario St SE, Suite 202 |
| Minneapolis, MN 55414 |
+--+

2663. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 18:46:44 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar7.184644.25858@ke4zv.atl.ga.us>
Source record: 270012

In article <1994Mar6.173414.5886@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: In article <1994Mar3.153014.6322@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
>: >BTW--how else does one improve a point to point link,
>: >besides using bigger antennas and more power?
>
>: Ah, the DXer mentality at work. That's what those guys
>: thought too. The only problem was, that wasn't why the
>: link was flakey. The real problem was that they had
>: established the world's worst exposed terminal in their
>: single frequency network, and the link was being killed
>: by all the DXer's with 160 watt amps and beams trying to
>: make it to their hubs and capturing the link node's receiver.
>: It would be held off for minutes at a time by the continous
>: collisions.
>
>Actually, if you are forced to do it all on a single
>frequency, bigger antennas and more power *is*
>just about the only solution (to improve the link).
>The more directive antennas would reduce chance of
>collisions, while more power would reduce the effect
>of a collision. Admittedly, an *ugly* situation. But,
>politics makes it difficult to find other frequencies
>that are those compatible with radios already in use.

No, the better solution is to convince people to use
lower power, and *lower* sites to reduce the exposed
terminal problem. 40 db over S9 signals are not required,
S2 is fine. The best solution is to use a separate non-
contending link frequency, of course.

>Yes, I know you could modify all the TNCs for some sort
>of optimized slotted Aloha protocol, but I doubt this
>is really practical.

Right, it isn't practical, and all it takes is one joker
who doesn't want to play to screw it up for everybody.

>Getting links on clear frequencies is where microwaves
>show their superiority. Not only is it more difficult
>to fill the wider bands with wall to wall signals, but
>highly directive antennas make frequency reuse more of a
>possibility. All that money spent on VHF bricks
>might be put to better use on microwave transverters.

The price of a VHF brick might make a down payment on
a stable microwave transverter, but you still are faced
with the LOS problems. Cheap, narrow, stable, pick one.
As far as I know, the cheapest suitable microwave
appliance is the SSB Electronics system. It costs
about what a VHF kilowatt does. Gunnplexers are neither
narrow nor stable. (not to say they won't *work* for
some unimpeded paths, but you can't co-locate a lot of
them in one of our bands).

>I'm pretty sure an analysis of the phone calls I've
>recorded would show that its not just DXers who run
>beams and amplifiers into their local BBS. I usually
>end up spending an extra few minutes explaining that
>while a beam results in stronger signals, this advantage
>is often eliminated by the extra collisions that result.

Yeah, there are others besides DXers who think power is
the answer to every problem. And it's true that too little
power, or too low an antenna can create hidden terminal
problems as well. The overall MAN system has to *balance*
to work well.

>I've found that an open wire fed *HF* dipole, even
>though it is cross polarized, works a lot better than
>an indoor yagi for packet work, because it hears more
>stations than the yagi.

A nice outdoor vertical that hears nearly as well as
your BBS or node is even better. Especially when coupled
with the minimum necessary transmit power. (Phil Karn's
pseudo-cellular approach would be best *if* the average
ham density was high enough. Unfortunately, it's not.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2664. Re: Chest Harness for HT?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 18:48:14 UTC
From: groverc@gvgadg.gvg.tek.com
Message-ID: <8454@gold.gvg.tek.com>
Source record: 270013

I had one made for me by a fellow locally. The cost was $25. It includes a harness, radio pocket, battery pocket, flashlight loop (mini), and map pocket. Call me if you like. I'm very pleased with mine.

Grover WT6P

(916) 478-3153

> The harness seemed to be made out of neoprene or nylon and was black in
> color. I want one. It would be terrific for cross-country skiing,
> because if you fall, you don't fall on your radio. Even if you
> don't fall, it makes the radio easier to use because you can simply
> press the ptt switch without removing the radio from the harness.
>
> Does anyone have any information?
>
> -- Dan N2EDC

2665. Re: Icom Package For Sale

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 19:20:55 UTC
From: grady@netcom.com
Message-ID: <gradyCMB72y.1GL@netcom.com>
Source record: 270014

Douglas S. Ring (dsring@equinox.unr.edu) wrote:

: I have the following Icom equipment for sale which I wish to seel
: only as a package!!!! The radio has a clean bill of health from Icom
: service, dated 12/28/93. The radio and all of it's accessories are in
: excellent condition and have been well cared for.

: IC W2A (2m/440 Handheld Transciever)
: HM 65 (Speaker Mic. W/earphone jack)
: BC 72 (Rapid Charger)
: 2-BP 84 (Battery Pack, Provides 2 watts)
: 2-BP 85 (Battery Pack, Provides 5 watts)
: AD 20 (Charging Adapter, Used with BP 84)
: LC 73 (Radio Case)
: BC 77 (Standard Charger {Comes With Radio})
: ----------
i
What is the serial number of the W2A? A littel while ago ICOM
modified the cpu board so the xmit modification won't work anymore.

--
Grady Ward | compiler of Moby lexicons: | finger grady@netcom.com
+1 707 826 7715 | Words, Hyphenator, Part-of-Speech | for more information
(voice/24hr FAX) | Pronunciator, Thesaurus | 15 E2 AD D3 D1 C6 F3 FC
grady@netcom.com | and Language; all royalty-free | 58 AC F7 3D 4F 01 1E 2F

2666. Re: 4-1000A Chimney

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 20:22:32 UTC
From: alanb@sr.hp.com
Message-ID: <CMB9xK.3qx@srgenprp.sr.hp.com>
Source record: 270015

Don Turner (don.turner@eabbs.com) wrote:
: Hi Guys: I need a chimney for my 4-1000A tube. The Eimac part number
: is SK-506. If any of you are will to let go of one of these, leave a
: message. .....Don Turner WA6WRX

I know that a Coleman lantern globes work perfectly for 3-1000's. Not sure
if they work with 4-1000's. They are much cheaper than Eimac chimneys.

AL N1AL

2667. Re: 400 Hz xtal ladder filter, help.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 20:33:56 UTC
From: alanb@sr.hp.com
Message-ID: <CMBAGL.448@srgenprp.sr.hp.com>
Source record: 270016
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

asirene@ntuvax.ntu.ac.sg (asirene@ntuvax.ntu.ac.sg) wrote:
: Hi,

: My homemade QRP xcvr has a 600 Hz BW xtal ladder filter
: consisting of 4 12.0000 MHz xtals. However I still find it hard to
: work pile-ups due to insufficient selectivity. I am planning to
: change it to 400 Hz. Does anyone know how much improvement I can
: expect to see? Also, how can this be done in the easiest way? Do
: I need to add xtal stages or just change to capacitor values?

: 72 es 73,
: Daniel

2668. Re: 400 Hz xtal ladder filter, help.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 20:56:18 UTC
From: alanb@sr.hp.com
Message-ID: <CMBBHv.4sK@srgenprp.sr.hp.com>
Source record: 270017
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

: asirene@ntuvax.ntu.ac.sg wrote:

: : My homemade QRP xcvr has a 600 Hz BW xtal ladder filter
: : consisting of 4 12.0000 MHz xtals. However I still find it hard to
: : work pile-ups due to insufficient selectivity. I am planning to
: : change it to 400 Hz. Does anyone know how much improvement I can
: : expect to see? Also, how can this be done in the easiest way? Do
: : I need to add xtal stages or just change to capacitor values?

Going from 600 Hz to 400 Hz may not be enough of a change to make
a significant difference. You might want to shoot for a bit narrower.

I'm assuming the circuit has the capacitors in series between input
and output with shunt capacitors at input/output and the junctions
of each pair of crystals. Increasing the capacitance should narrow
the bandwidth. It will also lower the resonant frequency a bit
and increase the insertion loss slightly.

Zack Lau (KH6CP) (zlau@arrl.org) wrote:

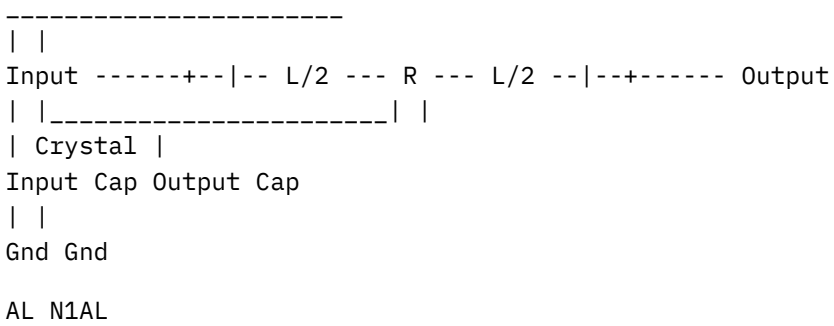
: ... Increasing the capacitor values will
: decrease the bandwidth, but will also decrease the impedance.
: Impedance matching is important to maintain the proper filter
: shape. ...

To clarify, the load impedance is not really matched to the crystals,
it is matched to the source. Consider a single-section series crystal
with no matching capacitors. So long as the crystal series resistance
is small compared to the load resistance, the crystal has no effect
on source/load match at resonance.

When you add the shunt capacitors on input/output, you basically have
added L-networks at both ends, with the crystal providing the required
series inductance to effect the proper match. (The crystal looks
inductive above resonance.) The "L-network" transforms the 50 ohm
source/load impedance down to a lower value, which increases the
loaded Q of the crystal, narrowing the bandwidth. That also increases
the insertion loss, which is proportional to (loaded Q) / (unloaded Q).
The bigger the capacitor, the greater the impedance transformation and
the narrower the bandwidth.

In the following "schematic", L is the net inductance of the off-resonant
crystal, and R is the crystal's effective series resistance:

L-network L-network
|<---------->| |<---------->|



AL N1AL

2669. Chest Harness for HT?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 23:07:16 UTC
From: William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM
Message-ID: <9402077630.AA763081636@smtpgty.anatcp.rockwell.com>
Source record: 270018

Dan (N2EDC) writes:

A few years ago, at a cross-country ski center, I saw an employee with a handheld radio attached to his chest with some sort of harness. It held the radio at a diagonal angle such that the antenna (VHF duck) pointed at his left shoulder and the base of the radio pointed at the right side of his waist.

The harness seemed to be made out of neoprene or nylon and was black in color. I want one. It would be terrific for cross-country skiing, because if you fall, you don't fall on your radio. Even if you don't fall, it makes the radio easier to use because you can simply press the ptt switch without removing the radio from the harness.

Does anyone have any information?

Look in police/rescue team supply catalogs. I think I saw this harness in the Gall's catalog, try 800 information for their number.

_____
Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI
(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com
---
Who are you? * I am number 2. * Who is number 1? * You are number 6.

2670. IPS Daily Report 07 03 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 23:08:48 UTC
From: rwc@corona.syd.ips.oz.au
Message-ID: <1994Mar7.230848.20069@ips.oz.au>
Source record: 270019
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 7 March 1994
Summary for 7 March and Forecast up to 10 March
IPS Warning 7 was issued on 02 March and is still current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 091/036

1B. SOLAR FORECAST
08 March 09 March 10 March
Activity Low Low Low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : storm levels

Estimated Indices : A K Observed A Index 6 March
Learmonth 48 4445 5665
Fredericksburg 35 10
Planetary 45 09

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
08 Mar 40 Minor storm.
09 Mar 30 Active to minor storm.
10 Mar 20 Active.

2C. MAGNETIC COMMENT
The coronal hole sourced disturbance has eventuated.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
07 Mar fair fair poor
PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
08 Mar poor poor poor
09 Mar fair poor poor
10 Mar normal fair poor
3C. GLOBAL HF PROPAGATION COMMENT
Degraded HF comms began during local night yesterday, and
are expected to continue for today.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were enhanced 15% until local dawn when depressions of
30% were observed

T index: 62

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
08 Mar -10 About 30% below predicted monthly values.
09 Mar 20 About 15% below predicted monthly values.
10 Mar 30 Near predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
Ionospheric conditions for today are expected to be very poor.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2671. Re: Chest Harness for HT?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-07 23:39:01 UTC
From: carndt@netcom.com
Message-ID: <carndtCMBJ12.Jrx@netcom.com>
Source record: 270020

Check out the cop/swat/military mailorder places like U.S. Cavalry. They have just the type of stuff you are looking for.

73,

Chris

KD6DSI

2672. Why no 10 meter activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 02:57:16 UTC
From: paulg105@aol.com
Message-ID: <2lgpic$2i2@search01.news.aol.com>
Source record: 270021

Why is there no 10 meter activity?? Is it because of the band openings? If so, how do you know when the openings are good?? 10 meters seems to have become or is a dead band.

Paul Gaspari

2673. 50 foot Radio/TV Tower- No. IL

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 03:27:59 UTC
From: MATT HUNSAKER <U61474@uicvm.uic.edu>
Message-ID: <94066.212759U61474@uicvm.uic.edu>
Source record: 270022
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,misc.forsale

For Sale

50 foot Tower suitable for Radio/TV/HAM Equipment

The tower is of a heavy duty construction. While it was in use, I was able to climb up/down it with no problem(and I'm 6'2", 220 lbs.). It is tapered in it's design. it currently has a rotor with a TV ant. attched the ant. is of qu estionable condition so I'll throw it and the rotor in for free. I would like to get $150 for it. It's in Rockford, IL. If you are local, come get it. If not buyer would have to pay for any kind of shipping in advance, or COD.

Thanks,

Matt u61474@uicvm.bitnet

2674. Day.Hamfest remote control for contesting meeting?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 06:41:28 UTC
From: apontej@dmapub.dma.org
Message-ID: <CMC2L6.Cv4@dmapub.dma.org>
Source record: 270023

anyone interested in discussing remote control for contesting
as an unschedule informal meeting during the dayton hamfest please
contact me (jose aponte - kp4uy). I will be working in the speaker &
forum desk, if not there please leave contact information & interest.
as a reference there was an article on cq july 93 page 68
that talks about the servant station. internet can be a land line
that would carry digitized morse code to be received by master. there has
been efforts by at&t to carry live packatized voice... anyone care to comment
on this? a way of doing it with existing tcp/ip? there are other issues on
how a station on the us can compete with the big guns in remote locations?
at present cq ssb wpx contest states that the xmiter needs to be connected
physically to the antenna, at least that was last years rule. so it is
posible to those rules to operate remotely, right? anyone care to comment?
on rules, interest, ways of doing it?of course you can't move the station
around from location to location depending on conditions... but what are the
rules for someone operating out an airplane, ship? no flames please because
they will not be read or replied to... only constructive comments.. gracias

2675. HELP: Yaesu ft-26 reset problems.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 06:58:19 UTC
From: burrus@cmu.unige.ch
Message-ID: <1994Mar8.085819.1@ugcmu>
Source record: 270024

I have done a reset on my ft-26, pressing simultaneously
" T " and " REV " while turning the transceiver on.

Before this operation I had RX 130-174 MHz
TX 140-150 MHz

and now I have only RX 144-148 MHz
TX 144-148 MHz

I have never open the transceiver to do some mods.
How can I retrieve the old limit values ?
How can I reprogram them ?
Can I change them ?

Thank's in advance
Christophe

2676. Looking for KA2ZNB

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 07:56:26 UTC
From: wil@maschinenbau.tu-ilmenau.de
Message-ID: <wil.6.0@maschinenbau.tu-ilmenau.de>
Source record: 270026

Hi,
I am looking for the location of KA2ZNB, who lived in Cape Cod previously.
The address in the NA-callbook seems not to be updated.
Does anybody know him?
We had many 2m QSOs when he has been in Germany. But now we have lost the
connections.
My former callsign was Y21DK , now I am DG0OD.
73,and thanks for reading this message.

T E C H N I C A L U N I V E R S I T Y I L M E N A U
==========
Technische Universitaet ILMENAU Tel. ++49 3677 691258
Dipl.-Ing. Wilfried Besig
Am Ehrenberg, Haus F, Fak. MB
PSF 327
D-98684 Ilmenau

email: Wil@Maschinenbau.tu-ilmenau.de
(ax25: DG0OD@DB0RSV.#THR.DEU.EU)

2677. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 09:08:34 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMC9EB.Kr1@news.Hawaii.Edu>
Source record: 270027

In article <1994Feb23.113305.7405@hemlock.cray.com> andyw@aspen32.cray.com (Andy Warner) writes:
>
>In article <N4HY.94Feb22150159@runner.ccr-p.ida.org>, n4hy@runner.ccr-p.ida.org (Bob McGwier) writes:
>>
>> Creative Technology DSP folks have given me an unbelievable reply. The
>> [Bobs obvious disapointment with CT's myopic world view deleted...]
>> to be more open about its architecture and/or the most versatile for our
>> applications.

Still sounds contrived to me.

>
>This must be some holy creed inside CT, since they did the same thing
>to *BSD developers a while back, so most developers switched efforts
>to the Gracillis card. Gracillis were more than willing to let people
>develop software for their card - if they have a comparable product,
>I suggest you contact them, you may be pleasantly surprised.
>
>Be sure to post repetative, boring posts of your progress so that
>we may compare it with the Hambluster :-)

But keep in mind that they're NOT ads because the item is not for sale yet (even though the price was posted for us).

>
>--
>andyw N0REN/G1XRL
>
>andyw@aspen.cray.com Andy Warner, Cray Research, Inc. (612) 683-5835

Jeff NH6IL

2678. Re: Why no 10 meter activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 09:40:18 UTC
From: elendir@enst.fr
Message-ID: <2lhh62$l3m@cismsun.univ-lyon1.fr>
Source record: 269828

PaulG105 (paulg105@aol.com) wrote:
: Why is there no 10 meter activity?? Is it because of the band openings? If
: so, how do you know when the openings are good?? 10 meters seems to have
: become or is a dead band.

Well, I sometimes hear CW QSOs round 28.05 28.1 MHz. Last saturday, I heard
4XPU from near Tel Aviv, Israel, QSG : 28.48 MHz if I remember correctly.

The band is not ccompletely closed, but the openings are quite rare, and
rely mostly on sporadic E, since the MUF is seldom wandering above 20 MHz.

Be patient.

Vince (14 weeks and waiting)

2679. US License Examination Opportunities Scheduled 3/4/94 to 6/6/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 12:57:22 UTC
From: bjahnke@arrl.org
Message-ID: <2196@bjj>
Source record: 269830
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

AMATEUR RADIO EXAMINATION OPPORTUNITIES

****

Special Note: Amateur Radio licenses usually arrive between 8 and 10 weeks after the test session. The FCC considers their processing time to be 90 days--from the date they receive the application. The FCC usually receives the application one to two weeks after the test session (once the VE Team and the coordinating VEC have completed their processing).

Note: Codeless Technician to Technician w/HF upgraders (who pass a Morse code test) will not receive a new license from the FCC. The existing Technician license plus the CSCE conveying the Morse code test credit is the only documentation issued for use of the additional HF privileges.

****

The following test session information is provided by the ARRL/VEC for the upcoming six to eight week period. For further information, please contact the test session CONTACT PERSON at the telephone number provided. If necessary, you may contact the ARRL/VEC at 203-666-1541 x282 for additional information. Electronic mail may be forwarded to the ARRL/VEC via USENET at "bjahnke@arrl.org" or via MCI Mail to MCI ID: 653-2312 or 215-5052.

Although the test session information presented here does not indicate whether walk-ins are accepted or not, most test sessions do allow walk-ins. We encourage you, however, to always contact the CONTACT PERSON at the telephone number provided so that the VE Team is aware that you be attending the test session.

STILL NEED TO PREPARE FOR YOUR EXAM?

If you would like information on how to become licensed; or how to locate Amateur Radio clubs, instructors, licensing classes and/or Novice examiners in your area; please contact the ARRL Educational Activities Department (EAD) at 203-666-1541 x219. The EAD can also provide information on recommended study materials. Electronic mail may be forwarded to the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to MCI ID: 215-5052.

EXAM LISTINGS - DEFINITION OF FIELDS

STATE
Test Date,VEC,City,,Contact Phone,Contact Person

The SECOND field in the following listing specifies the VEC
which is coordinating this examination. This single-character
designator denotes the VEC as defined below. An "A" (for example)
indicates that this examination is coordinated by the ARRL/VEC.

For further information on any examinations listed, or if you do not
find any examinations listed for your area, you may contact
any of the coordinating VECs below.

A = ARRL/VEC, 225 Main St, Newington, CT 06111; (d) 203-666-1541
The 1994 test fee is $5.75.

X = Anchorage ARC, 2628 Turnagain Parkway, Anchorage, AK 99517;
(d) 907-786-8121, (n) 907-243-2221 (or) 907-276-5121
(or) 907-274-5546

C = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
205-536-3904

N = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
704-596-2168

D = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
708-486-8019

E = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.

G = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
818-892-2068, 805-822-1473.

J = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368;
504-737-2315. Test fee for 1994 is $5.00.

K = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
808-235-4132

L = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
(d) 301-572-5124, 301-317-7819, (n) 301-588-3924

M = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
414-774-6999. Test fee for 1994 is $5.00.

H = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
301-724-0674

P = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313

R = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926

S = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
408-255-9000

T = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
919-841-7576

W = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
Knoxville, TN 37912-2500; 615-688-7771.
The 1994 test fee is $5.75.

5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
The 1994 test fee is $5.75.

EXAMINATION OPPORTUNITIES OUT

03/20/94,A,Adelup,,627-646-7611,Harry Y Taguchi
03/12/94,A,Belgium,,32-11439164,Ronald A.L. Torfs
03/12/94,A,Columbia,,571-222-8855,Jeff App - B P Exploration
03/05/94,A,England,,0462-812571,Leland Vandervort
03/19/94,A,Germany,,06561-18202,George L Hoke
03/26/94,A,Papua New Guinea,,FAX-77-3504,Randall Pearson
04/17/94,A,Saipan,,670-234-6323,David Hardt

US VIRGIN ISLANDS
04/09/94,A,St Croix,,809-778-3156,Frank Jaeger
05/14/94,A,ST Thomas,,809-774-4740,Ronald A Hall Sr

03/26/94,A,Yokosuka Japan,,243-6092,Paul W Jackson USN
03/26/94,A,Yokosuka Japan,,243-6092,Paul W Jackson USN

*eof

2680. RS-15 info

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 13:30:46 UTC
From: jennings@eng115.rochny.USpra.abb.COM
Message-ID: <9403081329.AA19523@nms1.abb.com>
Source record: 269832

Hello,

I noticed Amateur Radio Newsline #864 mentioned a new Russian
ham satellite will be launched later this month. I was wondering
if someone could tell me where I could find some information on this
new satellite.

Thanks and 73

TJ, kv2x
--

|
Thomas J. Jennings | Tel: (716) 273 7071
Development Engineer | Fax: (716) 273 7262
|
ABB Process Automation |
Post Office Box 22685 |
Rochester, New York 14692-2685 |
|

Internet: jennings@jennings.rochny.uspra.abb.com

2681. Re: PY0FM and 6Y5IC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 13:39:08 UTC
From: junger@rsg1.er.usgs.gov
Message-ID: <1994Mar8.133908.29432@rsg1.er.usgs.gov>
Source record: 269833

>
>1) PY0FM - which island group, and how to get a card?
>2) 6Y5IC - any special route to get a card?
>
>

Well, my callbook (94) says that PY0FM's QSL route is via PY5CC,
but I asked him for a route when I worked him during the contest
and I have written down on my notes "via PY7CC". I assume that
the disagreement between this note and the callbook is due to
contest fatigue on my or PY0FM's part and that the callbook is
correct. Did anyone else actually get a route from him while
on the air?

cheers -- John Unger, W3GOI

2682. Re: PY0FM

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 13:55:57 UTC
From: eckman@eos1.larc.nasa.gov
Message-ID: <2li05d$8b3@reznor.larc.nasa.gov>
Source record: 269834

In article <1994Mar8.133908.29432@rsg1.er.usgs.gov> junger@rsg1.er.usgs.gov (John Unger) writes:
>
>Well, my callbook (94) says that PY0FM's QSL route is via PY5CC,
>but I asked him for a route when I worked him during the contest
>and I have written down on my notes "via PY7CC". I assume that
>the disagreement between this note and the callbook is due to
>contest fatigue on my or PY0FM's part and that the callbook is
>correct. Did anyone else actually get a route from him while
>on the air?
>
Yes, I heard him on 10 meters this weekend and he said "via PY5CC".
Then again, I tried this route over a year ago and never received a
response (for a direct QSL request). Has anyone ever had any luck
with this route?

Richard Eckman KO4MR
NASA Langley

2683. QSL route for PJ8CW

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 14:00:52 UTC
From: ginsburg@wellfleet.COM
Message-ID: <9403081400.AA16407@pobox.wellfleet>
Source record: 269835

Does anyone have the QSL route for PJ8CW that I worked this
past weekend in the ARRL DX contest?

73,
Scott

Scott Ginsburg Voice: 508-436-3836
Wellfleet Communications Internet: ginsburg@wellfleet.com
2 Federal St. Amateur Radio: WA2CJT
Billerica, MA 01821

2684. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 14:31:41 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar8.143141.29301@ke4zv.atl.ga.us>
Source record: 269836

In article <2lg5vo$err@news.delphi.com> mahjmac@news.delphi.com (MAHJMAC@DELPHI.COM) writes:
>>Just couldn't resist adding to his thread. Copying by typewriter has been
>>around for as long as their have been typewriters. Even the FCC when it
>>gave the test would let you bring a typewriter. The computer is just the
>>late 20th century typewriter. The object really is to demonstrate the
>>ability to receive code at the required level. The mechanism by which you
>>(as distinct from some computer program) write down the code is immaterial
>>and not germane to the testing of code proficiency. Not even the FCC is
>>requiring a handwriting proficiency test at a particular speed.
>
>>Erich
>>N3OXM
>
>As I was learning the code, I developed an application that would sound random
>letters, numbers, or pro-signs, and I would then press the proper key on the
>keyboard. As a high speed touch typist (> 120 wpm) I found that after a
>while, my fingers were conditioned to pressing a certain key in response to
>a certain audible pattern. When I then began attempting to write down
>what I heard, instead of hitting a key, I discovered that I was not nearly
>as proficient as I was on the keyboard.

That's what the military and commercial operators discovered too. Copying with a typewriter is much faster than copying by hand. That's why they *teach* the Code that way, and why intercept operators always copy with a keyboard. Note that what they want is an accurate and legible copy of what was sent. Since most intercepted traffic is encoded, and most commercial traffic heavily abbreviated and filled with "commercial codes", flawless copy is mandatory or all meaning could be lost. That's what the FCC wants on the test too, though the current amateur test doesn't require zero errors, just one minute out of five perfect copy, or the answers to the multiple choice questions as the case may be. That level of performance would wash you out at military or commercial levels of required accuracy.

Copying in the head isn't real copy, but it's what some hams do on the air. That's because their communications content isn't important enough to require perfect or permanent copy, and because they can "fill in the blanks" from plain English context and from the standard amateur QSO format. That wouldn't do if artillery coordinates were being sent.

>But, you bring up an even different point. If the only goal is to make
>certain people are proficient in code, no matter what the means, then why
>couldn't a decoding device that takes audible morse and converts it into
>text be allowed. In under a week I could develop a program for the Sound
>Blaster or other audio cards that could do exactly that.

>
>It would be no different than a person who can only decode morse if they have
>a typewriter or other keyboard device available. It seems to me that in this
>day and age, it is so easy to develop inexpensive devices that could decode
>morse, that the only reason to keep the test is to be certain people are
>proficient in reading and writing without devices to assist them.

Actually, I think you'll find that your Sound Blaster code wouldn't
do a very good copying job on normal, noisy, interference filled, HF
channels. It's possible to exceed human Morse copying ability with DSP
and/or massive processing, but it's neither simple nor cheap to do it
in real time now. That's because Morse is an irregular code with
non-uniform element lengths, spacings, and character lengths. It's
also normally sent by incoherent on/off keying. Machines can easily
exceed trained humans in flawlessly copying signals buried in noise
and interference when the encoding is uniform and coherent, but Morse
is not a good code in those respects. It was designed, rather haphazardly,
in an era before a good understanding of information theory existed.
And it was designed for use on essentially noiseless and interference
free wire lines. It's use over radio is more of a historical accident
than an intelligent choice.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2685. Daily Summary of Solar Geophysical Activity for 07 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 15:00:00 UTC
From: oler@rho.uleth.ca
Message-ID: <9403081501.AA08474@rho.uleth.ca>
Source record: 269837
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACT

07 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACT

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 066, 03/07/94
10.7 FLUX=091.3 90-AVG=106 SSN=080 BKI=4444 4645 BAI=036
BGND-XRAY=B1.1 FLU1=1.2E+06 FLU10=1.6E+04 PKI=5356 5555 PAI=045
BOU-DEV=066,042,042,060,050,***,064,090 DEV-AVG=059 NT SWF=00:000
XRAY-MAX= B3.2 @ 2139UT XRAY-MIN= A9.6 @ 2341UT XRAY-AVG= B1.3
NEUTN-MAX= +001% @ 2300UT NEUTN-MIN= -003% @ 1315UT NEUTN-AVG= -0.6%
PCA-MAX= +0.1DB @ 2355UT PCA-MIN= -0.5DB @ 0920UT PCA-AVG= -0.0DB
BOUTF-MAX=55348NT @ 0835UT BOUTF-MIN=55285NT @ 1703UT BOUTF-AVG=55330NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+050,+000,+000
GOES6-MAX=P:+172NT@ 1628UT GOES6-MIN=N:-118NT@ 0713UT G6-AVG=+075,+045,-059
FLUXFCST=STD:090,095,095;SESC:090,095,095 BAI/PAI-FCST=030,025,020/030,030,025
KFCST=5555 5555 4555 4444 27DAY-AP=056,034 27DAY-KP=6566 6455 4445 4455
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MINSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 06 MAR 94 is not available.
The Full Kp Indices for 06 MAR 94 are: 2o 2o 3o 3- 1o 2- 2+ 3o
The 3-Hr Ap Indices for 06 MAR 94 are: 9 9 17 13 4 6 10 15
Greater than 2 MeV Electron Fluence for 07 MAR is: 3.1E+06

SYNOPSIS OF ACT

Solar activity was very low. Three weak B-class xray
events were recorded this period. Region 7685 (S08W04) has
shown slight white light growth while indicating some trailer
penumbra decay. Region 7687 (N18E03) elongated slightly along
a E-W axis this period. All other regions quiet.

Solar activity forecast: solar activity is expected to be
very low to low with Regions 7685 and 7687 the most likely to
produce C-class activity.

The geomagnetic field has been at mostly quiet to
unsettled levels until 07/03Z when the field became disturbed.
Conditions since 07/03Z have been mostly active to minor storm
at middle latitudes and active to major storm at high
latitudes. Periods of severe storm levels were recorded at
07/18Z at high latitudes. This geomagnetic storm is believed
to be caused by a favorably positioned coronal hole. Recurrence
indicates this hole has persisted for several rotations.

Geophysical activity forecast: the geomagnetic field is
expected to remain disturbed for the remainder of this
forecast period. Active to minor storm conditions with
isolated periods of major storm levels will persist at mid
latitudes. Active to major storm levels with some severe
storm levels can be expected at high latitudes.

Event probabilities 08 mar-10 mar

Class M 05/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 08 mar-10 mar

A. Middle Latitudes
Active 30/25/25
Minor Storm 30/25/20
Major-Severe Storm 10/05/01

B. High Latitudes
Active 30/30/25
Minor Storm 40/35/20
Major-Severe Storm 15/10/05

HF propagation conditions began deteriorating during the
day. High and polar latitude paths experienced poor to
occasionally very poor propagation due to the enhanced
geomagnetic and auroral activity. Middle latitudes observed
minor signal degradation. Stronger degradation is expected
during the local night hours. No improvements are expected
until after about 10 March.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WIT

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7684 S08W30 008 0020 CRO 03 002 BET
7685 S08W04 342 0110 DAI 07 020 BET
7686 N08W59 037 0020 BXO 06 006 BET
7687 N18E03 335 0050 DSO 06 012 BET
7678 S11W65 043 PLAGE

7680 S11W42 020 PLAGE
REGIONS DUE TO RET
NMBR LAT
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 07 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 07 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 07/2400Z

ISOLATED HOLES AND POLAR EXT
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DAT

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
06 Mar: 0626 0630 0633 B2.0
0636 0640 0642 B3.9 SF N09W36
0652 0656 0659 B3.6 SF N17E26
0812 0817 0819 B8.3 SF N17E25
1025 1030 1034 B4.4
1135 1144 1149 B2.3
1229 1237 1240 C2.3 SF N17E23
1513 1519 1531 B3.8
1550 1604 1610 B5.7 SF 7685 S09E15
1626 1633 1643 B3.2 SF N17E21
1711 1714 1722 SF 7685 S09E13
1739 1754 1803 B2.9 SF 7687 N18E21
1805 1817 1834 SF 7685 S09E13
1933 1940 1945 B6.1 SF 7685 S09E12
2208 2213 2219 B2.2
2312 2316 2319 B2.0

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7685: 0 0 0 4 0 0 0 0 004 (25.0)
Region 7687: 0 0 0 1 0 0 0 0 001 (6.2)
Uncorrellated: 1 0 0 5 0 0 0 0 011 (68.8)

Total Events: 016 optical and x-ray.

EVENTS WIT

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
06 Mar: 0636 0640 0642 B3.9 SF N09W36 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2686. This week on Spectrum 12/03/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 15:03:52 UTC
From: barry@garion.it.com.au
Message-ID: <2li44o$6tn@garion.it.com.au>
Source record: 269838
Cross-posted to: alt.radio.scanner,rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.cb,alt.radio.pirate

[The original had the date back to front]

This week Spectrum takes to the road. We will be broadcasting live from
the Winter Swl Fest in Kulpsville Pennsylvania. Everyone who is anyone
in the communications hobbyist community will be on hand. If you can
make it we would love to shake your hand. If you can't join in on the
fun in person, you can listen to our live broadcast at the usual times
and frequencies. See you at the Winter Swl Fest '94.
--
Spectrum airs live Sunday at 0300 UTC (2200 EST Saturday) on:

WWCR, 5810 KHz, Nashville, TN (World Wide)
WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
KHNC, 1360 AM, Denver, CO (Denver Area)
Omega Radio Network, Galaxy III, X17, 5.8 MHz WIDE audio. (Satellite)

Spectrum is rebroadcast:

Sunday at 1500 EST, on WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Monday at 0400 UTC (2300 EST Sunday),
on WWCR, 7435 KHz, Nashville, TN (World Wide)

--
Spectrum, "The Communications Magazine You Read With Your Ears."
Box 722, Holmdel, NJ, 07733-0722, USA
spectrum@overleaf.com, askspectrum@attmail.com, spectrumshow@genie.geis.com
+1 800-787-SPECTRUM, +1 908-671-4209

2687. help identifying a tube

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 15:15:23 UTC
From: vbreault@rinhp750.gmr.com
Message-ID: <VBREAULT.94Mar8151523@rinhp750.gmr.com>
Source record: 269858

I just got a high power tube and am wondering what it's characteristics might be. It's an Eimac 3CW20 000A7. If it's worth something to someone I may consider selling it, but it will make a great conversation piece in the event no one does.

For what it's worth: I also have the filament transformer (6V 100A), blower and socket. It is mounted in it's socket.

--
Val Breault - N8OEF - vbreault@gmr.com \ /|
Instrumentation dept GM NAO R&D Center \ / |
My opinions are not necessarily those of \ /__|
GMR nor of the General Motors Corporation \/ |___

2688. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 15:47:00 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CMCruE.8n6@ucdavis.edu>
Source record: 269839

Jeffrey Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:

: But keep in mind that they're NOT ads because the item is not for sale
: yet (even though the price was posted for us).
I've seen this argument posited before, I'm not sure if it's real or
not. Anyone who thinks that the non-existence of a product means that
ads for it are not advertisements should look at the last couple months
of QST. Lots of companies advertise before the product is actually
available. (Sorta like President Clinton and the health care program)

cheers,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2689. Re: PY0FM and 6Y5IC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 16:00:47 UTC
From: jayk@fc.hp.com
Message-ID: <CMCsHB.98z@fc.hp.com>
Source record: 269840

Scott Richard Rosenfeld (ham@wam.umd.edu) wrote:

: 1) PY0FM - which island group

The _0F_ in his call is used to indicate that he is on Fernando de Noronha.

73, Jay K0GU jayk@fc.hp.com

2690. Need ITU Call Sign Prefix List

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 16:30:53 UTC
From: gaus@islandgirl.crd.ge.com
Message-ID: <CMCtvI.74M@crdnns.crd.ge.com>
Source record: 269841

Hello all,

Does anyone have an up-to-date list of ITU call sign prefixes?
If so, could you please send it to me by email.

Thanks,

Rick Gaus
WA3INC

2691. Re: Ten-Tec question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 16:32:15 UTC
From: co128@cleveland.Freenet.Edu
Message-ID: <2li9af$ofq@usenet.INS.CWRU.Edu>
Source record: 269842

Noise blankers typically do their best job on periodic
impulse noise (car ignitions, light dimmers). They
have little effect however on atmospheric background
like the kind you hear on 40 & 80 meters.
--
JIM MARTIN W8AC
co128@cleveland.freenet.edu

2692. Fred

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 16:39:09 UTC
From: zawada@softage.demon.co.uk.demon.co.uk
Message-ID: <763144749snx@softage.demon.co.uk.demon.co.uk>
Source record: 269843
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.misc

```
This is a test

--
Mark Simpson
SoftAge Solutions.
```

2693. Re: Status of Online Repeater Directory Project....

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 16:48:59 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <CMCupn.5G7@cscsun.rmc.edu>
Source record: 269844

Conway Yee (yee@mipg.upenn.edu) wrote:
: In the subsequent two posts, I enclose copies of the two letters that
: the ARRL has or will send me. The second letter has not yet been
: received so I am unable to verify the accuracy of the email version
: compared to the printed version but I have no reason to believe that
: there will be any differences.

[Rest of letters deleted]

Maybe if we talk nicely to the coordination bodies and explain what's been going on we can get them to either refuse the ARRL the free (and unacknowledged) use of their data or to charge them for it. I for one would rather see the online database than the silly paper one. I think the ARRL has been a real poop about this, and is running amok over its members. I wonder what they'd say if TMARC or SARA decided to allow Mr. Yee free access to their data, but not the ARRL??? Serves them right...
--
David Tiller | Network Administrator | Voice: (804) 752-3710 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
"Drunk, [Beowulf] slew | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
no hearth companions." | Ashland, Va 23005 | 77d 31' 32.19" W |

2694. Re: Ten-Tec question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 17:17:57 UTC
From: julian@bongo.tele.com
Message-ID: <1994Mar8.171757.9711@bongo.tele.com>
Source record: 269845

In article <199403081458.GAA03204@ucsd.edu> rrossi@vnet.IBM.COM (Ron D. Rossi) writes:
>I recently purchased a TEN-TEC Omni-D and the thing works great.

>The rig came with all the filters, but no noise blanker.
>I am new to this game and wondered what the noise blanker would buy me.
>The filters really let me single out the CW ops in a crowd (but they need
>to be relatively strong). I am guessing the noise blanker would be of
>better use with SSB. By virtue of its name I would say the blanker
>reduces the background static. Am I far wrong and is this a useful
>feature on this rig?

The noise blanker reduces impulse noise. The sort of noise
generated by mopeds, lawn mowers, electric fences etc. This is a nice
feature on a mobile rig. If you live in an RF quiet neighbourhood, you
don't need it.

I have an Omni D with the noise blanker. I use it in rural
Wisconsin. I have played with the noise blanker, but have never needed
it.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

2695. CAN WE SELL STUFF HERE?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 17:19:07 UTC
From: MAYNARD@uriacc.uri.edu
Message-ID: <199403081720.JAA18342@ucsd.edu>
Source record: 269846

Here is a real naive question, but is it ok to list ham related items for sale on the LIST? Please differentiate Official Replies from Official Opinions . TNX, WY2G, Brian

2696. Why no 10 meter activity?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 19:05:53 UTC
From: keating@nosc.mil
Message-ID: <1994Mar8.190553.16473@nosc.mil>
Source record: 269847

Sunday, here in San Diego, W6RDF was QSOing with Pitcairn Island.

10m is open more than I would expect.

Roger Keating - KD6EFQ

2697. Definition of CW speeds

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 21:24:31 UTC
From: battin@cyclops.iucf.indiana.edu
Message-ID: <CMD7Gw.2wo@usenet.ucs.indiana.edu>
Source record: 269848
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

I am writing a code-practice program for my Amiga computer, and
I wonder if anyone can give me a definitive answer to exactly
how many milliseconds long a dit at 18 wpm is supposed to be?

The only references I have say that wpm is defined for 5-letter
words. But, since letters vary in their dit content, I assume that
this is supposed to be some sort of "average" letter. Does the FCC
say in some regulation (not in Part 97 that _I_ can find) how
many dits an "average" word or letter should be composed of?

Note that this would be different for messages composed of random
letters, and messages composed of plain-text. In fact, plaintext
that has a lot of ham-style abbreviations will have different letter
frequencies than other sorts of plaintexts. Throw in proceedural symbols
like AR and SK, various punctuation marks, numbers and what-not, and
you can see why I'm looking for the real, "definitive", definition.

FWIW, Morse used the number of pieces of type in a printer's type case
to determine letter frequencies when he assigned various seqences
and if you compare the results with other people's data concerning
letter frequencies you'll see some real differences.

So, just what _is_ the _exact_ standard? (Assuming that there _is_ one.)

[I know, I'm talking about differences that are very small, but still
I'd be surprised if there isn't some better standard than simply saying
"x wpm = x (undefined) words of 5 (undefined) letters per minute". The
simplest such standard I can think of is to simply _define_ some particular
x wpm as composed of dit units of y milliseconds, thus my question above.
Since the ARRL uses 18 wpm character rate in their code exams for 5 and 13
wpm tests, I figured that there must be some standard by which they are
going.]

--
Gene Battin
battin@cyclops.iucf.indiana.edu

```
_____________________________________________________________________
| "Ideas that have outlived their day may hobble about the world for |
| years, but it is hard for them ever to lead and dominate life. |
| Such ideas never gain complete possesion of a man, or they gain |
| possesion only of incomplete people." |
| - Alexander Herzen _My_Past_and_Thoughts_ (1861) |
|_____________________________________________________________________|
```

2698. Re: Need ITU Call Sign Prefix List

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 21:26:59 UTC
From: wps@ElSegundoCA.NCR.COM
Message-ID: <5706@tdbunews.teradata.COM>
Source record: 269849

send mail to the ARRL server.

To: info@arrl.org

put the following in the message body

send itu-call
quit

Then wait until the server sends you the info.

73's

Bill

Bill Starkgraf wps@ElSegundoCA.ncr.com
AT&T Global Information Solutions (310) 524-5754
El Segundo, CA (800) 222-6245 x5754

Call: KD6UQB Simi Settlers ARC
Simi Valley, CA

2699. Re: help identifying a tube

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 22:22:44 UTC
From: myers@fc.hp.com
Message-ID: <CMDA5w.L01@fc.hp.com>
Source record: 269850

Val Breault (vbreault@rinhp750.gmr.com) wrote:
> I just got a high power tube and am wondering what it's characteristics
> might be. It's an Eimac 3CW20 000A7. If it's worth something to someone
> I may consider selling it, but it will make a great conversation piece in
> the event no one does.

The 3CW20,000A7 is a power triode rated at a maximum plate dissipation of
20 kW @ 110 MHz. Max. plate voltage is 7 kV, max. plate current 4.0 A.
According to my trusty old Eimac handbook, it takes 7.5V at 99A to run the
filament, and uses a combination of forced-air and water cooling. Anything
else you need to know about it?

(This is an impressive tube from a ham perspective, but it's *far* from the
heftiest thing that Eimac offers. Their catalog is an interesting read....)

Bob Myers KC0EW Hewlett-Packard Co. |Opinions expressed here are not
Advanced Systems Div. |those of my employer or any other
myers@fc.hp.com Fort Collins, Colorado |sentient life-form on this planet.

2700. Re: CAN WE SELL STUFF HERE?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 22:33:37 UTC
From: Kenneth.E.Harker@Dartmouth.Edu
Message-ID: <2liug1$gmg@dartvax.dartmouth.edu>
Source record: 269851

In article <199403081720.JAA18342@ucsd.edu>
MAYNARD@uriacc.uri.edu writes:

> Here is a real naive question, but is it ok to list ham related items for
> sale on the LIST? Please differentiate Official Replies from Official Opinions
> . TNX, WY2G, Brian

On the USENET, no commercial activity is allowed. That means that
you cannot post advertisements for your company, or for a product you
wish to market, etc. Anything you will be making a profit on that
contributes to your steady income is not allowed.
However, it is perfectly all right for people to post for
sale/wanted ads on the USENET, so long as the items for sale are few in
number, and your sale is infrequent. So, if you want to sell your dual
band mobile unit for money to get an HF rig, that is allowed. But if
you want to sell a product, like a new software program you've written,
or a PC card you've designed, that is not allowed.
The appropriate newsgroup for classified advertisements in the
rec.radio.* hierarchy is rec.radio.swap.

==
Kenneth E. Harker N1PVB Dartmouth College Amateur Packet Radio
kenneth.e.harker@dartmouth.edu Hinman Box 1262 n1pvb@w1et.nh.usa.na
(603) 643-6549 Hanover, NH 03755 or n1pvb-5 on 144.99
==
(PGP Public Key now available on request)

2701. Re: HELP: Yaesu ft-26 reset problems.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 22:35:00 UTC
From: ijordan@freenet3.scri.fsu.edu
Message-ID: <2liuik$9uj@freenet3.scri.fsu.edu>
Source record: 269852

From what I know, all yaesu HT's use the same expand receive/TX mod. Hold the freq "\/" and "/\" buttons at the same time when you turn the radio on. This works on most yaesu radios that i know of, but it will erase your memories. This should return your factory pre-set range. Good luck!

--
* * Ian Jordan * *
KC7ANP

2702. Amateur Satellite Information?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 22:39:35 UTC
From: zawada@softage.demon.co.uk
Message-ID: <CMDAxz.2H1@demon.co.uk>
Source record: 269853
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.space,uk.radio.amateur,sci.space

I'm looking for information on receiving packet radio satellites on VHF.
I've got a packet radio decoder and VHF receiver, what I need is....

Name Of Satellite
Frequency
Type of transmission (aerial type)

Any information would be greatly appreciated.

Thanks

Mark
--

Mark Simpson

2703. FCC Regulations: Freq., Power, etc

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 22:45:18 UTC
From: martino@nosc.mil
Message-ID: <CMDB7J.Bnu@sunspot.nosc.mil>
Source record: 269854

I don't usually read this group so bear with me and my ignorance on the subject. Could someone point me to the FCC document that lists the regulations (limits) on radio equipment, such as frequency bands, power, etc?. A brief summary of what the document contains would also be helpful. Please e-mail responses to the above address. If I get any requests I'll post what I receive.

Thanx in advance.

==========
Martin Olivera
==========

2704. Re: Tracking info.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 22:49:36 UTC
From: bmiller@landesk.intel.com
Message-ID: <2live0$j54@ornews.intel.com>
Source record: 269855

In article <CMCxo7.86v@inf.utfsm.cl> ce2usm@inf.utfsm.cl (Circulo de Radio Aficiionados UTFSM) writes:
>'lo all.
>I'm working in a project tracking some satellites.... I've been
>using some progs (SIMTEL20 :), but now I need the info to update
>the information about each sattelite orbit.
>Where can I find a file with this information????
>I hope there is a site where anyone can get this kind of data
>'cause is very important to me to update this in order to have
>the program working properly.
>Please any reply to this not to news but to my presonal e-mail
>address: rrodrigu@loa.disca.utfsm.cl
>
>Thanks in advance for any help.
>
>Rodrigo E. Rodriguez (ROD)
>CE 6 NUG
>rrodrigu@loa.disca.utfsm.cl

You can get the satellite orbit information from rec.radio.info They often post orbital elements. Some are 2 line elements, and some are the other kind (whatever you call them). Your program may require a particualr input format.

I use Traksat sometimes and find it very functional. It is available via FTP from fdtp.std.com

--
Brett Miller N7OLQ E-mail: brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

2705. IPS Daily Report 08 03 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 23:13:09 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar8.231309.13488@ips.oz.au>
Source record: 269856
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 8 March 1994
Summary for 8 March and Forecast up to 11 March
IPS Warning 07 was issued on 02 March and expires today.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 091/036

1B. SOLAR FORECAST
09 March 10 March 11 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : active to minor storm

Estimated Indices : A K Observed A Index 7 March
Learmonth 33 4444 5553
Fredericksburg 35 37
Planetary 55 55

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
09 Mar 30 Active.
10 Mar 20 Unsettled to active.
11 Mar 20 Unsettled.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
08 Mar normal normal poor-fair
PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
09 Mar fair poor poor
10 Mar normal fair poor
11 Mar normal fair poor
3C. GLOBAL HF PROPAGATION COMMENT
Degraded HF comms are expected early today with an improvement
by the end of the day. High lat HF comms will be slower to
recover and may not show an improvement until tommorrow.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were about 30% below predicted monthly values

T index: -23

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
09 Mar 5 About 15% below predicted monthly values.
10 Mar 20 About 10% below predicted monthly values.
11 Mar 30 Near predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
Ionospheric conditions for today are expected to poor
initially, then showing some improvement by this afternoon.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2706. Re: Medium range point-to-point digital links

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 23:13:50 UTC
From: johng@ecs.comm.mot.com
Message-ID: <johng-080394171350@johng.comm.mot.com>
Source record: 269857

In article <1994Mar4.141341.9861@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> It's hard to beat a stationwagon full of mag tapes for throughput. :-)

I see Gary read Tannenbaum's text on data communications.

--
John Gilbert johng@ecs.comm.mot.com

2707. Re: HT use on Cruise to Mexico

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-08 23:24:27 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-080394162228@129.188.192.107>
Source record: 269859

In article <tjf-080394103349@mamie.lanl.gov>, tjf@beta.lanl.gov (Thomas J. Farish) wrote:

> OK mea culpa! I didn't pay much attention to the posts about
> reciprocal licenses, etc when on a cruise.
>
> Looks like I'll be able to cruise to Mexico on a Norwegian ship
> registered in the Bahamas. I'd like to take my HT along for
> jollies. Along with getting permission from the cruise line (and
> the captain?), do I need to contact a Bahamian consulate? How
> 'bout Mexican authorities?

You will need reciprocal licenses from all three! Norway for "high seas" operation, and the respective countries for operation in their waters.

> Thanks for your help! I've got about a month's lead time here, so
> any info would be appreciated!

A month may well be too little time. Contact ARRL's FAQ on the subject (help@arrl.org) to get the basic information you will need and use airmail!

Be sure you specify the time of your cruise so the license will be issued for the correct time.

--
Phooey on it all - I'm going sailing for a year or two!!!

2708. ARRL DX Bulletin #13 - March 3, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 00:35:32 UTC
From: Jim Reisert AD1C <reisert@wrksys.enet.dec.com>
Message-ID: <$arld.013@ampr.org>
Source record: 269860
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

ZCZC AE11
QST de W1AW
DX Bulletin 13 ARLD013
>From ARRL Headquarters
Newington CT March 3, 1994
To all radio amateurs

SB DX ARL ARLD013
ARLD013 DX news

The items in this week's bulletin are courtesy of Tedd, KB8NW; the OPDX Bulletin; Chod, VP2ML; the DX Bulletin; Bob, W5KNE; QRZ DX; the Yankee Clipper Contest Club PacketCluster network; and Contest Corral in QST

PRATAS ISLAND. Martti, OH2BH, reports that preparations are under way for the upcoming 10 day DXpedition. The target date is March 16. So far there are 14 operators on tap for this one.

PACIFIC DXPEDITION KC6/KH2/V63. JR6IQI and JK6UER will operate all bands both CW and SSB. Their schedule is Belau from March 13 to 16 as KC6KT and KC6UA; Micronesia from March 16 to 18; and Guam from March 18 to 20 as KH2/JK6UER.

SIERRA LEONE AND LIBERIA. Jay, K4ZLE, will be in Sierra Leone until March 10; Liberia between March 11 and 17; and back in 9L-land on March 18 and 19. Operations will be mainly CW on 80, 40, 30, 17 and 12 meters, though some SSB and activity on the other HF bands is possible. He will be active with 9L2SH and AA8NW in the phone portion of the ARRL International DX Contest signing 9L2SH.

EGYPT. SU2MT should be on in the phone portion of the ARRL International DX Contest. Also listen for this one on the lower bands and on CW.

NAMIBIA. V51GB has been on 14192 kHz around 0615z. Baldur, DJ6SI, and company have been operating V59PI from the former Penguin Islands. Look for V51HK on 24944 kHz at about 1530z; and V51Z on 1832 kHz at 0500z, 7007 kHz at 0600z, and 10100 kHz at 0400z.

GUYANA. Larry, N4VA, is expected to be in Guyana on March 4. He will be involved in radio training and putting together a club station with the Guyana Amateur Radio Association. His on-the-air activities as 8R1/N4VA will offer fills for band/country holes. Check the PacketCluster for frequencies.

TURKS AND CAICOS ISLANDS. W2KHM will sign VP5/W2HKM from March 19 to 27 on SSB only. Check 14226, 14247, 21335 and 28495 kHz. Low band skeds can be arranged via internet address athanrrpi.edu. QSL via 15 Eaton Road, Troy NY 12180.

ZAMBIA. DL7VTM and crew will be on from March 14 to April 6. They will operate on all bands and modes, including some satellite work, as 9I2Z, 9I2A and 9I2M. Lots of activity is planned for the CQ WPX Phone contest. QSL all three calls via DL7VRO.

THIS WEEKEND ON THE RADIO. The phone portion of the annual ARRL International DX Contest is a 48 hour event starting at 0000z March 5. W/VE stations work amateurs in as many DXCC countries as possible. DX stations work W/VE stations. W/VE stations send signal report and state/province. DX stations sent signal report and three digit number indicating transmitter output power. For full information and contest rules, check page 125 of December QST NNNN

--
James J. Reisert Internet: reisert@wrksys.enet.dec.com
Digital Equipment Corp. UUCP: ...decwrl!wrksys.enet.dec.com!reisert
146 Main Street - MLO3-6/C9 Voice: 508-493-5747
Maynard, MA 01754 FAX: 508-493-0395

2709. Re: Mail Order

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 02:57:00 UTC
From: Steve.Fleckenstein%express@rhosoft.com
Message-ID: <F0CC32FC@rhosoft.com>
Source record: 269861

BB>I would appreciate any info on where and whether you have
BB>had any good or bad experiences with such places. In particular I am
BB>interested in purchasing a Kenwood 641 in the upcoming months and
BB>would like
BB>to find out some info on mail ordering.
BB>

Recently purchased a TNC from HRO with excellent results. Decent
price on a KPC-3 and quick on time delivery.
Steve Fleckenstein
N2UBP
--- RBBSMail v18.2
* Origin: Red Onion, ExPress Wawayanda,New York 914 342 4585 (100:911/7.0)

2710. Re: FT-530 Receive Problem Followup

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 05:17:23 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCMDtD1.DzM@netcom.com>
Source record: 269862

In article <CMD8wr.4y@inmet.camb.inmet.com> leber@panther.warm.inmet.com (Thomas Leber) writes:
>OK, all of you who have been following my adventures with Yaesu, trying to
>resolve interference heard around 145.13, here's some more info:
>
>The Service people at Yaesu claimed not to have been able to reproduce the
>problem, so I had them return the radio to me. I've been living with it for
>a couple of weeks now, mostly ignoring the problem, since it's really not
>severe.
>
>Last night, I started playing with the VHF and UHF VFOs simultaneously,
>and suddenly heard the same type of interference, but this time it
>was full scale, and it was coming in on the UHF side. A little experimentation
>indicated that for a given 2 meter frequency, the unit generated a spur at
>3.172845 times that frequency. Example: 145.13 generates 460.475. The noise is
>exactly like the weaker noise I hear in 2 meter, but it pegs the S meter.
>I'd say it's likely that these phenomena are related. I checked the schematic
>for crystals that oscillate around 3.1728, but didn't see any. Can any of the
>more technically savvy of you out there suggest the culprit?
>
>I like this HT a lot, and I'd like to be able to eliminate this if possible.
>
>Cheers,
>Tom
>
>--
>----------------------------
> Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
> "Smother technology and it rebels." - Max Headroom

I just keyed in the frequencies you mentioned into my 530, and the 2m
side has an S9 signal on the meter, but no 'Busy' indication on the LED.

The 440 side has a constant S3/S5 signal, with an intermittent 'Busy'
indication.

Just letting you know...

Scott

--
==
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on

```
| the World - ftp.std.com pub/hamradio |
================================================================================
```

2711. Re: CAN WE SELL STUFF HERE?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 05:19:42 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CMDtGv.I7t@ucdavis.edu>
Source record: 269863

Kenneth E. Harker (Kenneth.E.Harker@Dartmouth.Edu) wrote:
: In article <199403081720.JAA18342@ucsd.edu>
: MAYNARD@uriacc.uri.edu writes:

: > Here is a real naive question, but is it ok to list ham related items for
: > sale on the LIST? Please differentiate Official Replies from Official Opinions
: > . TNX, WY2G, Brian

: On the USENET, no commercial activity is allowed. That means that
: you cannot post advertisements for your company, or for a product you
: wish to market, etc. Anything you will be making a profit on that
: contributes to your steady income is not allowed.
No offence but this is patently wrong. Commercial activity is not
allowed to run along the NSF backbone which is the Internet (with a
capital I). The internet (with a lowercase i) is not controlled by NSF
and if your messages are not routed through NSF nodes there is no
problem. Usenet is another animal altogether Usenet is run on many
sifferent sites and is not the Internet. You can advertise and treat the
Acceptable use Policy of the NSF much like the new Ham regs, but if you
are a .com site that is all supposed to be taken care of by your
provider or systems guy. It is the responsibility of the systems
administrators at NSF connected sites to keep commercial activity off.
For a more thorough (and possibly more accurate) treatment of this look
at news.newuser.announce (I think thats the right name).

good luck,
Dan
--
---
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
---
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *

2712. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 06:08:21 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMDvpx.AJp@news.Hawaii.Edu>
Source record: 269864

In article <2li7a8$sj6@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:
>In article <CMCruE.8n6@ucdavis.edu>,
>Daniel D. Todd <ez006683@chip.ucdavis.edu> wrote:
>>Jeffrey Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:
>>
>>: But keep in mind that they're NOT ads because the item is not for sale
>>: yet (even though the price was posted for us).

I was being facetious!

>>I've seen this argument posited before, I'm not sure if it's real or
>>not. Anyone who thinks that the non-existence of a product means that
>>ads for it are not advertisements should look at the last couple months
>>of QST. Lots of companies advertise before the product is actually
>>available. (Sorta like President Clinton and the health care program)
>
>Indeed. I think that they are called `Teasers' - a common marketing
>ploy. It is used to signal prospective customers and competitors. To
>competitors: better watch out, I am going to come out with this new product.
>It is a `territorial' thing. Like dogs marking the fire hydrant.
>
>Rajiv
>aa9ch
>r-dewan@nwu.edu

But Rajiv, does this mean that when h.b. is finally on the market
it'll smell of .... of .... oh yuck!

Jeff NH6IL

2713. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 06:27:29 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMDwLt.Au6@news.Hawaii.Edu>
Source record: 269865

In article <763139873snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>In article <CMC9EB.Kr1@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
>
> [more grousing about the hamblaster postings]
>
> > Jeff NH6IL
>
> Stay on 'em Jeff. If you keep it up, they might even suspect that you're
> following them around and persecuting them.

Well then, I'll start posting my ads over here rather than on r.r.swap:

HW-202 for sale - make offer. [I guess that's okay as long as I call it an `update'.]

So Jeff#2, still stopping traffic on the Santa Ana Freeway? Hee hee...

73,
Jeff NH6IL

2714. DOVE Keps

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 07:33:33 UTC
From: TILBURY@ph.und.ac.ZA
Message-ID: <MAILQUEUE-101.940309093333.416@lola.ph.und.ac.za>
Source record: 269866

Hello

Would you please send me the latest Keps for DOVE DO-17.

Many thanks

Graham Tilbury
ZS5GMT

__· ·_· ·_ ···· ·_ __ _ ·· ·_·· _··· ··_ ·_· _·__

Graham Tilbury Ph : 31 260 2768 (W)
Antarctic Officer 31 814 773 (H)
Physics Department
University of Natal Fax : 31 261 6550
King George V Avenue
Durban 4001
South Africa email : tilbury@ph.und.ac.za

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·_ __ _ ___ ·_· ·_ _· _·· ·__· ·_ _·_· _·_ · _

2715. Re: Testing Procedures (was: Re: Keyboards at testing sessions)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 08:12:30 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <763200750snz@g8sjp.demon.co.uk>
Source record: 269867

In article <rcrw90-080394154104@129.188.192.107>
rcrw90@email.mot.com "Mike Waters" writes:

> Note that many VE teams will allow you to try the next faster speed (13 wpm
> when trying for 5 wpm), if you get 1 minute of 5wpm copy (however many
> characters that is) you pass! In other words it is quite legitimate to get
> three tries at the test. If you are given this opportunity, it is well
> worthwhile even if you don't copy a single letter since the real test will
> sound so much slower after the higher speed.

Just to put this into context:-

That should read:
In other words, it is quite legitimate to get tries a three *different* tests.

And just for interest's sake, at a testing session last weekend, one chap
managed only six questions from the quiz. Checking his written text, we
found that he had above *three* minutes of solid copy, and of course, he
passed at that speed.

Just one of those things, I guess :-)

--
Iain Philipps

2716. Re: Honda ignition recall - now NOISE!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 08:37:13 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar9.083713.2970@ke4zv.atl.ga.us>
Source record: 269868

In article <CMCxL6.7Mu@armory.com> dev@armory.com (Uncle Dave) writes:
>i have an '86 Honda Accord, and get ignition noise up
>the wazoo on my HT in the car. i've tried replacing the
>"spec. condenser" which goes from the battery (one lead)
>and then to the ignition coil (another lead), but this
>didn't help a lot. it did help reduce the noise, but not
>greatly. the local folks at HRO suggested replacing the
>spark-plug cables. from the sounds of postings here,
>however, it seems like the problem may be the distributor.
>sometimes the noise is overpowering, and sometime it's
>barely audible. no clue as to why. perhaps it's cold/hot?
>orientation of it with the earth's magnetic field?

Honda seems to have a problem with their ignition system that's reminiscent of the problems that used to plague Fords back in the 1960s. You have to understand that a Kettering ignition is very similar to an old spark transmitter (in fact auto spark coils were often used in low power spark transmitters). So you have to take steps to suppress this hash.

There are three ways to suppress this type of noise. The first method is to bypass the noise from the low voltage wiring. To do this, you need to place capacitors (often still called "condensers" in the auto world) *directly* to ground from the offending interference sources. The low voltage wiring going to the ignition module should receive 0.001 uf capacitors with as near *zero* lead length as possible directly to frame/engine ground. "Feedthru" type capacitors are ideal for this application, but the "condensers" used in older point type ignitions can be used too, though with somewhat less effect at VHF. The key things to remember about bypassing is that you need to attach the capacitor as close to the noise source as possible, and have as direct an *RF* path as possible to frame ground. A 2 inch lead length is way too much and won't let the bypass do it's job properly. Note too that the distributer lower body is usually directly attached to the engine block, so it can be used as the ground point.

The second line of attack is on the high voltage side of the ignition system. The reason we get RF hash up in our bands is because of the sharp risetime of the ignition pulses. If you recall theory, a square wave is made up of an infinite number of odd harmonics, so it's a rich source of noise in the RF spectrum. The trick here is to soften the edges of the waveform so that it approaches a triangle or sine wave. You do this by using *resistance* in series with the circuit. Common ways

are resistor plugs, resistor wiring, and special resistor inserts to the wiring. A resistor plug has a resistive element built into it's body. Champion resistor plugs have a "R" in their part number. For example, a J-10 plug does not have the resistor element but a J-10R does. Resistance "wires" once had cotton cores that had been carbonized as their conductive element. You don't see these much anymore because modern cars have such high underhood temperatures that the "wires" deteriorate rapidly. Modern wires use other construction methods, but still maintain the principle of distributed resistance. You can check your wires with an ohmmeter. If they read near zero ohms end to end, they aren't resistor wires. A resistor insert looks like a coax adaptor fitting. It has a mating connector that goes into the distributor tower, a short bakelite body containing the resistor, and a mating connector to accept the wire. I haven't seen these around lately, but they used to be common in parts stores.

The third line of attack is shielding. In the Corvette, radio noise used to be a horrible problem. The way GM solved it was by placing the distributor and HV wiring in a monel metal "doghouse" that completely surrounded the noise sources and was attached firmly to engine/frame ground. This structure formed a Faraday cage for electrical fields, and due to the anti-magnetic properties of monel, formed a magnetic cage as well. (You have to be concerned about magnetic induction from the HV wiring to the rest of the wiring harness. Watch your wire *routing*, wires carrying high energy pulses should never be allowed to run parallel with other wiring.) This extreme shielding was necessary due to the plastic body of the Corvette. In a more normal car, the hood, fenders, and grille form a metallic shield about the engine compartment. (Well they used to, in today's cars the inner fenders are usually plastic, as is the grille, and the hood often isn't electrically well bonded to the frame.) Flexible copper bond straps can assure that the hood is electrically grounded. Bond straps to the exhaust system are useful as well since the exhaust system is often rubber isolated and is long enough to form an effective antenna when shock excited by sparks at the engine end. Ground bond it about halfway back, and at the far end.

Another approach to shielding is the one used on aircraft. The electrical components are shielded using wiring similar to coaxial cable. You can do this in an auto too. There used to be a fellow who advertised kits for various cars in QST. I haven't seen his ads in a while, but the kits may still be available. There is also a HV wire sold that uses a similar approach. It's copper cored and wrapped in a flat ribbon of monel metal. Or you can make your own shielded wires. If you take the shield from RG-8 and slip it over your spark plug wires, and ground it to the engine, you'll suppress most of the noise being radiated by the wires.

There are always ways to attack ignition noise. Some manufacturers do it for you, others don't do as good a job. There are also other sources of electrical noise in a car, such as electric fuel pumps, electrically driven fuel injection systems, blower and wiper motors, etc. They all

will respond to bypassing or shielding. You can always do the job right if you are determined enough, or you can just buy an American car. :-) (EM compatablity has long been a concern of car companies with strong fleet sales programs to police, taxi, and other two way radio users. Honda brags that they don't have a fleet sales program. That should be a red flag to any two way radio user.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2717. Re: FT-530 Receive Problem Followup

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 08:56:05 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar9.085605.3212@ke4zv.atl.ga.us>
Source record: 269869

In article <CMD8wr.4y@inmet.camb.inmet.com> leber@panther.warm.inmet.com (Thomas Leber) writes:
>OK, all of you who have been following my adventures with Yaesu, trying to
>resolve interference heard around 145.13, here's some more info:

>Last night, I started playing with the VHF and UHF VFOs simultaneously,
>and suddenly heard the same type of interference, but this time it
>was full scale, and it was coming in on the UHF side. A little experimentation
>indicated that for a given 2 meter frequency, the unit generated a spur at
>3.172845 times that frequency. Example: 145.13 generates 460.475. The noise is
>exactly like the weaker noise I hear in 2 meter, but it pegs the S meter.
>I'd say it's likely that these phenomena are related. I checked the schematic
>for crystals that oscillate around 3.1728, but didn't see any. Can any of the
>more technically savvy of you out there suggest the culprit?

This is almost certainly internally generated intermod. It's a mixing product of the two LOs at some harmonic. That product is either in-band, or falls on the IF frequency (likely the latter). Look for X*F1-Y*F2=IF where F1 is one LO, F2 is the other, and X and Y are small integers. To do this you need to know whether the radio uses high or low side injection, and what the IF frequency is. As I recall, Yaseu doesn't use the common 10.7 MHz as the first IF.

This is a common problem with dual banders. Most will exhibit this behavior at some combination of 2 meter and 70 cm frequencies. There's no good way to fix it. The high receive sensitivity required to work with a rubber dummy load, the strong LOs, and the common IF make this type of problem almost inevitable between 2 meters and 70 cm. The only advice I can give is to not try to monitor two frequencies that are related by the intermod equation.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2718. Re: Need help with GE MasterPro Repeater

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 09:03:38 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar9.090338.3316@ke4zv.atl.ga.us>
Source record: 269870

In article <2lj28v$mkv@coyote.rain.org> sterman@coyote.rain.org (Sterling R. Ellsworth) writes:
>
>So how do I operate this thing ?
>
>I have the original manuals but they are beyond my level of understanding.
>My level of understanding = 2 on a scale of 1 to 100.
>
>I may be in over my head here but I want to run this thing simplex (or
>duplex, but not as a repeater) just to get started.
>
>Anyone have any basic pointers to get me started ?

Attach antenna and power, plug in the control head, turn on the radio by rotating the volume knob past the "click" and adjusting for a comfortable level, adjust the squelch knob until the "rushing" sound just stops. Now press the PTT switch on the side of the microphone and talk. Release the switch to listen. (These radios were designed to be operated by *cops* for heaven sakes, they can't be that complicated.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2719. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 09:11:49 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar9.091149.3408@ke4zv.atl.ga.us>
Source record: 269871

In article <wilpwr.10.01ED6FC6@rsvl.unisys.com> wilpwr@rsvl.unisys.com (Bill Powers) writes:
>In article <1994Mar8.143141.29301@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>
>> Since most intercepted traffic is encoded, and most commercial
>>traffic heavily abbreviated and filled with "commercial codes", flawless
>>copy is mandatory or all meaning could be lost. That's what the FCC wants
>>on the test too, though the current amateur test doesn't require zero errors,
>>just one minute out of five perfect copy, or the answers to the multiple choice
>>questions as the case may be. That level of performance would wash you out at
>>military or commercial levels of required accuracy.
>
>I seem to remember that back when I took my 13 wpm code test in the FCC
>offices in NYC, the receiving portion of the test required only one solid
>minute out of five or so. I don't remember whether the text was plain or
>code groups. Of course, there was also a sending test, using a straight key.
>
>It was 1960 or 1961, I was in high school, and intimidated by all the glory
>and grandeur of the Federal Gummint, so my memory may not be very accurate.
>The point is that, at least at that time, the FCC didn't require 100% accuracy
>for the entire test session, just a burst.

That's right, the FCC doesn't require the level of copy from amateurs that
is required from military or commercial operators, and never has. My test
in 1963 consisted of 5 letter code groups, sent and received, though I
understand some field offices were using plain text tapes on their
Instructographs. Since the amateur service is supposed to be "self training",
the exams are merely entrance exams. You're not expected to have developed
complete mastery until you've actually done the "learning by doing" on the air.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2720. Re: ARRL DX Bulletin #13 - March 3, 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 09:21:05 UTC
From: Keskinen Petri <oh3mep@lehtori.cc.tut.fi>
Message-ID: <199403090921.AA00672@lehtori.cc.tut.fi>
Source record: 269872

> PRATAS ISLAND. Martti, OH2BH, reports that preparations are under
> way for the upcoming 10 day DXpedition. The target date is March
> 16. So far there are 14 operators on tap for this one.

Don't count on that. There are many rumours here at Finland, that
it's not going to take place. There might be some troubles getting
it valid for DXCC and if it's not qualified, Martti will not go.
These are just rumours from Finnish cluster-network!

Pete

********** oh3mep@cc.tut.fi **********
* Petri Keskinen * Kitiniitynkatu 7a3 * 33850 Tampere * Finland * Europe *
********** oh3mep@oh3rce **********

2721. Re: Digest of Articles - QST Feb 1993 (Long - 40k)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 11:38:20 UTC
From: wvanhorn@magnus.acs.ohio-state.edu
Message-ID: <2lkcfc$hnu@charm.magnus.acs.ohio-state.edu>
Source record: 269873

Greg WA9EVY wrote:

>The digest is too large for my mailer to digest. Can someone put this
>on an FTP or Gopher somewhere?

These postings are (or soon will be) available, courtesy of the Boston ARC, at ftp.std.com. For info, contact Scott Ehrlich via wy1z@neu.edu. I believe they will also be at several other ftp sites.

73, Van - W8UOF
* *
* It ain't wot you don't know 't gets you into trouble. *
* It's wot you know 't ain't true. - "Mr. Dooley" *
* *
wvanhorn@magnus.acs.ohio-state.edu

2722. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 11:43:42 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403090639591.gilbaronw0mn.DLITE@delphi.com>
Source record: 269874

>In article <2lg5vo$err@news.delphi.com> mahjmac@news.delphi.com
(MAHJMAC@DELPHI.COM) writes:
>>>Just couldn't resist adding to his thread. Copying by typewriter has
been
>is not a good code in those respects. It was designed, rather haphazardly,
>in an era before a good understanding of information theory existed.
>And it was designed for use on essentially noiseless and interference
>free wire lines. It's use over radio is more of a historical accident
>than an intelligent choice.

On the other hand it is a very efficient code. Since it is variable lenght
it is kind of a built in compression. The most used letters have the fewest
elements. It is much more efficient than ascii, baudot and other fixed
length codes. It is also very precise as toi length and timing by
defintions. If it is machine sent it is one of the best codes around and was
created many years ago.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

2723. Keyboards at testing

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 11:53:00 UTC
From: steve.allen@brent.uucp
Message-ID: <21779.553.uupcb@brent.uucp>
Source record: 269875

William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM writes:
>Ok, so if he just guesses, the odds of coming up with the right answer on 7 of
>10 is the odds of picking the right answer at random (1/4) 7 times (1/4 ** 7).
>or about 1 in 16384.

Actually, now that you mention it, the odds of getting at least
7 out of 10 in a 4-choice multiple-choice test are much better:
about 1 in 285.
To get the right odds you have to add the probability of
getting 7 out of 10, 8 out of 10, 9 out of 10, and 10 out of 10.

For 7 out of 10, the odds are (.25^7)(.75^3) for *one* combination
of right and wrong. (One combination might be getting the first 7
right and the next 3 wrong. Another combination might be getting 1
wrong, 5 right, 2 wrong, 2 right.) To figure the total possible
combinations of n things taken r at a time you need to figure
n!/(r!(n-r!)). For 10 things taken 3 at a time, there are
10!/(7!3!), or 3628800/(5040*6), or 120 possible combinations. So
the total probability of getting 7 out of 10 is 120(.25^7)(.75^3),
or 1 in 323.6.
For 8 out of 10, there are 45 combinations. The probability is
45(.25^8)(.75^2), or 1 in 2589.
For 9 out of 10, there are 10 possibilities. So 10(.25^9)(.75), or
1 in 34,952.
There's only one way to get all 10 right, so the odds of that are
.25^10, which is one in a million.
Add them all up and you get .0035057, or 1 in 285. You still
better learn *some* morse, I think.
-Steve N2WSA

. QMPro 1.51 . This information for entertainment purposes only

---
The Brentwood BBS! 12 Nodes (914)-381-1600

2724. Directory changes on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 13:50:43 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCMEH4K.1K5@netcom.com>
Source record: 269876
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,alt.radio.scanner

I have made some small changes to the directory structore on World
(ftp.std.com).

The following directories have been renamed as follows:

pub/hamradio/ARRL => pub/hamradio/arrl
pub/hamradio/BARC => pub/hamradio/barc
pub/hamradio/Incoming => pub/hamradio/incoming
pub/hamradio/General_Info => pub/hamradio/general-info

As a side note, there is now an satellite tracking program available for
Atari users. Check out pub/hamradio/atari/satellite/atari_sat-tracker.lzh

If you have any questions, comments, problems, or anything else, please
let me know.

73,
Scott

--
```
==============================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|----------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
==============================================================================
```

2725. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 15:55:45 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <CMEMwy.9Kx@odin.corp.sgi.com>
Source record: 269877

In article <wilpwr.10.01ED6FC6@rsvl.unisys.com>, wilpwr@rsvl.unisys.com (Bill Powers) writes:
....stuff deleted...
|> I seem to remember that back when I took my 13 wpm code test in the FCC
|> offices in NYC, the receiving portion of the test required only one solid
|> minute out of five or so. I don't remember whether the text was plain or
|> code groups. Of course, there was also a sending test, using a straight key.
|>
|> It was 1960 or 1961, I was in high school, and intimidated by all the glory
|> and grandeur of the Federal Gummint, so my memory may not be very accurate.
|> The point is that, at least at that time, the FCC didn't require 100% accuracy
|> for the entire test session, just a burst.
|>
|> 73,
|> Bill.
|>
|>
|> Bill Powers WY0Q <wilpwr@rsvl.unisys.com>
|> <powe0040@gold.tc.umn.edu>
|> UNISYS Corp.
|> MS 4033 Phone: [612] 635-5267
|> P.O. Box 64942 FAX: [612] 635-7523
|> St. Paul, MN 55164-0942
|>

the exam was plain text. i was one of the idiots that came into
the Dallas office of the FCC and copied all 5 minutes without a
single error and then have the badge wielding examiner announce
same to the entire group of 40 or so testees that fact.

those that passed the receiving then got to come up front and send
to the group. that was interesting and you had to use a straight
key. imagine if you will (twilight zone) - no bug, no paddles with
iambic keyer (this was before iambic anyway ;-)), and certainly
no keyboard.

dit dit
--
Chuck Adams K5FO CP-60
adams@sgi.com

2726. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 16:11:40 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar9.161140.6442@ke4zv.atl.ga.us>
Source record: 269928

In article <9403090639591.gilbaronw0mn.DLITE@delphi.com> gilbaronw0mn@delphi.com (Gilbert Baron) writes:
[I wrote]
>>is not a good code in those respects. It was designed, rather haphazardly,
>>in an era before a good understanding of information theory existed.
>>And it was designed for use on essentially noiseless and interference
>>free wire lines. It's use over radio is more of a historical accident
>>than an intelligent choice.
>
>On the other hand it is a very efficient code. Since it is variable lenght
>it is kind of a built in compression. The most used letters have the fewest
>elements. It is much more efficient than ascii, baudot and other fixed
>length codes. It is also very precise as toi length and timing by
>defintions. If it is machine sent it is one of the best codes around and was
>created many years ago.

Morse selected his letter frequencies by looking at the relative abundances of letters and numbers in a typesetter's box. That's OK for the rather stilted written English of the period, but isn't so good for the QSO English hams use on the radio. Example: Take the QSO English phrase PSE QSL. That's 49 bit times in async Baudot, 49 bit times in sync ASCII, but it's 59 bit times in Morse. A bit time being defined as the shortest element in each case. They're all the same in ASCII, or Baudot, and the dot is the shortest element in Morse. Now if we want signal reports, UR RST 599 in async Baudot is 77 bit times, in sync ASCII it is 70 bit times, in Morse it's 93 bit times. Doesn't look like very good compression to me. If hams used 'E' signals instead of 'Q' signals, and never used numbers, the comparison might be a tad closer. :-)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2727. Re: Guy Tower with Phillistran Non-metallic ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 16:27:52 UTC
From: jayk@fc.hp.com
Message-ID: <CMEoEH.BDo@fc.hp.com>
Source record: 269929

wayne.a.strahl (wstrahl@cbnewsg.cb.att.com) wrote:
: Does anyone out there use the Phillistran guy material and can
: relate their experiences ?
: Wayne Strahl - W9II wstrahl@cbnewsg.att.com

I've been using it for about 10 years. Had a 120' Rohn 55 tower guyed with Philly. Now have a 55' Rohn 45 tower using it for guys. I wouldn't use anything else.

Just make sure you use the right Philly for the tower and follow the instructions. Use some steel guy wire on the lower ends to prevent vandalism, fire damage, etc. The main difference I find is that Philly can be cut (its not easy, but it can be cut). So you need to be a bit more carefully when installing antennas, cranking over the tower, etc.

73, Jay K0GU jayk@fc.hp.com

2728. Re: 2m/70cm stub duck wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 18:07:10 UTC
From: kevin jessup <kevin.jessup@mixcom.mixcom.com>
Message-ID: <1994Mar9.180710.11138@mixcom.mixcom.com>
Source record: 269930
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

In <wy1zCM89GE.3p3@netcom.com> wy1z@netcom.com (Scott Ehrlich) writes:

>I am looking for a stubby duck antenna for use with my Yeasu FT530.

>I've only been able to find stubbies for 2m, 1.25m, or 70cm, but nothing
>for two bands.

>Can anyone help?

>Thanks much in advance.

The Comet "Miracle Baby" CH-32 1.75 inch long stubby duck is what you
want. Designed for 2 meters and 70 cm. AES in Milwaukee has them
for the unbelievably low price of $33.95!! ;-)) Perhaps a 50 ohm 5 watt
carbon composition resistor would provide equivalent performance?? ;-))

Oh...

Why is it called the "Miracle Baby"?? As someone else here once said,
"If you can hit the repeater with this baby, it's a @!*!ing miracle!"

--
/`-_ kevin.jessup@mixcom.com
{ }/ Marquette Electronics, Inc
\ / N9SQB, ARRL, Amateur Radio
|__*| N9SQB @ WD9ANY.#MKE.WI.USA.NA

2729. Re: Definition of CW speeds

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 18:32:26 UTC
From: mjsilva@ted.win.net
Message-ID: <143@ted.win.net>
Source record: 269931

In article <CMD7Gw.2wo@usenet.ucs.indiana.edu>, Laurence Gene Battin
(battin@cyclops.iucf.indiana.edu) writes:
>I am writing a code-practice program for my Amiga computer, and
>I wonder if anyone can give me a definitive answer to exactly
>how many milliseconds long a dit at 18 wpm is supposed to be?
>
>So, just what _is_ the _exact_ standard? (Assuming that there _is_ one.)
>
>

Looking in the ARRL Handbook I see that "they" have determined that the
average English plain language word is 50 units (dit lengths) long. It
also says that the word PARIS exactly matches this length. The
formulas they give are: wpm = (dots / min) / 25, = 2.4 * dots / sec.

73,
Mike, KK6GM

2730. CW speed standard

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 18:34:43 UTC
From: mjsilva@ted.win.NET
Message-ID: <144@ted.win.net>
Source record: 269932

In article <CMD7Gw.2wo@usenet.ucs.indiana.edu>, Laurence Gene Battin (battin@cyclops.iucf.indiana.edu) writes:
>I am writing a code-practice program for my Amiga computer, and
>I wonder if anyone can give me a definitive answer to exactly
>how many milliseconds long a dit at 18 wpm is supposed to be?
>
>So, just what _is_ the _exact_ standard? (Assuming that there _is_ one.)
>
>

Looking in the ARRL Handbook I see that "they" have determined that the average English plain language word is 50 units (dit lengths) long. It also says that the word PARIS exactly matches this length. The formulas they give are: wpm = (dots / min) / 25, = 2.4 * dots / sec.

73,
Mike, KK6GM

2731. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 19:02:22 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <CMEvJz.Fr0@cscsun.rmc.edu>
Source record: 269933

Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:

: In article <2kqtae$cg5@news.delphi.com> mahjmac@news.delphi.com writes:

: > It would seem to me that being alowed to use a keyboard doesn't conform
: > to the whole reason CW is required. It is used on an international scale,
: > and if you are ever in any type of emergency or spontaneous situation
: > where you need to receive code with no keyboard, then you would be
: > worthless.
: >
: > Mike

: How about we change the test to laying on ones side in a crashed police
: car and be able to send with the wires hanging out of the broken mic?

Sounds like an old "Adam 12" episode I saw twenty years ago. Exact same
scenario. He wasn't sending CQ contest, though.... :-)
--
David Tiller | Network Administrator | Voice: (804) 752-3710 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
"Drunk, [Beowulf] slew | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
no hearth companions." | Ashland, Va 23005 | 77d 31' 32.19" W |

2732. NO SUBJECT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 20:34:00 UTC
From: usib5z2z@ibmmail.COM
Message-ID: <199403092035.MAA08275@ucsd.edu>
Source record: 269934

---------- Mail item text follows ----------

To: INTERNET--IBMMAIL

From: Bill Gillenwater - LEXVM2(GILLIE)
Program Manager-Logistic Services
Mechanicsburg, Pa
Subject:

SUBSCRIBE

Bill Gillenwater 8-528-4180 717-795-4180

2733. Re: Chest Harness for HT?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 20:49:24 UTC
From: ronk@cascade.ens.tek.com
Message-ID: <2llcok$7na@zephyr.ens.tek.com>
Source record: 269935

In article <CMD7v8.LED@alsys.com>, garym@alsys.com (Gary Morris @ignite) writes:
|>
|> Funny this comes up today. Last night at our RACES Strike Team meeting
|> one of the members mentions she has found this radio harness used by Ski
|> Patrol groups in this Ski patrol catalog. If we can make a minimum order
|> of 10 units, we can get them for about $15 each. These are black nylon

Could you please post the name and address for the catalog?

--
Thanks,
Ron Kirkpatrick
News Administrator/Postmaster
Tektronix, Inc
503-627-6707

2734. repeaters to use in NM/CO?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 21:13:54 UTC
From: dthomas@bbx.basis.com
Message-ID: <1994Mar9.211354.4023@bbx.basis.com>
Source record: 269936

I'll be travelling from Albuquerque to Denver soon, and I finally have my old 2m ICOM working again. Can anyone suggest repeater frequencies to try along the way? I'd be particularly interested in any within range of the CO-NM border, since that part of the drive is always so lonely.

Thanks & 73...
David Thomas
N5IZU
--
Their address sums up their attitude: One Microsoft Way.

2735. Reminder - Special Event 3/12/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 21:59:17 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-090394165917@k4dii.ksc.nasa.gov>
Source record: 269937

28.333 MOSQUITO NET

Members of the Titusville Amateur Radio Club will operate 1400-2300Z, March 12, 1994, to commemorate the 150th anniversary of Brevard County, Florida, and the 3rd anniversary of the TARC Mosquito Net.

CW - near the bottom of the Novice 10, 15, and 40 sub-bands

Voice - 28.333 (Mosquito Net frequency), and near the bottom of the General 15 and 40 sub-bands

For a certificate, make contact and send your QSL with a 9" X 12" self-addressed, stamped envelope to:

TARC
Post Office Box 73
Titusville, Florida 32781

We'll be listening for you!

KC4VIN, Carole Ann
Stinger #1, Net Manager
(TARC Mosquito net operates Wednesdays, 7PM Eastern on 28.333 MHz)

(Posted for Carole by Fred, K4DII)

2736. Re: CAN WE SELL STUFF HERE?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 22:42:04 UTC
From: dave@llondel.demon.co.uk
Message-ID: <763278124snx@llondel.demon.co.uk>
Source record: 269938

In article <2liug1$gmg@dartvax.dartmouth.edu> Kenneth.E.Harker@Dartmouth.Edu (Kenneth E. Harker) writes:
> On the USENET, no commercial activity is allowed. That means that
>you cannot post advertisements for your company, or for a product you
>wish to market, etc. Anything you will be making a profit on that
>contributes to your steady income is not allowed.

There is nothing which says you can't post commercial ads, although the usual response to something which is a blatant ad rather than a product announcement is a load of flames.

Bits of the net (usually those with a government subsidy) have rules on acceptable use, but much of it is paid for by commercial interests and so why shouldn't they use it (subject to thermal overload as mentioned above).

An example would be comp.dcom.modems, where a company might post a technical spec for their new product.... in theory it is advertising, but provided there is no marketing hype, most people are happy to see such announcements.

One-off ads by individuals are OK, but as mentioned, please stick to the proper newsgroups where possible.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

2737. RESULT: sci.geo.satellite-nav passes 452:16

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 23:06:30 UTC
From: rdippold@qualcomm.com
Message-ID: <sci.geo.satellite-nav-RESULT@uunet.uu.net>
Source record: 269939
Cross-posted to: news.announce.newgroups,news.groups,rec.autos.tech,rec.backcountry,rec.boats,rec.radio.amateur.misc,sci.aeronautics,sci.engr.civil,sci.space.tech,rec.aviation.products,rec.aviation.piloting,sci.geo.geology

RESULTS
unmoderated group sci.geo.satellite-nav passes 452:16

There were 452 YES votes and 16 NO votes, for a total of 468 valid votes.
There was 1 invalid ballot.

For group passage, YES votes must be at least 2/3 of all valid (YES and NO)
votes. There also must be at least 100 more YES votes than NO votes.

There is a five day discussion period after these results are posted. If no
serious allegations of voting irregularities are raised, the moderator of
news.announce.newgroups will create the group shortly thereafter.

Newsgroups line:
sci.geo.satellite-nav Satellite navigation systems, especially GPS.

This vote was conducted by a neutral third party. For voting
questions only contact rdippold@qualcomm.com. For questions about the
proposed group contact Andy Arkusinski <arkusinski_andy@si.com>.

CHARTER

This will be an unmoderated newsgroup.

SCI.GEO.SATELLITE-NAV was chosen because the focus of this group is on
navigation. The SCI.SPACE hierarchy deals with various aspects of
space exploration and use, but this newsgroup deals mostly with
terrestrial applications. The fact that the space segment is in space
is almost incidental to the focus of the newsgroup.

SCI.GEO.SATELLITE-NAV will allow a centralized location for discussion
of global navigation satellite systems (GNSS). The charter
specifically includes the US Global Positioning System (GPS) and
Russian GLONASS, but is also open to discussion of other existing and
future satellite positioning systems.

Some topics that fall under this newsgroup charter are:
* Technical aspects of GNSS operation.
* User experiences in the use of GNSS.
* Information regarding GNSS products.
* Discussion of GNSS policy (such as GPS
selective availability).
* Extensions to basic GNSS technology, such as
differential GPS and pseudolites.
* Navigational uses of satellite systems whose primary

purpose is not navigation, such as a communication
satellite net.

Examples of topics that would not fall under the group charter are:
* Other satellite systems such as communications and
intelligence gathering, except for navigational uses of
such systems.
* Discussion of space policy in general.
* Discussion of areas that may use GNSS, such as
surveying, sailing, or aeronautics, except as they
directly relate to use of GNSS.

GPS, in particular, has turned out to be a technology with a great
deal of synergism with many fields. GPS is used, not only for
military positioning which was the original purpose, but in
applications as diverse as entomology and film making. A major intent
of this newsgroup is to share the uses to which GNSS technology is
being put, thus inspiring even more innovative uses.

While part of the SCI.GEO hierarchy, this newsgroup does not exclude
non-terrestrial uses of satellite navigation. Use of GPS to determine
space vehicle position is within the charter.

This group is also intended to function as a resource for newcomers,
who can post their questions and receive help from others who have
passed that way before.

unmoderated group sci.geo.satellite-nav Final Vote Ack

Voted Yes

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Voted No
---
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soundmind@aol.com
whostler@procy.gi.com wade hostler

Votes in error
---
ybourassa@rpn.aes.doe.CA Yvon Bourassa
! No vote statement in message

2738. Body Parts by J. Herman

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 23:09:55 UTC
From: jangus@skyld.grendel.com
Message-ID: <763065386snx@skyld.grendel.com>
Source record: 269940

In article <CM25Hs.L3I@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:

>
> COMPTON (Reuters) - Police psychologists today were extremely puzzled
> as to why a Compton man, identified as Jeffrey Angus, had stopped
> northbound traffic on the Santa Ana freeway by running along side
> cars only to stare at the crotches of male drivers and passengers.
> Witnesses stated he was yelling obscenities and clothed only in a
> black basket-weave print belt; a 2-way radio was said to be
> clipped to the belt (one ham radio operator who claimed to be
> a victim of Angus' staring said that the radio appeared to be
> on a frequency of 147.435 MHz - this could not be confirmed).
>
> Story compiled by Jeff NH6IL

If you're going to engage yourself in this nonsense, at least take the
time to come up with something original.

But thanks for playing. Even lame-flamers need some encouragement from
time to time.

Nice try with the 435 inuendo. I even sent you e-mail about that. Do you
think I would lie to you about where I operate? Ask Dana.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2739. [News] Auctioning Rules set up by FCC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 23:18:13 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMF7EE.Ly1@news.Hawaii.Edu>
Source record: 269941
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Thought this might be of interest to everyone. If 11M goes up for bid
lets each kick in a few bucks to win it back...

Jeff NH6IL

****

WASHINGTON (AP) -- The Federal Communications Commission took a
first step Tuesday for setting the ground rules by which businesses
can bid for certain chunks of the airways.
The FCC adopted ``generic'' rules for auctioning radio
frequencies for a variety of new services, including the next
generation of mobile telephone service called personal
communications service.
The rules will:
-- Allow several auctions to be conducted at the same time.
-- Require $2,500 as a minimum up-front payment for parties to
participate in the auction.
-- Set deadlines for payments on winning bid.
-- Set aside a portion of the frequencies to be bid on by women,
minorities, rural telephone companies and small businesses.
FCC Chairman Reed Hundt said the rules set the stage for ``the
most important disposition of public property'' since the Oklahoma
land rush.
More detailed rules for specific services -- notably lucrative
personal communications service licenses -- will be decided later
this year.
Companies obtaining personal communications services licenses
will be able to offer consumers the next generation of mobile phone
service, in which the number travels with the phone's owner.
The FCC is exploring all options -- electronic, oral and paper --
for submitting bids, said Robert Pepper, chief of the FCC's Plans
and Policy Office.

2740. Re: 2m/70cm stub duck wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 23:36:10 UTC
From: tgosse@world.std.com
Message-ID: <CMF88B.72n@world.std.com>
Source record: 269942
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

ez006683@chip.ucdavis.edu (Daniel D. Todd) writes:

>kevin jessup (kevin.jessup@mixcom.mixcom.com) wrote:
>: In <wy1zCM89GE.3p3@netcom.com> wy1z@netcom.com (Scott Ehrlich) writes:

>: >I am looking for a stubby duck antenna for use with my Yeasu FT530.

>: >I've only been able to find stubbies for 2m, 1.25m, or 70cm, but nothing
>: >for two bands.

>: >Can anyone help?

>: >Thanks much in advance.

>: The Comet "Miracle Baby" CH-32 1.75 inch long stubby duck is what you
>: want. Designed for 2 meters and 70 cm. AES in Milwaukee has them
>: for the unbelievably low price of $33.95!! ;-)) Perhaps a 50 ohm 5 watt
>: carbon composition resistor would provide equivalent performance?? ;-))
>My fiance bought me one of these for a gift last year. It worked out
>great!! When I returned it I was able to get a DJ-580 antenna
>(considerably shorter than the ft-470 ant) and an MFJ speaker mic.

>: Why is it called the "Miracle Baby"?? As someone else here once said,
>: "If you can hit the repeater with this baby, it's a @!*!ing miracle!"
>I could hear the 2m machine 5 miles away with it, but I couldn't get in!

>cheers,
>Dan
>--

I use a "Miracle Baby" in and around Boston. I have no problem hitting repeaters that are on very high buildings (the Boston ARC, the New England Telephone ARC). I find that I can get into these repeaters from five to ten miles away. With other repeaters, it gives me marginal performance.

Most of my antennas, a stock ICOM, a Diamond RH77CA (5/8 wave whip), the miracle baby and a Cushcraft AR270 all pick up repeaters that I can't hit with my radio. I normally receive the Derry, NH repeater on my HT, but I can't hit it from Boston.

In a nutshell: the "Miracle Baby" is a good antenna for use in an urban area where you have good coverage repeaters. That's my $0.02.

--

Tom Gosse

N1PHG
tgosse@world.std.com

2741. IPS Daily Report 09 03 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-09 23:37:48 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar9.233748.8384@ips.oz.au>
Source record: 269943
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 9 March 1994
Summary for 9 March and Forecast up to 12 March
IPS Warning 08 will be issued on 10 Mar and be current for
10-13 Mar.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 090/034

1B. SOLAR FORECAST
10 March 11 March 12 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 095/041

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : minor storm

Estimated Indices : A K Observed A Index 8 March
Learmonth 36 3454 5554
Fredericksburg 38 38
Planetary 50 57

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
10 Mar 35 Active to minor storm.
11 Mar 30 Active.
12 Mar 25 Active.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
09 Mar normal normal poor-fair

PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
10 Mar fair poor poor
11 Mar fair poor poor
12 Mar fair poor poor
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were 30% below predicted monthly values during local
day.

T index: 2

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
10 Mar 0 20 to 30% below predicted monthly values.
11 Mar 5 About 20% below predicted monthly values.
12 Mar 10 About 15% below predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2742. Angus vs Herman (was: Body Parts by J. Angus)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 00:03:58 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMF9In.MMK@news.Hawaii.Edu>
Source record: 269944

In article <763065386snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>In article <CM25Hs.L3I@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
>
> >
> > COMPTON (Reuters) - Police psychologists today were extremely puzzled
> > as to why a Compton man, identified as Jeffrey Angus, had stopped
> > northbound traffic on the Santa Ana freeway by running along side
> > ....
> > Story compiled by Jeff NH6IL
>
> If you're going to engage yourself in this nonsense, at least take the
> time to come up with something original.

Ha ha - I see you deleted what you wrote about me (something about a `deranged professor blowing up a restroom' - so who started this `nonsense', Angus? When are you going to learn that if you post something about me I'll post back?

I've got to go find what you originally posted that prompted me to write above. What's that old expression? `You can dish it out but you can't take it'? When you finish, so will I.

> But thanks for playing. Even lame-flamers need some encouragement from
> time to time.

Yeah, your `body parts' newspaper article was rather lame.

> Nice try with the 435 inuendo. I even sent you e-mail about that. Do you
> think I would lie to you about where I operate? Ask Dana.

But you've got the .435 personality! Speaking of inuendos, do you actually believe that I'd blow up a restroom with plastic explosives? You've been breathing too much of that Compton smog (oxygen starvation).

My offer still stands: Let's take this to email so the rest of the good folks on .misc don't get pissed. This has REALLY gotten boring and childish.

73 Jeff#2 (The SLOW Learner),
Jeff#1 NH6IL

2743. Craig, VE4CET

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 00:57:08 UTC
From: espee@inqmind.bison.mb.ca
Message-ID: <XT6Xic2w165w@inqmind.bison.mb.ca>
Source record: 269945

Hi there Craig. Ian here. I hope you get this, if not maybe someone out in radioland will pass it on. As you can see I got into INTERNET and I need Roman's Address. Either leave it in rec. railroad, amateur.misc, or amateur. packet or call me. Thanks.

espee@inqmind.bison.mb.ca-
The Inquiring Mind BBS, Winnipeg, Manitoba 204 668-8845

2744. where do i qsl rs-12/13 robot??help

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 01:48:32 UTC
From: ab4vj@rock.concert.net
Message-ID: <2llu9g$qet@inxs.concert.net>
Source record: 269946
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space

Help.... I worked the rs-12/13 cw robot and recvd my serial # Now where do I send the qsl card?? Thanks de ab4vj ..:wq

2745. [News] Auctioning Rules set up by FCC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 01:51:28 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMFEHt.1Dn@news.Hawaii.Edu>
Source record: 269947
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Thought this might be of interest to everyone. If 11M goes up for bid
lets each kick in a few bucks to win it back...

Jeff NH6IL

****

WASHINGTON (AP) -- The Federal Communications Commission took a
first step Tuesday for setting the ground rules by which businesses
can bid for certain chunks of the airways.
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generation of mobile telephone service called personal
communications service.
The rules will:
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participate in the auction.
-- Set deadlines for payments on winning bid.
-- Set aside a portion of the frequencies to be bid on by women,
minorities, rural telephone companies and small businesses.
FCC Chairman Reed Hundt said the rules set the stage for ``the
most important disposition of public property'' since the Oklahoma
land rush.
More detailed rules for specific services -- notably lucrative
personal communications service licenses -- will be decided later
this year.
Companies obtaining personal communications services licenses
will be able to offer consumers the next generation of mobile phone
service, in which the number travels with the phone's owner.
The FCC is exploring all options -- electronic, oral and paper --
for submitting bids, said Robert Pepper, chief of the FCC's Plans
and Policy Office.

2746. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 02:59:07 UTC
From: tim@umcc.umcc.umich.edu
Message-ID: <2lm2dr$12a@umcc.umcc.umich.edu>
Source record: 269948

In article <CMC9EB.Kr1@news.hawaii.edu>,
Jeffrey Herman <jherman@uhunix3.uhcc.Hawaii.Edu> wrote:
>In article <1994Feb23.113305.7405@hemlock.cray.com> andyw@aspen32.cray.com (Andy Warner) writes:
>>
>>In article <N4HY.94Feb22150159@runner.ccr-p.ida.org>, n4hy@runner.ccr-p.ida.org (Bob McGwier) writes:
>>>
>>> Creative Technology DSP folks have given me an unbelievable reply. The
>>> [Bobs obvious disapointment with CT's myopic world view deleted...]
>>> to be more open about its architecture and/or the most versatile for our
>>> applications.

The same thing happened between Bob & AEA a few years ago. They
couldn't come to an agreement about something, & so Bob terminated his
relationship with them & tried to make a big deal about it via electronic
systems such as Internet, Compu$erve, etc.

Scanning thru the mess once might make me have thoughts about the
company, but after two times, I wonder about Bob...

Well actually, I don't care about Bob, but I just think people
should be aware of his track record concerning this type of thing.

Tim

--
Tim Tyler Internet: tim@ais.org Packet: KA8VIR @WB8ZPN.#SEMI.MI.USA.NA
P.O. Box 443 C$erve:72571,1005 GEnie:Sneaker AOL:Hooligan MCI: 442-5735
Ypsilanti MI "I'm just an innocent little frog, trying to
48197 hop my way across the Information Superhighway"

2747. Re: 4-1000A Chimney

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 03:31:51 UTC
From: root@jackatak.raider.net
Message-ID: <sZcyic3w165w@jackatak.raider.net>
Source record: 269949

alanb@sr.hp.com (Alan Bloom) writes:
> Don Turner (don.turner@eabbs.com) wrote:
> : Hi Guys: I need a chimney for my 4-1000A tube. The Eimac part number
> : is SK-506. If any of you are will to let go of one of these, leave a
> : message. .....Don Turner WA6WRX
>
> I know that a Coleman lantern globes work perfectly for 3-1000's. Not sure
> if they work with 4-1000's. They are much cheaper than Eimac chimneys.
Good thought, Al! Never tried that myself, but a fairly easy
substitute is a LARGE Pickel jar... fire a string around the
"bottom/top" and POOF! A chimney! ;^)
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

2748. Re: Guy Tower with Phillistran Non-metallic ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 03:43:54 UTC
From: andrews@fms.com
Message-ID: <CMFJp7.94B@fms.com>
Source record: 269950

In article <CMEoEH.BDo@fc.hp.com> jayk@fc.hp.com writes:
>wayne.a.strahl (wstrahl@cbnewsg.cb.att.com) wrote:
>: Does anyone out there use the Phillistran guy material and can
>: relate their experiences ?
>: Wayne Strahl - W9II wstrahl@cbnewsg.att.com
>
>I've been using it for about 10 years. Had a 120' Rohn 55 tower guyed
>with Philly. Now have a 55' Rohn 45 tower using it for guys. I wouldn't
>use anything else.
>73, Jay K0GU jayk@fc.hp.com

We used "Silly-Strand" on the K8TV repeater in Medina. 85 feet of
ROHN 35, holds it like a champ. Even on VHF, that stuff greatly
improved the 'ears' of the machine!
Andrew "NEON" Sargent - N8OFS andrews@telemax.com

--
Mesmerized by a decade of hate, ! AMATEUR = N8OFS
Flowers and remorse, ! ARMY MARS = AAN5HJT
Fading vision lost in time, ! CB = THE NEON KNIGHT
Tragedy on course!!! - Frontline Assembly ! HACKER = TH3 N30N KN16Ht

2749. CAN WE SELL STUFF HERE?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 03:59:38 UTC
From: jangus@skyld.grendel.com
Message-ID: <763271978snx@skyld.grendel.com>
Source record: 269951

In article <CMEp3s.38H@ucdavis.edu> ez006683@chip.ucdavis.edu writes:

> I suppose that we will just have to accept that my four years on the
> Usenet and your X years have yielded different impressions of what
> happens in the newsgroups, if you think it's bad now AOL is now on the
> newsgroups another million newbies in one fell swoop.
>
> cheers,
> Dan

Oh yeah, and with a vengence too. The clueless morals cops have shown up whining over on alt.tasteless. What a joke. Perhaps they will be too busy to come over here.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2750. QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 04:01:42 UTC
From: jangus@skyld.grendel.com
Message-ID: <763272102snx@skyld.grendel.com>
Source record: 269952

In article <1994Mar9.083813.394@sfpp.com> longo@sfpp.com writes:

> Unfortunately ftp.std.com does not allow anonymous logins! They expect you to
> pay. No thanks, I'll look elsewhere.
>
> -Bob Longo
> KE6EQY

Really? When did this happen? Did this happen to you or are you passing on
anecdotal information from someone else?

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2751. Re: FT-530 Receive Problem Followup

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 04:06:45 UTC
From: sadams@eis.calstate.edu
Message-ID: <2lm6cl$s3u@eis.calstate.edu>
Source record: 269953

I tried the two freq. on my 530 and it did the same thing. On the 440 side it acted like it was receiving a signal. Very strong, with not much noise behind it.

--

2752. Daily Summary of Solar Geophysical Activity for 09 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 04:17:53 UTC
From: oler@rho.uleth.ca
Message-ID: <9403100418.AA18707@rho.uleth.ca>
Source record: 269954
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

09 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 09 MARCH, 1994

NOTE: Stratospheric warming exists. A large warm region exists from central
and northeastern Siberia to Canada and the adjacent arctic with a
temperature increase of about 30 degrees C at 10 HPA over the Canadian
Arctic. The temperature gradient is reversed between 60N and the pole
from 10 HPA upwards into the upper stratosphere.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 068, 03/09/94
10.7 FLUX=089.9 90-AVG=106 SSN=068 BKI=4563 3444 BAI=033
BGND-XRAY=B1.1 FLU1=1.8E+07 FLU10=2.1E+04 PKI=4675 5555 PAI=052
BOU-DEV=054,095,121,033,038,045,044,044 DEV-AVG=059 NT SWF=00:000
XRAY-MAX= B7.7 @ 2141UT XRAY-MIN= A7.6 @ 0105UT XRAY-AVG= B1.5
NEUTN-MAX= +003% @ 1930UT NEUTN-MIN= -002% @ 2155UT NEUTN-AVG= -0.1%
PCA-MAX= +0.1DB @ 1825UT PCA-MIN= -0.4DB @ 0450UT PCA-AVG= -0.0DB
BOUTF-MAX=55364NT @ 0340UT BOUTF-MIN=55294NT @ 0723UT BOUTF-AVG=55327NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+061,+000,+000
GOES6-MAX=P:+123NT@ 1845UT GOES6-MIN=N:-125NT@ 0309UT G6-AVG=+081,+028,-060
FLUXFCST=STD:095,095,090;SESC:095,095,090 BAI/PAI-FCST=020,020,015/035,030,020
KFCST=3446 6543 4444 5444 27DAY-AP=031,041 27DAY-KP=4555 4334 4556 5544
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MINSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 08 MAR 94 was 23.0.
The Full Kp Indices for 08 MAR 94 are not available.
The 3-Hr Ap Indices for 08 MAR 94 are not available.
Greater than 2 MeV Electron Fluence for 09 MAR is: 1.1E+09

SYNOPSIS OF ACTIVITY

Solar activity was at very low levels.

Solar activity forecast: solar activity is expected to be
low levels. Region 7685 (S08W3E1) appears to have the greatest

potential of producing a C-class flare.

The geomagnetic field has been at unsettled to major storm levels. Periods of severe storm levels were observed at high latitudes.

Geophysical activity forecast: the geomagnetic field is expected to be mostly at active levels. Minor storm conditions are expected during local night time.

Event probabilities 10 mar-12 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 10 mar-12 mar

A. Middle Latitudes
Active 30/30/15
Minor Storm 25/25/15
Major-Severe Storm 05/05/05

B. High Latitudes
Active 25/25/15
Minor Storm 30/30/10
Major-Severe Storm 15/10/10

HF propagation conditions continue to be poor to very poor for transpolar and transauroral circuits, particularly during the local night hours. Middle latitudes are also experiencing minor signal degradation, but not as seriously as the higher latitudes. Conditions are expected to begin improving on 11 or (preferably) 12 March. The high and polar latitudes will likely take several additional days to recover from this activity.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 09/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7684 S08W56 007 0020 CRO 04 004 BETA
7685 S08W31 342 0110 CAO 07 017 BETA
7686 N08W87 038 0010 BXO 04 002 BETA
7687 N17W26 337 0020 CRO 04 005 BETA
7680 S11W68 019 PLAGE
REGIONS DUE TO RETURN 10 MARCH TO 12 MARCH
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 09 MARCH, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 09 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 09/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
67 S62W33 S62W33 S61W83 S25W45 014 EXT NEG 028 10830A
68 N62E29 N20W15 N22W16 N62E29 319 EXT POS 018 10830A
69 S10E57 S16E49 N10E35 N15E42 277 ISO POS 006 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
08 Mar: 0236 0240 0243 B2.0
1211 1328 1410 B3.5
1901 1904 1908 B1.4
2251 2254 2257 B1.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
Uncorrellated: 0 0 0 0 0 0 0 0 004 (100.0)

Total Events: 004 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2753. Re: Guy Tower with Phillistran Non-metallic ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 07:06:30 UTC
From: mcduffie@unlinfo.unl.edu
Message-ID: <2lmgtm$p9b@crcnis1.unl.edu>
Source record: 269955

andrews@fms.com (Andrew Sargent N8OFS) writes:

>In article <CMEoEH.BDo@fc.hp.com> jayk@fc.hp.com writes:

>>I've been using it for about 10 years. Had a 120' Rohn 55 tower guyed
>>with Philly. Now have a 55' Rohn 45 tower using it for guys. I wouldn't
>>use anything else.

>We used "Silly-Strand" on the K8TV repeater in Medina. 85 feet of
>ROHN 35, holds it like a champ. Even on VHF, that stuff greatly
>improved the 'ears' of the machine!

While we are on the subject (thanks for bringing it up), I have 70' of
Rohn 25 to put up this spring and had thought about making the top
half of the top set of guys Phillystran. Does anyone have any good
ideas of how to join the upper Philly with the lower steel? Or, is
this more trouble than it's worth. I already OWN the new steel, and
I'm trying to save a little $$ on the Philly.

Gary

2754. Schematic for Mizuho MX-14S??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 08:03:13 UTC
From: eivind@gribb.hsr.no
Message-ID: <eivind.1.763286593@gribb.hsr.no>
Source record: 269956

Does anyone know where I can get a schematic for the Mizuho MX-14S
handheld QRP transceiver?

73's de Eivind
packet: LA9XFA @ LA8D
e-mail: eivind@gribb.hsr.no

2755. GB2ATG (March 1994)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 09:18:00 UTC
From: IKENDALL@UNIVERSITY-OF-HUMBERSIDE.AC.UK
Message-ID: <94Mar10.040253-0700.18549-1@scapa.cs.ualberta.ca>
Source record: 269957
Cross-posted to: rec.radio.amateur.misc,uk.radio.misc,rec.radio.info

BARTG * GB2ATG * NEWS * BARTG * NEWS * GB2ATG * BARTG
This is the - British Amateur Radio Teledata Group - News Broadcast Service
for all Amateurs and Short Wave Listeners interested in RTTY Amtor, Pactor
and Packet Radio.

This news is broadcast during the first full week commencing Monday each
month, to the following schedule..

Evening transmissions at 1930 GMT. on 3.584 MHz. Mark. +/- for QRM.
RTTY on Monday-AFSK, Wednesday-AFSK and Friday-FSK
Pactor-FEC on Tuesday.
Amtor-FEC on Thursday and Saturday.

Morning transmission at 1000 GMT. on 7.041 MHz. Mark. +/- for QRM.
RTTY on Sunday-AFSK.

An edited version of this bulletin is available on the Packet network as a
BARTG at GBR. file thanks to: Andy (G3ZYP) at GB7MXM.#36.GBR.EU.

It is also posted on the "INTERNET" system via the INFO-HAMS list on UCSD.EDU.
thanks to Iain (G6ARO) who is available on the "JANET" network as
Iain@HUMBER.AC.UK

News for March 1994. Bulletin No. 015. (all times are GMT).

BARTG Information.
Due to pressure of other work, Ian Wade (G3NRW) is unable to continue editing
"Packet International" and has resigned his position on the committee. The
Packet pages will continue under another author.

Andy (G3ZYP) has volunteered to adopt the work of BARTG Publicity Officer.
This will relieve some of the pressure from BARTG Secretary Ian Brothwell
(G4EAN).

RTTY DX Activity.
14 MHz.
6W6JX and ZL3AFT 0830,
SU1AH 1000
ZA1MH 1300
OD5PL 1400
J28JJ and YB3AQF 1500
TA5C and 5B4VX 1530
A45XC and 4U1ITU 1600
XU7VK and EA8BUT 1630
ZS6NW 1730
FG5FI 1800

C91AI and CO2AW 1830
3Y0PI, CX3ABE, PY3QA and P43VLP 1900
EA8AKL and VP8BFH 1930
FM5GN and V50CM 2000
ZP5FGS 2200
S92ZM 2300

21 MHz.
CU1AC 1630

Pactor Activity.
3.5 MHz.
T91EZG 2030

QSL Information.
4U1ITU via IK2NCJ.
C91AI via CT1DGZ.
OD5PL via HB9CRV.
3Y0PI via AA6BB.

Contests.
The BARTG VHF/UHF RTTY contest open to all in CQ zones 14 and 15 runs from
1000 until 1500 on Sunday 10th April.
144 - 432 - 1296 MHz bands excluding repeaters.
Exchange message is Time of QSO (GMT), RST report and Maidenhead Locator.
Score in accordance with the distance chart for 144 and 432 MHz.
0 to 50 Km = 1 Point.
50 to 100 Km = 3 points and pro-rata.
For 1296 MHz score 1 point per Km.
Separate classes for (A) Single operator. (B) Multi operator and
(C) Short Wave Listener.
Entry logs must be post marked no later than May 9 to qualify.

Full rules and copies of sample log and summary sheets available from the
BARTG Contest Manager by enclosing a SASE A4 size to:-
John Barber (G4SKA) P.O. Box 8, Tiverton, Devon EX16 5YU.

The SARTG Amtor contest starts Saturday April 16 with 3 periods of operation.
0000-0800 Saturday April 16.
1600-2400 Saturday April 16.
0800-1600 Sunday April 17.
All 5 HF bands 80 to 10 metres. Stations may be contacted once per band for
QSO points and multiplier credit.

This contest is Amtor only using FEC mode for CQ calls and ARQ for contest
exchange. Contest exchange in any other mode is subject to disqualification.

Exchange message is RST - Own name - and three digit QSO serial number
starting 001.

Classes:
(A) Single operator all bands.
(B) Single operator single band.

(C) Multi operator single TX all bands.
(D) Short Wave Listener all bands.
A single operator all band may also enter a single band class.

Scoring:
(5) Points for QSO with own country.
(10) Points for QSO with other countries in own continent.
(15) Points for QSO with other continents.

Multipliers:
Each country on the current DXCC countries list including the first contact with - W - VE - VK - and JA - plus each call district in - W - VE - VK - and JA - count as separate multipliers on each band.

Total score = Sum of QSO points times sum of multipliers on each band.

Short Wave Listeners use same rules but based on stations and messages copied.

Logs must be received by June 10, 1994 and must contain a separate sheet for each band plus an overall summary sheet. Copies of the full rules are available from the editor with SASE please.

Send completed logs to:
SARTG contest manager.
Bo Ohlsson (SM4CMG). Skulsta 1258, S-710 41 Fellingsbro. Sweden.

Thanks this month to..
G3ZYP and G4BMK.

BARTG caters for all DATA interests with information-components-kits -ready built units and software from experts. Members receive a 120 page quarterly journal devoted to data modes. Beginners guides for most data modes are available. The group sponsors HF and VHF RTTY contests, administers its own DX and members award scheme and runs an annual rally.

This copy of BARTG News is posted by Iain Kendall (G6ARO) who can be contacted via Internet e-mail at.. iain@humber.ac.uk Items for inclusion in the broadcast may also be mailed to this address, as well as any queries regarding membership or services offered by BARTG.

Copy of the news as distributed by G0ARF 940301

2756. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 09:56:32 UTC
From: tcj@netcom.com
Message-ID: <tcjCMG0y9.E9q@netcom.com>
Source record: 269958

Bob McGwier (n4hy@runner.ccr-p.ida.org) writes:

> Creative Technology DSP folks have given me an unbelievable reply.

Tim Tyler (tim@umcc.umcc.umich.edu) replies:

> The same thing happened between Bob & AEA a few years ago....I just
> think people should be aware of his track record concerning this
> type of thing.

If I recember correctly, Bob had a business relationship with AEA; I don't recall that he mentioned anything about a business relationship with CT. What I *do* recall is that when Bob inquired about an API for the CT card, they offered to sell it to him for $5K. Yikes!

I think Bob was trying to make a point about open versus closed systems. The open system vendor assumes that it will realize more revenue by making its API available at a reasonable cost (or none at all) because developers will write applications that will generate more harware sales, while the closed system vendor views its API as an alternate source of revenue. Unfortunately, developers who pay $5K for an API generally sell their software for a pretty hefty sum, and this certainly won't benefit anyone with regard to the ham market since, as we all know, hams are notoriously tight with a penny.

Personally, I'm with Bob on this one. My only application to date for sound is to have my PC make cute little noises when I drag a file to the trash can; I'm quite satisfied with the PC speaker driver for this purpose, and as a result I don't currently own a sound card. I'll buy one just as soon as some good ham-oriented freeware and shareware apps become available, and I'll buy whichever card that software runs on. After reading Bob's message, however, I kinda doubt that it will be a SoundBlaster16 ASP.

Todd, KB6JXT (setting down my tightly clenched checkbook
long enough to type this message.... ;-)

2757. Re: Angus vs Herman (was: Body Parts by J. Angus)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 10:29:23 UTC
From: tcj@netcom.com
Message-ID: <tcjCMG2H0.G56@netcom.com>
Source record: 269959

Jeffrey Herman (jherman@uhunix3.uhcc.Hawaii.Edu) writes:

> Let's take this to email so the rest of the good folks on .misc
> don't get pissed. This has REALLY gotten boring and childish.

The 'man' page for the 'tin' newsreader replies:

> When there is a subject or an author which you...find completely
> uninteresting, you can easily instruct tin to...auto-kill
> articles...from specific authors. These instructions are stored in
> a kill file...accessed by pressing '^K'

I reply:

> ^K

Or in good, old-fashioned hamspeak, it's time to pull the plug....

Todd, KB6JXT

2758. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 13:28:28 UTC
From: jwa@tellabs.com
Message-ID: <1994Mar10.132828.9493@tellab5.tellabs.com>
Source record: 269960

In article <CMC9EB.Kr1@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:

>
>But keep in mind that they're NOT ads because the item is not for sale
>yet (even though the price was posted for us).
>
>>andyw@aspen.cray.com Andy Warner, Cray Research, Inc. (612) 683-5835
>
>Jeff NH6IL

The amount that I gave is what it cost me to build one 3 years
ago. I guess I should have elaborated.

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

2759. QSL info for HH2PK - via KA9RLJ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 13:50:26 UTC
From: ham@wam.umd.edu
Message-ID: <2ln8j2$d5h@cville-srv.wam.umd.edu>
Source record: 269961

I netted this QSL route during the ARRL CW contest, but wanted to be sure I heard right. Anyone else have this route (KA9RLJ) for HH2PK before I send it out?

Thanks, 73 es gud DXing

--
73, _________ _________ The
\ / Long Original
Scott Rosenfeld Amateur Radio NF3I Burtonsville, MD | Live $5.00
WAC-CW/SSB WAS DXCC - 125 QSLed on dipoles __________| Dipoles! Antenna!

2760. Alliance 5-wire Rotor Motor Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 14:59:01 UTC
From: galen@picea.CFNR.ColoState.EDU
Message-ID: <1994Mar10.145901.65354@yuma>
Source record: 269962
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I've accquired an Alliance rotor motor with no control box. The rotor
takes 5 wires, has the rotating mast thru the body and the mast top clamp
on the side of the case. I've been told this style is often used as an
altitude rotor on Satellite setups.
Questions:
1. What voltage does it take to turn the motor? AC or DC?
2. WHat are the pinouts for the five wires?
3. What is the model number or other ID's? (nothing on the case but Alliance).

I can open it up to get the pinouts, but I don't want to burn it out with
the wrong voltage etc.
I'm planning to use it to turn small VHF/UHF antennas.
Any positive responses are greatly appreciated!!!!!
Galen, KF0YJ

2761. Re: Ten-Tec question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 15:15:34 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CMGFq0.7GD@hpqmoea.sqf.hp.com>
Source record: 269963

Ten-Tec aren't alone, a great many other radios sport decorative knobs labelled "noise blanker" which have no discernable effect. I'd say the same of my IC765.

Perhaps the marketing departments of all the manufacturers, in unison found that you couldn't sell a rig without a noise blanker, but that it didn't matter if the noise blanker didn't work ?

I find that the blanker on my 2 metre multimode mobile DOES work, but then that is the sort of radio that really needs one.

Cheers
David GM4ZNX

2762. WWV time station freq

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 16:48:23 UTC
From: schottd@ucs.orst.edu
Message-ID: <2lnj0n$ekf@gaia.ucs.orst.edu>
Source record: 269964

I am searching for some of the frequencies for this station.
I need it sometime today, and I have no way of looking for it
other than by computer. Could someone please email me a few
of the operating frequencies of WWV; especially those that
can be picked up easily on the West coast. Thnks...

--
==
* Derek Schott Mail:schottd@ucs.orst.edu *
* Department of Public Safety Corvallis OR OSU *
==

2763. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 17:35:19 UTC
From: lapin@casbah.acns.nwu.edu
Message-ID: <2lnlon$lk4@news.acns.nwu.edu>
Source record: 269965

>jlw3@cec3.wustl.edu (Jesse L Wei) writes:
>: Now this is my question: do hams *ever* talk about anything besides what
>: kind of rig (s)he's got, ham problems, ham equipment, etc? As a waiting
>: (as in for my ticket) prospective, I've liistened to the local repeaters,
>: and personally, the conversations seem pretty boring if that's all you
>: ever talk about. Have I missed anything? or something? Is the purpose
>: of ham radio to talk about the technicalities of it? I know that the
>: whole nature of it requires technicality, but isn't there more to
>: it than that?
>:
>: --jesse (still waiting)

Techni-speak (I made it up) can be fun: Like the time I discussed wire antennas for 2 hours with a guy in England who said he lives near G5RV.

Greg KD9AZ

2764. 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 17:44:29 UTC
From: levine@mc.com
Message-ID: <2lnm9t$643@jericho.mc.com>
Source record: 269966

Has anyone seen anything in print about whether the vanity
callsign program (someday) might allow 1x1 calls?

(for info, a 1x1 is like K1X)

Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599

2765. Re: WWV time station freq

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 17:50:23 UTC
From: Anthony_Pelliccio@brown.edu
Message-ID: <Anthony_Pelliccio-100394124830@138.16.64.25>
Source record: 269967

In article <2lnj0n$ekf@gaia.ucs.orst.edu>, schottd@ucs.orst.edu (Derek Schott) wrote:

> I am searching for some of the frequencies for this station.
> I need it sometime today, and I have no way of looking for it
> other than by computer. Could someone please email me a few
> of the operating frequencies of WWV; especially those that
> can be picked up easily on the West coast. Thnks...

5.000, 15.000 and 20.000 are the ones I'm familiar with.....

--
== Anthony_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)
== Box 1908, Providence, RI 02912 Tel. (401) 863-1880
== All opinions expressed are those of the individual, and not those
== of Brown University.

2766. Re: Schematic for Mizuho MX-14S??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 18:15:15 UTC
From: slay@netcom.com
Message-ID: <slayCMGo1F.5Fs@netcom.com>
Source record: 269968

Reiersen, Eivind 7-94 (eivind@gribb.hsr.no) wrote:

: Does anyone know where I can get a schematic for the Mizuho MX-14S
: handheld QRP transceiver?

Mizuho Tsushin K.K.
2-8-6 Morino
Machida-shi, Tokyo 194
JAPAN

Tel: 81-427-23-1049
Fax: 81-427-26-6793

Cheers de Sandy WA6BXH/7J1ABV slay@netcom.com

2767. Re: Need a better antenna for my HT...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 18:36:46 UTC
From: jrl2@crux2.cit.cornell.edu
Message-ID: <jrl2.763324606@crux1.cit.cornell.edu>
Source record: 269969

paulg105@aol.com (PaulG105) writes:
B
Paul, look at the 73 plans for a portable 2m quad
antenna.I've built one from their plans and it works
GREAT!. Cost me about $6 and lets me hit all the repeaters
around here on low power.
-Jeff Luszcz
jrl2@cornell.edu
N2TIQ

(sorry about the attribution above to you of my reply,
my termi is screwed up right now so....)
73
-J

>Does anyone have any good antenna plans for a 2m HT???

>Thanks,
>Paul Gaspari
>N3PMH

2768. Re: QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 19:10:32 UTC
From: sdavis@fili.eecs.wsu.edu
Message-ID: <1994Mar10.191032.23532@serval.net.wsu.edu>
Source record: 269970

In article <763272102snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>In article <1994Mar9.083813.394@sfpp.com> longo@sfpp.com writes:
>
> > Unfortunately ftp.std.com does not allow anonymous logins! They expect you to
> > pay. No thanks, I'll look elsewhere.
> >
> > -Bob Longo
> > KE6EQY
>
> Really? When did this happen? Did this happen to you or are you passing on
> anecdotal information from someone else?
>
>
>
> Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
>Internet: jangus@skyld.grendel.com | a fanciful dimension to any
> US Mail: PO Box 4425 Carson, CA 90749 | story."
> Phone: 1 (310) 324-6080 | Peking Noodle Co.
>

This is true!!! I encountered the same thing. Use
world.std.com instead. It wasn't charging as of yesterday
and has the exact same stuff as std.com.

Scott Davis

EE/CS WSU

2769. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 19:11:06 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <763408657.F00002@ocitor.fidonet>
Source record: 269891

```
The following files were processed Thursday 3-10-94:

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
ARLB022.ZIP ( 388 bytes) 03/02/94 - New South Carolina SM
ARLB023.ZIP ( 858 bytes) 03/03/94 - Callsign plan extended
ARLB024.ZIP ( 891 bytes) 03/03/94 - ARRL, FCC ink pact
ARLB025.ZIP ( 970 bytes) 03/04/94 - New exposure deadline
ARLP009.ZIP ( 1235 bytes) ARRL Propagation Bulletin 03/04/94
NEWS0304.ZIP ( 6767 bytes) News Line 03/04/94

---------------------------------------------------------------------
11109 bytes in 6 file(s)

HAMSAT [ HAM: Satellite tracking and finding programs ]
---------------------------------------------------------------------
AMSAT064.ZIP ( 3417 bytes) AmSat Bulletin #064 03/06/94
OBS063.ZIP ( 5203 bytes) AmSat Orbital Elements #063
03/04/94
SPC0307.ZIP ( 2574 bytes) Space Bulletin 03/07/94

---------------------------------------------------------------------
11194 bytes in 3 file(s)

HAMUTIL [ HAM: Radio operating aids ]
---------------------------------------------------------------------
MSSOF411.ZIP ( 211235 bytes) Meteor-scatter V4.11 by OH5IY -
predict meter shower openings

---------------------------------------------------------------------
211235 bytes in 1 file(s)

Total of 233538 bytes in 10 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
```

/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

2770. Keyboards at testing

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 19:18:11 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199403101925.LAA09864@ucsd.edu>
Source record: 269971

>Actually, now that you mention it, the odds of getting at least
>7 out of 10 in a 4-choice multiple-choice test are much better:
>about 1 in 285.
[etc...]

this will teach me to not to do the high wire math w/o my punishability and modern sadistics book around....(only 1 in 285?...maybe that's where the VECs can rake in some bucks....those that know code pass, those that play the CW Lottery keep plunking down the bucks...and the losers are probably easier to process than the "winners"....)

bill wb9ivr

2771. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 19:37:13 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <763408657.F00004@ocitor.fidonet>
Source record: 269892

```
The following files were processed Thursday 3-10-94:

HAMPACK [ HAM: Packet Communications programs ]
---------------------------------------------------------------------
APRS400.ZIP ( 748602 bytes) Automatic Packet Report system V4.0
by WB4APR

---------------------------------------------------------------------
748602 bytes in 1 file(s)

Total of 748602 bytes in 1 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)
```

2772. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 19:49:20 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <763408657.F00006@ocitor.fidonet>
Source record: 269893

```
The following files were processed Thursday 3-10-94:

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
HOD001.ZIP ( 31307 bytes) Ham on Disk #1 vol 1
HOD002.ZIP ( 50260 bytes) Ham on Disk #2 vol 1

---------------------------------------------------------------------
81567 bytes in 2 file(s)

Total of 81567 bytes in 2 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)
```

2773. Re: [News] Auctioning Rules set up by FCC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 19:52:18 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMGsJ6.EqB@news.Hawaii.Edu>
Source record: 269972

In article <763281224snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>In article <CMF7EE.Ly1@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
>
> >
> > Thought this might be of interest to everyone. If 11M goes up for bid
> > lets each kick in a few bucks to win it back...
> >
> > Jeff NH6IL
>
> So tell me, good buddy, where are all them there CB critters going to go?

Oh, that's easy. We'll give 'em a no-code license and send 'em up to the VHF/UHF bands (oops - forgot this isn't .policy).

While we're on the subject, until recently I had an older FT-101 xcvr - it was an early 70's model - analog tuning and solid state except for PA tubes in the final. The band switch included an 11 meter position. This 11m slot has always perplexed me, since the amateur service lost 11m back in the 50's; why would a 70's era rig still carry 11m?

Jeff NH6IL

2774. Re: Ten-Tec question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 20:07:10 UTC
From: mosier@fagan.uncg.edu
Message-ID: <mosier.105.0@fagan.uncg.edu>
Source record: 269973

In article <milewski-090394162950@fp2-st-affairs-11.uoregon.edu>
milewski@oregon.uoregon.edu (Steve Milewski) writes:

>I've used the noise blanker on my Omni VI to help cut out electric fence
>interference and some engine noise from the log trucks on the fire road
>next to my antenna location.

I took the electric fence in my shack down. Wouldn't load.

steve
mosier@fagan.uncg.edu

2775. Re: Angus vs Herman (was: Body Parts by J. Angus)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 20:09:32 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMGtBw.Exq@news.Hawaii.Edu>
Source record: 269974

In article <763282347snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>In article <CMF9In.MMK@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
>
> [yapp yapp yapp yapp]
>
> > Jeff#1 NH6IL
> >
>
> You sound like a small dog with a bladder problem.
>

<usual crap deleted>

The only way that this pest will stop is for me to not respond to his continuous baiting. Therefore, as a service to the readers of this net, I promise not to reply to any more to this bad-natured little boy's attacks. [His parents must be soooo disappointed that he never grew up.]

> Jeff-1 Still the original (Some things just can't be improved)

73 to you Jeffrey D. Angus,
Jeffrey D. Herman NH6IL

2776. noise blankers

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 20:11:15 UTC
From: hellman@cbnewsm.cb.att.com
Message-ID: <CMGtEw.Lno@cbnewsm.cb.att.com>
Source record: 269975

Those of you who have never needed to use the "decorative knob"
labled noise blanker should consider yourselves fortunate.
I find the one on my ts 440 does just fine when some mysterious
noise appears.

Shel Darack WA2UBK
dara@physics.att.com
.

2777. Re: Guy Tower with Phillistran Non-metallic ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 20:13:12 UTC
From: jayk@fc.hp.com
Message-ID: <CMGtI0.LI9@fc.hp.com>
Source record: 269976

Chuck Bowden (chuckb@tc.fluke.COM) wrote:
: It's easy. You simply use galvanized thimbles and cable clamps.

I've also considered using a good size guy wire insulator. Only because I have a number of sightly used ones, courtesy of the local REA. I use wraps (guy grips) instead of cable clamps on the steel cable (just my preference). A few months ago there was a rumor that P.R. would soon come out with a version of Phillystran that uses wraps. Anyone have info on this??

73, Jay K0GU jayk@fc.hp.com

2778. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 20:17:48 UTC
From: jholly@cup.hp.com
Message-ID: <CMGtpo.4t9@cup.hp.com>
Source record: 269977

Bob Levine (levine@mc.com) wrote:
: Has anyone seen anything in print about whether the vanity
: callsign program (someday) might allow 1x1 calls?

: (for info, a 1x1 is like K1X)

No, but I've heard ther is a 2X1 ... JY1

Jim, WA6SDM

2779. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 21:12:23 UTC
From: t1terryb@cascade.ens.tek.com
Message-ID: <2lo2fn$q5m@cascade.ens.tek.com>
Source record: 269878

In article <2lnlon$lk4@news.acns.nwu.edu> lapin@casbah.acns.nwu.edu (Gregory Lapin) writes:
>>jlw3@cec3.wustl.edu (Jesse L Wei) writes:
>>: Now this is my question: do hams *ever* talk about anything besides what
>>: kind of rig (s)he's got, ham problems, ham equipment, etc? As a waiting
>>: (as in for my ticket) prospective, I've liistened to the local repeaters,
>>: and personally, the conversations seem pretty boring if that's all you
>>: ever talk about. Have I missed anything? or something? Is the purpose
>>: of ham radio to talk about the technicalities of it? I know that the
>>: whole nature of it requires technicality, but isn't there more to
>>: it than that?
>>:
>>: --jesse (still waiting)
>
>Techni-speak (I made it up) can be fun: Like the time I discussed wire
>antennas for 2 hours with a guy in England who said he lives near G5RV.
>
>Greg KD9AZ

You forgot to mention the guy who calls his wife-mate on two meters to tell her his will be home in two minutes. Or the average how is the weather, pain in the back, etc. Most of two meter stuff is like that.

After about a year of being in ham radio, I talked to a guy on 80 meters that told me about his experiences in the Merchant Marine during WWII. He got torpedoed twice or three times as I recall. Now that was a more interesting conversation.

When the sunspot cycle was up I used to get on 15 meters and ragchew with the Europeans. That was alot of fun and you meet some interesting people... and also work some nice DX.

Terry
KI7M

2780. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 21:44:28 UTC
From: dbushong@wang.com
Message-ID: <CMGxq7.F0L@wang.com>
Source record: 269879

jholly@cup.hp.com (Jim Hollenback) writes:

>Bob Levine (levine@mc.com) wrote:
>: Has anyone seen anything in print about whether the vanity
>: callsign program (someday) might allow 1x1 calls?

>: (for info, a 1x1 is like K1X)

>No, but I've heard ther is a 2X1 ... JY1

Wouldn't that be a "two by nothin'?" Mine (KZ1O) is a 2X1, so if
the 'o' were dropped, it would be a 2X

--
Dave Bushong, Wang Laboratories, Inc.

2781. Re: QSL's? VI9XN ZL7FD ZS8MI

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 21:59:58 UTC
From: milewski@oregon.uoregon.edu
Message-ID: <milewski-100394140052@fp2-st-affairs-11.uoregon.edu>
Source record: 269880

In article <CMApKt.Mv2@murdoch.acc.Virginia.EDU>,
clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) wrote:

> Has anyone received QSL cards from the DX operations:
> VI9XN December 1993
> ZL7FD November 1993
> ZS8MI December 1993.

I'm still waiting for my card on ZS8MI and my QSO goes back to May or June
1993.

--
Steve Milewski
milewski@oregon.uoregon.edu
Ham:AA7FL
*** Save the environment - Ship a logger to Japan ***

2782. test (don't read)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 23:14:47 UTC
From: inge@mac_inge
Message-ID: <2lo9l7$7oo@ratatosk.uninett.no>
Source record: 269881

```
This is just a test from a slip connection.
73 La5vk
```

2783. For Sale Ads Here?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-10 23:25:09 UTC
From: hopken@interaccess.com
Message-ID: <2loa8l$qq8@mailhost.interaccess.com>
Source record: 269882

Hi All. What's the feeling about posting personal ham radio equip
ads here? I have some stuff for sale (good equipment, not boat anchors)
but I hesitate to post an ad here if that's frowned on. Someone advise me.
--
==========
Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA

2784. Re: Keyboards at testing sessions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 00:04:56 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403101900591.gilbaronw0mn.DLITE@delphi.com>
Source record: 269883

>Nntp-Posting-Host: wpp1
>Organization: UNISYS
>X-Newsreader: Trumpet for Windows [Version 1.0 Rev B]
>
>In article <1994Mar8.143141.29301@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us
(Gary Coffman) writes:
>>From: gary@ke4zv.atl.ga.us (Gary Coffman)
>>Subject: Re: Keyboards at testing sessions
>>Date: Tue, 8 Mar 1994 14:31:41 GMT
>
>> Since most intercepted traffic is encoded, and most commercial
>>traffic heavily abbreviated and filled with "commercial codes", flawless
>>copy is mandatory or all meaning could be lost. That's what the FCC wants

>>on the test too, though the current amateur test doesn't require zero
errors,
>>just one minute out of five perfect copy, or the answers to the multiple
choice
>>questions as the case may be. That level of performance would wash you out
at
>>military or commercial levels of required accuracy.
>
>I seem to remember that back when I took my 13 wpm code test in the FCC
>offices in NYC, the receiving portion of the test required only one solid

>minute out of five or so. I don't remember whether the text was plain or
>code groups. Of course, there was also a sending test, using a straight
key.
>
>It was 1960 or 1961, I was in high school, and intimidated by all the
glory
>and grandeur of the Federal Gummint, so my memory may not be very accurate.

>The point is that, at least at that time, the FCC didn't require 100%
accuracy
>for the entire test session, just a burst.
>
>73,
>Bill.
>
>
>Bill Powers WY0Q <wilpwr@rsvl.unisys.com>
> <powe0040@gold.tc.umn.edu>
>UNISYS Corp.
>MS 4033 Phone: [612] 635-5267

>P.O. Box 64942 FAX: [612] 635-7523
>St. Paul, MN 55164-0942
>
That is the truth and always has been. You can still pas the test with one minute of solid copy. If you don't get the 70% correct then they are to check for a minute of solid copy. Either one will pass the test.

When I got mine the one miute solid copy of 5 was the only way. It was tough.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

2785. Re: For Sale Ads Here?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 00:08:24 UTC
From: Kenneth.E.Harker@Dartmouth.Edu
Message-ID: <2locpo$k7g@dartvax.dartmouth.edu>
Source record: 269884

Classified ads should be posted in rec.radio.swap.

==
Kenneth E. Harker N1PVB Dartmouth College Amateur Packet Radio
kenneth.e.harker@dartmouth.edu Hinman Box 1262 n1pvb@w1et.nh.usa.na
(603) 643-6549 Hanover, NH 03755 or n1pvb-5 on 144.99
==
(PGP Public Key now available on request)

2786. Re: QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 00:15:24 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2lod6s$jr6@bigfoot.wustl.edu>
Source record: 269885

Scott Davis - EECS (sdavis@fili.eecs.wsu.edu) wrote:
: In article <763272102snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:

: This is true!!! I encountered the same thing. Use
: world.std.com instead. It wasn't charging as of yesterday
: and has the exact same stuff as std.com.

Well after telling a couple of people that I never had any problems,
I tried to ftp ftp.std.com, and got a disconnection. Seems they're
having some problems. I think the ftp server actually _does_ have a
anon ftp limit: they said they don't. They've had a lot of traffic
lately. FYI, world.std.com *was* the ftp server also until it was
moved to ftp.std.com. So try ftp.std.com before you try world.std.com;
else, they may close world if ftp.std.com is left unused (or world load
gets too high. . .

--jesse

2787. Info on Alinco mods?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 01:45:28 UTC
From: georges@earlham.edu
Message-ID: <1994Mar10.204543.1362@earlham.edu>
Source record: 269886

I recently bought a 2nd hand Alinco DJ-F1T hand held. The manual says
that it can be modified to do aeronautical band AM between 118 MHz and 130
MHz, but Alinco wouldn't tell me how to make the modification on the phone.
They said there are books that tell how to do it, but they can't tell me
since I am not okayed by C.A.P./MARS.

So, where do I get these books? Or better yet is there some place on
the Internet where such info is available?

Also, how complicated and ticklish are such mods?

Any help/ideas/opinions welcomed.

--George Silver
Director of Computing
Earlham College
georges@earlham.edu

2788. ICOM IC-2GAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 02:03:22 UTC
From: Tjilos@nova.eng.wayne.edu
Message-ID: <2lojha$i7t@oak.oakland.edu>
Source record: 269887

I am looking for a good technical person that can help me with my radio.
THE SQL WILL NOT WORK! AND IT IS DRIVING MY CRAZY. All I can hear is a
hummmming and hisssssing noise. However, the radio performs fine with
this problem. Has anyone ever had this problem or even better know what
I can do to correct it? I would prefer fixing it myself if possible.

Any information would be helpful.

Thanks

2789. [News] Auctioning Rules set up by FCC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 02:54:26 UTC
From: jangus@skyld.grendel.com
Message-ID: <763354466snx@skyld.grendel.com>
Source record: 269888

In article <CMGsJ6.EqB@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:

[I said in regards to us getting 11 meters back:]
So tell me, good buddy, where are all them there CB critters going to go?
>
> Oh, that's easy. We'll give 'em a no-code license and send 'em up to the
> VHF/UHF bands (oops - forgot this isn't .policy).

Don't forget to turn on the bug light so they know which band they belong on.

> While we're on the subject, until recently I had an older FT-101 xcvr -
> it was an early 70's model - analog tuning and solid state except for
> PA tubes in the final. The band switch included an 11 meter position.
> This 11m slot has always perplexed me, since the amateur service lost
> 11m back in the 50's; why would a 70's era rig still carry 11m?
>
> Jeff NH6IL

In a word, marketing. How else are the CB's supposed to know that the FT-101
works on 11 meters if it isn't marked? It's a REAL popular part at the swap
meets around here. Usually selling for more than it did when it was new.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2790. Angus vs Herman (was: Body Parts by J. Angus)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 02:57:36 UTC
From: jangus@skyld.grendel.com
Message-ID: <763354656snx@skyld.grendel.com>
Source record: 269889

In article <CMGtBw.Exq@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:

> The only way that this pest will stop is for me to not respond to his
> continuous baiting. Therefore, as a service to the readers of this net,
> I promise not to reply to any more to this bad-natured little boy's
> attacks. [His parents must be soooo disappointed that he never grew up.]

And so, just to show us how much of a better person he is, he responds to
the posting rather than ignoring it.

As Nike would say, "Just DO it."

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2791. 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 02:59:21 UTC
From: jangus@skyld.grendel.com
Message-ID: <763354761snx@skyld.grendel.com>
Source record: 269890

In article <2lo1ii$g94@oak.oakland.edu> prvalko@vela.acs.oakland.edu writes:

> They should allow for ANY combination of legitimate US-amateur allocated
> calls. If I remember correctly, In the US, the call must BEGIN with "A,
> K, N, or W" then have a SINGLE DIGIT NUMBER and followed by at LEAST one
> letter.

Based on how some people view me, I'm gonna sign up for A6H. It's look good
on the car too.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2792. Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 04:13:01 UTC
From: penneys@brahms.udel.edu
Message-ID: <2lor4d$krj@brahms.udel.edu>
Source record: 269894
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

I need to replace a car and want one which 100 watts or so of HF and 50 watts or so of 2 meters or 440 will not interfere with the electronics af the vehicle. Nor do I want ignition or other noise beyond the bare minimum.

In consideration are four door sedans from the size of a Corolla up to that of a Taurus. or perhaps a minivan or small pickup. Replacing a Ford Aerostar.

Will listen to all viewpoints. Tnx a million. Bob
--
Bob Penneys, WN3K Frankford Radio Club Internet: penneys@pecan.cns.udel.edu
Work: Ham Radio Outlet (Delaware) (800) 644-4476; fax (302) 322-8808
Mail at home: 12 East Mill Station Drive Newark, DE 19711 USA

2793. email

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 04:37:51 UTC
From: zabrodsk@med.ucalgary.CA
Message-ID: <Pine.3.89.9403102149.A847-0100000@ume>
Source record: 269895

hope this is the right address. I was told this was a email reflector for
ham radio type stuff. Rick VE6GK

2794. Jargon

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 06:09:38 UTC
From: ST1860@SIUCVMB.SIU.EDU
Message-ID: <199403110617.WAA10013@ucsd.edu>
Source record: 269896

Being an Electrical Engineering student I love "Techni-speak". But if you f
ind the jargon boring....Try every thursday night at 0000 GMT on 14.265 MHz. I
kid you not...."The International Nude Net". That's right The nude net!!!
I ran accross them last night, and they say there planning a special event. It
was certainly different than technical stuff..hi
Gary AA9JS
st1860@siucvmb.siu.edu

2795. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 12:19:49 UTC
From: sww@csuohio.edu
Message-ID: <1994Mar11.121949.17460@news.csuohio.edu>
Source record: 269897
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

Winnebago Industries makes a bunch of very fine vehicles for mobile HF.
You don't even have to worry about missing your turn off!

73,
Steve NO8M.#NEOH.OH.USA.NA
ag807@Cleveland.freenet.edu

2796. Former Yugoslav Broadcast Station Freqs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 12:33:38 UTC
From: jmitchen@lynx.axion.bt.co.uk
Message-ID: <2lpof2$5tu@zaphod.axion.bt.co.uk>
Source record: 269898
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.misc,soc.culture.yugoslavia,soc.culture.bosna-herzgvna,soc.culture.croatia,uk.radio.amateur

A friend of mine from the former Yugoslavia wants to be able to
listen to some "home" language and music via Short Wave Broadcast
stations from that part of the world in the UK. Does anyone have `
any up-to-date SW frequencies for such stations please?

Please email any info: (we don't read all these groups)

in English to: jmitchen@axion.bt.co.uk
or in other languages to: rmilovan@axion.bt.co.uk

Thanks,

Jonathan.

p.s. Apologies for the cross-posting.

2797. Re: Definition of CW speeds

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 13:21:52 UTC
From: drt@world.std.com
Message-ID: <CMI54H.1Mp@world.std.com>
Source record: 269899
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

Carole L. Hamilton (clh6w@faraday.clas.Virginia.EDU) wrote:
: In article <CMDD89.1pH@world.std.com>,
: David R Tucker <drt@world.std.com> wrote:
: >Laurence Gene Battin (battin@cyclops.iucf.indiana.edu) wrote:
: >: I am writing a code-practice program for my Amiga computer, and
: >: I wonder if anyone can give me a definitive answer to exactly
: >: how many milliseconds long a dit at 18 wpm is supposed to be?
: >
: Then David R. Tucker wrote:
: >You're right. There is a more exact standard.
: >
: >The average English text word length is 50 units, which is the same as
: >the work "PARIS", and that's considered the "standard" word length.
: ...

: You've make quite a leap in going from PARIS to 50 units! What
: asumptions did you make about dash per dot ratio? And how many
: dots per space?

Well, I assumed he understood this from another source, since he
didn't ask that question, and could look it up in the source I gave.
Still:

dit = 1 unit
dah = 3
intracharacter space = 1 unit
space between characters = 3 units
space between words = 7 units

(BTW, a fast way to figure out the number of units in a text is to
count all the dits, dahs, characters, and words. Then

Length = 2*(dits+chars) + 4*(dahs+words)

The proof of this is left as an exercise, but it works.
PARIS : 10 dits, 5 letters, 4 dahs, 1 word = 50 units. Or, you can
count all the units up.)

: Also some code is sent Farnsworth (sp?) where the characters are
: sent at one (faster) speed while the spaces between words are spread
: out.

Between characters and between words. I assume you keep the
word space:character space ratio at 7:3, extending the duration of
word spaces and character spaces so that when you combine everything,
PARIS comes out at the speed you desire, despite faster characters.

This, the formula I gave before, and a bit of algebra should give a formula for char and word spaces for any overall speed and character speed specified. Then it's plug & chug.

: Your final conclusions are approximately correct but you need
: to account for the above spacings.

"Approximately"??? 66.6666666666666... ms for a dit length at 18 wpm is approximate?? Boy, you're a tough one! :-> (Maybe, "correct as far as it goes"?)

: By the way to the original poster: the best to write a program that
: sends code is to start with the dot length. Then make all the
: other ratios a function of that dot length. (e.g. dash-dot ratio,
: space length in units of dots, and character speed versus word
: speed). Then adjust the ratios until you get a pleasant sounding
: "fist."

: 73, Ned Hamilton, AB6FI.

You could also allow the user to vary those ratios to taste, as an option.

Sorry if it wasn't clear. Happy ... coding!!! :-) (groan ...)

-drt

|David R. Tucker KG2S drt@world.std.com|

2798. Re: WWV time station freq

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 13:45:13 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <CMI67D.A0r@odin.corp.sgi.com>
Source record: 269900

In article <Anthony_Pelliccio-100394124830@138.16.64.25>, Anthony_Pelliccio@brown.edu (Tony Pelliccio) writes:
|> In article <2lnj0n$ekf@gaia.ucs.orst.edu>, schottd@ucs.orst.edu (Derek
|> Schott) wrote:
...stuff deleted...
|> 5.000, 15.000 and 20.000 are the ones I'm familiar with.....
|>
|> --
|> == Anthony_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)
|> == Box 1908, Providence, RI 02912 Tel. (401) 863-1880
|> == All opinions expressed are those of the individual, and not those
|> == of Brown University.

What!? You missed 10.000000000000 MHz, the most important one, IMHO. :-)

dit dit
--
Chuck Adams K5FO CP-60
adams@sgi.com

2799. Re: Sound Blaster stupidity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 13:53:38 UTC
From: jwa@tellabs.com
Message-ID: <1994Mar11.135338.19753@tellab5.tellabs.com>
Source record: 269901

In article <CMDvpx.AJp@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>In article <2li7a8$sj6@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:
>>In article <CMCruE.8n6@ucdavis.edu>,
>>Daniel D. Todd <ez006683@chip.ucdavis.edu> wrote:
>>>Jeffrey Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:
>>>
>>>: But keep in mind that they're NOT ads because the item is not for sale
>>>: yet (even though the price was posted for us).
>I was being facetious!
>>>I've seen this argument posited before, I'm not sure if it's real or
>>>not.

Anyone who thinks that the non-existence of a product means that
>>>ads for it are not advertisements should look at the last couple months
>>>of QST. Lots of companies advertise before the product is actually
>>>available. (Sorta like President Clinton and the health care program)
>>
>>Indeed. I think that they are called `Teasers' - a common marketing
>>ploy. It is used to signal prospective customers and competitors. To
>>competitors: better watch out, I am going to come out with this new product.
>>It is a `territorial' thing. Like dogs marking the fire hydrant.
>>
>Jeff NH6IL

I'm just a "functional illiterate" electronic tech. I'm not
much of a business man. However, I do know one thing. All of
this hullabaloo about the Hamblaster means exposure and that
what advertisers want. Just talking about is a form of
advertising. So whose the bad guy?

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

"You can't please everyone so you have to please yourself"

Rick Nelson

2800. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 13:56:13 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar11.135613.16379@ke4zv.atl.ga.us>
Source record: 269902
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

In article <2lor4d$krj@brahms.udel.edu> penneys@brahms.udel.edu (Robert Penneys) writes:
>I need to replace a car and want one which 100 watts or so of HF and 50 watts
>or so of 2 meters or 440 will not interfere with the electronics af the
>vehicle. Nor do I want ignition or other noise beyond the bare minimum.
>
>In consideration are four door sedans from the size of a Corolla up to that
>of a Taurus. or perhaps a minivan or small pickup. Replacing a Ford
>Aerostar.
>
>Will listen to all viewpoints. Tnx a million. Bob

Look at what the cops are driving. Ford Crown Victorias seem popular
with them, as do Chevy Caprices. Order your's with the same fleet codes
that they use and you'll have a car that works well with radios. (It'll
also have the heavy duty electrical system, cooling system, and suspension
of a cop car.) Get the same color scheme that they use for their unmarked
cars too, that way the antennas won't draw suspicion. (And you may avoid
some tickets.)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2801. Heath 2036 manual

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 13:59:49 UTC
From: A15TAH%ANDV06@gmr.COM
Message-ID: <01H9U9852FCY9BWZTO@gmr.com>
Source record: 269903

Greetings to all,

I have a friend in need of a manual for a Heathkit 2036 radio. He made the fatal mistake of lending his out to another, and it came up missing.

Any help would be appreciated.

73,

Ty N9UIY
a15tah%andv06@gmr.com

The opinions are mine and not of my employer.

2802. ORBS$070.OSCAR.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 14:00:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8620.99.0C38A432@drig.com>
Source record: 269904

```
SB KEPS @ AMSAT $ORBS-070.O
Orbital Elements 070.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH,TX March 11, 1994
BID: $ORBS-070.O
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94069.18379542
Element set: 268
Inclination: 27.1934 deg
RA of node: 337.9178 deg
Eccentricity: 0.6022504
Arg of perigee: 160.8947 deg
Mean anomaly: 238.2860 deg
Mean motion: 2.05878778 rev/day
Decay rate: -2.10e-06 rev/day^2
Epoch rev: 8074
Checksum: 333

Satellite: UO-11
Catalog number: 14781
Epoch time: 94067.56924816
Element set: 672
Inclination: 97.7916 deg
RA of node: 86.9836 deg
Eccentricity: 0.0010793
Arg of perigee: 229.7625 deg
Mean anomaly: 130.2638 deg
Mean motion: 14.69163339 rev/day
Decay rate: 3.14e-06 rev/day^2
Epoch rev: 53553
Checksum: 344

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94067.01740430
Element set: 880
Inclination: 82.9209 deg
RA of node: 43.6165 deg
Eccentricity: 0.0010632
Arg of perigee: 312.3195 deg
Mean anomaly: 47.7057 deg
```

Mean motion: 13.72332558 rev/day
Decay rate: 3.6e-07 rev/day^2
Epoch rev: 33603
Checksum: 280

Satellite: AO-13
Catalog number: 19216
Epoch time: 94069.54851579
Element set: 892
Inclination: 57.8718 deg
RA of node: 263.9681 deg
Eccentricity: 0.7210511
Arg of perigee: 336.6114 deg
Mean anomaly: 2.6497 deg
Mean motion: 2.09726483 rev/day
Decay rate: -4.56e-06 rev/day^2
Epoch rev: 4394
Checksum: 341

Satellite: FO-20
Catalog number: 20480
Epoch time: 94067.40210310
Element set: 667
Inclination: 99.0229 deg
RA of node: 238.3245 deg
Eccentricity: 0.0540340
Arg of perigee: 207.7414 deg
Mean anomaly: 149.3880 deg
Mean motion: 12.83223761 rev/day
Decay rate: -5.5e-07 rev/day^2
Epoch rev: 19120
Checksum: 274

Satellite: AO-21
Catalog number: 21087
Epoch time: 94069.83595116
Element set: 443
Inclination: 82.9370 deg
RA of node: 215.4726 deg
Eccentricity: 0.0036191
Arg of perigee: 0.5572 deg
Mean anomaly: 359.5617 deg
Mean motion: 13.74535665 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 15607
Checksum: 317

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94067.45619162
Element set: 670

Inclination: 82.9185 deg
RA of node: 86.1590 deg
Eccentricity: 0.0030648
Arg of perigee: 31.0404 deg
Mean anomaly: 329.2549 deg
Mean motion: 13.74036632 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 15481
Checksum: 302

Satellite: ARSENE
Catalog number: 22654
Epoch time: 93338.80803910
Element set: 243
Inclination: 1.4104 deg
RA of node: 113.5274 deg
Eccentricity: 0.2936576
Arg of perigee: 161.9838 deg
Mean anomaly: 210.8642 deg
Mean motion: 1.42202044 rev/day
Decay rate: -8.7e-07 rev/day^2
Epoch rev: 299
Checksum: 278

/EX

2803. ORBS$070.MISC.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 14:08:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8624.99.0C38A436@drig.com>
Source record: 269905

```
SB KEPS @ AMSAT $ORBS-070.M
Orbital Elements 070.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX March 11, 1994
BID: $ORBS-070.M
TO ALL RADIO AMATEURS BT

Satellite: POSAT
Catalog number: 22829
Epoch time: 94068.17748386
Element set: 262
Inclination: 98.6568 deg
RA of node: 144.9950 deg
Eccentricity: 0.0010522
Arg of perigee: 125.3851 deg
Mean anomaly: 234.8327 deg
Mean motion: 14.28009726 rev/day
Decay rate: 7.0e-07 rev/day^2
Epoch rev: 2342
Checksum: 309

Satellite: MIR
Catalog number: 16609
Epoch time: 94070.24194089
Element set: 170
Inclination: 51.6441 deg
RA of node: 317.2746 deg
Eccentricity: 0.0014925
Arg of perigee: 20.9171 deg
Mean anomaly: 339.2181 deg
Mean motion: 15.58120678 rev/day
Decay rate: 4.8719e-04 rev/day^2
Epoch rev: 46077
Checksum: 309

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94069.79166515
Element set: 456
Inclination: 28.4682 deg
RA of node: 147.9860 deg
Eccentricity: 0.0006415
Arg of perigee: 138.1868 deg
Mean anomaly: 221.9207 deg
```

Mean motion: 14.90518485 rev/day
Decay rate: 1.109e-05 rev/day^2
Epoch rev: 1469
Checksum: 321

Satellite: GRO
Catalog number: 21225
Epoch time: 94069.68912255
Element set: 72
Inclination: 28.4620 deg
RA of node: 195.6665 deg
Eccentricity: 0.0003925
Arg of perigee: 176.6497 deg
Mean anomaly: 183.4127 deg
Mean motion: 15.40327704 rev/day
Decay rate: 5.994e-05 rev/day^2
Epoch rev: 4173
Checksum: 315

Satellite: UARS
Catalog number: 21701
Epoch time: 94067.64252385
Element set: 485
Inclination: 56.9829 deg
RA of node: 201.9698 deg
Eccentricity: 0.0004222
Arg of perigee: 99.9238 deg
Mean anomaly: 260.2271 deg
Mean motion: 14.96479516 rev/day
Decay rate: 2.623e-05 rev/day^2
Epoch rev: 13588
Checksum: 331

/EX

2804. Re: BAYCOM <-> KA9Q/NOS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 14:37:11 UTC
From: mike@uxp.bs2.mt.nec.co.jp
Message-ID: <MIKE.94Mar11143711@allegro.uxp.bs2.mt.nec.co.jp>
Source record: 269779

>>>>> On 6 Mar 94 13:16:06 GMT, acornwal@fox.nstn.ns.CA (Andrew Cornwall) said:
> Hello. If you have been able to use a Baycom (Baypac) type
> modem with KA9Q/NOS (for example, JNOSX150) I would like to know
> how it is done. Also, have you encountered any problems or
> idiosyncrasies?
> Thank you.

I have. You can use an AX25 packet driver but need a version of KA9Q/NOS
that supports it. I got a copy of ax25drv.zip by Pawel Jalocha,
SR9VRC, Jan 1993. I believe I got it by sending this message
to file-request@tapr.org :-

GET /pub/packet/ax25drv.zip
QUIT

Here is an excerpt from the doc:

Q: How to start quickly ?
A:
1. Start the ax25.com - most important parameters are COM base and irq.
an example for COM1: ax25 -B3f8 -I4
Now the driver takes control over the RS232 port and stays resident
waiting for NOS orders...
2. Start KA9Q NOS (you need the one supporting packet drivers)
and then type in:
ax25 mycall <your callsign>
attach packet 0x60 ax25 5 512
trace ax25 111
you should see packets being received now in trace window
In most NOS versions you press F9 to get there.
3. Try to connect to another station by typing:
connect ax25 <callsign>
or split ax25 <callsign> (split window session in JNOS)

This setup in far from complete - it's just to see whether the driver
cooperates with your hardware and it only allows you to work native
AX.25.

--

Mike Collinson
Assistant Manager, Product Engineering Dept., UX Software Development Div.,
NEC Corporation, Daito Tamachi Building, 14-22 Shibaura 4-Chome,
Minato-ku, Tokyo 108, JAPAN
Email: mike@uxp.bs2.mt.nec.co.jp Fax:+81-3-3456-6675

Tel:+81-3-3456-7451

2805. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 14:37:31 UTC
From: as779@yfn.ysu.edu
Message-ID: <2lpvnb$j2s@news.ysu.edu>
Source record: 269906

A glance at the ITU Callsign prefix allocations will show that
the United States is assigned "A" prefixes in the range AA through
AL, so a A1A call is not permitted under current International
agreements. The W,K and N series can be used as single letter
prefixes because the US is allocated WAA-WZZ,KAA-KZZ,NAA-NZZ.
Chuck Reti WV8A Detroit,MI

2806. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 15:14:37 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CMIACE.D9C@hpqmoea.sqf.hp.com>
Source record: 269907
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

I'm happy with my choice, a Diesel powered Range-Rover derivative
called a "Discovery"

Give serious thought to Diesels, no ignition, no computers

David GM4ZNX

2807. Looking for "Stabilant 22" contact cleaner

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 15:53:44 UTC
From: jp07@harvey.gte.com
Message-ID: <CMIC5L.EE4@gte.com>
Source record: 269908

Does anyone know where I can get my hands on "Stabilant 22" contact cleaner?
A mail-order source would be ideal.
Thanks for any help.
Jim Paschetto jp07@gte.com GTE Laboratories, Waltham, MA

2808. Re: Good car for HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 16:01:35 UTC
From: serafin@metronet.com
Message-ID: <CMICIn.3Mz@metronet.com>
Source record: 269909
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <2lpmsf$8do@brahms.udel.edu>,
Robert Penneys <penneys@brahms.udel.edu> wrote:
>I need to get another car and want one which will be radio-friendly for 100
>watts or so of HF, mostly CW, and 50 or so of 2 meters and 440.

Shees, and people complain about the cellphones stuck to peoples ears
while in traffic. :-)

>
>Criteria are:
>No interference to electronics of car by RF
>Minimal noise generated by car
>Reasonable space for rigs
>Reasonable mounting of antennas
>
>Car will probably be four door sedan in size range from Corolla to Taurus.

How about a Suburban with a Diesel engine? Only interfering electronics
you should have to worry about is the alternator. And it has tons of
space for antennas.

2809. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 16:09:28 UTC
From: CSLE87
Message-ID: <CSLE87-110394110929@145.39.1.10>
Source record: 269910

In article <CMGxq7.F0L@wang.com>, dbushong@wang.com (Dave Bushong) wrote:

> jholly@cup.hp.com (Jim Hollenback) writes:
>
> >Bob Levine (levine@mc.com) wrote:
> >: Has anyone seen anything in print about whether the vanity
> >: callsign program (someday) might allow 1x1 calls?
>
> >: (for info, a 1x1 is like K1X)
>
> >No, but I've heard ther is a 2X1 ... JY1
>
> Wouldn't that be a "two by nothin'?" Mine (KZ1O) is a 2X1, so if
> the 'o' were dropped, it would be a 2X
>
> --
> Dave Bushong, Wang Laboratories, Inc.

Well, guys, don't forget two crucial pieces of information about that call:
1) It is not a US callsign, it is Jordan, in the middle east;
2) JY1 happens to be King Hussein, who has done much to promote amatuer radio in the middle east and throughout the world. He is also the ruler of those issuing callsigns. Therefore he gets to pick the shortest and most prestigious call for himself. His wife Queen Noor has the call JY1AA.

FYI, King Hussein visits the USA regularly, including both the Cleveland Clinic and Mayo Clinic for health care. He has been heard locally on the bands during his visits, and I hope to hear him speak some day at an amateur club meeting.

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

The statements and opinions expressed here are not those of Motorola Inc.
Motorola paid a marketing firm a huge sum of money to get their opinions;
they have made it clear that they do not wish to share those of employees.

Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

2810. Re: Definition of CW speeds

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 16:31:51 UTC
From: CSLE87
Message-ID: <CSLE87-110394113152@145.39.1.10>
Source record: 269911

In article <CMEG3M.GJ9@murdoch.acc.Virginia.EDU>,
clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) wrote:

> In article <CMDD89.1pH@world.std.com>,
> David R Tucker <drt@world.std.com> wrote:
> >You're right. There is a more exact standard.
> >
> >The average English text word length is 50 units, which is the same as
> >the work "PARIS", and that's considered the "standard" word length.
> ...
>
> You've make quite a leap in going from PARIS to 50 units! What
> asumptions did you make about dash per dot ratio? And how many
> dots per space?
>
> Also some code is sent Farnsworth (sp?) where the characters are
> sent at one (faster) speed while the spaces between words are spread
> out.

It may sound that way because most amatuers do not properly time the
intervals between characters or words. The computerized sending programs
normally do it properly, so if it sounds unnatural to your ears, the others
you've been listening to might learn to send more accurately (slam not
intended). The "Farnsworth" method often involves a person using a computer
keyboard with the speed set faster than he can type (CT's minimum 22 WPM is
a classic example).

> Your final conclusions are approximately correct but you need
> to account for the above spacings.
>
> By the way to the original poster: the best to write a program that
> sends code is to start with the dot length. Then make all the
> other ratios a function of that dot length. (e.g. dash-dot ratio,
> space length in units of dots, and character speed versus word
> speed). Then adjust the ratios until you get a pleasant sounding
> "fist."

The ONLY proper ratio for dash to dot is 3:1. If the original sender is
having problems, the timing constants within his rig may be shortening all
characters, thereby stretching the ratio beyond 3:1.

> 73, Ned Hamilton, AB6FI.
>
> 73, Ned Hamilton, AB6FI

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

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Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

2811. Re: Yaesu 2400H recs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 16:43:02 UTC
From: armyrman@vms4.sci.csupomona.edu
Message-ID: <1994Mar11.094302.1@clstcs>
Source record: 269912

In article <Bg6soUO.wcarty@delphi.com>, wcarty@delphi.com writes:
> best radio i have ever purchased! It goes with me from the house, to the car to
> the house, to the red cross truck to red cross national assignments back to the
> house. It's been dropped once or twice and doesn't seem to mind it.

Totally agree. I to use it in the house and in the field, which includes
disaster communications, (Here in Los Angeles we've had alot of that lately!)
and off road racing. It's had a lot of dust and vibration with out a single
problem.

What I need is a quick release kind of mobile bracket similar to the MMB-37
bracket sold for the FT-5100. That would make moving it from house to car to
truck to box etc etc much nicer. Anybody got somethin' like that?

> It is also if memory serves me right, the only ham rig that is built to
> millitary specs.

Only MIL-STD 810C mechcanical spec which is for shock and vibration using
methods 514.2/VII and 516.2/I. Supposedly the sister radio FT-7400H is the
440 MHz version of the same.

I would a very exspensive radio to be completely built to MIL-STD
But it's the only one I know of that is built to those standards.

Trying to decide between a FT-7400H or a FT-5100.

Alex R. Myrman - KC6TMB - LA Co DCS W-03 - armyrman@vms4.sci.csupomona.edu
College of Science Computational Systems - (909) 869-4226
California State Polytechnic University, Pomona, CA. USA

2812. Need LA5VK's address

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 16:48:54 UTC
From: tomrune@mac_inge
Message-ID: <2lq7dm$pke@ratatosk.uninett.no>
Source record: 269913

Hello!
My father and I are going to Svalbard Isl.
March 18 until March 21.
I want to know if my father is in the newest call-book.
Or if I am there.
The reason why I ask is that LA5VK will be the manager
for the "dx'pedition", and I want to know if he is in the
newest call-book.
By the way, we will be operating all bands, including
WARC, mostly on SSB.
This is probably one of the first times JW is activated
on SSB on the new WARC bands.
The WARC bands was opened for SSB for Norwegian amateurs
January 1 1994.

Please help me, I must have the answer before Friday...

de

We will be using this call signs:

JW1BJA TOM (that's me, homecall LA1BJA)
JW5VK INGE (my father, homecall LA5VK)

vy 73 de Tom, LA1BJA

2813. Re: copying cw on typewriters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 17:01:55 UTC
From: kchen@apple.com
Message-ID: <2lq863$o4t@apple.com>
Source record: 269914

ez006683@chip.ucdavis.edu (Daniel D. Todd) writes:

>Derek Wills (oo7@astro.as.utexas.edu) wrote:

>: Because when you are shipwrecked and have built your CW radio transmitter
>: out of coconuts and paper clips, you won't be able to decode any messages
>: received in response to your distress call. You have to know whether
>: someone is saying "Ship will be there in 2 days", "pse QSY have been on
>: this freq for last 10 hrs", or "599 TX qsl via buro, QRZ?"

>Perhaps we should just lobby the FCC to change the law so that any
>amateurs who pass the code elements with a keyboard be required to be
>able to homebrew a typewriter to get their license.

>ps. If the professor was a Ham "Gilligan's Island" would have lasted only
>three episodes. (unless he was a no-code :-)

But, *our* perfesser *is* a Ham, and professes to know his code, no
less.

However, I think Prof. Dr. Derek is confusing varieties of home-brews.
The young shoots of the coconut palm make mighty fine "home-brew," but
of the spirits kind, that is. Folks in the South Indian and Malayan
Peninsulas call it Toddy.

A few chugs of that home-brew later, the sea gulls on your deserted
island will all appear to be saying "CQ dah-dit-dididit-dah" to you!

Kok "CQD" Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

2814. Definition of CW speeds

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 17:18:02 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940311091802_1@ccm.hf.intel.com>
Source record: 269915

Text item: Text_1

Subject: Definition of CW speeds

>You've make quite a leap in going from PARIS to 50 units! What
>asumptions did you make about dash per dot ratio? And how many
>dots per space? 73, Ned Hamilton, AB6FI.

Hi Ned,

All this is spelled out in detail in the Morse Code section
of the ARRL Handbook. PARIS is exactly 50 units! The assumptions
are also spelled out in detail there. What might help the original
poster is:

ten WPM is 120 mS per unit... 12 WPM is 100 mS per unit... etc.

73, KG7BK, Cecil_A_Moore@ccm.hf.intel.com
(I do not speak for Intel on Internet)

2815. arld014 DX news

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 17:18:39 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arld014.1994@ampr.org>
Source record: 269916
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ARL $ARLD014
ARLD014 DX news

ZCZC AE12
QST de W1AW
DX Bulletin 14 ARLD014
From ARRL Headquarters
Newington CT March 10, 1994
To all radio amateurs

SB DX ARL ARLD014
ARLD014 DX news

The items in this week's bulletin are courtesy of Rolf, DL7VEE, the Ohio/Penn DX Bulletin, the Yankee Clipper Contest Club PacketCluster network and Contest Corral in QST. Thanks.

PRATAS ISLAND. The latest news is that the planned DXpedition for this month has been scrubbed.

LACCADIVE ISLANDS. VU7LI continues both his geological surveys and QRP operation for a few more weeks.

KERGUELEN ISLAND. Listen for Pierre, FT5XJ, on 14188 kHz around 0330 and 1600z.

NEPAL. Equipment donations by DJ6SI and DJ6JC, with the help of EUDXF, DL9WVM and WB6ZUC, have put Satis, 9N1AA, and Surish, 9N1HA, on the air. QSL via PO Box 4292, Kathmandu, Nepal.

TONGA. Bob, W7TSQ, is island hopping as A35SQ around the main island of Tonga, much to the delight of IOTA chasers. He should be active until March 15. QSL via W7TSQ.

NORTHERN COOK ISLANDS. Amy, ZK1AT, has been on 3787 kHz at 0630z, 7205 kHz around 0715 and 0900, 14195 kHz at 0430z, 18150 at 2200, and 24950 at 2315. QSL via WB6EQX.

FERNANDO DE NORONHA ISLAND. Peter, PY5CC, is QRV as PY0FM until April 1. He prefers SSB, 160 and 6 meters, but also operates some CW and satellites. QSL his home call.

FRANZ JOSEF LAND. 4K2MAL has been quite active lately. Check 10104 kHz at 2230z and 0400z, 18072 kHz at 1645z, 14182 kHz at 1415z, and 7004 kHz around 0245z.

GUYANA. Larry, 8R1/N4VA, should be active for another week. His on the air times are fluid, so listen to the 20 and 15 meter IOTA frequencies, 14260 and 21260 kHz, for details.

NORTHERN MARIANA ISLANDS. JA1CMD will sign KH0/JA1CMD from March 27 to April 1, mainly on 80 and 40 meter CW. QSL to CBA.

COCOS ISLAND. Members of the OKDXA are planning a big TJI9 DXpedition for May.

THIS WEEKEND ON THE RADIO. Both the Kentucky and Wisconsin QSO Parties are this weekend. The Kentucky event, sponsored by the Paducah ARA, is from 1500z March 12 to 0300z March 13, and 1500z to 2400z March 13, both phone and CW.

The Wisconsin Party is sponsored by the West Allis RAC and runs from 1800z March 18 to 0100z March 14, both CW and phone.

The exchange for both events is signal report, state, province or country. Kentucky and Wisconsin stations will send signal report and county for their exchange. Full details/rules appear on page 111 of February QST.
NNNN
/EX

2816. Where can I find "netrom"?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 17:39:41 UTC
From: dgf@netcom.com
Message-ID: <dgfCMIH26.42A@netcom.com>
Source record: 269917

A friend of mine (nq9i) wants to connect his PC though his TNC to a TCP/IP-based frequency using his PK-232. What software does he need in his PC? What firmware would he need in his PK-232 (it has firmware about 4 years old)?

Sorry if this is a FAQ...

Thanx!

73 Dave WB0GAZ dgf@netcom.com

2817. Re: Grounding and lightning protection

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 17:47:55 UTC
From: jwc@col.hp.com
Message-ID: <2lqasc$31u@hp-col.col.hp.com>
Source record: 269918
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <2lo2ck$pod@dartvax.dartmouth.edu> Kenneth.E.Harker@Dartmouth.Edu (Kenneth E. Harker) writes:
: > I am going to be installing a VHF/UHF vertical base station
: >antenna on the roof of my fraternity house in the next week or two.
: >Before I do, however, I am really interested in learning about what
: >steps I can take to help protect the house against lightning. The
: >antenna is about 7 feet tall and the tip of the antenna will be about
: >40' off the ground.
: > Is there a book or other source of information that someone could
: >recommend to me? While I'm not terribly worried about this (there are
: >plenty of other structures nearby that are a lot taller than 40') I
: >would like to take whatever reasonable precautions I can.
: > Thanks.

: Here's something I posted a while back on this subject that may be
: helpful.

: In article <9209291528.AA03542@PCS.CNU.EDU> doughty@PCS.CNU.EDU (David Doughty) writes:
: >I have recently come into posession of a roof mounted tower (about 10 ft.
: > - has thrust bearing, uses guy wires attached to roof, etc.) and want to
: >mount it on the roof of my two story house. My problem is that the tower
: >will be one of the highest structures around, and is almost certain to be
: >struck by lightning sooner or later (at least I want to be prepared).
: >I would like to know the best way to ground the tower.
: >
: >In the ARRL handbook (and also the NEC - National Electrical Code) there
: >is a lot of discussion about protecting the feedline by grounding the shield
: >of the coax, using arrestors, switching them to ground when not in use etc.
: >There is also some discussion of grounding a REAL tower. But I haven't been
: >able to find much on roof towers. What I want to be sure (or at least as
: >sure as possible) of is that if the antenna/tower gets hit, the lightning
: >strike doesn`t arc through the house, etc.
: >
: >Some specific questions I have are:
: >
: >1. What size of ground lead(s) to use for the tower? I realize that
: >bigger is better but the cost of enormous cable is prohibitive. What
: >is reasonable if you EXPECT or PLAN on a direct hit?

: The NEC says number 8 solid is the minimum size for the downlead of
: a lightning rod. Consider this the smallest wire you can use. Since
: lightning is a pulse that has RF components through VHF, skin effect
: matters. A better downlead is 5 inch wide copper flashing run as straight

: as possible to ground, but in no case having a 90 degree or sharper
: bend in the path.

: >2. How many?

: If you use the correct size, and do the bonding correctly, one is
: sufficient. If you aren't going to be able to inspect the run
: frequently, you might consider paralleling a number 8 solid wire
: with the 5 inch strap so that if corrosion opens one connection,
: you will still have a better path to ground than through your
: roof.

Also concider using old RG-8 & RG-11 with centers & sheilds tied
together as grounding cables. Lots of this coax throwed away needlessly.

(John)

k
: >3. What paths do I run them? The obvious answer would be the shortest,

j
: except that the shortest path is on the opposite side of the house from
: the shack and the feedlines. Would the resulting 'cage' effect be good
: or bad?

: Normally, you want the shortest and *straightest* path to ground. However,
: ground loops can be disasterous. Make up your mind to establish a single
: ground point somewhere on your property and connect all ground runs to
: this one point. Make sure the utility grounds are also bonded to this
: point. Don't ever depend on earth conductivity to close a ground circuit
: and don't ever use a feedline shield as a ground conductor.

: It's ok to have multiple grounds, but they must tie to the single
: point ground via low inductance, high conductivity cabling in a
: *star* configuration, not in a daisy chain. Daisy chaining grounds
: is a recipe for disaster.

: Setting up a ground cage is an extreme measure of protection. To do
: it right is not simple. Doing it wrong can be dangerous. If you can't
: analyse all the current paths properly for ground loop effects, don't
: do it.

: Bring *all* cables into your shack via a "ground window", that includes
: power and telephone. A ground window is a single small area, usually a
: rack panel, copper plate, or the like, that each wire is attached to via
: an arrestor of the proper type for that kind of cable. The ground window
: is then connected to the master single point ground by a heavy strap or
: cable. This assures you that all cabling entering the shack will be at
: near the same potential during a strike (plus or minus the breakover
: voltage of the arrestors). With quality arrestors, you shouldn't ever
: have a voltage differential of more than 200-400 volts across your
: equipment. Most equipment will tolerate this kind of voltage for the
: few milliseconds required. Note that your entire shack may be elevated

: to several thousand volts above ground due to the resistive drop of
: your single ground lead, but as long as *every* part of the shack is
: elevated the same amount, no net current can flow.

: >3. Do I need to stand them off from the roof?

: It's generally not necessary, but it won't hurt. Remember that a direct
: lightning stroke will typically flow 4,000 amperes or more for several
: milliseconds. The wire can get quite hot. I've seen number 12 solid
: *vaporized* by a lightning stroke. That's why you want to use at least
: number 8 wire or heavy strap.

: >4. Do I need to attach to each leg of the tower?

: That depends on the tower construction. If the tower is welded, connecting
: to one leg is sufficient. If it is bolted or riveted, inspect it carefully
: for loose connections and use bond straps to make it a single conductor.

: >5. What about the guy wires?

: Generally, *don't* ground the guy wires. If the tower is going to carry
: an HF antenna, you'll likely want to break guys with insulators anyway
: to avoid pattern disturbances.

: >6. Anything else I should know?

: A single ground rod is not an effective ground in most soils. Use
: at least three no closer than 4 feet apart in a triangular arrangement.
: Bond them all together with your heavy strap. If you have *metal*
: underground water piping, tie to that too. Remember, *star* configuration.
: No ground should connect to another except at the *single* point
: connection. And no downlead should connect anywhere but at the single
: point.

: Always *mechanically* bond ground wires and straps. Don't depend on
: *any* soldered connection. Solder *will* melt when lightning strikes.
: The NEC says there should be *no* splices in a ground run. That's perhaps
: a bit extreme. A *good* mechanical and electrical splice should be ok,
: but rather safe than have the insurance company void your claim.

: >I know that there's no guarantee when it comes to lightning strikes,
: >but it is my family in the house and I want to be sure I have done
: >everything I can to protect them.

: That's a good attitude Dave. Lightning kills more people each year
: than any other weather related thing. Besides, the better ground
: field can help your HF signals *every* day.

: Gary KE4ZV

: --
: Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
: Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
: 534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary

: Lawrenceville, GA 30244 | |

2818. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 17:54:26 UTC
From: dts@world.std.com
Message-ID: <CMIHqr.IAK@world.std.com>
Source record: 269919
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

In article <CMIACE.D9C@hpqmoea.sqf.hp.com> dstock@hpqmoca.sqf.hp.com (David Stockton) writes:
>
> I'm happy with my choice, a Diesel powered Range-Rover derivative
>called a "Discovery"
>
> Give serious thought to Diesels, no ignition, no computers
>

And no emissions controls. :-(Diesel smoke is a suspension of carbon particles impregnated with the byproducts of combustion, which is small enough to enter your lungs and lodge in the lung walls. Once lodged all those combustion byproducts leach out into your body. Diesel vehicles need dust traps at the very least.

>
> David GM4ZNX
>
>
>
>
>
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>
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>

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

2819. Re: Dayton parking

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 17:56:36 UTC
From: ruthy@meaddata.com
Message-ID: <2lqbck$rqj@meaddata.meaddata.com>
Source record: 269920

In article <2ke42t$144@transfer.stratus.com>, fms@sw.stratus.com (Faith Senie) writes:
|>
|> Last year at Dayton, we were staying at the Radisson (with the rest of the
|> RTTY types!). After an afternoon of wandering around the show, I had myself
|> a craving for a bit of orange juice. I'd have ordered from room service, but
|> I wasn't about to pay that kind of money for simple OJ. I checked at the
|> gas station right there at the Radisson -- no luck. I asked at the front desk
|> if there was some place I could go. They suggested a mall down the street.
|> Having no car, I asked them if the mall was within walking distance. Their answer
|> was to strongly suggest that I NOT walk along the road, no matter how far I
|> was going, because the road was DANGEROUS. Of course, I DID end up walking along
|> the road -- across the street and down to the convenience store a half-block down.
|> No death or dismemberment, but it wasn't a good time, either (no sidewalk except
|> across the I-75 bridge, rushing traffic, etc.)...
|>
|> I'm personally hoping that the Radisson is going to be running shuttles to the
|> show, because I don't relish sitting in the traffic jam (which happened last
|> year, even with loaded busses) for an hour or more in a Standard-Shift vehicle,
|> and it's WAAAAAY too far from the Radisson to walk, even if the road wasn't
|> 'DANGEROUS', as the folks at the Radisson claim.

Of course, Faith, dangerous here in Dayton, Ohio may be a little different than some other folk's view of dangerous. Downtown Dayton is pretty highly patrolled, just don't cross over 75 to the west (that tends to be a high crime area for us). I thought shuttles ran from one of the downtown hotels (Stouffers maybe?). Perhaps another Daytonian subscriber knows more, but I'll try to find out for you.

Until then, I'm looking forward to showing "y'all" some Dayton hospitality!

|>
|> 73 de Faith "It's HOW far???" N1JIT
|> --
|> Faith M. Senie InterNet: fms@vos.stratus.com
|> Stratus Computer, Inc. InterNet: fms@hoop.sw.stratus.com
|> 55 Fairbanks Blvd. Pkt Radio: n1jit@wa1phy.ma.usa.na
|> Marlboro, MA 01752 Phone: (508)460-2632

Ruthann Weaver Todd
ruthy@meaddata.com
Mead Data Central
Miamisburg, Ohio
|>
|> Curiosity doesn't flourish among the burned-out...

2820. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 19:33:22 UTC
From: gleason@mwk.com
Message-ID: <1994Mar11.133322.1912@mwk.com>
Source record: 269921

In article <2lo1ii$g94@oak.oakland.edu>, prvalko@vela.acs.oakland.edu (prvalko) writes:
> calls. If I remember correctly, In the US, the call must BEGIN with "A,
> K, N, or W" then have a SINGLE DIGIT NUMBER and followed by at LEAST one

W, A, N, and K...guess that makes us hams here in the states a
bunch of WANKers...I suspect the Brits had a hand in assigning us
these letters...

Lee K. Gleason N5ZMR
Control-G Consultants
gleason@mwk.com

2821. Re: Definition of CW speeds

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 20:18:50 UTC
From: wjturner@iastate.edu
Message-ID: <2lqjna$8a3@news.iastate.edu>
Source record: 269922
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

In article <CMEG3M.GJ9@murdoch.acc.Virginia.EDU> clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) writes:
>You've make quite a leap in going from PARIS to 50 units! What
>asumptions did you make about dash per dot ratio? And how many
>dots per space?

FYI--the accepted "correct" ratios are 3 to 1. Thus a dah is three times the length of a dit. This same ratio holds in the length of the "spaces" between dits and dahs and longer spaces between characters and then words. Adding this all up, using a dit as the basic length, you should get the word paris lasting 50 dits-lengths.

This is why peole who have some background in music generally have a cleaner fist--it's in the tripletts.

73, Will N0RDV/AE
--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

2822. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 20:23:21 UTC
From: wjturner@iastate.edu
Message-ID: <2lqjvp$8hg@news.iastate.edu>
Source record: 269923

In article <763354761snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
> Based on how some people view me, I'm gonna sign up for A6H. It's look good
> on the car too.

Hate to rain on your parade, but that call won't work. The US only has the first half of the 'A's, thus you can't have an A#XXX call. (Or A#XX, A#X)
--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

2823. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 20:28:53 UTC
From: wjturner@iastate.edu
Message-ID: <2lqka5$8k3@news.iastate.edu>
Source record: 269924

In article <2lptqg$7b4@cville-srv.wam.umd.edu> ham@wam.umd.edu (Scott Richard Rosenfeld) writes:
>As for the request for a call like A4L, this can't be done because the US
>doesn't have the rights to these calls. I believe A1, A4, A5, and A6 are
>all allocated (can't remember exactly who, though). The US has allocations
>to "AA-AL."

My understanding was that they are not allocated. The only reason we can have N#XXX, W#XXX, or K#XXX is because the US has KAA-KAZ, NAA-NZZ, and WAA-WZZ, whereas whe only have AAA-ALZ. (If they are allocated, it is as a prefix, and thus a person may have A66XX in whatever place it is that has them, but there is *no* A6XX.)

--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

2824. Re: [News] Auctioning Rules set up by FCC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 21:07:06 UTC
From: dbashaw@synoptics.com
Message-ID: <CMIqnv.2p7@synoptics.com>
Source record: 269925

In article <CMF7EE.Ly1@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:

>
> Thought this might be of interest to everyone. If 11M goes up for bid
> lets each kick in a few bucks to win it back...
>
> Jeff NH6IL

So tell me, good buddy, where are all them there CB critters going to go?

> Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
>Internet: jangus@skyld.grendel.com | a fanciful dimension to any
> US Mail: PO Box 4425 Carson, CA 90749 | story."
> Phone: 1 (310) 324-6080 | Peking Noodle Co.

Maybe 14.313. Or 2M, used HT's are fairly cheap at a swap :)

Dave
wa6qwl

2825. Re FT-726r for sale

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 21:44:07 UTC
From: ggs@lanl.gov
Message-ID: <2lqlfr$3nt@newshost.lanl.gov>
Source record: 269926
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.equipment

The FT-726r has found a good home with a Chicago family. Thanks to all who responded.

2826. Re: WWV time station freq

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 21:50:30 UTC
From: boutell@pogo.den.mmc.com
Message-ID: <1994Mar11.215030.5743@news2.den.mmc.com>
Source record: 269927

In article <2lnj0n$ekf@gaia.ucs.orst.edu> schottd@ucs.orst.edu (Derek Schott) writes:
>I am searching for some of the frequencies for this station.
>I need it sometime today, and I have no way of looking for it
>other than by computer. Could someone please email me a few
>of the operating frequencies of WWV; especially those that
>can be picked up easily on the West coast. Thnks...
>
>--
If all else fails, call (303) 499-7111 for the audio portion of WWV. Not
very useful as a frequency reference though :-)

73, WD0FTF Russ

2827. midwest micro

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 22:29:51 UTC
From: henryf@freenet2.scri.fsu.edu
Message-ID: <2lqrcv$vl@freenet3.scri.fsu.edu>
Source record: 269778

I am thinking about purchasing a clone from midwest micro. Does anybody have experience with them? How is their customer service?? How about the quality of their engineering?? Thanks.

2828. Re: JARGON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 22:38:44 UTC
From: kchen@apple.com
Message-ID: <2lqrtk$akc@apple.com>
Source record: 269780

ah301@yfn.ysu.edu (Jerry Sy) writes:

>In article <199402282109.NAA17392@ucsd.edu>,
>William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:

>> >use...it's XYL and it stands for ex young lady....(which I take great
>> >offense to as a deragatory remark (I am not an "XYL" because I am only 22
>> >years old! :-)) The term is used to refer to one's wife...(because most
>>

>is there a list of jargon and their meanings used by hams on 2m/440,
>terms like

>destinated
>very good
>fine business
>
>
>73s
>Jerry N3RKD

Best wishes-es. (73s)
Best best wishes-es. (Best 73s)

:-)

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

2829. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 23:02:51 UTC
From: drt@world.std.com
Message-ID: <CMIw0s.Kp5@world.std.com>
Source record: 269781

Scott Richard Rosenfeld (ham@wam.umd.edu) wrote:

: As for the request for a call like A4L, this can't be done because the US
: doesn't have the rights to these calls. I believe A1, A4, A5, and A6 are
: all allocated (can't remember exactly who, though). The US has allocations
: to "AA-AL."

Oh, well, there goes A1OP!

(Actually, I believe A1 as well as A0 cannot be allocated as a prefix.)

-drt

|David R. Tucker KG2S drt@world.std.com|

2830. ARLP010 Propagation de KT7H

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 23:09:09 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlp010.1994@ampr.ab.ca>
Source record: 269782
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB PROP @ ARL $ARLP010
ARLP010 Propagation de KT7H

ZCZC AP24
QST de W1AW
Propagation Forecast Bulletin 10 ARLP010
From Tad Cook, KT7H
Seattle, WA March 11, 1994
To all radio amateurs

SB PROP ARL ARLP010
ARLP010 Propagation de KT7H

Coronal holes played havoc with the Earth's magnetosphere again last
week, sending the A and K indices soaring. Conditions were actually
stable from the 4th through the 6th, but were otherwise very
unstable, with frequent reports of K indices around 5 and 6. When
this happens, absorption of HF signals becomes a problem, especially
over polar paths.

Solar flux dropped slowly after peaking just above 100 at the start
of the period. Look for the flux to continue dropping, reaching a
low near 85 around the middle of this month. It will then rise and
peak again near 105 before month's end.

Active geomagnetic conditions may remain over the next few days,
occurring again around the end of the month.

Sunspot Numbers from March 3 through 9 were 122, 80, 86, 101, 80, 80
and 68, with a mean of 88.1. 10.7 cm flux was 100.9, 97.9, 95.7,
95.5, 91.3, 91.3 and 89.9, with a mean of 94.6.

The path projection this week is from Chicago, Illinois to Guyana,
where 8R1/N4VA is operating.

80 meters should be open from 2330 to 1030z, with the best
conditions from 0200 to 0930. 40 meters looks good from 2230 to
1100, with the best shot from 0030 to 0930. 30 meters may be
open on many days almost around the clock, with best conditions from
2230 to 0630. 20 meters should be good from 1500 to 0130, and
17 meters from 1430 to 2300. Check 15 meters from 1600 to 2000.
10 and 12 meters do not look too promising over this path, but check
12 meters around 1630 to 2130 and 10 meters from 1830 to 1930.
NNNN
/EX

2831. IPS Daily Report 11 03 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-11 23:21:27 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar11.232127.10347@ips.oz.au>
Source record: 269783
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 11 March 1994
Summary for 11 March and Forecast up to 14 March
IPS Warning 08 was issued on 09 MAR and is still current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 088/032

1B. SOLAR FORECAST
12 March 13 March 14 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : active to minor storm

Estimated Indices : A K Observed A Index 10 March
Learmonth 29 4445 4444
Fredericksburg 25 35
Planetary 35 35

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
12 Mar 25 Active.
13 Mar 20 Active.
14 Mar 16 Unsettled to active.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
11 Mar normal normal fair
PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
12 Mar fair poor poor
13 Mar normal fair poor
14 Mar normal fair poor
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were depressed 15-30% during local day, near predicted
monthly values during local night.

T index: 25

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
12 Mar 25 Depressed 15%/near predicted monthly values.
13 Mar 35 Near predicted monthly values.
14 Mar 40 Near predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2832. Diesel or Taurus fr HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 00:29:39 UTC
From: penneys@brahms.udel.edu
Message-ID: <2lr2dj$20m@brahms.udel.edu>
Source record: 269784
Cross-posted to:
rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

I got a variety of responses for a car which would be good for 100 watts or so of HF and 50 or so of 2 meter and 440 radio. Criteria were lack of interference from car into receiver and from transmitter into auto electronics.

Diesels and the Taurus were among those favored. Anyone else have comments on these choices.

Tnx agn Bob

--
Bob Penneys, WN3K Frankford Radio Club Internet: penneys@pecan.cns.udel.edu
Work: Ham Radio Outlet (Delaware) (800) 644-4476; fax (302) 322-8808
Mail at home: 12 East Mill Station Drive Newark, DE 19711 USA

2833. Re: Info on Alinco mods?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 00:38:45 UTC
From: kld@netcom.com
Message-ID: <kld-110394163845@kld.slip.netcom.com>
Source record: 269785

In article <1994Mar10.204543.1362@earlham.edu>, georges@earlham.edu wrote:

> I recently bought a 2nd hand Alinco DJ-F1T hand held. The manual says
> that it can be modified to do aeronautical band AM between 118 MHz and 130
> MHz
> Also, how complicated and ticklish are such mods?
>
> Any help/ideas/opinions welcomed.
>
>
> --George Silver
> Director of Computing
> Earlham College
> georges@earlham.edu

I own and modified two alinco radios a 590 & 560. I had the benefit of
paperwork I got from my local dealer, but when I opened the radios I found
the jumpers that were to be cut were EXTREMELY obvious. They were loops of
orange wire about 1/4 to1/2 inch long connecting two points on a circuit
board. They were the only such wires on the board. I would suspect that if
you open your radios you'll find the same sort of thing.

--
Keith Dicker N6CKT

2834. HMS Carlskrona

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 00:58:00 UTC
From: hermod.pedersen@swedx.ct.se
Message-ID: <2381e6d6@swedx.ct.se>
Source record: 269786

The Swedish navy's school ship HMS Carlskrona is out on its yearly voyage around the globe. Aboard is as usual several hams. The ships signals can be caught primarily on CW, using these frequencies:

CW: 14.038 and 21.038 kHz
SSB: 14.178 and 21.178 kHz

Right now the ship is in Tokyo, Japan, with a scheduled departure on March 14 heading for Seoul, South Korea, with an expected arrival on March 17.

---
* Origin: (2:200/110)

2835. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 03:29:01 UTC
From: prvalko@vela.acs.oakland.edu
Message-ID: <2lrctt$nfc@oak.oakland.edu>
Source record: 269787

Gee Russ... can't get anything past you now, can we? :-)

yup.

3's as in seven thirds =paul= wb8zjl

2836. Re: Guy Tower with Phillistran Non-metallic ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 03:37:33 UTC
From: k9cw@prairienet.org
Message-ID: <2lrddt$9er@vixen.cso.uiuc.edu>
Source record: 269788

In a previous article, wstrahl@cbnewsg.cb.att.com (wayne.a.strahl) says:

>I am posting this query for a friend who is considering guying his
>Rohn 60' fold-over tower with Phillistran non-metallic guy cable in
>order to reduce interaction with his low-band slopers and Mosley
>PRO-57A that is mounted on it.

A year ago, I installed a 58 foot Rohn foldover tower with steel guys at the hinge (31 feet) and Phillystran at the top. It works great! Until I put the guys on the upper half, it would really move about in the wind out here in the country. The Phillystran kept the top stable and it does not effect the two inverted V's hanging off the tower.

Nice stuff...

73, Drew K9CW

He presently has unbroken lengths
--
-----------------------------------------------------------------*
| Andrew B. White K9CW | internet: k9cw@prairienet.org |
| ABW Associates, Ltd. | phone/fax: 217-643-7327 |
-----------------------------------------------------------------*

2837. Re: noise blankers

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 04:00:13 UTC
From: mjsilva@ted.win.net
Message-ID: <169@ted.win.net>
Source record: 269789

In article <CMGtEw.Lno@cbnewsm.cb.att.com>, eric.s.hellman (hellman@cbnewsm.cb.att.com) writes:
>Those of you who have never needed to use the "decorative knob"
>labled noise blanker should consider yourselves fortunate.
>I find the one on my ts 440 does just fine when some mysterious
>noise appears.
>
>

I bought my first rig-with-noise-blanker (TS-940) used, and when I turned it on for some nasty static and nothing happened I figured it was broken. It wouldn't touch anything I tried it on, until one day it took some nasty hash and poof! Gone. When it does work it's amazing. After a while you learn to hear what kind of noise the blanker is likely to be effective on, but there are still lots of marginal cases where it works when I didn't think it would, or vice-versa.

Mike, KK6GM

2838. 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 04:35:44 UTC
From: mraz@maverick.aud.alcatel.com
Message-ID: <9403120435.AA21714@maverick.aud.alcatel.com>
Source record: 269790

Will Turner, N0RDV, says:

>The US only has the
>first half of the 'A's, thus you can't have an A#XXX call. (Or A#XX, A#X)

I realize the callbook isn't the authority, but it show's that A0 and A1
prefixes aren't assigned to any other country. Since the US has AAA-ALZ
then it *might* be possible for the US to assign A0 and A1. Does anyone
know for sure (not just guessing, like me)?

Kris AA5UO
mraz@aud.alcatel.com

2839. Re: Yaesu 2400H recs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 07:36:19 UTC
From: cscon0151@uoft02.utoledo.edu
Message-ID: <1994Mar12.023619.1@uoft02.utoledo.edu>
Source record: 269791

In article <1994Mar02.233029.28849@sco.com>, stevenbl@sco.COM (Steve Blackwell) writes:
>
> In article <9402270310.AA21723@jumbo.Read.TASC.COM> racuti@tasc.com writes:
>>Hi,
>>
>> I would appreciate feedback from those who have
>> the 2400 as to what they like or dislike about the
>> rig. I'm also open to any other suggestions on the
>> choice of a 2M mobile rig. Thanks.
>>
>> -- Rich N1QVT
>>| Richard A. Cuti Voice: 617-942-2000 x3309 |
>>| TASC Internet: racuti@tasc.com |
>>| 55 Walkers Brook Drive Compu$erve: 76170,420 |
>>| Reading, MA 01867 Amateur Radio: N1QVT |
>>| |
>>| (Opinions are strictly those of me, myself and I) |
>>+---+
>>
>
-I had one for a year or so.I sold it to buy an all mode 2M(Kenwood Tr-751A)
I wish I would have kept it.The only thing I didn't like was the modular mike
plug,it's a good idea,but they should sell a 6 foot mike cord for it,not
just that little 2 foot one for packet.Don't they realize that most of the
radios aren't ever going to be used mobile.Buying a RJ-45 crimper for one
mike cord is insane!I bought a cord from Digi-Key that worked ok,but was
too "kinky" for me.Actually,it wouldn't cost them much to just put a cord in
the box.

Barry Felstein,N8pvx,using the acct of:
Brad Steinman, N8ZRP
The University of Toledo
Internet: cscon0151@uoft02.utoledo.edu (131.183.1.4)
stu0105@uoft01.utoledo.edu (131.183.1.2)
Packet : N8ZRP@w2xo.#swpa.pa.usa.noam (Amateur Radio Packet Network)
* Member of the All-Ohio Scanner Club (OH-48-1859) * yah...

2840. Ts450s recieve mod??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 08:00:55 UTC
From: cscon0151@uoft02.utoledo.edu
Message-ID: <1994Mar12.030055.1@uoft02.utoledo.edu>
Source record: 269792

Does anybody have the mod for a TS-450s to open up the recieve to 60mhz,like the TS690 ?I know how to open up the transmit to 30 mhz,I just want to use it for low band VHF listening.Thanks!

Barry Felstein,N8PVX,using the acct of:
Brad Steinman, N8ZRP
The University of Toledo
Internet: cscon0151@uoft02.utoledo.edu (131.183.1.4)
stu0105@uoft01.utoledo.edu (131.183.1.2)
Packet : N8ZRP@w2xo.#swpa.pa.usa.noam (Amateur Radio Packet Network)
* Member of the All-Ohio Scanner Club (OH-48-1859) * yah...

2841. Re: Macintosh Ham Radio Software 1.0.6 - 3/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 09:06:01 UTC
From: tstader@aol.com
Message-ID: <2ls0lp$qgh@search01.news.aol.com>
Source record: 269793

>You SHOULD upload it to ucsd or std or one of the other sites, please.

Hmmm... do not have access to that mode yet... but soon I hope! In the meantime... judging from the amount of e-mail I get supporting the list and its intent... it will continue.

Thanks all who help out with new inputs and changes.

73 for now.... c u on the shortwaves
Terry Stader - KA8SCP
Internet: tstader@aol.com (files <28K) or
p00489@psilink.com (files >28K)
KA8SCP@WA1PHY.#EMA.MA.USA.NOAM
ka8scp@ka8scp.ampr.org [44.56.4.82] Mac
ka8scp-1@ka8scp-1.ampr.org [44.56.4.120] DOS Clone
(they're BOTH pc's!... personal computers)

2842. Re: Definition of CW speeds

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 09:26:01 UTC
From: battin@cyclops.iucf.indiana.edu
Message-ID: <CMJovD.45D@usenet.ucs.indiana.edu>
Source record: 269794
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

I'd like to thank all the kind people who have replied to my query both here on the net, and via email.

In summary, everyone agrees that the defining word for wpm is PARIS, and most mentioned that it is in the ARRL book. (I obviously gotta get an up-to-date copy! :_)) Interestingly, no one seemed to know where this standard is enshrined in law or treaty, but I'd assume it's an ITU thing (just 'cause the word is PARIS). It'd be nice to know...

BTW, one email respondant mentioned that the military used a _different_ word, CODEX, which I found interesting. CODEX consists of 60 units, rather than 50, leading to a faster dit-rate at any given wpm, and according to my calculations 60 is a better approximation to the average number of units you'd get if your plaintext was always pure random letters (I count, for an average 5-letter word (5*(214/26))+19 units. This is 60.153846153846...)

In the light of all this, I have written my program to allow the user to pick any of the above "standards" _or_ inform the computer of his/her _own_ preferred defining word. It will even allow the word to have more or less than 5 letters. I have also written it so that the user can have the character rate be independent of the word rate. This gives it the maximum flexibility, and, anyhow it was fun to come up with an algorithm to compute the timing.

So, for example, the user can have code sent with a character rate of 18 wpm, but with more delay between them to achieve a word rate of 5 wpm, with wpm defined by the word "FRED", if s/he wanted. (Not that I'd reccomend such a thing, mind you!) Actually, I have found it useful to learn code with a fast character rate, as it seems to help make increasing your speed easier.

Anyhow, in the spirit of giving back to those from whom you've received, I include below the algorithm that computes the needed timing for all this. The computed values are 2 different dit-units, one used to create the characters' dots, dashes, and spacing within the characters, and the other dit-unit governs the timing _between_ characters and words.

I hope anyone else who decides to program their computer to send code can make some use of all this.

1. Input the defining word.
(example "CODEX")

2. For each _letter_ in the defining word, cound the dit-units needed (_don't_ count spaces between the letters yet!) and sum. Let this be called Q.
(example: "C"=11, "O"=11, "D"=7, "E"=1, "X"=11, sum=41=Q)

3. Multiply the number of letters in the defining word, minus 1, times
3 and add 7 to the product. Call this P
P = [(#letters - 1) * 3] + 7
(example: ((5letters-1)*3)+7 = (4*3)+7 = 19 = P)

4. Let N be the desired _character_ rate (in wpm), and M be the desired _word_
rate (in wpm). N _must_ be greater than, or equal to, M.
(example: N = 18, M =5)

5. Let A = (Q + P) * N
(example: A = (41 + 19) * 18 = 1080)

6. The dit-unit-time for characters (C) is then:
C = 60 / A sec per dit
(example: C = 60/1080 = 0.05556 sec per dit)

7. The dit-unit-time for spacing the characters (W) is then:
W = (60 / P) * [(1 / M) - (Q / A)] sec per dit
(example: W = (60/19)*[(1/5)-(41/1080)]=(60/19)*(0.162037)=0.5117 sec/dit)

(So, in our example, if letters are generated using a dit-time of
0.05556 secs and the spacing between letters is generated using a dit-time
of 0.5117 secs, the result will be text at 5 wpm with letters at 18 wpm.
This was with "CODEX" as the standard. The values you get using "PARIS"
differ: you would get 0.06667 sec and 0.5228 sec. This is slower, as
expected, since PARIS has fewer units than CODEX.)

73s...
--
Gene Battin (still waiting for my call-sign)
battin@cyclops.iucf.indiana.edu

```
_____________________________________________________________________
| "Ideas that have outlived their day may hobble about the world for |
| years, but it is hard for them ever to lead and dominate life. |
| Such ideas never gain complete possesion of a man, or they gain |
| possesion only of incomplete people." |
| - Alexander Herzen _My_Past_and_Thoughts_ (1861) |
|_____________________________________________________________________|
```

2843. Russian Robinson Club

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 11:38:32 UTC
From: "Albert I. Sushkov" <rv3gw@lttsco.lipetsk.su>
Message-ID: <AAucQWj8P2@lttsco.lipetsk.su>
Source record: 269795

Hello ALL

The radio amateurs-travellers club named "Russian Robinson Club" interested in world island program - IOTA is applied to separate radioamateurs, associations, funds and also clubs, interests of which are equally connected to the above mentioned club.
The club "RRC" (Russian Robinson Club) created at the beginning of 1993 rendered support in organization more than ten island arctic DX' pedition in 1993, two of which are NEW IOTA:
4K2RRC (EU 019), 4K3RRC (EU 082), 4K4RRC (AS 005), 4K5RRC (AS 025), 4K3GW (EU 161), 4K3WQ (EU 162), 4K3/RW3GW (EU 082), 4K3/RA1ZA, 4K3/RA1WQ, UW1ZZ/A (EU 082), UW1ZZ/A (EU 161), 4K4DV (AS 029).
During this year Russian island national diploma program (RRA) has been developed like national island program of Italy (IIA), Spain (IDEA), France (DIFM), Portugal (DIP), Polska (SP IOTA A).
Competitors of this program have receive already more than 150 diplomas. We greatly hope that interest to Russian national island "RRA" will be increased every year. Besides it a list with separate numbering of Russian islands according to "RRA" has been developed already.
Club "RRC" publishes magazin - report every quarter which informers about members of this club; last island, polar and sea expedition (.../mm); IOTA - News; database of Russian island stations, antarctic station (4K1); diplomas and other news.
Every Sunday at 08:00 utc 14.120 +/- QRM this club organizes different discussions.
The club "RRC" includes a great number of polar explorers, islanders, navigators which had a lot of expedition to islands, Antarctica (4K1) and (.../mm). Besides it there is a lot of radioamateurs interested in IOTA and "RRA".
At present this club experiences a great financial problems for arranging expeditions to Russian islands and other places.
There are wonderful opportunities to visit many islands among which rare available and desert, which are of great interes-ting opportunities and suggestions.

This club has many problems with industrial radio equipment which is sometimes necessary in expeditions. Now many of radioamateurs work with home-made apparatus which often break at unsuitable moment. Sometimes there are rare possibilities

to visit islands of Arctic and Antarctic basin. The club has
a wonderful developed diploma program but financial means are
greatly need for its realization.
Council of "RRC" applies to sponsor, radioamateurs, organiza-
tions, associations, funds and clubs to render any financial
support in carrying out islands expeditions.
We shall also be thankful to all who give us any used (second-
hand) industrial radio equipment for its further using in dif-
ferent expedition.
In all cases any sponsor will receive a description of events,
photos, slides or videofilm from the participants of DX' pedi-
tions.
The sponsors indicate in their agreement what they want to
have in return for their financial support or equipment. All
those who will render any support in any cases they'll be
free of charge subscribers of our magazine-report "Russian
Robinson News". "RRC" invites all interested HAMs from diffe-
rent countries of the world to arrange joint expedition to the
islands of Russia.

"RRC" can help to arrange any visit to any island of Russia and
to settle all organization problems. Wait for your suggestions !

Address of head quarters: P. O. Box 3, 398000, Lipetsk, Russia.

UTC Ltd, (RRC), 218 Goddard Row, Newport
RI - 02840, USA

I1HYW (RRC), Gianni Varetto, P. O.
Box 1,10060, Pancalieri, (Torino),
Italy.

Internet: rv3gw@lttsco.lipetsk.su
Our best Robinson wishes ! de: RW3GW - V. Sushkov

Albert, RV3GW, 73!
--
Albert (RV3GW)
< ***** Russian Robinson Club, #34 ***** >
pse will send only personal E-mail addr.

2844. Re: Grounding and lightning protection

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 12:02:23 UTC
From: wvanhorn@magnus.acs.ohio-state.edu
Message-ID: <2lsb0f$9dg@charm.magnus.acs.ohio-state.edu>
Source record: 269796
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

This whole discussion of lightning protection has been very good, but nobody yet has pointed out that the best "protection" is prevention. The real function of lightning rods is to PREVENT lightning from occurring; only if they fail is it necessary to carry off the multi-kilovolt, multi-kiloamp strike current and SOME damage is inevitable.

An antenna tower can be a very effective lightning rod, if properly made. I won't go into the basic physics involved, which is only poorly understood anyway; but before a strike can occur, a very high level of charge must develop overhead. That charge can usually be drained off by a lightning rod before it gets high enough to break down the air column from cloud-to-ground. The key is to make the top extremity a sharp point, or points.

To do this with an antenna tower is tricky. A path should be made from the pointed top member to ground that bypasses the antenna circuit, because in the process of draining off charge, a lot of noise will be developed and it would be very annoying, to say the least, to have it directly piped into the receiver. Even with it bypassing the input stage of the receiver, the noise will be heard but that can be a very effective warning that it is time to get off the air and disconnect the receiver input!

73, Van - W8UOF
* *
* It ain't wot you don't know 't gets you into trouble. *
* It's wot you know 't ain't true. - "Mr. Dooley" *
* *
wvanhorn@magnus.acs.ohio-state.edu

2845. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 12:14:38 UTC
From: rwilkins@ccnet.com
Message-ID: <2lsbne$200@ccnet.ccnet.com>
Source record: 269797

Todd Jonz (tcj@netcom.com) wrote:
: Ed Hare (KA1CV) (ehare@arrl.org) writes:

: > Bob Levine (levine@mc.com) wrote:
: >
: > > Has anyone seen anything in print about whether the vanity
: > > callsign program (someday) might allow 1x1 calls?
: >
: > Well, I want *my* call to be "K".

: Golly, Ed, you must be one of those long-winded types. Would you settle for
: something a little shorter -- like maybe "N"? ;-)

: Todd, KB6JXT

I considered upgrading to extra just so I could get the shorter call "N".
But then I realized that I would be left out of all the nets. Our local
ares-races nets call the roll by suffix. With my new found privelidges on
twenty meters I would not be called when the sixes are listed for that
rare island dx. Oh Well. You know with a call of "N" I would be
listening up every time I heard that letter....It is like can you name
that tune in one note? I like some rythem. Think I will keep my no-clue
call n6fri. I can hear that call in a 2 meter contest pileup anytime.
With n6amg and n6ig and myself operating, we still hold the record scores
of all three ARRL VHF contests in the Pacific Division.

Bob

--
Bob Wilkins work bwilkins@cave.org
Berkeley, California home rwilkins@ccnet.com
94701-0710 play n6fri@n6eeg.#nocal.usa.noam

2846. ARLX011 AA8FQ runs for charity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 12:32:58 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlx011.1994@ampr.org>
Source record: 269798
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB SPCL @ ARL $ARLX011
ARLX011 AA8FQ runs for charity

ZCZC AX43
QST de W1AW
Special Bulletin 11 ARLX011
From ARRL Headquarters
Newington CT March 9, 1994
To all radio amateurs

SB SPCL ARL ARLX011
ARLX011 AA8FQ runs for charity

AA8FQ runs for charity

Fred Doob, AA8FQ, raised more than 2000 dollar(s) for the Childrens Cancer Research Fund while running the Los Angeles Marathon.

Fred made more than 400 contacts on 144 and 440 MHz using a hand held transceiver; a commercial manufacturer donated 5 dollar(s) to the CCRF for each contact Fred made.

Fred, 47, topped his run last November in the New York City Marathon by 100 contacts and his time was better, too, by 15 minutes. ''I average about 3.5 hours in a marathon without radio, and about 5 hours when I operate. Listening to the radio takes your mind away from the mental concentration necessary to run 26 miles.''

Fred's operation was coordinated by the Baldwin Hills Amateur Radio Club, organized by President Ed Walker, WA6MDJ. Fred's principal net control, Keith Glispie, WA6TFD, ''did a great job. But more people should use phonetics; it's hard to hear when you're running.''

KCOB-TV, Channel 11, ran a story about AA8FQ's run for charity the evening of the marathon, with film both of him, at the finish line, and inside the Amateur Radio communications tent. Amateurs provide a medical net as well as a ''start'' and a ''finish'' net. Greg Powell, KD6AIS, helped to arrange the television coverage.

Fred Doob will be at the Dayton Hamvention; look for him at the Solder-It booth.
NNNN
/EX

2847. ARLX012 Radio to the rescue

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 12:33:07 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlx012.1994@ampr.org>
Source record: 269799
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB SPCL @ ARL $ARLX012
ARLX012 Radio to the rescue

ZCZC AX44
QST de W1AW
Special Bulletin 12 ARLX012
From ARRL Headquarters
Newington CT March 10, 1994
To all radio amateurs

SB SPCL ARL ARLX012
ARLX012 Radio to the rescue

Amateur Radio to the rescue

Two men rescued from a sinking boat in the Gulf of Mexico credit Amateur Radio for saving their lives.

Larry Hooker, KB5ZNY, of Thaxton, Mississippi, and his sailing partner, Rett White, were returning from Honduras on Hooker's 35-ft sailing vessel ''Off The Hook,'' when they ran into an unexpected storm and high seas.

Hooker had been in contact with his friend Randall O'Brian, KD5ZH, of West Point, Mississippi, since hoisting anchor on February 6, on 80, 40, and 20 Meters. Hooker had visited his daughter, Tina Hooker, KB5YNN, a missionary with Global Outreach in the northeastern part of Honduras, in an area accessible only by air or sea.

O'Brian was the first to learn of their difficulties and eventually contacted the US Coast Guard. O'Brian continued to help provide communication, along with the Coast Guard, who came up on 3862.

On March 4, Hooker and White were taken aboard the Coast Guard cutter Cushing and their boat was put under tow but subsequently sank.

''The Lord decided that he would use Amateur Radio to save us,'' Hooker said.
NNNN
/EX

2848. ARLP010 Propagation de KT7H

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 12:33:29 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlp010.1994@ampr.org>
Source record: 269800
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB PROP @ ARL $ARLP010
ARLP010 Propagation de KT7H

ZCZC AP24
QST de W1AW
Propagation Forecast Bulletin 10 ARLP010
From Tad Cook, KT7H
Seattle, WA March 11, 1994
To all radio amateurs

SB PROP ARL ARLP010
ARLP010 Propagation de KT7H

Coronal holes played havoc with the Earth's magnetosphere again last
week, sending the A and K indices soaring. Conditions were actually
stable from the 4th through the 6th, but were otherwise very
unstable, with frequent reports of K indices around 5 and 6. When
this happens, absorption of HF signals becomes a problem, especially
over polar paths.

Solar flux dropped slowly after peaking just above 100 at the start
of the period. Look for the flux to continue dropping, reaching a
low near 85 around the middle of this month. It will then rise and
peak again near 105 before month's end.

Active geomagnetic conditions may remain over the next few days,
occurring again around the end of the month.

Sunspot Numbers from March 3 through 9 were 122, 80, 86, 101, 80, 80
and 68, with a mean of 88.1. 10.7 cm flux was 100.9, 97.9, 95.7,
95.5, 91.3, 91.3 and 89.9, with a mean of 94.6.

The path projection this week is from Chicago, Illinois to Guyana,
where 8R1/N4VA is operating.

80 meters should be open from 2330 to 1030z, with the best
conditions from 0200 to 0930. 40 meters looks good from 2230 to
1100, with the best shot from 0030 to 0930. 30 meters may be
open on many days almost around the clock, with best conditions from
2230 to 0630. 20 meters should be good from 1500 to 0130, and
17 meters from 1430 to 2300. Check 15 meters from 1600 to 2000.
10 and 12 meters do not look too promising over this path, but check
12 meters around 1630 to 2130 and 10 meters from 1830 to 1930.
NNNN
/EX

2849. Re: Grounding and lightning protection

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 15:00:42 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar12.150042.22113@ke4zv.atl.ga.us>
Source record: 269801
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

In article <2lsb0f$9dg@charm.magnus.acs.ohio-state.edu> wvanhorn@magnus.acs.ohio-state.edu (William E Van Horne) writes:
>
>This whole discussion of lightning protection has been very good, but
>nobody yet has pointed out that the best "protection" is prevention.
>The real function of lightning rods is to PREVENT lightning from
>occurring; only if they fail is it necessary to carry off the multi-
>kilovolt, multi-kiloamp strike current and SOME damage is inevitable.
>
>An antenna tower can be a very effective lightning rod, if properly
>made. I won't go into the basic physics involved, which is only
>poorly understood anyway; but before a strike can occur, a very high
>level of charge must develop overhead. That charge can usually be
>drained off by a lightning rod before it gets high enough to break down
>the air column from cloud-to-ground. The key is to make the top
>extremity a sharp point, or points.

This is a common misconception, and a few companies have made good livings feeding this error. But the FAA put it to rest with their field tests in Florida. They set up a series of towers, some unprotected, some with lightning rods, and some with point dischargers designed, so the companies said, to drain off the space charge harmlessly. The FAA found there was *no difference* in lightning strike frequency among the three groups of towers, but only the towers protected with properly installed lightning rod systems sustained no damage. The ones protected with the point dischargers sustained the *most* damage.

If we dig a bit into the physics of lightning, which *is* becoming well understood thanks in part to these highly instrumented tests, we see why these point dischargers don't work, and why lightning rods *don't* prevent strikes, but do carry the strike currents away harmlessly if properly installed.

The charge responsible for a single lightning strike is typically around 20 coulombs, and may extend vertically in a thunderhead as much as 7 km, and horizontally by 2 to 3 km. It's stirred by winds moving at up to 70 km/hr. It induces a matching, but opposite polarity, "mirror" charge in the ground under the cloud.

A point discharge that exceeds about 20-50 *microamps* will start to generate upward *streamers*. It's these streamers coming up from the ground that, when they meet a stepped leader coming down from the cloud, form the channel through which the lightning bolt is conducted. So for a dissipation array to prevent rather than attract lightning, each point

discharger must be limited to a current of less than 20 microamps. Typical commercial arrays have about 5,000 points arranged in either a brush or an umbrella configuration. That gives a total array dissipation of 100 ma.

Now remembering that 20 Coulombs have to be dissipated, the following formula tells how long that would take.

T = 3600*Q*I

where T is time in hours, Q is charge in Coulombs, I is dissipator current in amperes, and 3600 is the number of seconds in an hour. For the condition outlined above,

T=3600*20*1*10^-4 = 7.2 *hours*.

That's 7.2 hours to dissipate the energy of *one* lightning bolt. A single thunderstorm may have *thousands* of lightning bolts. Note too that the space charge that is created by the minimal current flow of the dissipator *doesn't* stay above the target because of the *winds* associated with storms. It's simply blown away as fast as it's created. The dischargers don't work in preventing strikes. What they, and lightning rods, *can* do is flow more than 20 microamps per point, generate streamers, and *stimulate* lightning bolts to strike them in *preference* to other nearby targets, and then conduct that 4000 ampere current harmlessly to ground *if* properly installed. Unfortunately, the dissipation arrays, because they're made up of a myriad of tiny sharp points, *can't* carry the heavy strike currents away without harm. The FAA found great chunks of the dissipation grids blown off their test towers by strikes.

BTW Ben Franklin was the first to realize how lightning rods work. He realized they were *diverters* of strike current, not lightning *prevention* devices. Many unscrupulous hucksters have *misrepresented* the action of lightning rods over the years, but a few moments contemplation of the physics of high energy discharges shows them to be scamsters.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

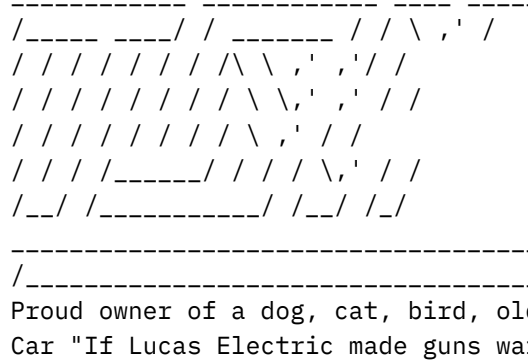
2850. Re: Good car for HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 15:26:39 UTC
From: wagner@mala.bc.ca
Message-ID: <1994Mar12.082639.3681@malins.mala.bc.ca>
Source record: 269802
Cross-posted to: rec.radio.swap,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <CMICIn.3Mz@metronet.com>, serafin@metronet.com (Michael Serafin) writes:
> In article <2lpmsf$8do@brahms.udel.edu>,
> Robert Penneys <penneys@brahms.udel.edu> wrote:
>>
>>Criteria are:
>>No interference to electronics of car by RF
>>Minimal noise generated by car
>>Reasonable space for rigs
>>Reasonable mounting of antennas
>>
>>Car will probably be four door sedan in size range from Corolla to Taurus.
>
> How about a Suburban with a Diesel engine? Only interfering electronics
> you should have to worry about is the alternator. And it has tons of
> space for antennas.
A friend is into Low Freq communication. He bought a pickup truck with an
aluminum canopy. He can mount as many antennas as he wants on the canopy, but
still remove the whole thing for other uses. If he resells the only thing he
looses is the value of the canopy with all the holes (unless he buys another
truck and uses it on it).

Big problem is size. I use a toyota pickup and thanks to new technology I
don't loose too much space to gear. Not having a fancy centre console I don't
have to worry about what goes on the hump, and I only drive 2 across the front
anyway.

I have been acused of driving a fishboat with all the antennas hanging off it
though...>
--



Proud owner of a dog, cat, bird, old Tractor and a British
Car "If Lucas Electric made guns wars wouldn't start"

2851. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 15:36:12 UTC
From: adam@wam.umd.edu
Message-ID: <2lsnhc$1nh@cville-srv.wam.umd.edu>
Source record: 269803
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

In article <1994Mar11.135613.16379@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
>Look at what the cops are driving.

Good idea, Gary. Just don't forget to leave off the whitewalls!

-N3NKI

2852. Wanted: Info on programming Wilson WH6016B

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 16:36:26 UTC
From: tim@umcc.umcc.umich.edu
Message-ID: <2lsr2a$fdm@umcc.umcc.umich.edu>
Source record: 269804
Cross-posted to: misc.wanted,rec.radio.amateur.equipment,rec.radio.amateur.misc

I have a couple of Wilson model WH-6016B VHF mobile radios that were
obtained by a law enforcement agency to be used by some of their detectives.

They'd like me to program these radios, so I'm tryingto track
down a service manual for this model, or at least a photocopy of any
relevent pages dealing with programming.

In the distant past, I have programmed similar radios, & know
that you need to pop the cover put the radio into program-mode by using a
jumper, & then using the keyboard to enter in things like channel #,
input/output freq, CTCSS, etc.

Does anyone out there have the manual for this radio, or know
how/where I could track down an inexpensive copy?

Thanks,

Tim

--
Tim Tyler Internet: tim@ais.org Packet: KA8VIR @WB8ZPN.#SEMI.MI.USA.NA
P.O. Box 443 C$erve:72571,1005 GEnie:Sneaker AOL:Hooligan MCI: 442-5735
Ypsilanti MI "I'm just an innocent little frog, trying to
48197 hop my way across the Information Superhighway"

2853. Daily Summary of Solar Geophysical Activity for 11 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 16:45:22 UTC
From: oler@rho.uleth.ca
Message-ID: <9403121645.AA02410@rho.uleth.ca>
Source record: 269805
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

11 MARCH, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 11 MARCH, 1994

NOTE: Stratospheric warming continues over Asia, Alaska, Canada, and the
adjacent Arctic region. Temperature gradient is reversed between 60N
and the pole from 10 HPA upwards into the upper stratosphere.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 070, 03/11/94
10.7 FLUX=088.1 90-AVG=106 SSN=066 BKI=4444 4334 BAI=024
BGND-XRAY=A9.1 FLU1=2.0E+07 FLU10=2.3E+04 PKI=5555 4434 PAI=037
BOU-DEV=065,063,056,050,046,027,021,045 DEV-AVG=046 NT SWF=00:000
XRAY-MAX= B3.8 @ 0049UT XRAY-MIN= A6.2 @ 0010UT XRAY-AVG= B1.2
NEUTN-MAX= +002% @ 2330UT NEUTN-MIN= -003% @ 2009UT NEUTN-AVG= +0.0%
PCA-MAX= +0.8DB @ 0700UT PCA-MIN= -0.6DB @ 1510UT PCA-AVG= +0.2DB
BOUTF-MAX=55354NT @ 0218UT BOUTF-MIN=00000NT @ 1706UT BOUTF-AVG=55281NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+069,+000,+000
GOES6-MAX=P:+138NT@ 1833UT GOES6-MIN=N:-107NT@ 1707UT G6-AVG=+088,+022,-051
FLUXFCST=STD:090,095,095;SESC:090,095,095 BAI/PAI-FCST=015,015,015/030,025,020
KFCST=2114 4121 2114 4111 27DAY-AP=036,028 27DAY-KP=4544 6444 4335 4554
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MINSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 10 MAR 94 is not available.
The Full Kp Indices for 10 MAR 94 are: 4o 4- 6- 5- 4+ 4+ 4o 5-
The 3-Hr Ap Indices for 10 MAR 94 are: 30 24 62 41 33 35 29 38
Greater than 2 MeV Electron Fluence for 11 MAR is: 2.3E+09

SYNOPSIS OF ACTIVITY

Solar activity was very low with only a short series of
uncorrelated, small B-class x-ray bursts. Region 7689 (S11W38)
was numbered today.

Solar activity forecast: solar activity is expected to be
very low to low. Regions 7685 (S08W57) and 7688 (N16E60) have

slim chances of producing isolated C-class flares.

The geomagnetic field has been at mostly active levels
for the past 24 hours. Minor to major storm levels were
observed at high latitudes. Energetic electron fluxes
(Gt 2 mev) were at high to very high levels during the period.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled to active for the next 24 hours then
mostly unsettled for the remainder of the period. High latitudes
should continue to see minor storm levels tapering off to
unsettled to active by the end of the forecast period.

Event probabilities 12 mar-14 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 12 mar-14 mar

A. Middle Latitudes
Active 20/20/20
Minor Storm 20/20/20
Major-Severe Storm 05/05/05

B. High Latitudes
Active 20/20/20
Minor Storm 25/25/25
Major-Severe Storm 05/05/05

HF propagation conditions were below normal over most
regions. MUFs continue to be depressed by up to about 35
percent. Propagation was worst for transauroral circuits.
Similar conditions are expected over the next 24 to 48 hours
before conditions begin improving. The transition from
degraded propagation to near-normal propagation is expected to
be a gradual process covering at least several days.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 11/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7684 S08W82 007 0000 BXO 02 002 BETA
7685 S08W57 342 0060 CAO 07 007 BETA
7687 N18W52 337 0000 AXX 00 001 ALPHA
7688 N18E60 225 0030 CRO 08 005 BETA
7689 S11W38 323 0000 AXX 00 001 ALPHA
REGIONS DUE TO RETURN 12 MARCH TO 14 MARCH
NMBR LAT LO

7671 N11 191

LISTING OF SOLAR ENERGETIC EVENTS FOR 11 MARCH, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 11 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 11/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
10 Mar: 0007 0012 0019 B4.0
0025 0028 0032 B4.3
0749 0757 0805 B6.4
0847 0909 0917 B7.0
2234 2243 2257 B2.6

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Uncorrellated: 0 0 0 0 0 0 0 0 005 (100.0)

Total Events: 005 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2854. Re: Ten-Tec question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 16:49:50 UTC
From: turner@safety.ics.uci.edu
Message-ID: <2lsrre$24v@safety.ics.uci.edu>
Source record: 269806

In <2lnbbc$2gr@oak.oakland.edu> prvalko@vela.acs.oakland.edu (prvalko) writes:

>I have a Corsair I. ten Tec installed a decorative knob on the front
>panel of this rig and labled it, "noise blanker."

Cute! True! I, too, have the Corsair I, and I don't know what happened,
I believe the Triton IV noise blanker did more for me. However, I actually
took the Corsair I mobile on Friday to Palm Springs, and I kept trying the
noise blanker on all the noise I encountered. There was one Chevy truck
that gave ignition noise that the blanker reduced, honest! Other than
that, I have never noticed any help from that knob at all.

Clark
WA3JPG

2855. Re: Need LA5VK's address

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 17:43:05 UTC
From: slay@netcom.com
Message-ID: <slayCMKBvt.4Eo@netcom.com>
Source record: 269807

Tom Rune Lauknes (tomrune@mac_inge) wrote:

: I want to know if my father is in the newest call-book.
: Or if I am there.
: The reason why I ask is that LA5VK will be the manager
: for the "dx'pedition", and I want to know if he is in the
: newest call-book.
: By the way, we will be operating all bands, including

: Please help me, I must have the answer before Friday...

Return-Path: <w6otc@aol.com>
Sender: "w6otc" <w6otc@aol.com>
Date: Sat, 12 Mar 94 11:21:58 EST
Subject: Re: JW DXped on WARC/SSB

LA5VK is in the 1994 Callbook as Inge Johan Lauknes, Oldersneia 10, N-9100
Kvaloysetta. Hope you receive this message in time for it to be useful.
Good luck on your trip.

2856. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 19:30:38 UTC
From: tcj@netcom.com
Message-ID: <tcjCMKGv2.HMM@netcom.com>
Source record: 269808

Bob Wilkins N6FRI (rwilkins@ccnet.com) writes:

> Todd Jonz (tcj@netcom.com) wrote:
>
> > Ed Hare (KA1CV) (ehare@arrl.org) writes:
> >
> > > Well, I want *my* call to be "K".
> >
> > Golly, Ed, you must be one of those long-winded types.
> > Would you settle for something a little shorter -- like
> > maybe "N"? ;-)
>
> I considered upgrading to extra just so I could get the shorter call
> "N". But then I realized that I would be left out of all the nets.
> Our local ares-races nets call the roll by suffix.

Good point, Bob. I guess you'd have to operate portable if you wanted a suffix. And if you wanted to keep your call as short as possible, I'd suggest Italy so that you could check into your ARES net as N/I. Of course, if it's a two meter net you'd better take a *BIG* beam with you.

> I would not be called when the sixes are listed for that rare island
> dx.

Since you'll be in Italy for the ARES net, your best bet would probably be to head down to Libya and operate as N/5A for the DX nets and wait for them to call for fives. But then I guess that would make *you* the DX, wouldn't it?

BTW, did we decide on the nomenclature for these calls. Are they 0x0's? ;-)

Todd, KB6JXT

2857. Re: Why no 10 meter activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 19:31:02 UTC
From: kchen@apple.com
Message-ID: <2lt59m$o4i@apple.com>
Source record: 269809

paulg105@aol.com (PaulG105) writes:

>Why is there no 10 meter activity?? Is it because of the band openings? If
>so, how do you know when the openings are good?? 10 meters seems to have
>become or is a dead band.

You would have found lots of 10m phone activity into South America
and the Pacific during the March 5 weekend (ARRL DX contest).

My log shows P4, PJ9, YV, ZP, V2, XE, LU, PY, KH6, CE, VP2V, V7,
KL7, T30, HP, HI, KP4, KG4, JA and CX on 10 meters phone last Sunday.

Granted, 15m and 20m were better into the rest of the world that
weekend, but 10m is far from "dead" yet. Maybe next year :-).

73

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

2858. Re: FT-530 Receive Proble

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 19:46:00 UTC
From: bob.hinkle@comstar
Message-ID: <9403130545196065@comstar>
Source record: 269810

S>Organization: California Technology Project of The Calif State Univ

S>I tried the two freq. on my 530 and it did the same thing. On the 440
S>side it acted like it was receiving a signal. Very strong, with not much
S>noise behind it.

S>--

Our local ham store (North Olmstead Amateur Radion Depot, North Olmsted
Ohio) stated last week that they automatically return all 530s to Yaesu
for the mod to cure this. They install it free and turn the radio around
in less than a week.

....Bob KA1RI/8

2859. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 20:20:40 UTC
From: kchen@apple.com
Message-ID: <2lt86o$si1@apple.com>
Source record: 269811

tcj@netcom.com (Todd Jonz) writes:

>Ed Hare (KA1CV) (ehare@arrl.org) writes:

> > Bob Levine (levine@mc.com) wrote:
> >
> > > Has anyone seen anything in print about whether the vanity
> > > callsign program (someday) might allow 1x1 calls?
> >
> > Well, I want *my* call to be "K".

>Golly, Ed, you must be one of those long-winded types. Would you settle for
>something a little shorter -- like maybe "N"? ;-)

How often have you heard such exchanges:

DX: QRZ contest, this is Lima One Delta

US: (huh??) Your call again?

DX: L1D

US: (geez, a new one...) WB0X

DX: Station WB0X something?

US: Willy Baker Zero X-ray.

DX: Willy Baker Zero X-ray, full call please...

Aren't you glad you have a traditional call? Don't you wish
everyone else have them too? :-)

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

2860. need extra class book and tape recommendation

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 22:36:14 UTC
From: ah301@yfn.ysu.edu
Message-ID: <ah301-120394173614@sy_j.pgh.wec.com>
Source record: 269812

I am thinking of upgrading to extra, any recommendations as to
which book, tapes, software (mac or pc) to use as study guide ?

please email response if possible
thanks in advance

jerry
N3RKD

2861. Q codes?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 23:07:24 UTC
From: djnorman@isle.waterloo-rdp.on.ca
Message-ID: <1994Mar12.230724.89@isle.waterloo-rdp.on.ca>
Source record: 269813

I bet this a been asked many times before..... but where can I find a list of the "Q" codes .... I'm not an amateur operater... but I do monitor alot...

thanx.
Darrin Norman

2862. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 23:23:06 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <763543172.F00002@ocitor.fidonet>
Source record: 269827

```
The following files were processed Saturday 3-12-94:

HAMLOG [ HAM: Amateur radio logging programs ]
---------------------------------------------------------------------
VA-QSO.ZIP ( 225346 bytes) Logging program for the Virgina QSO
Program

---------------------------------------------------------------------
225346 bytes in 1 file(s)

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
ANART797.ZIP ( 6301 bytes) ANART Bulletin #797 02/20/94
ANART798.ZIP ( 5697 bytes) ANART Bulletin #798 02/26/94
ANART799.ZIP ( 5547 bytes) ANART Bulletin #799 03/06/94
ARLD013.ZIP ( 2522 bytes) ARRL DX Bulletin 03/03/94
ARLD014.ZIP ( 2338 bytes) ARRL DX Bulletin 03/10/94
ARLP010.ZIP ( 1866 bytes) ARRL Propagation Bulletin 03/11/94
ARLX011.ZIP ( 1833 bytes) 03/09/94 - AA8FQ runs for charity
ARLX012.ZIP ( 1690 bytes) 03/10/94 - Amateur radio to the
rescue
BARTG015.ZIP ( 3446 bytes) BARTG #015 03/94
HDNBBS.ZIP ( 6242 bytes) Ham Distribution Net BBS Listing -
03/10/94
IRTS0306.ZIP ( 2849 bytes) IRTS Bulletin 03/06/94
OPDX150.ZIP ( 4003 bytes) Oh/Pa DX Bulletin #150 03/07/94
RTDX0304.ZIP ( 2820 bytes) RTTY DX Bulletin 03/04/94
RTDX0311.ZIP ( 2531 bytes) RTTY DX Bulletin 03/11/94

---------------------------------------------------------------------
49685 bytes in 14 file(s)

HAMPACK [ HAM: Packet Communications programs ]
---------------------------------------------------------------------
BAY-TPK.ZIP ( 78478 bytes) Packet Driver Set for TPK
HAMLET33.ZIP ( 32698 bytes) Simple packet terminal program

---------------------------------------------------------------------
111176 bytes in 2 file(s)

HAMSAT [ HAM: Satellite tracking and finding programs ]
---------------------------------------------------------------------
ARLS012.ZIP ( 1458 bytes) 03/08/94 - Astronaut to Russia
OBS070.ZIP ( 6220 bytes) AmSat Orbital Elements #070
03/11/94
SATSKED.ZIP ( 118777 bytes) V1.937 - Multi-satellite pass
```

manager by WA2N and NZ2F. Requires
registration from AmSat
SPC0314.ZIP (4383 bytes) Space Bulletin 03/14/94
TRAKBOX.ZIP (156019 bytes) PCB layout - Corel draw panels by
W4UJZ

286857 bytes in 5 file(s)

HAMSCAN [HAM: Scanner Freqs and Freq database programs]

SDIEGO.ZIP (2906 bytes) San Diego, Ca scanner frequencies

2906 bytes in 1 file(s)

HAMUTIL [HAM: Radio operating aids]

ID112.ZIP (115178 bytes) ID timer for Windows 3.1 by KK7A

115178 bytes in 1 file(s)

Total of 791148 bytes in 24 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

2863. IPS Daily Report 12 03 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 23:24:39 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar12.232439.6102@ips.oz.au>
Source record: 269814
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 12 March 1994
Summary for 12 March and Forecast up to 15 March
IPS Warning 08 was issued on 09 MAR and is still current.

1A. SOLAR SUMMARY
Activity: low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 093/038

1B. SOLAR FORECAST
13 March 14 March 15 March
Activity Low Low Low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 095/041

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : unsettled 00-09UT then active levels
were observed.

Estimated Indices : A K Observed A Index 11 March
Learmonth 22 3334 4444
Fredericksburg 24 29
Planetary 34 37

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
13 Mar 25 Active.
14 Mar 18 Unsettled to active.
15 Mar 14 Unsettled.

2C. MAGNETIC COMMENT
The coronal hole sourced disturbance is expected to decline over the
next 3-4 days.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH

12 Mar normal normal fair-normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
13 Mar fair poor poor
14 Mar normal fair poor
15 Mar normal normal fair
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were depressed 20-30% during local day, near predicted
monthly values during local night.

T index: 6

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
13 Mar 25 Depressed 15-30% during local day to near predicted
monthly values at night.
14 Mar 30 Depressed 10 to 20%/near predicted monthly values.
15 Mar 35 Depressed 10 to 15%/near predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2864. GE MASTR II

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 23:34:00 UTC
From: biekert@aol.com
Message-ID: <2ltjh8$3vo@search01.news.aol.com>
Source record: 269815

I need some info on a GE MASTR II.

I need the tune up procedure for the exciter board PL19B219640G3, and also the pin outs for the tune up jack to match the instructions, that is, PIN 1 not GE METER Setting B or whatever.

Using this for a link radio, had the manual for the receiver but not the exciter.

Any help greatly appriciated... email me at BIEKERT@aol.com
Thanks, Bob KA5GLX Houston Tx

2865. 1x1 calls

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-12 23:49:13 UTC
From: dwilson@s850.mwc.EDU
Message-ID: <199403122346.PAA15573@ucsd.edu>
Source record: 269816

A2 through A9 calls do not belong to the US but to other countries. I
believe the 1x1 calls starting with N are already assigned to aircraft.
(Note I said the 1x1 ones!) I am certain the 1x1 starting with W
are also assigned. You can forget getting a 1x1 call.
--
David L. Wilson INTERNET: dwilson@s850.mwc.edu
Phone: (703)898-1084 (H) Amateur callsign: AC4IU G.S.: FM18fg

2866. Re: Need LA5VK's address

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 00:36:42 UTC
From: kchen@apple.com
Message-ID: <2ltn6q$j23@apple.com>
Source record: 269817

tomrune@mac_inge (Tom Rune Lauknes) writes:

>The reason why I ask is that LA5VK will be the manager
>for the "dx'pedition", and I want to know if he is in the
>newest call-book.

LA5VK is listed in the '94 callbook as Inge Johan Lauknes, Oldersneia 10,
N-9100 Kvaloysletta.

LA1BJA is not in the callbook.

P.S.: Tom, your return address don't seem to work for me
(ratatosk.uninett.no claims circular address).

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

2867. RE: Chest Harness

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 01:41:00 UTC
From: greg.pool@cld9.com
Message-ID: <7.15891.976.0N5C5BDF@cld9.com>
Source record: 269818

DB>A few years ago, at a cross-country ski center, I saw an employee with a
DB>handheld radio attached to his chest with some sort of harness. It held
DB>the radio at a diagonal angle such that the antenna (VHF duck) pointed at
DB>his left shoulder and the base of the radio pointed at the right side of
DB>his waist.

Yah! I used one when I was fighting fire for the Hawaii Volcanoes
National Park and it was a dream. I always had my hands free for
whatever. But when I was pau with that job, I couldn't find the same
kind of harness anywhere for Amateur Radio uses (and I didn't think to
slip one in my pack when I left, hi)...

DB>Does anyone have any information?

...until I looked in the back pages of a QST. Try the EMARS group and
their chest harness ($29.95 + $3.50 S/H). I bought one and it is
very well-made. I use it primarily when biking but also emergency
communications (I haven't made it up to the Sierra this year to test it
for cross country skiing, but your message made me think twice). For an
info sheet, call 210-493-7546. Their address is EMARS, PO Box 781204,
San Antonio TX 78278.

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Aloha+73 de Greg Pool Internet: greg.pool@nitelog.com
273 San Bernabe Drive Amateur: wh6dt@k6ly.#nocal.ca.usa.noam
Monterey CA 93940-6123 Phone: (408) 372-5564

• OLX 2.1 TD • I brake for lava!
• [R2.00o] • Usenet • Nitelog BBS • Monterey CA • 408-655-1096

2868. Re: Looking for "Stabilant 22" contact cleaner

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 01:41:33 UTC
From: leber@panther.warm.inmet.com
Message-ID: <CMKy1A.9qJ@inmet.camb.inmet.com>
Source record: 269819

> Does anyone know where I can get my hands on "Stabilant 22" contact cleaner?
> A mail-order source would be ideal.

Stabilant 22 is available from:

Soft Solutions
907 River Road, Suite #98
Eugene, OR 97404
Phone: 503-461-1136
Fax: 503-461-2005

Soft Solutions is a Service and Parts supplier for Macintosh computers.
The brochure I have (about a year old) lists it in a prediluted formula
(4:1 dilution with an ispropyl alcohol carrier) at $36 for a 15ml container.
(Phew! Don't spill it!)

Cheers,
Tom Leber
N3QKV
--

Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
"Smother technology and it rebels." - Max Headroom

2869. Wanted: "This Week in Amateur Radio" Info

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 02:51:20 UTC
From: tremolo@kaiwan.com
Message-ID: <2ltv38$out@kaiwan.kaiwan.com>
Source record: 269820

I heard a taped TX of "This Week in Amateur Radio" from the Omega Network. I was wondering if anyone had any info of when and what freq this can be heard in the Los Angeles area.

--

John "Tremolo" Molson (tremolo@kaiwan.com)
PGP 2.3 Public Key Available Upon Request.

2870. St Patrick's Day Special Event Station

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 03:45:19 UTC
From: payned@dmapub.dma.org
Message-ID: <CML3rn.Hzt@dmapub.dma.org>
Source record: 269821
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave

There is a change in the operation of special event station WB8SMC/8
from St. Patrick, Ohio as announced in the major ham magazines. The original
dates of operation were to be March 12 - 13 1994, but as explained by a member
of St Patrick Church (where we will be operating from), "We have basketball
tournaments up this way that take precedence over weddings, having babies and
other such trivial events - and had to move the celebration back to the 26th."

Well, March madness notwithstanding, the FAROUT ARC will operate WB8SMC/8
from St Patrick OH (Shelby County) during the period 1800 UTC 26 March 94 to
1800 UTC 27 March 94 to belatedly celebrate St Patrick's Day. Frequencies of
operation will be in:

80 - 40 - 15 - 10m Novice CW and 20m General CW
80 - 40 - 20 - 15m General phone and 10m Novice phone

WB8SMC QSL's hams and SWL's 100%. Send QSL and business size SASE to:

WB8SMC/8
FAROUT ARC
P.O. Box 9181
Dayton, Ohio 45409-9181
--

| Doug Payne | payned@dmapub.dma.org |

2871. Filter Shape Factor?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 05:11:08 UTC
From: chrism@col.hp.com
Message-ID: <2lu79c$o0e@hp-col.col.hp.com>
Source record: 269822
Cross-posted to: rec.radio.amateur.misc,sci.electronics

What does the shape factor spec of a filter indicate? I assume something about passband/stopband transition or some such?

Thanks,
Chris Magnuson
chrism@col.hp.com

2872. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 05:42:28 UTC
From: prvalko@vela.acs.oakland.edu
Message-ID: <2lu944$suh@oak.oakland.edu>
Source record: 269823

Todd Jonz (tcj@netcom.com) wrote:
: Ed Hare (KA1CV) (ehare@arrl.org) writes:

: > Bob Levine (levine@mc.com) wrote:
: >
: > > Has anyone seen anything in print about whether the vanity
: > > callsign program (someday) might allow 1x1 calls?
: >
: > Well, I want *my* call to be "K".

: Golly, Ed, you must be one of those long-winded types. Would you settle for
: something a little shorter -- like maybe "N"? ;-)

Don't be a DOPE, Todd. The letter "N" is, "dah dit." It ends in a DIT
so it's not as good as a call that ends in a DAH.

BTW, when I wrote the book on calls, I suggested that "K", "N", and "W"
could easily command $10,000 or more in the open market.

73 =paul= wb8zjl

2873. Re: noise blankers

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 05:47:41 UTC
From: prvalko@vela.acs.oakland.edu
Message-ID: <2lu9dt$t8o@oak.oakland.edu>
Source record: 269824

eric.s.hellman (hellman@cbnewsm.cb.att.com) wrote:
: Those of you who have never needed to use the "decorative knob"
: labled noise blanker should consider yourselves fortunate.
: I find the one on my ts 440 does just fine when some mysterious
: noise appears.

: Shel Darack WA2UBK
: dara@physics.att.com
: .
Well, as the guy who first called the Ten Tec noise blanker a decorative knob... I'd like you all to know I happily sold my TS-440s and kept the Corsair because the Corsair was a much, much better, functional RADIO!

Now if THAT doesn't stir the pot... nothing will.

73 paul wb8zjl

2874. Where is PED410?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 06:11:38 UTC
From: exe01022@vnet.net
Message-ID: <2luaqq$elo@rtp.vnet.net>
Source record: 269825

Recently there was a posting announcing that PED version 4.10 was
available on some FTP site. I lost this info, so please repost
if possible. FYI, PED is a CW pileup simulator/trainer for use
with sound boards like the Sound Blaster.

Dan, N9XX exe01022@vnet.net

2875. Licensing in Japan

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 06:29:35 UTC
From: slay@netcom.com
Message-ID: <slayCMLBDC.7Dp@netcom.com>
Source record: 269826

So, we think we got it bad in the USA on getting our ham licenses? Take a look at the following article that I received recently from Japan.

The following article first appeared in the vernacular Asahi Shimbun newspaper in Japan. It was translated and reprinted in the TIARA NEWS - the Tokyo International Amateur Radio Association's newsletter in their February 1994 issue. Permission to reprint was/is clearly stated in the masthead, provided credit is given to both the individual author(s) and to TIARA NEWS.

ASSOCIATIONS: The Barrier To Simplifying Japanese Amateur Radio Licensing

"There are too many procedures and it is too expensive to get a Ham license. Why can't the Japanese system be like that in the U.S. where you obtain your license once and then you can operate freely within certain
limits?" That is the plea of Japanese Hams.

THREE STEPS TO GET ON THE AIR
To get on the air you have to go through three steps:

(1) First you take the national examination or a special training course to obtain your radio operator license (musen jujisha menkyosho).

(2) You then must file an application for "opening the station" [i.e. to establish the station] with the Japanese Ministry of Posts and Telecommunications (MPT).

(3) Then you must obtain confirmation that your transmitter and receiver satisfy certain technical standards.

These procedures take about four months to complete. Moreover, whenever you buy a new rig you must make an application for such change, and your station must be re-inspected. Furthermore, your license must be renewed after five years.

In the case of the DENWA-KYU license (fourth class, phone only) which most Japanese Hams hold, the national exam costs 2,700 yen (approx. $26) and the special training course costs 23,050 yen (approx. $220). The application for opening a station costs 7,300 yen (approx. $70). An application for change of radio equipment and renewal of the license costs from 1,000 to 4,000 yen (approx. $9.50 to $38).

The Land Mobile Communications Division (Yuseisho Ido Tshukinka) of the MPT responds to the above criticism by saying: "All of

the procedures are necessary to enable so many people to make
good use of the available frequencies which are limited resources.
We have partially simplified the procedures."

IN THE USA, PERMITS ARE LUMPED TOGETHER
There are 2,450,000 licensed Hams in Japan. One Ham who is an officer
of an Amateur Radio organization stated, "I have been pleading with
the government for 30 years to change to a system like one in the USA
but I have not gotten anywhere, even though I have yet to find any
fault with the US system."

When you look into each of these procedures you will find that each
procedure has a connection with an organization in which former
MPT bureaucrats are working after their retirement (from government
service). First, the application forms are sold at the JARL -
Japan Amateur Radio League (Shadan Hojin Nihon Amateur Musen Renmei)
at prices ranging from 500 to 800 yen (approx. $4.75 - 7.60).
The special training course and the station modification inspection
are done by the JARD - Japan Amateur Radio Development Association
(Zaidan Hojin Nihon Amateur Musen Shinko Kyokai).
And that is the way it goes.

The JARL however, is an organization of Ham-loving people and therefore,
there are few retired bureaucrats there, but in the aforementioned
organizations out of a total of 29 directors, 12 are retired MPT
bureaucrats.

MOST OF THE REVENUE IS OBTAINED FROM BUREAUCRATIC PROCEDURES.
The total JARD income in 1992 was 560 million yen (approx. $5.3M)
and of that, 547 million yen (approx. $5.2M) came from the (kind)
of bureaucratic procedures described above. That seems to be
the reason that they will not change to the US system.

The above is a translation of an article that appeared in the
morning edition of the Asahi Shimbun newspaper on October 9, 1993.
The translator's comments follow:

1) After passing the national examination or successfully completing
the special training course, the prospective Ham will have to file an
application for a radio operator license together with an additional
1,050 yen ($10) worth of revenue/tax stamps. Every application for
a station license, modification or renewal requires the completion
of complicated forms. These forms can generally only be obtained at
Ham specialty-stores, certain large bookstores, or at JARL branch
offices.

2) By paying 1,000 to 3,000 yen to the JARD for a station "guarantee",
amateur stations up to 100 watts are exempted from undergoing the
station inspection which requires a complicated application procedure,
long waiting time, and expensive inspection fee.

3) The license term for non-permanent residents of Japan is one year. Applications for station license renewal and modification must be filed separately.

4) Formerly referred to as "Denwa-kyu", the 4th class (No Code) licensees comprise more than 90% of all Japanese amateur radio operator license holders.

5) This the amount of revenue/tax stamps required together with license application forms. 14,600 yen ($140) for stations over 50 watts An additional "guarantee fee (nominally 3,000 yen or approx. $28.50) is paid to the JARD. Or, in the case of a 500 watt station, the station inspection fee is 21,200 yen (approx. $200) plus another 5,300 yen (approx. $50) "guarantee" fee to the JARD. In addition, an annual "radio spectrum users fee" of 500 yen (approx. $4.75) or 1,000 yen ($9.50) if you have both the 100 watt fixed and 50 watt portable station licenses, is levied by the MPT.

6) In the USA, the station license is automatically issued together with the operator license without the necessity to already own any radio equipment. Mailing address changes, etc. can be done easily and the term of validity automatically resets for another 10 years from the date of the change. And what is more, you only have to pay about $6 for the examination, and the rest of the procedure is all free of charge. You do not even have to attach an SASE to your application forms.

7) Station inspections in Japan are done by the local bureaus of telecommunications (Denkan).

The above article was translated by Roy Waite 7J1AAK/W9PQN and edited by Motoi Kawatsu JK2PNY/AB6GT.

Sorry this was so long, but thought others might be interested.
73 de Sandy WA6BXH/7J1ABV slay@netcom.com WA6BXH@N0ARY

2876. Ramsey Kit Transceivers-Also any others???

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 07:26:32 UTC
From: ah157@cleveland.Freenet.Edu
Message-ID: <2luf79$qh0@usenet.INS.CWRU.Edu>
Source record: 269728

I was going to get the ramsey 2 or 6 meter fx models transceiver that you build yourself simply because I think I will find radio more interesting if i do it myself instead of getting premade.

Now,I have heard these are no good?
Is this true,will someone leave me their experiences in maiL?

Also,are there any other kit radios that may be better for the same price?
Leave MAIL If possible.

2877. Electronic Schematics-Exotica...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 07:39:20 UTC
From: MICHAEL ENLOW <no1sleuth@delphi.com>
Message-ID: <Be+M4MY.no1sleuth@delphi.com>
Source record: 269729

Would anyone mind assisting me by downloading my catalog from the BBS and let me know if it is possible to post it in specified groups of people who could possibly become part of our manufacturing team of exotic surveillance gear for law enforcement agencies. We are in the process of developing a global distribution network for sensitive intelligence equipment with over 150 unique designs--in full detail... The BBS number is 601-876-9905 and you can download doc: CATALOG.ZIP or CATALOG.EXE (self extracting) and for the ASCII version get CATALOG.TXT... Send replies to NO1SLEUTH@delphi.com Thank you.

2878. noise blankers

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 07:50:15 UTC
From: jangus@skyld.grendel.com
Message-ID: <763545015snx@skyld.grendel.com>
Source record: 269730

In article <2lu9dt$t8o@oak.oakland.edu> prvalko@vela.acs.oakland.edu writes:

> Well, as the guy who first called the Ten Tec noise blanker a decorative
> knob... I'd like you all to know I happily sold my TS-440s and kept the
> Corsair because the Corsair was a much, much better, functional RADIO!

Ya know, it absolutly amazes me the lack of quality that hams will put up with in a radio as long as it a.) looks spiffy and b.) they know someone else that made the same mistake (er ah... choice. Yeah, that's it)

Kenwood for years has been pulling the game of adding noise to the front end and cutting off the lowend audio response so the radio "sounds hot". And a little under dampening in the CW filter makes a pleasant ringing tone that just "jumps out of the QRM". Ya gotta love it! (It only takes a handful of parts to make a receiver that's just on the verge of self-oscillation. You really don't need to spend $2K plus.)

But the DX Hogs (oops, I mean emergency preparedness types) around here with the Ultra-2K amps and 80 foot towers swear by them for snagging that rare one. (er I mean passing health and welfare traffic).

"QRZ county, your supplies are on the truck, 59 LA qsl?"

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

2879. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 08:55:53 UTC
From: smtp@zeus.USG.Sandy.NOvell.COM
Message-ID: <9403130903.AA14015@ns.Novell.COM>
Source record: 269731

```
From smtp Sat Mar 12 01:18 MST 1994 remote from zeus
Received: from ucsd.edu by ns.Novell.COM (4.1/SMI-4.1)
id AA00812; Fri, 11 Mar 94 19:37:47 MST
Received: from localhost by ucsd.edu; id PAA16404
sendmail 8.6.4/UCSD-2.2-sun
Fri, 11 Mar 1994 15:32:33 -0800 for info-hams-list
Received: from localhost by ucsd.edu; id PAA15906
sendmail 8.6.4/UCSD-2.2-sun
Fri, 11 Mar 1994 15:31:32 -0800 for info-hams-ddist
Errors-To: info-hams-relay@UCSD.EDU
Content-Length: 24325
Content-Type: text
Sender: info-hams-relay@UCSD.EDU
Precedence: List
Message-Id: <199403112331.PAA15906@ucsd.edu>
Date: Fri, 11 Mar 94 15:31:23 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@UCSD.EDU>
Errors-To: Info-Hams-Errors@UCSD.EDU
Reply-To: Info-Hams@UCSD.EDU
Precedence: Bulk
Subject: Info-Hams Digest V94 #278
To: Info-Hams@UCSD.EDU

Info-Hams Digest Fri, 11 Mar 94 Volume 94 : Issue 278

Today's Topics:
**For Sale** MFJ-948 Antenna Tuner & Astron RS-20A
1x1 Callsigns? (2 msgs)
800 number for QRZ CD-ROM @ $15 (2 msgs)
<world|ftp>.std.com and ftp
Best cars for mobile HF/VHF??
For Sale Ads Here?
Grounding and lightning protection
Re FT-726r for sale

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------
```

Date: Fri, 11 Mar 1994 11:22:07 MST
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.umbc.edu!eff!news.kei.com
!news.byu.edu!cwis.isu.edu!mica.inel.gov!pc-ojg.inel.gov!ojg@network.ucsd.edu
Subject: **For Sale** MFJ-948 Antenna Tuner & Astron RS-20A
To: info-hams@ucsd.edu

FOR SALE!!!

I have a brand new MFJ 948 antenna tuner. It is a Cross-Needle meter with
built-in lamp. Sells from MFJ for $129.95 (when they have them) + shipping
and handling. I just got it, but I just purchased a matching auto-tuner for
my Kenwood. I will sell this MFJ 948 for $119.00 + shipping.

The other item I have is a 6-month old Astron RS-20A (16 amp continuous, ICS -
20 amp). Cost new $90.00. Will sell for $75.00 + shipping. Again, the
reason for selling this gear is that I aquirred a matching Kenwood power
supply.

If interested, call (208) 526-7033 weekdays, (208) 524-1388 eves, or leave a
message on email at the addresses below.

Jay - WA4VRV

For all email, write to:

ojg@tis.inel.gov or GREENBJC@inel.gov

73's

For all email, write to:

ojg@tis.inel.gov or GREENBJC@inel.gov

73's

Date: 11 Mar 1994 20:23:21 GMT
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.
ans.net!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!wjturner@network.ucsd.ed
u
Subject: 1x1 Callsigns?
To: info-hams@ucsd.edu

In article <763354761snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus)
writes:
> Based on how some people view me, I'm gonna sign up for A6H. It's look good
> on the car too.

Hate to rain on your parade, but that call won't work. The US only has the
first half of the 'A's, thus you can't have an A#XXX call. (Or A#XX, A#X)
--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

Date: 11 Mar 94 13:33:22 CST
From: ihnp4.ucsd.edu!swrinde!menudo.uh.edu!hounix!mwk!gleason@network.ucsd.edu
Subject: 1x1 Callsigns?
To: info-hams@ucsd.edu

In article <2lo1ii$g94@oak.oakland.edu>, prvalko@vela.acs.oakland.edu (prvalko) writes:
> calls. If I remember correctly, In the US, the call must BEGIN with "A,
> K, N, or W" then have a SINGLE DIGIT NUMBER and followed by at LEAST one

W, A, N, and K...guess that makes us hams here in the states a
bunch of WANKers...I suspect the Brits had a hand in assigning us
these letters...

Lee K. Gleason N5ZMR
Control-G Consultants
gleason@mwk.com

Date: Fri, 11 Mar 1994 18:20:41 GMT
From: ihnp4.ucsd.edu!swrinde!emory!news-feed-2.peachnet.edu!ukma!rsg1.er.usgs.gov!dgg.cr.u
sgs.gov!bodoh@network.ucsd.edu
Subject: 800 number for QRZ CD-ROM @ $15
To: info-hams@ucsd.edu

A few weeks ago, there was a posting that offered a copy of the new QRZ
CD-ROM for $15. I ordered one but haven't gotten it, now I can't seem
to find the number. Anyone still have it? Thanks...

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

Date: Fri, 11 Mar 1994 19:51:19 +0000
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!pipex!d
emon!golflima.demon.co.uk!George@network.ucsd.edu
Subject: 800 number for QRZ CD-ROM @ $15
To: info-hams@ucsd.edu

The phone number on my QRZ disk is - +1 800 786-9907 but it may
not be what you want...73 from Rus. G6GLIn article
<1994Mar11.182041.22542@rsg1.er.usgs.gov>
bodoh@dgg.cr.usgs.gov "Tom Bodoh" writes:

> Newsgroups: rec.radio.amateur.misc
> Path: golflima.demon.co.uk!demon!pipex!howland.reston.ans.net!
> europa.eng.gtefsd.com!emory!news-feed-2.peachnet.edu!ukma!rsg1.er.usgs.gov!

> dgg.cr.usgs.gov!bodoh
> From: bodoh@dgg.cr.usgs.gov (Tom Bodoh)
> Subject: 800 number for QRZ CD-ROM @ $15
> Message-ID: <1994Mar11.182041.22542@rsg1.er.usgs.gov>
> Sender: news@rsg1.er.usgs.gov
> Organization: U.S. Geological Survey, Reston VA
> Date: Fri, 11 Mar 1994 18:20:41 GMT
> Lines: 11
>
> A few weeks ago, there was a posting that offered a copy of the new QRZ
> CD-ROM for $15. I ordered one but haven't gotten it, now I can't seem
> to find the number. Anyone still have it? Thanks...
>
> --
> ++
> + Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
> + USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
> + Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
> + "Welcome back my friends to the show that never ends!" EL&P +
> ++
>

--
Russell Lee

Date: Fri, 11 Mar 1994 18:23:27 GMT
From: world!dts@uunet.uu.net
Subject: <world|ftp>.std.com and ftp
To: info-hams@ucsd.edu

In article <763369646snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus)
writes:
>For the pickers of nits out there, this was from a usershell at Netcom.
>Bottom line, the ftp server at <something>.std.com is indeed up and working.
>I guess if you've logged in with a "-"prefix to suppress the logon message
>you miss the details and only get the access denied comment. Also, it is
>entirely NORMAL to get access denied to anonymous users on most systems.
>After all the system IS there for the "real" users. Anonymous is a freebie
>for guests. Kind of like that "special" window at the bank for special
>customers. But sometimes (when there aren't any) they'll take the regulars.
>
>73 es GE from Jeff
>
>/u1/jangus[150]=>> ftp world.std.com
>Connected to world.std.com.
>220 world FTP server (Version 6.19 Wed Nov 24 18:28:15 EST 1993) ready.
>Name (world.std.com:jangus): anonymous
>530-
>530-Sorry, there are currently too many FTP sessions connected to

>530-"world.std.com".
>530-
>530-The FTP archive is being moved to "ftp.std.com". Unlimited
>530-connections are allowed there, so please use it instead.
>530-
>530 User anonymous access denied.
>Login failed.
>ftp> quit
>221 Goodbye.
>/u1/jangus[151]=>> ftp wor ftp.std.com
>Connected to ftp.std.com.
>220 ftp FTP server (Version wu-2.1c(1) Sun Feb 13 14:46:20 EST 1994) ready.
>Name (ftp.std.com:jangus): anonymous
>331 Guest login ok, send your complete e-mail address as password.
>Password:
>230-
>230-Hello!
>230-
>230-This is the anonymous FTP area for world.std.com, a public access Unix
>230-system. Accounts directly on the system are available via telnet or
>230-direct-dial (617-739-9753, 8N1, V.32bis (14.4K), V.32 (9600), 2400, etc.),
>230-login as new (no password) to create an account. Accounts are charged
>230-at $5/mo+$2/hr or $20/20hrs/month, your choice. Grab the details in
>230-the world-info directory here if interested.

I think a lot of people are NOT reading this message carefully. This message
is simply an advertisement for the World online service. Rates are for logging
in as an interactive user (eg. dialup, telnet) and using the machine that
way.

Anonymous FTP is by its nature a FREE service.

the reason the service was moved from world.std.com to ftp.std.com is because
the usage level was having performance implications for PAYING customers.

If the operators of ftp.std.com see fit to limit the number of simultaneous
accesses, well that's their right. You'll find such no nearly every ftp site.

(I am a customer of world.std.com, not otherwise associated).

>230-
>230-
>230-Please read the file README
>230- it was last modified on Wed Apr 21 16:46:51 1993 - 324 days ago
>230 Guest login ok, access restrictions apply.
>ftp> pwd
>257 "/" is current directory.
>ftp> quit
>221 Goodbye.
>/u1/jangus[152]=>> exit
>
>

> Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
>Internet: jangus@skyld.grendel.com | a fanciful dimension to any
> US Mail: PO Box 4425 Carson, CA 90749 | story."
> Phone: 1 (310) 324-6080 | Peking Noodle Co.
>

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

Date: Fri, 11 Mar 1994 17:54:26 GMT
From: world!dts@uunet.uu.net
Subject: Best cars for mobile HF/VHF??
To: info-hams@ucsd.edu

In article <CMIACE.D9C@hpqmoea.sqf.hp.com> dstock@hpqmoca.sqf.hp.com (David Stockton)
writes:
>
> I'm happy with my choice, a Diesel powered Range-Rover derivative
>called a "Discovery"
>
> Give serious thought to Diesels, no ignition, no computers
>

And no emissions controls. :-(Diesel smoke is a suspension of carbon particles
impregnated with the byproducts of combustion, which is small enough to
enter your lungs and lodge in the lung walls. Once lodged all those combustion
byproducts leach out into your body. Diesel vehicles need dust traps at the
very least.

>
> David GM4ZNX
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Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

Date: 10 Mar 94 23:25:09 GMT
From: nprdc!ihnp4.ucsd.edu!sdd.hp.com!vixen.cso.uiuc.edu!howland.reston.ans.net!news.intercon.com!news.pipeline.com!malgudi.oar.net!mailhost.interaccess.com!interaccess.com!hopken@network.ucsd.
Subject: For Sale Ads Here?
To: info-hams@ucsd.edu

Hi All. What's the feeling about posting personal ham radio equip
ads here? I have some stuff for sale (good equipment, not boat anchors)
but I hesitate to post an ad here if that's frowned on. Someone advise me.
--
==========
Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA

Date: 11 Mar 1994 17:47:55 GMT
From: ihnp4.ucsd.edu!swrinde!emory!europa.eng.gtefsd.com!howland.reston.ans.net!math.ohio-state.edu!magnus.acs.ohio-state.edu!csn!col.hp.com!jwc@network.ucsd.edu
Subject: Grounding and lightning protection
To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <2lo2ck$pod@dartvax.dartmouth.edu> Kenneth.E.Harker@Dartmouth.Edu (Kenneth E. Harker) writes:
: > I am going to be installing a VHF/UHF vertical base station
: >antenna on the roof of my fraternity house in the next week or two.
: >Before I do, however, I am really interested in learning about what
: >steps I can take to help protect the house against lightning. The
: >antenna is about 7 feet tall and the tip of the antenna will be about
: >40' off the ground.
: > Is there a book or other source of information that someone could
: >recommend to me? While I'm not terribly worried about this (there are
: >plenty of other structures nearby that are a lot taller than 40') I
: >would like to take whatever reasonable precautions I can.
: > Thanks.

: Here's something I posted a while back on this subject that may be
: helpful.

: In article <9209291528.AA03542@PCS.CNU.EDU> doughty@PCS.CNU.EDU (David Doughty) writes:
: >I have recently come into posession of a roof mounted tower (about 10 ft.
: > - has thrust bearing, uses guy wires attached to roof, etc.) and want to
: >mount it on the roof of my two story house. My problem is that the tower

: >will be one of the highest structures around, and is almost certain to be
: >struck by lightning sooner or later (at least I want to be prepared).
: >I would like to know the best way to ground the tower.
: >
: >In the ARRL handbook (and also the NEC - National Electrical Code) there
: >is a lot of discussion about protecting the feedline by grounding the shield
: >of the coax, using arrestors, switching them to ground when not in use etc.
: >There is also some discussion of grounding a REAL tower. But I haven't been
: >able to find much on roof towers. What I want to be sure (or at least as
: >sure as possible) of is that if the antenna/tower gets hit, the lightning
: >strike doesn`t arc through the house, etc.
: >
: >Some specific questions I have are:
: >
: >1. What size of ground lead(s) to use for the tower? I realize that
: >bigger is better but the cost of enormous cable is prohibitive. What
: >is reasonable if you EXPECT or PLAN on a direct hit?

: The NEC says number 8 solid is the minimum size for the downlead of
: a lightning rod. Consider this the smallest wire you can use. Since
: lightning is a pulse that has RF components through VHF, skin effect
: matters. A better downlead is 5 inch wide copper flashing run as straight
: as possible to ground, but in no case having a 90 degree or sharper
: bend in the path.

: >2. How many?

: If you use the correct size, and do the bonding correctly, one is
: sufficient. If you aren't going to be able to inspect the run
: frequently, you might consider paralleling a number 8 solid wire
: with the 5 inch strap so that if corrosion opens one connection,
: you will still have a better path to ground than through your
: roof.

Also concider using old RG-8 & RG-11 with centers & sheilds tied
together as grounding cables. Lots of this coax throwed away needlessly.

(John)

k
: >3. What paths do I run them? The obvious answer would be the shortest,

j
: except that the shortest path is on the opposite side of the house from
: the shack and the feedlines. Would the resulting 'cage' effect be good
: or bad?

: Normally, you want the shortest and *straightest* path to ground. However,
: ground loops can be disasterous. Make up your mind to establish a single
: ground point somewhere on your property and connect all ground runs to
: this one point. Make sure the utility grounds are also bonded to this
: point. Don't ever depend on earth conductivity to close a ground circuit
: and don't ever use a feedline shield as a ground conductor.

: It's ok to have multiple grounds, but they must tie to the single
: point ground via low inductance, high conductivity cabling in a
: *star* configuration, not in a daisy chain. Daisy chaining grounds
: is a recipe for disaster.

: Setting up a ground cage is an extreme measure of protection. To do
: it right is not simple. Doing it wrong can be dangerous. If you can't
: analyse all the current paths properly for ground loop effects, don't
: do it.

: Bring *all* cables into your shack via a "ground window", that includes
: power and telephone. A ground window is a single small area, usually a
: rack panel, copper plate, or the like, that each wire is attached to via
: an arrestor of the proper type for that kind of cable. The ground window
: is then connected to the master single point ground by a heavy strap or
: cable. This assures you that all cabling entering the shack will be at
: near the same potential during a strike (plus or minus the breakover
: voltage of the arrestors). With quality arrestors, you shouldn't ever
: have a voltage differential of more than 200-400 volts across your
: equipment. Most equipment will tolerate this kind of voltage for the
: few milliseconds required. Note that your entire shack may be elevated
: to several thousand volts above ground due to the resistive drop of
: your single ground lead, but as long as *every* part of the shack is
: elevated the same amount, no net current can flow.

: >3. Do I need to stand them off from the roof?

: It's generally not necessary, but it won't hurt. Remember that a direct
: lightning stroke will typically flow 4,000 amperes or more for several
: milliseconds. The wire can get quite hot. I've seen number 12 solid
: *vaporized* by a lightning stroke. That's why you want to use at least
: number 8 wire or heavy strap.

: >4. Do I need to attach to each leg of the tower?

: That depends on the tower construction. If the tower is welded, connecting
: to one leg is sufficient. If it is bolted or riveted, inspect it carefully
: for loose connections and use bond straps to make it a single conductor.

: >5. What about the guy wires?

: Generally, *don't* ground the guy wires. If the tower is going to carry
: an HF antenna, you'll likely want to break guys with insulators anyway
: to avoid pattern disturbances.

: >6. Anything else I should know?

: A single ground rod is not an effective ground in most soils. Use
: at least three no closer than 4 feet apart in a triangular arrangement.
: Bond them all together with your heavy strap. If you have *metal*
: underground water piping, tie to that too. Remember, *star* configuration.
: No ground should connect to another except at the *single* point
: connection. And no downlead should connect anywhere but at the single
: point.

: Always *mechanically* bond ground wires and straps. Don't depend on
: *any* soldered connection. Solder *will* melt when lightning strikes.
: The NEC says there should be *no* splices in a ground run. That's perhaps
: a bit extreme. A *good* mechanical and electrical splice should be ok,
: but rather safe than have the insurance company void your claim.

: >I know that there's no guarantee when it comes to lightning strikes,
: >but it is my family in the house and I want to be sure I have done
: >everything I can to protect them.

: That's a good attitude Dave. Lightning kills more people each year
: than any other weather related thing. Besides, the better ground
: field can help your HF signals *every* day.

: Gary KE4ZV

: --
: Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
: Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
: 534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
: Lawrenceville, GA 30244 | |

Date: Fri, 11 Mar 94 13:44:07 PST
From: ihnp4.ucsd.edu!swrinde!elroy.jpl.nasa.gov!nntp-server.caltech.edu!mustang.mst6.lanl.
gov!newshost.lanl.gov!usenet@network.ucsd.edu
Subject: Re FT-726r for sale
To: info-hams@ucsd.edu

The FT-726r has found a good home with a Chicago family. Thanks to
all who responded.

Date: 11 Mar 1994 20:18:50 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!howland.reston.ans.net!vixen.cso.uiuc.edu!newsr
elay.iastate.edu!news.iastate.edu!wjturner@network.ucsd.edu
To: info-hams@ucsd.edu

References <CMD7Gw.2wo@usenet.ucs.indiana.edu>, <CMDD89.1pH@world.std.com>,
<CMEG3M.GJ9@murdoch.acc.Virginia.EDU>re
Subject : Re: Definition of CW speeds

In article <CMEG3M.GJ9@murdoch.acc.Virginia.EDU> clh6w@faraday.clas.Virginia.EDU (Carole
L. Hamilton) writes:
>You've make quite a leap in going from PARIS to 50 units! What
>asumptions did you make about dash per dot ratio? And how many
>dots per space?

FYI--the accepted "correct" ratios are 3 to 1. Thus a dah is three times the
length of a dit. This same ratio holds in the length of the "spaces" between
dits and dahs and longer spaces between characters and then words. Adding
this all up, using a dit as the basic length, you should get the word paris
lasting 50 dits-lengths.

This is why peole who have some background in music generally have a cleaner fist--it's in the tripletts.

73, Will N0RDV/AE
--
Will Turner, N0RDV ----------
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov ----------

Date: 11 Mar 1994 20:28:53 GMT
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!wjturner@network.ucsd.edu
To: info-hams@ucsd.edu

References <2lnm9t$643@jericho.mc.com>, <1994Mar10.223223.13794@arrl.org>, <2lptqg$7b4@cville-srv.wam.umd.edu>ton.a
Subject : Re: 1x1 Callsigns?

In article <2lptqg$7b4@cville-srv.wam.umd.edu> ham@wam.umd.edu (Scott Richard Rosenfeld) writes:
>As for the request for a call like A4L, this can't be done because the US
>doesn't have the rights to these calls. I believe A1, A4, A5, and A6 are
>all allocated (can't remember exactly who, though). The US has allocations
>to "AA-AL."

My understanding was that they are not allocated. The only reason we can have N#XXX, W#XXX, or K#XXX is because the US has KAA-KAZ, NAA-NZZ, and WAA-WZZ, whereas whe only have AAA-ALZ. (If they are allocated, it is as a prefix, and thus a person may have A66XX in whatever place it is that has them, but there is *no* A6XX.)

--
Will Turner, N0RDV ----------
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov ----------

Date: 11 Mar 1994 19:56:13 GMT
From: ihnp4.ucsd.edu!pacbell.com!sgiblab!swrinde!emory!sol.ctr.columbia.edu!newsxfer.itd.umich.edu!news1.oakland.edu!vela.acs.oakland.edu!prvalko@network.ucsd.edu
To: info-hams@ucsd.edu

References <CMF7EE.Ly1@news.Hawaii.Edu>, <763281224snx@skyld.grendel.com>, <LEVIN.94Mar11103108@powell.bbn.com>d.um
Subject : Re: [News] Auctioning Rules set up by FCC

I worked in a ham radio shop back then and the FT-101 was the PREMIER radio for the 10 1/2 Meter crew. It was sold as receive only but was modified by clipping a little brown wire on the bandswitch.

I actually had an FT-101E a year or so ago. Sold it to a new novice,
probably could have got more for it if I sold it to a CBer.

73 =paul= wb8zjl

Date: 11 Mar 1994 20:01:59 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.msfc.nasa.gov!sol.ctr.columbia.edu!newsxfer.itd.umich.edu!news1.oakland.edu!vela.acs.oakland.edu!prvalko@network.ucsd.edu
To: info-hams@ucsd.edu

References <2kdqco$7lq@geraldo.cc.utexas.edu>, <2ke42t$144@transfer.stratus.com>, <2lqbck$rqj@meaddata.meaddata.com>bia.edu
Subject : Re: Dayton parking

I'm staying at the Radisson this year too. I was told they would be
running their own shuttle because their would be no bus service this
year.

The problem is not going to be WHERE to park but HOW to get near HARA!
I imagine that Shiloe Spring Road is going to be hellacious.

73 paul wb8zjl

End of Info-Hams Digest V94 #278
****

2880. Re: Grounding and lightning protection

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 12:04:19 UTC
From: pcant@mta.ca
Message-ID: <pcant-130394120419@animation.mta.ca>
Source record: 269732

In article <1994Mar12.150042.22113@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> EXCERPT

> Now remembering that 20 Coulombs have to be dissipated, the following
> formula tells how long that would take.
>
> T = 3600*Q*I
>
> where T is time in hours, Q is charge in Coulombs, I is dissipator
> current in amperes, and 3600 is the number of seconds in an hour.
> For the condition outlined above,
>
> T=3600*20*1*10^-4 = 7.2 *hours*.
>
> That's 7.2 hours to dissipate the energy of *one* lightning bolt.

Remember that Amperes are the same as Coulombs per second. So the correct formula is

I = Q/T and we get T = Q/I = 20/0.1 = 200 seconds, if we use the suggested current value of 100 mA.

OK, this is still a fair bit of time to get rid of the dangerous 20 Coulombs of charge. If the lightning is really crashing all around you, this flow rate is not sufficient to avoid a strike.

Paul Cant Physics Dept., Mount Allison University

2881. Suggestions for Resistive Spark Plug Cables

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 12:25:26 UTC
From: andy@clark.net
Message-ID: <2lv0nm$c7t@clarknet.clark.net>
Source record: 269733

Recently, I had a major tuneup on my Plymouth Acclaim. The service included replacing the spark plug cables. The tuneup people used cheap, non resisistive cables. The result is that on 220 MHz FM, I now have some QRN which I never had before. If I went to the dealer for exact replacement cables, the set would cost around $85. In the auto discount stores, the cables are pretty cheap looking, and probably non resistive. So I'm looking for suggestions for nationally-available resistive type cable sets that are reasonably priced, which you have had success with in minimizing ignition noise. Thanks!

Please e-mail your responses to andy@clark.net.

andy-k4adl

2882. Electronic Schematics-Exo

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 12:31:00 UTC
From: ed.lang@pplace.com
Message-ID: <5c.14830.23.0N17ADCE@pplace.com>
Source record: 269734

ME-->Would anyone mind assisting me by downloading my catalog from the BBS and
-->let me know if it is possible to post it in specified groups of people who
-->could possibly become part of our manufacturing team of exotic surveillanc
-->gear for law enforcement agencies.

I would like to hear more about this. I am self employed and have
electronics experience. I have been servicing equipment since 1976.

Thanks

 SLMR 2.1a KC4YLX DX-CLUSTER & WA4TFZ PBBS ed.lang@pplace.com

2883. Ramsey Kit Transceivers-A

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 12:31:00 UTC
From: ed.lang@pplace.com
Message-ID: <5c.14828.23.0N17ADCC@pplace.com>
Source record: 269735

RH-->I was going to get the ramsey 2 or 6 meter fx models transceiver that you
-->build yourself simply because I think I will find radio more interesting i
-->do it
-->myself instead of getting premade.

I wish Heathkit was still active in the HAM radio market place for kits.

RH-->Now,I have heard these are no good?
-->Is this true,will someone leave me their experiences in maiL?

I have never build any Ramsey kit, but a few hams in the local club
bought the 220MHZ kits and build them as a group project.
have not heard anything good about the radio. Some of
the units have never worked, some dont work long before
needing repair (few days) and then they do not have a
good sound to them. I understand that the 2M kit is OK.
This group of hams are made up of engineers and some with no technical
background so the quality of building should be ok. I will not buy the
220Mhz kit that I wanted to because of this experience.
Remember, I have no direct experience with this case, just talking to
and listening on the local repeater to the topic.

Good Luck

• SLMR 2.1a • KC4YLX DX-CLUSTER & WA4TFZ PBBS ed.lang@pplace.com

2884. Electronic Schematics-Exo

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 12:31:00 UTC
From: ed.lang@pplace.com
Message-ID: <5c.14829.23.0N17ADCD@pplace.com>
Source record: 269736

ME-->Would anyone mind assisting me by downloading my catalog from the BBS and
-->let me know if it is possible to post it in specified groups of people who
-->could possibly become part of our manufacturing team of exotic surveillanc
-->gear for law enforcement agencies.

I would like to hear more about this. I am self employed and have
electronics experience. I have been servicing equipment since 1976.

Thanks

 SLMR 2.1a KC4YLX DX-CLUSTER & WA4TFZ PBBS ed.lang@pplace.com

2885. Re: Diesel or Taurus fr HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 13:43:56 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar13.134356.26825@ke4zv.atl.ga.us>
Source record: 269737
Cross-posted to:
rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

In article <2lr2dj$20m@brahms.udel.edu> penneys@brahms.udel.edu (Robert Penneys) writes:
> I got a variety of responses for a car which would be good for 100 watts
>or so of HF and 50 or so of 2 meter and 440 radio. Criteria were lack of
>interference from car into receiver and from transmitter into auto
>electronics.
>
>Diesels and the Taurus were among those favored. Anyone else have comments
>on these choices.

People often say to buy a diesel because it won't generate any RFI. I wish they could have owned my diesel Nissan pickup. It had the most horrendous RFI I've ever experienced in a vehicle. There was a severe popping noise, similar to really severe ignition noise, any time the engine was running. I could disconnect the alternator belt and the battery (after starting the engine), and the noise was still there with no vehicle electrical equipment operating at all. It got into everything from the entertainment radio to HF, VHF, and UHF ham gear.

I tried every trick I know, (and I thought I knew them all), without any success. The dealer couldn't fix it. The zone office couldn't fix it. I even talked to factory engineers in Japan. Everyone was stumped. I finally sold the vehicle back to them and bought a Jeep pickup. Aside from some alternator whine, which I fixed with a choke, it's generated no RFI from it's 6 cylinder gasoline engine.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2886. Re: Filter Shape Factor?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 14:34:44 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar13.143444.27083@ke4zv.atl.ga.us>
Source record: 269738
Cross-posted to: rec.radio.amateur.misc,sci.electronics

In article <2lu79c$o0e@hp-col.col.hp.com> chrism@col.hp.com (Chris Magnuson) writes:
> What does the shape factor spec of a filter indicate? I assume something
> about passband/stopband transition or some such?

Yes, it's the ratio of the 60 db to 6 db attenuation bandwidths. A perfect filter would have a shape factor of 1:1, IE the 6 and 60 db bandwidths are identical. But real filters are never that good. A shape factor of 2:1 is considered excellent. Note that this doesn't tell you everything you want to know about the filter. You also want to know the passband ripple and differential phase response, and, of course, you're interested in the insertion loss and terminating impedances of the filter if you're going to design it into a piece of equipment.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2887. Re: CAN WE SELL STUFF HERE?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 14:52:33 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403130947591.gilbaronw0mn.DLITE@delphi.com>
Source record: 269739

>Kenneth E. Harker (Kenneth.E.Harker@Dartmouth.Edu) wrote:
>: In article <CMDtGv.I7t@ucdavis.edu>
>
>
>: Everything you say is correct except where you claim that advertising
>: is acceptable here. However, I have always understood that the
>: self-adopted rules of the USENET (and no, I'm not referring to the
>happens in the newsgroups, if you think it's bad now AOL is now on the
>newsgroups another million newbies in one fell swoop.

I suppose you are mad at both AOL and Delphi. I say hooray and the more the merrier. At least I don't quote entire messages and quotes fo quotes as do a lot of the so called experienced old timers here from edu sites.
Often even the headers are qutoed. I think that there is room for all. The more access, the more information. If people don't follow good procedure then just inform them gently and most will change.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

2888. TX amp kit? Help.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 15:09:43 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Mar13.230943.1@ntuvax.ntu.ac.sg>
Source record: 269740
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,

I need a reccomendation for a TX amp of about 20-30 watts output on
20 meters from about 4 watts input, kitform, small sized so I can put it in
the same case as my QRP xcvr and with built in T-R switching. Price must not
be too expensive. Any ideas?

73,
Daniel

2889. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 16:42:44 UTC
From: jmaynard@nyx10.cs.du.edu
Message-ID: <1994Mar13.164244.26464@mnemosyne.cs.du.edu>
Source record: 269741
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

In article <1994Mar11.135613.16379@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
>Look at what the cops are driving. Ford Crown Victorias seem popular
>with them, as do Chevy Caprices.

There's a brand new '94 Crown Vic with police package sitting in my driveway
as I type this, courtesy of the EMS I run with. All I can say is...WOW!!!
(Unfortunately, I have to pass it along at the end of my shift...)

> Order your's with the same fleet codes
>that they use and you'll have a car that works well with radios.

I thought mere mortals couldn't buy cars with those fleet codes.
--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"The difference between baseball and politics is that, in baseball, if you
get caught stealing, you're out!" -- Ed Shanks

2890. Re: Diesel or Taurus fr HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 16:42:59 UTC
From: dts@world.std.com
Message-ID: <CMM3ro.BLM@world.std.com>
Source record: 269742
Cross-posted to:
rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

In article <1994Mar13.134356.26825@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <2lr2dj$20m@brahms.udel.edu> penneys@brahms.udel.edu (Robert Penneys) writes:
>> I got a variety of responses for a car which would be good for 100 watts
>>or so of HF and 50 or so of 2 meter and 440 radio. Criteria were lack of
>>interference from car into receiver and from transmitter into auto
>>electronics.
>>
>>Diesels and the Taurus were among those favored. Anyone else have comments
>>on these choices.
>
>People often say to buy a diesel because it won't generate any RFI. I wish
>they could have owned my diesel Nissan pickup. It had the most horrendous
>RFI I've ever experienced in a vehicle. There was a severe popping noise,
>similar to really severe ignition noise, any time the engine was running.
>I could disconnect the alternator belt and the battery (after starting the
>engine), and the noise was still there with no vehicle electrical equipment
>operating at all. It got into everything from the entertainment radio to
>HF, VHF, and UHF ham gear.

Ignition noise is often NOT the problem. It is very possible that the
engine used fuel injection (solenoids, square wave pulses), an electronic
fuel pump (my Pathfinder has a noise problem from the fuel pump), and
a computer system. So getting a diesel is not likely to be a big help. Now
in the old days of mechanical fuel pumps, carbs, etc. it might have been
fine...

>
>I tried every trick I know, (and I thought I knew them all), without
>any success. The dealer couldn't fix it. The zone office couldn't fix
>it. I even talked to factory engineers in Japan. Everyone was stumped.
>I finally sold the vehicle back to them and bought a Jeep pickup. Aside
>from some alternator whine, which I fixed with a choke, it's generated
>no RFI from it's 6 cylinder gasoline engine.
>
>Gary
>--
>Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
>Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
>534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
>Lawrenceville, GA 30244 | |

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

2891. Ramsey Hobbykits QAMP.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 17:12:01 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Mar14.011201.1@ntuvax.ntu.ac.sg>
Source record: 269743
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,
Has anyone here built the Ramsey Hobbykits' QAMP Tx amplifier with
the T-R reply? Any comments? What is the size of this thing and how well does
it perform? Tks.

73,
Daniel

2892. ANS-071 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 17:17:34 UTC
From: cowdin@pogo.DEn.mmc.COM
Message-ID: <199403131720.JAA07200@AMSAT.Org>
Source record: 269744

SB SAT @ AMSAT $ANS-071.01
W3IWI EXPLAINS SAT PROPAGATION

HR AMSAT NEWS SERVICE BULLETIN 071.01 FROM AMSAT HQ
SILVER SPRING, MD MARCH 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-071.01

W3IWI Explains A Propagation Phenomenon Observed By IT9XXS

Giovanni Mazzola (IT9XXS) posed a question about a propagation phenomenon he has been noticing on KO-23, KO-25, UO-22 and other digital satellites. He reported that he has regularly observed that at the end of the pass, when the satellite is between 0 and -2 degrees elevation, the signal exhibits three strong peaks. During the pass it may be S4 but when the three peaks in signal strength occur, they are over S9. After that he loses the signal altogether. He notes that he has a good horizon, looking out to the sea to the north.

Ton Clark (W3IWI) offers the following explanation: What IT9XXS is observing is classic and very predictable. It is the result of two physical effects: atmospheric refraction and "Lloyd's Mirror" reflections.

The earth's atmosphere bends the signals so that your "radio" horizon is below the physical horizon. The refractive index of the air is about 300 parts per million different from unity depending on the temperature and water vapor content of the air. This is precisely the reason that most line-of-sight computations of terrestrial paths increase the effective radius of the earth by about 1.33. Under some tropospheric conditions like when the temperature increases with height and/or when anomalous water vapor content is present, ducting can occur and VHF/UHF paths may extend to thousands of kilometers. This is especially true of over-water paths like the frequent duct that occurs between southern California and Hawaii or between Italy and Spain. Since the path in question is over water, this is probably the reason signals are received from the satellite when it is below the apparent horizon.

The second effect that is occurring is a reflection of the signals from the water, so the antenna is receiving two different signals. In optics this is often called the "Lloyd's mirror" effect. When the signal is reflected, its phase is changed by 180 degrees, so the direct and reflected signals arrive at the antenna out of phase and cancel at the horizon. At other elevations, the two signals traverse different paths so the phase difference of the direct and reflected signals varies, and the signals may either add constructively (increasing the signal strength) or destructively (causing a null). If the angles at which maxima

and minima signal were known, it would be possible to compute the height of receiving antenna above the level of the sea (reflector).

This reflection effect was first seen in about 1947 when some Australians observed the radio "star" Cygnus-A from an antenna atop a sea cliff. The fact that they observed deep nulls allowed them to demonstrate that Cygnus-A was a compact object, smaller than a few arc-minutes in diameter and not a large-scale feature of the previously discovered radiation from our Milky Way galaxy. This work was done at VHF frequencies not far from our 2M amateur band.

[The AMSAT News Service (ANS) would like to thank Tom Clark (W3IWI) for this explanation and IT9XXS for posing the question.]

/EX
SB SAT @ AMSAT $ANS-071.02
STS-59 SAREX INFO

HR AMSAT NEWS SERVICE BULLETIN 071.02 FROM AMSAT HQ
SILVER SPRING, MD MARCH 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-071.02

N5QWL Provides A "Fact" Sheet For The Upcoming STS-59 SAREX Mission

Shuttle Amateur Radio Experiment (SAREX) Fact Sheet

STS-59 Space Shuttle Endeavour

When: Planned Launch April 7, 1994 at 12:07 UTC for 9 days of 2M operations.

Where: Earth Orbit. Altitude 220 kilometers, with radio coverage of latitudes from 70 degrees North to 70 degrees South. We are in one of the lowest altitude orbits ever flown by the shuttle, so pass times will be shorter than usual.

Operators: Dr. Jay Apt (N5QWL) and Dr. Linda Godwin N5RAX. N5QWL is the commander of the Blue Shift aboard Endeavour and will operate the shuttle systems during the "night" shift, while N5RAX is the Payload Commander, responsible for overall operation of three large radars in the shuttle's cargo bay during the "day" shift.

Modes: FM Voice
VOICE CALL SIGNS: N5QWL and N5RAX
Packet (Beacons giving daily mission activities daily if we get a chance, and robot QSOs -- successful connects will be issued a contact number by the robot) PACKET CALL SIGN: W5RRR-1

Frequencies: We will operate split.
PLEASE DO NOT TRANSMIT ON THE DOWNLINK FREQUENCY!

VOICE: Downlink (shuttle transmits) on 145.55 MHz
Uplink (ground transmits) on 144.91, 144.93, 144.95,
144.97, and 144.99 (except over Europe) - we'll listen
on those 5 frequencies to spread out the pileup a bit.
Uplink for Europe only: 144.80, 144.75, 144.70

Successful QSOs on voice will be facilitated by using
standard international phonetics for your call sign.
We will not answer any stations using non-standard
phonetics. Use your entire call sign -- we log with an
audio tape recorder. Do not use our call sign --
passes are very short, and we want to work as many
folks as possible.

PACKET: Downlink (shuttle transmits) on 145.55
Uplink (ground transmits) on 144.49 (worldwide)

If you can, decrease your radio's deviation to 3 KHz (most are
initially set at 5 KHz) and compensate for the Doppler shift. If
you cannot, wait until a minute or 90 seconds after we come over
your horizon to transmit -- that will put you within our IF. If a
station transmits without following these suggestions, we just hear
what sounds like a noisy carrier. The above applies to both voice
and packet.

QSL via: ARRL, ATTN: STS-59 QSLs, 225 Main Street, Newington, CT 06111,
USA. Include a self-addressed stamped envelope (SASE). Non-US
stations include a self addressed envelope with $0.50 of US
postage affixed or appropriate IRCs. Include the Callsign worked,
Date, UTC, Mode, and Frequency. For packet contacts, include the
QSO number issued by the robot. SWL QSL's: Include the Callsign
heard, Date, UTC, Mode, and Frequency.

Information during the mission: AMSAT bulletins, Compuserve, Genie,
Prodigy, local packet bulletin boards,
ARRL bulletins, and HF voice from NASA
Johnson Space Center ARC, Houston, Texas,
W5RRR, or NASA Goddard Spaceflight Center
ARC, Greenbelt, Maryland, WA3NAN,
frequencies listed below.

W5RRR may be found on or near: 7.215, 14.280, 21.360, and 28.400 MHz.

WA3NAN retransmits NASA Select Audio and SAREX bulletins simultaneously on
or near 3.860, 7.185, 14.295, 21.395, and 28.650 MHz.

The NASA Info BBS at Johnson Space Center, Houston, will also carry
Keplerian elements and SAREX bulletins. (713) 483-2500, 1200 baud,
8-N-1. At the "ENTER NUMBER:" prompt, type 62511 <return> and log onto the
BBS. The Keps and bulletins will be in the welcome message. Disconnect
rapidly to facilitate access by others.

Operations Notes: If you have a packet QSO number issued to you by the
robot, don't try to get another one! Our on-board

program drops the duplicates anyhow, and all you
are doing is making it harder for the other folks. We'll
issue you a QSL card if you appear in the "heard" list on
the TNC and we have issued you a QSO number...that's a
2-way contact, AND REMEMBER, THIS IS ONLY A HOBBY!

N5QWL will be asleep over most USA passes, and N5RAX will be busy with
assigned duties for most daylit US passes, so try us on packet over the
USA if the sun is up. Remember, our packet call sign is W5RRR-1. We'll
try to work voice (1) when we are not otherwise engaged, and (2) at night
or when the ground is cloudy (we are generally busy taking pictures of the
Earth during clear daylight passes).

If I can get to it, I'll activate the SAREX about 3 hours into the mission;
deactivation will occur at about 8 days, 17 hours after launch (unless we
get a one-day science mission extension, then it will be deactivated at
about 9 days, 17 hours after launch).

Prelaunch Keplerian Elements, courtesy of Gil Carman (WA5NOM) of the JSC
ARC):

STS-59
1 00059U 94097.74947238 .00221188 00000-0 11303-3 0 70
2 00059 57.0053 276.3038 0009259 269.9963 90.0094 16.19806752 56

Satellite: STS-59
Catalog number: 00059
Epoch time: 94097.74947238 = (07-APR-94 17:59:14.41 UTC)
Element set: 007
Inclination: 57.0053 deg
RA of node: 276.3038 deg Space Shuttle Flight STS-59
Eccentricity: .0009259 Prelaunch Element set JSC-007
Arg of perigee: 269.9963 deg Launch: 07-APR-94 12:07 UTC
Mean anomaly: 90.0094 deg
Mean motion: 16.19806752 rev/day G. L. Carman
Decay rate: 2.21188e-03 rev/day^2 NASA Johnson Space Center
Epoch rev: 5
Checksum: 327

[The AMSAT News Service (ANS) would like to thank N5QWL for in this
bulletin item.]

/EX
SB SAT @ AMSAT $ANS-071.03
AO-13 OPERATIONS NET SCHEDS

HR AMSAT NEWS SERVICE BULLETIN 071.03 FROM AMSAT HQ
SILVER SPRING, MD MARCH 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-071.03

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date UTC Mode Phs NCS Alt NCS

19-Mar-94 1730 B 073 W5IU WA5ZIB
26-Mar-94 2130 B 084 WA5ZIB W5IU

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. If neither of the Net Control Stations show up, any participant is invited to act as the NCS.

AO-13 ZRO Tests For March 1994

The following schedule of Mode "B" tests were chosen for convenient operating times and favorable squint angles. The tests can be heard on 145.840 MHz. Andy McAlister (WA5ZIB) will conduct all the tests. Mode "JL" tests will no longer occur due to the failure of AO-13's 70CM trans-mitter.

Day Date (UTC) Time Areas covered

Saturday Mar. 19, 1994 1930 UTC NA, SA, Europe, Africa
Saturday Mar. 26, 1994 2315 UTC NA, SA

Note that the dates and days are shown in "UTC". Any changes will be announced as soon as possible via the AMSAT HF and AO-13 Operations Nets.

All listener reports with date of test and numbers copied should be sent to Andy MacAllister (WA5ZIB), AMSAT V.P. User Operations, 14714 Knights Way Drive, Houston, TX 77083-5640. A report will be returned verifying the level of accurate reception. An S.A.S.E. is appreciated but not required.

/EX
SB SAT @ AMSAT $ANS-071.04
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 071.04 FROM AMSAT HQ
SILVER SPRING, MD MARCH 12, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-071.04

Weekly OSCAR Status Reports: 12-MAR-94

AO-13: Current Transponder Operating Schedule:
L QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Jan 31-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 145 |<- S transponder; B trsp. is OFF

Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 240/0, Apr 04
[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current schedule for transponder operations:
ANALOG MODE:

23-MAR-94 7:52 -TO- 30-MAR-94 8:15 UTC

DIGITAL MODE: Unless otherwise noted above.
[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

RS-10: Still operating normally for ZS6AOP. The usual regular stations are often found working thru the satellite as well as the "odd" new comer. Reports of copying the beacon while well below the horizon, over the South Pole on south-to-north passes with good signal strengths have been coming in. Hopefully, with more stations becoming active there will be some real long distance sub-horizon contacts soon. [ZS6AOP]

RS-12: RS-12 is currently operating in Mode K. The uplink passband is 21.210 - 21.250 MHz with downlink on 29.410 - 29.450 MHz. The transponder is non-inverting USB or CW, i.e., if you are on 21.225, then listen on 29.425 +/- the doppler shift, adjust your transmit frequency as you work the satellite to keep the downlink frequency constant. The beacon frequencies are 29.408 MHz or 29.454 MHz. The Robot operates on 29.454 MHz. The uplink frequency for the the Robot is 21.129 MHz. When the Robot is not operating, this freq-uency pair can also be used for general QSOs.
[KB8FGC @ KC8TW.#swoh.usa.na]

AO-21: This OSCAR sends down beautiful signals, 59+ signals about 90% of the time. Along with DOVE, ZS6AOP can recommend AO-21 to anyone who wants to start capturing and examing telemetry using basic equipment. [ZS6AOP]

AO-16: Operating normally. [WH6I]

LO-19: Operating normally. [WH6I]

IO-26: Operating normally. [WH6I]

KO-23: Operating normally. [WH6I]

KO-25: Operating normally. KO-25 has a number of new earth images this past week. So far WH6I notes that he has not seen any pictures that were particularly interesting to him. [WH6I]

AO-27: There is no particular schedule transponder schedule per se, and the way it works is that amateur radio section of the satellite has only solar cell illumination to power it so as to not strain the drain of on board battery power on the commercial side. Therefore, if your

using ITRACK OR QUICKTRACK watch the sun terminator (sun darkness line) when it crosses into the light, the Analog repeater turns on but not until it is in sunlight. N4OUL's own experience is that he has worked it with a hand held ICOM-2AT on low power 2.5 W into 4 el 2M antenna and was full quieting stateside. Also VE3BDR worked it with a portable low power with a mag mount. Uplink on 2M is FM at 145.850 MHz and downlink on FM at 436.800 MHz. [N4OUL]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

2893. RB317 7/7 Semantics Words to Avoid

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 17:21:24 UTC
From: Roy Engehausen <enge@almaden.ibm.com>
Message-ID: <$racesbul.317.1994@ampr.org>
Source record: 269745
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Bid: $RACESBUL.317

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
LANDLINE BBS OPEN TO ALL 916-262-1657
RACESBUL.317 RELEASE DATE: March 14, 1994

Subject: MGT - Semantics - 7/7 - Words To Avoid

Amateur Radio operators have a tendency to use terms that are meaningless to others with whom they work (which leads to confusion) and even cases where Amateurs are not used due to that confusion. Accordingly, over the past two years a concerted effort to avoid certain words has paid off in many areas in those organizations cognizant of this aspect of interpersonal communication.

Astute Amateurs do NOT say to the sheriff's deputy at the roadblock "I'm a ham radio operator in the RACES, or the Vista Radio Club." Rather, they reply "I'm with the Vista Country Emergency Management Agency reporting to my duty station."

Here, our State Auxiliary Communications Service participants make a conscious effort to avoid these terms: Amateur, ham, ARES, ARRL, DEC, EC, RACES, SEC, section or emergency coordinator, and volunteer. Instead, they say they work for the Governor's Office of Emergency Services. If needed, they add that they work for the Telecommunications Branch. Rarely is it necessary to indicate in what capacity; but if needed, they are FCC licensed communications specialists, not Amateur Radio operators.

Recognition of how Amateurs deprecate themselves by their own terminology was emphasized by a California Department of Forestry official who pointedly requested that "Never say you are just a volunteer, or an Amateur. Say you are a CDF Fire Information Officer, for that is what you have been trained for, and are in fact."

The words YOU use DO make a difference in how YOU are perceived by other people. A poor choice of words (no matter how highly YOU

think of them) can unknowingly convey a concept or picture that
is totally at odds with what you THINK you conveyed!

(End of a series originally titled "From My Lookout" in 7 parts,
by Stanly E. Harter.)
EOF

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races
and can be retrieved using FTP.

2894. RB317 7/7 Semantics Words to Avoid

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 17:21:24 UTC
From: enge@almaden.ibm.COM
Message-ID: <199403131723.JAA07713@ucsd.edu>
Source record: 269746

Bid: $RACESBUL.317

TO: ALL ES, CD, AND PUBLIC SAFETY DIRECTORS VIA AMATEUR RADIO
INFO: ALL RACES OPERATORS IN CALIFORNIA
INFO: ALL AMATEUR RADIO OPERATORS
FROM: CA STATE OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 MEADOWVIEW RD., SACRAMENTO, CA 95832
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(End of a series originally titled "From My Lookout" in 7 parts,
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EOF

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and can be retrieved using FTP.

2895. Ham Radio Mail/UUCP/FTP Software Archive & Callsign Server @NS.RISC.NET

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 17:37:30 UTC
From: phil@multiop.com
Message-ID: <2lvj0q$eej@paperboy.ids.net>
Source record: 269747

```
* RISC.NET Ham Radio Server *

RISC.NET has established a series of services which all radio amateurs can
access. These services currently include access to the Buckmaster CD ROM
public domain files in addition to the Buckmaster callsign database.

Additional information can be obtained by writing to: root@ns.risc.net

This file contains information on:

1. Accessing RISC.NET's callsign database
2. Accessing RISC.NET's public domain shareware database

================================================================================
1. ACCESSING THE BUCKMASTER CD-ROM CALLSIGN DATABASE

The Buckmaster Callsign Database is accessed by logging into a special account
called "hamradio". From this account, you can access the Buckmaster CD-ROM
callsign database (only the US calls at this point, as the international
database is encrypted and Buckmaster will not provide the key so we can
create a UNIX version of their ICALL.EXE program - if anyone knows how to
decrypt this data, please contact us!) or you can TELNET to the Buffalo or
NJIT callsign databases.

Procedure:

Telnet or rlogin to "155.212.2.2" (or, "ns.risc.net")
Login with user-id "hamradio". No password is required.

At this point the system is self-explanatory.

================================================================================
2. ACCESSING THE BUCKMASTER CD-ROM PUBLIC DOMAIN SHAREWARE

The Buckmaster PD Software Library can be accessed in one of the following
manners: UUCP, FTP, or Mail-based archive server. A complete list of all
files available for transfer may be obtained by retrieving file:

!~/ham-radio/mascd.dir

--------------------------------------------------------------------------------

Anonymous UUCP Information:

Telebit Trailblazer Plus Dial-In: 1.401.455.0347
9600 to 300bps v.32/v.42 Dial-In: 1.401.331.3706
ns.risc.net!login: xxcp
Password: xenix
```

To download a file, issue the following uucp request on your machine:

uucp anomaly!~/ham-radio/files/<filename> yoursite!<to-filename>

All files are stored in /usr/spool/uucppublic/ham-radio on RISC.NET's
Archive.

To request the master list of ham-related files, uucp as follows:

uucp anomaly!~/ham-radio/mascd.dir yoursite!yourname

Mail-based Archive Server:

To answer the interim demand of people on the Internet who wish access
to the ham radio files, we have established a mail-based server which can
process requests for files. Note that in order to keep our SMTP connection
from getting bogged down, we only process *5* megabytes worth of software
requests PER DAY. Users with alternative means of obtaining files are
encouraged to do so.

To receive instructions on how to use the mail-based archive server, send
an e-mail message to "snarf@ns.risc.net", with a Subject: of 'snarf'
and the following two lines starting in column 1:

snarf address [your e-mail address]
snarf help

For example:

snarf address wb9aaz@gello.pcb.org
snarf help

These commands will forward a help file to your reply address. This help
file contains all information you require on how to obtain software listings
and uuencoded mailings of archive contents.

To receive a 104k detailed description of all ham files in the archive,
include the following line in the body of your message:

snarf send ham-radio/mascd.dir

Note that if you do not have an address line, or you have other errors in the
body of your text, you will not get a reply from the server.

Zmodem/Ymodem/Xmodem/Kermit/Sealink:

All files can be accessed from RISC.NET's "bbs" login, for those users without
UUCP or FTP access. Validation is required to access the file sections,
though, so on your first call leave a note in FEEDBACK stating that you're
calling to download from the ham-radio archive, and we'll see that you get an
special access account.

FTP Access:

Our IP Address is: 155.212.2.2! Or, for those of you with Nameservers, try "ns.risc.net"! As with our SMTP connection, the number of FTP users we allow on our link is also limited to prevent net-congestion. If you receive an "all ports are currently in use" message, please try again later. Login using anonymous FTP account "ftp", and your e-mail address for a password!

==========

2896. Telemetering Hardware

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 18:27:55 UTC
From: ms38@prism.gatech.EDU
Message-ID: <144959@hydra.gatech.EDU>
Source record: 269748

Perhaps some of you can help me with a couple of projects we have in our Biodynamics lab. We have need for transmitting (one way) some analog and digital signals to a nearby PC for recording and later processing, but need a wireless link. On one project, the maximum distance is around 30' (mobile cats walking around) and the other, around 1 mile (instrumenting Olympic cyclists).

Can you recommend vendors that offer kits, modules or systems that enable the wireless transmission of analog and digital signals over small distances? More specifically, we would like to remote 4+ x 2000 hz, analog (12 bit range) signals to a PC. I could ADC and convert to high speed serial locally then transmit a digital serial stream. I am familiar with EE cktry so am not afraid to build peripherial equipment but need help with the basic RF link.

Your help is most appreciated. Since I don't often read newsgroups, I would appreciate any information mailed to me @

ms38@prism.gatech.edu

Thanks in advance. -Mike Sinclair-

2897. Tokyo HiPower HL-90U Amp

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 20:54:19 UTC
From: ggs@lanl.gov
Message-ID: <2lvrga$jpo@newshost.lanl.gov>
Source record: 269749
Cross-posted to: rec.radio.swap,rec.radio.amateur.space,rec.radio.amateur.misc,rec.radio.amateur.equipment

Recently I have aquired a THP HL-90U amplifier with it I got
a schematic drawing only no other docs. I would love to aquire
both the owners manual and service manual. Actually I would be
happy with anything. The usual offer to compense for copying
mailing etc applies.

2898. 1296 Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 20:58:40 UTC
From: ggs@lanl.gov
Message-ID: <2lvrkq$jpo@newshost.lanl.gov>
Source record: 269750
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna

I just bought my first 1296 rig and naturally have no
antenna. I am looking for input on what to get and/or
wanting to buy one. I have hade recommended to the the
loop Yagi from Down East Microwave. Opinions and offers
will greatly appreciated.

2899. Wanted Yaesu G-5400B

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 21:01:03 UTC
From: ggs@lanl.gov
Message-ID: <2lvrt7$jpo@newshost.lanl.gov>
Source record: 269751
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna

As the subject implies I am in the market for
a Yaesu G-5400B azimuth/elevation rotor for my
fledgeling satellite station. Before buying a new
one I thought I ask if anyone has one to sell. Drop
e-mail to ggs@lanl.gov or phone (505)672-3717 home
(505)667-3923 office

2900. TM-732 or FT-5100?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 21:17:11 UTC
From: cxn2624@u.cc.utah.edu
Message-ID: <2lvvsn$er0@u.cc.utah.edu>
Source record: 269752

I am having a hard time deciding between the Kenwood TM-732
and the Yaesu FT-5100. Can anyone give me their opinion.

Thanks

P.S. what is the best price you have been quoted and where was it?

Thanks
Jon

2901. Re: Filter Shape Factor?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 23:00:47 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403131753591.gilbaronw0mn.DLITE@delphi.com>
Source record: 269753
Cross-posted to: rec.radio.amateur.misc,sci.electronics

> What does the shape factor spec of a filter indicate? I assume something
> about passband/stopband transition or some such?
>
> Thanks,
> Chris Magnuson
> chrism@col.hp.com
>

Ussually the shape would be the Freq at the top of a curve at 6 db down over the frequency at the bottom of the curve at 60 db down. In other words if attenuation is 6 db at 4 mhz and 60 db at 8 mhz then the shape is 2 to 1. It can get more complicated that that but that is the idea.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

2902. IPS Daily Report 13 03 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 23:29:37 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar13.232937.29627@ips.oz.au>
Source record: 269754
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

IPS RADIO AND SPACE SERVICES AUSTRALIA
Daily Solar And Geophysical Report
Issued at 2330 UT 13 March 1994
Summary for 13 March and Forecast up to 16 March
No warning is current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 090/034

1B. SOLAR FORECAST
14 March 15 March 16 March
Activity Very low Low Low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : unsettled to active

Estimated Indices : A K Observed A Index 12 March
Learmonth 18 4324 3433
Fredericksburg 20 27
Planetary 22 36

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
14 Mar 20 Unsettled to active.
15 Mar 18 Unsettled.
16 Mar 13 Unsettled.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
13 Mar normal normal fair
PCA Event : None.

3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
14 Mar normal fair poor
15 Mar normal fair poor
16 Mar normal normal fair
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were depressed 20-40% then near predicted monthly values after 12UT.

T index: -2

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
14 Mar 30 Near predicted monthly values.
15 Mar 35 Near predicted monthly values.
16 Mar 35 Near predicted monthly values.

Predicted Monthly T Index for March is 40.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2903. Re: QST review of Dual-Bander HTs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-13 23:46:39 UTC
From: longo@sfpp.com
Message-ID: <1994Mar13.154639.402@sfpp.com>
Source record: 269755

```
In article <2lnmln$9h9@news.aero.org>, cantrell@Aero.org (JC Cantrell) writes:
> In article <1994Mar9.083813.394@sfpp.com>, longo@sfpp.com (Bob Longo) writes:
> |>
> |> Unfortunately ftp.std.com does not allow anonymous logins! They expect you to
> |> pay. No thanks, I'll look elsewhere.
> |>
> |> -Bob Longo
> |> KE6EQY
> |> =====================================+====================================
> |> Bob Longo (longo@sfpp.com) | "I am not gonna raise taxes on the
> |> Santa Fe Pacific Pipelines | middle class to pay for these
> |> Los Angeles, CA | programs." - Bill Clinton
>
> Ahh, but try anonymous ftp, not a login. It just worked for me, and then you
> can download the files you want.
>
> Yours,
> cantrell@aero.org
> WA2VXU
--

Thanks to all of you who have pointed out to me that ftp.std.com does in fact
allow anonymous logins. The first time I tried to login via anonymous to
them, I got the message about paying for an account and then FTP promptly
disconnected me - leading me to believe that a paid account was the only
access they allowed.

Someone pointed out via mail that the limit on anonymous logins may have
been exceeded resulting in the ftp disconnection.

Anyway, I tried again - and success! FTP anonymous DOES work! Thanks to
all who straightened me out.

-Bob Longo
================================================================================
Bob Longo (longo@sfpp.com) KE6EQY
Santa Fe Pacific Pipelines
Los Angeles, CA
```

2904. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 00:02:47 UTC
From: kchen@apple.com
Message-ID: <2m09j7$4i@apple.com>
Source record: 269756

wjturner@iastate.edu (William J Turner) writes:

[regarding A2, A3, A4, ... prefixes]

>My understanding was that they are not allocated. The only reason we can have
>N#XXX, W#XXX, or K#XXX is because the US has KAA-KAZ, NAA-NZZ, and WAA-WZZ,
>whereas whe only have AAA-ALZ. (If they are allocated, it is as a prefix, and
>thus a person may have A66XX in whatever place it is that has them, but there
>is *no* A6XX.)

This rule is violated all the time. Examples are V7A and V7X.

The ARRL DXCC list shows

A2 Botswana
A3 Tonga
A4 Oman
A5 Bhutan
A6 United Arab Emirates
A7 Qatar
A9 Bahrain

Geez, perhaps I can move to the UAE and use A6TY :-).

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

2905. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 00:28:01 UTC
From: davros@bga.com
Message-ID: <2m0b2h$dn7@ivy.bga.com>
Source record: 269757

OK, since everyone else is dreaming of confusing calls, how about if I get:
W5HSI

Try sending that one in cw, with a paddle, especially at hi speed.

Actually, I think I'll keep mine. I've thought about changing it to a
WB
or
WA
or K
prefix but I rather like KB. Besides...I haven't been around long enough
to earn the W. ;)
I mean really, how can you beat
-.- -... ....-.. ...- ..--.. -... -.-

73

--
Buddy Brannan, KB5ELV | God is love.
Riff-Raff #4 | Love is blind.
Internet: davros@bga.com | Buddy is blind.
davros@ccwf.cc.utexas.edu | Buddy is God.

2906. Daily Summary of Solar Geophysical Activity for 12 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 00:34:57 UTC
From: oler@rho.uleth.ca
Message-ID: <9403140035.AA07504@rho.uleth.ca>
Source record: 269758
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

12 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 12 MARCH, 1994

NOTE: Stratospheric warming continues over Siberia, Canada, and the polar
regions, extending towards Greenland today. Temperature gradient
remains reversed between 60N and the pole at 10 HPA and above.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 071, 03/12/94
10.7 FLUX=092.8 90-AVG=106 SSN=078 BKI=4465 4334 BAI=033
BGND-XRAY=B1.1 FLU1=1.7E+07 FLU10=2.3E+04 PKI=4465 5344 PAI=036
BOU-DEV=055,044,152,079,067,036,031,063 DEV-AVG=065 NT SWF=00:000
XRAY-MAX= C1.1 @ 0743UT XRAY-MIN= A5.1 @ 0623UT XRAY-AVG= B1.6
NEUTN-MAX= +002% @ 2355UT NEUTN-MIN= -002% @ 1950UT NEUTN-AVG= +0.2%
PCA-MAX= +0.2DB @ 0230UT PCA-MIN= -0.3DB @ 0810UT PCA-AVG= +0.0DB
BOUTF-MAX=55356NT @ 0223UT BOUTF-MIN=55301NT @ 0643UT BOUTF-AVG=55328NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+071,+000,+000
GOES6-MAX=P:+133NT@ 1637UT GOES6-MIN=N:-126NT@ 0603UT G6-AVG=+091,+023,-050
FLUXFCST=STD:095,095,095;SESC:095,095,095 BAI/PAI-FCST=020,015,015/025,020,015
KFCST=3214 5112 3214 4112 27DAY-AP=028,028 27DAY-KP=4335 4554 4443 3544
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MINSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 11 MAR 94 was 34.7.
The Full Kp Indices for 11 MAR 94 are: 5- 5o 5o 5+ 4o 4+ 3+ 4+
The 3-Hr Ap Indices for 11 MAR 94 are: 38 46 45 56 30 31 19 34
Greater than 2 MeV Electron Fluence for 12 MAR is: 2.4E+09

SYNOPSIS OF ACTIVITY

Solar activity was low by virtue of a single,
uncorrelated C-class xray burst. Region 7690 (S15W54) was
numbered.

Solar activity forecast: solar activity is expected to be
very low to low. Regions 7688 (N19E47) and 7690 have the best

chance for C-class activity.

The geomagnetic field has been at unsettled to minor
storm levels. High latitude stations saw major storm levels.
Energetic electron fluxes (GT 2 MeV) were at high levels during
the period.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled to active levels for the next 24 hours
then mostly unsettled for the remainder of the forecast period.
High latitude stations will experience minor storming for the
next 24 hours.

Event probabilities 13 mar-15 mar

Class M 01/01/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 13 mar-15 mar

A. Middle Latitudes
Active 20/25/35
Minor Storm 25/20/15
Major-Severe Storm 05/05/05

B. High Latitudes
Active 20/20/35
Minor Storm 30/30/15
Major-Severe Storm 05/05/05

HF propagation conditions were below normal again over
most regions. Conditions are expected to gradually improve
over the next 48 to 72 hours, although a return to near-normal
conditions is not expected for several days thereafter.
Transpolar and transauroral circuits will continue to see the
strongest signal degradation and will be the slowest to
recover.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 12/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7685 S08W71 343 0080 CSO 06 007 BETA
7687 N18W66 338 0000 AXX 00 001 ALPHA
7688 N19E47 225 0090 CAO 08 011 BETA
7689 S11W53 325 0010 BXO 04 004 BETA
7690 S14W54 326 0010 BXO 04 005 BETA
REGIONS DUE TO RETURN 13 MARCH TO 15 MARCH
NMBR LAT LO

NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 12 MARCH, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1541 1541 1542 390

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 12 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 12/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
68 N58W34 N33W52 N38W54 N60W44 323 EXT POS 004 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
11 Mar: 0036 0048 0103 B3.8
0424 0428 0441 B2.4
0606 0612 0618 B2.1
1003 1007 1013 B1.2
1930 1933 1936 B1.2

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 005 (100.0)

Total Events: 005 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2907. Best truck/sport util for HF/VHF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 01:10:38 UTC
From: penneys@brahms.udel.edu
Message-ID: <2m0die$7t5@brahms.udel.edu>
Source record: 269759
Cross-posted to:
rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Thanks for your input on cars etc. so far.

I have narrowed my thinking to a small pickup or sport utility such as
Bronco, Trooper, etc., probably 86 to 91.

I am told that American cars have less solid state devices to go awry
due to RF from HF or VHF rigs, that Ford seems to be a good choice, that
Japanese vehicles may be more susceptible to RF.

Again, besides physical comfort (my back) criteria include lack of problems
from car to rig and vice versa, and other normal concerns.

All input welcomed. Thanks again. Bob

--
Bob Penneys, WN3K Frankford Radio Club Internet: penneys@pecan.cns.udel.edu
Work: Ham Radio Outlet (Delaware) (800) 644-4476; fax (302) 322-8808
Mail at home: 12 East Mill Station Drive Newark, DE 19711 USA

2908. 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 03:00:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <940314013024222@sec21.uucp>
Source record: 269760

From: sec21!grissin@ax.apc.org (Gerson Rissin)
Newsgroups: rec.radio.amateur.misc
Subject: 1x1 Callsigns?
Date: Mon, 14 Mar 1994 03:30:09 GMT

BL-.Has anyone seen anything in print about whether the vanity
BL-.callsign program (someday) might allow 1x1 calls?

BL-.(for info, a 1x1 is like K1X)

At least it will be very good for my WPX HONOR ROLL...

73, Gerson Rissin, PY1APS & PY7APS, EX-PY0APS
5BDXCC & 5BWAZ (1st. PY), DXCC (ALL COUNTRIES) & WPX HONOR ROLL

################################ Super Tag ################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

2909. 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 03:01:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <940314013024223@sec21.uucp>
Source record: 269761

From: sec21!grissin@ax.apc.org (Gerson Rissin)
Newsgroups: rec.radio.amateur.misc
Subject: 1X1 Callsigns?
Date: Mon, 14 Mar 1994 03:41:09 GMT

BL-.Has anyone seen anything in print about whether the vanity
BL-.callsign program (someday) might allow 1x1 calls?

BL-.(for info, a 1x1 is like K1X)

I found in my WPX HONOR ROLL log the following:

L1Y, R1W, M1B, R6F

73, Gerson Rissin, PY1APS & PY7APS, EX-PY0APS
5BDXCC & 5BWAZ (1st. PY), DXCC (ALL COUNTRIES) & WPX HONOR ROLL

##################################### Super Tag #####################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

2910. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 03:02:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <940314013024224@sec21.uucp>
Source record: 269762

From: sec21!grissin@ax.apc.org (Gerson Rissin)
Newsgroups: rec.radio.amateur.misc
Subject: 1X1 Callsigns?
Date: Mon, 14 Mar 1994 03:45:09 GMT

JH-.Bob Levine (levine@mc.com) wrote:
JH-.: Has anyone seen anything in print about whether the vanity
JH-.: callsign program (someday) might allow 1x1 calls?

JH-.: (for info, a 1x1 is like K1X)

JH-.No, but I've heard ther is a 2X1 ... JY1

I found in my WPX HONOR ROLL log the following:

LI1, R1W, M1B, R6F

73, Gerson Rissin, PY1APS & PY7APS, EX-PY0APS
5BDXCC & 5BWAZ (1st. PY), DXCC (ALL COUNTRIES) & WPX HONOR ROLL

################################ Super Tag ################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

2911. Re: QSL's? VI9XN ZL7FD ZS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 03:02:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <940314013024225@sec21.uucp>
Source record: 269763

From: sec21!grissin@ax.apc.org (Gerson Rissin)
Newsgroups: rec.radio.amateur.misc
Subject: QSL's
Date: Mon, 14 Mar 1994 03:49:11 GMT

SM-.> Has anyone received QSL cards from the DX operations:
SM-.> VI9XN December 1993
SM-.> ZL7FD November 1993
SM-.> ZS8MI December 1993.
^^^^^^^^^^^^
Are you sure about this operation - Dec. 93?

SM-.I'm still waiting for my card on ZS8MI and my QSO goes back
SM-.to May or June 1993.
^^^ ^^^^
Did you work the same station May and June 1993 ?

I got my QSL but my QSO was earlier (at least two years).

73, Gerson Rissin, PY1APS & PY7APS, EX-PY0APS
5BDXCC & 5BWAZ (1st. PY), DXCC (ALL COUNTRIES) & WPX HONOR ROLL

################################ Super Tag ################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

2912. 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 03:19:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <940314030027226@sec21.uucp>
Source record: 269764

From: sec21!grissin@ax.apc.org (Gerson Rissin)
Newsgroups: rec.radio.amateur.misc
Subject: 1x1 Callsigns?
Date: Mon, 14 Mar 1994 03:30:09 GMT

BL-.Has anyone seen anything in print about whether the vanity
BL-.callsign program (someday) might allow 1x1 calls?

BL-.(for info, a 1x1 is like K1X)

At least it will be very good for my WPX HONOR ROLL...

73, Gerson Rissin, PY1APS & PY7APS, EX-PY0APS
5BDXCC & 5BWAZ (1st. PY), DXCC (ALL COUNTRIES) & WPX HONOR ROLL

################################ Super Tag ################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

2913. 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 03:20:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <940314030027227@sec21.uucp>
Source record: 269765

From: sec21!grissin@ax.apc.org (Gerson Rissin)
Newsgroups: rec.radio.amateur.misc
Subject: 1X1 Callsigns?
Date: Mon, 14 Mar 1994 03:41:09 GMT

BL-.Has anyone seen anything in print about whether the vanity
BL-.callsign program (someday) might allow 1x1 calls?

BL-.(for info, a 1x1 is like K1X)

I found in my WPX HONOR ROLL log the following:

L1Y, R1W, M1B, R6F

73, Gerson Rissin, PY1APS & PY7APS, EX-PY0APS
5BDXCC & 5BWAZ (1st. PY), DXCC (ALL COUNTRIES) & WPX HONOR ROLL

##################################### Super Tag #####################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

2914. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 03:21:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <940314030027228@sec21.uucp>
Source record: 269766

From: sec21!grissin@ax.apc.org (Gerson Rissin)
Newsgroups: rec.radio.amateur.misc
Subject: 1X1 Callsigns?
Date: Mon, 14 Mar 1994 03:45:09 GMT

JH-.Bob Levine (levine@mc.com) wrote:
JH-.: Has anyone seen anything in print about whether the vanity
JH-.: callsign program (someday) might allow 1x1 calls?

JH-.: (for info, a 1x1 is like K1X)

JH-.No, but I've heard ther is a 2X1 ... JY1

I found in my WPX HONOR ROLL log the following:

LI1, R1W, M1B, R6F

73, Gerson Rissin, PY1APS & PY7APS, EX-PY0APS
5BDXCC & 5BWAZ (1st. PY), DXCC (ALL COUNTRIES) & WPX HONOR ROLL

################################## Super Tag ##################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

2915. Re: QSL's? VI9XN ZL7FD ZS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 03:24:00 UTC
From: gerson.rissin@sec21.uucp
Message-ID: <940314030027229@sec21.uucp>
Source record: 269767

From: sec21!grissin@ax.apc.org (Gerson Rissin)
Newsgroups: rec.radio.amateur.misc
Subject: QSL's
Date: Mon, 14 Mar 1994 03:49:11 GMT

To: milewski@oregon.uoregon.edu

SM-.> Has anyone received QSL cards from the DX operations:
SM-.> VI9XN December 1993
SM-.> ZL7FD November 1993
SM-.> ZS8MI December 1993.
^^^^^^^^^^^^^
Are you sure about this operation - Dec. 93?

SM-.I'm still waiting for my card on ZS8MI and my QSO goes back
SM-.to May or June 1993.
^^^ ^^^^
Did you work the same station May and June 1993 ?

I got my QSL but my QSO was earlier (at least two years).

73, Gerson Rissin, PY1APS & PY7APS, EX-PY0APS
5BDXCC & 5BWAZ (1st. PY), DXCC (ALL COUNTRIES) & WPX HONOR ROLL

################################ Super Tag ################################
# #
[] Gerson Rissin - Rio de Janeiro, RJ. - BRASIL
#

2916. Icom 737 Transmit Mod File

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 04:11:18 UTC
From: lmarrin@delphi.com
Message-ID: <xm+tgKW.lmarrin@delphi.com>
Source record: 269768

Following is a copy from Packet, on how to do the transmit mod for the well-reviewed. Icom 737 HF transciever. If someone else tries it, please let us know if it works.

73 from Leigh/KM6JE in Santa Barbara.

1300 B# 1312 ALL IW3BKW WW 940312 ICOM IC-737 GEN.COVERANGE.
From: IW3BKW@OE7XCI.#TIR.AUT.EU
ICOM IC-737

GENERAL COVERANGE IN TRANSMISSION.

1) Remove the top and bottom covers of the transceiver.

2) Remove the final power amplifier module.

3) Locate the LOGIC-UNIT on witch there is a back-up lithium battery for the RAM memory.

4) On the LOGIC-UNIT, near the chip called IC6 (TMP82C265BF-2),between the output pin PC06 and the imput pin PA15, find the diode D3.

5) This diode is not an SMD component.

6) Cut the diode D3.

..Now the ICOM IC-737 will transmit from 1,6 to 30 Mhz !!!.
73's de IW3BKW Riccardo @OE7XCI. ***

*** END OF MSG # 1300 from IW3BKW @ OE7XCI.#TIR.AUT.EU

2917. Repeaters reaching into the Black Rock Desert, Nevada?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 04:30:10 UTC
From: don.irving@rahul.net
Message-ID: <CMn0IA.BBw@rahul.net>
Source record: 269769

I'll be going into the Black Rock Desert 15 miles Northwest of Gerlack, Nevada later this spring for a rocket launch. I wonder if there are any repeaters that reach into there on two meters. The Susanville repeaters might if they are high enough. I suspect the Stateline repeaters are too far away. There is one listed in Winnemucca that might work if it is on the mountain peaks West of town. Nothing listed at Gerlach itself.

Any ideas?

Don, N6DRB
--

--
_/ _/ _/ _/ _/ _/ _/ _/ _/ _/ _/ _/ _/

2918. Re: ITU zone and CQ area?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 08:03:00 UTC
From: CSMSCST@MVS.OAC.UCLA.EDU
Message-ID: <19940314080324CSMSCST@MVS.OAC.UCLA.EDU>
Source record: 269593

In article <199403141440.GAA24663@ucsd.edu>,
rrossi@vnet.IBM.COM (Ron D. Rossi) writes:

>I live in Northwestern Vermont and want to include my ITU zone
>and CQ area on my QSL cards, but I don't know what they are?
>Can someone tell me or point me to a place to look?
>
You're in CQ zone 5 and ITU zone 8. There is a pair of maps
on 17-57 of the "ARRL Operating Guide". This book has a number
of other nice maps of use to DXers.
-- 73 de Chris Thomas, AA6SQ (ex-WA6HTJ) (CSMSCST@MVS.OAC.UCLA.EDU)

2919. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 08:55:59 UTC
From: smtp@zeus.USG.Sandy.NOvell.COM
Message-ID: <9403140904.AA23823@ns.Novell.COM>
Source record: 269770

```
From smtp Sat Mar 12 01:18 MST 1994 remote from zeus
Received: from ucsd.edu by ns.Novell.COM (4.1/SMI-4.1)
id AA00812; Fri, 11 Mar 94 19:37:47 MST
Received: from localhost by ucsd.edu; id PAA16404
sendmail 8.6.4/UCSD-2.2-sun
Fri, 11 Mar 1994 15:32:33 -0800 for info-hams-list
Received: from localhost by ucsd.edu; id PAA15906
sendmail 8.6.4/UCSD-2.2-sun
Fri, 11 Mar 1994 15:31:32 -0800 for info-hams-ddist
Errors-To: info-hams-relay@UCSD.EDU
Content-Length: 24325
Content-Type: text
Sender: info-hams-relay@UCSD.EDU
Precedence: List
Message-Id: <199403112331.PAA15906@ucsd.edu>
Date: Fri, 11 Mar 94 15:31:23 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@UCSD.EDU>
Errors-To: Info-Hams-Errors@UCSD.EDU
Reply-To: Info-Hams@UCSD.EDU
Precedence: Bulk
Subject: Info-Hams Digest V94 #278
To: Info-Hams@UCSD.EDU

Info-Hams Digest Fri, 11 Mar 94 Volume 94 : Issue 278

Today's Topics:
**For Sale** MFJ-948 Antenna Tuner & Astron RS-20A
1x1 Callsigns? (2 msgs)
800 number for QRZ CD-ROM @ $15 (2 msgs)
<world|ftp>.std.com and ftp
Best cars for mobile HF/VHF??
For Sale Ads Here?
Grounding and lightning protection
Re FT-726r for sale

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
------------------------------------------------------------------------
```

Date: Fri, 11 Mar 1994 11:22:07 MST
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.umbc.edu!eff!news.kei.com
!news.byu.edu!cwis.isu.edu!mica.inel.gov!pc-ojg.inel.gov!ojg@network.ucsd.edu
Subject: **For Sale** MFJ-948 Antenna Tuner & Astron RS-20A
To: info-hams@ucsd.edu

FOR SALE!!!

I have a brand new MFJ 948 antenna tuner. It is a Cross-Needle meter with
built-in lamp. Sells from MFJ for $129.95 (when they have them) + shipping
and handling. I just got it, but I just purchased a matching auto-tuner for
my Kenwood. I will sell this MFJ 948 for $119.00 + shipping.

The other item I have is a 6-month old Astron RS-20A (16 amp continuous, ICS -
20 amp). Cost new $90.00. Will sell for $75.00 + shipping. Again, the
reason for selling this gear is that I aquirred a matching Kenwood power
supply.

If interested, call (208) 526-7033 weekdays, (208) 524-1388 eves, or leave a
message on email at the addresses below.

Jay - WA4VRV

For all email, write to:

ojg@tis.inel.gov or GREENBJC@inel.gov

73's

For all email, write to:

ojg@tis.inel.gov or GREENBJC@inel.gov

73's

Date: 11 Mar 1994 20:23:21 GMT
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.
ans.net!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!wjturner@network.ucsd.ed
u
Subject: 1x1 Callsigns?
To: info-hams@ucsd.edu

In article <763354761snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus)
writes:
> Based on how some people view me, I'm gonna sign up for A6H. It's look good
> on the car too.

Hate to rain on your parade, but that call won't work. The US only has the
first half of the 'A's, thus you can't have an A#XXX call. (Or A#XX, A#X)
--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

Date: 11 Mar 94 13:33:22 CST
From: ihnp4.ucsd.edu!swrinde!menudo.uh.edu!hounix!mwk!gleason@network.ucsd.edu
Subject: 1x1 Callsigns?
To: info-hams@ucsd.edu

In article <2lo1ii$g94@oak.oakland.edu>, prvalko@vela.acs.oakland.edu (prvalko) writes:
> calls. If I remember correctly, In the US, the call must BEGIN with "A,
> K, N, or W" then have a SINGLE DIGIT NUMBER and followed by at LEAST one

W, A, N, and K...guess that makes us hams here in the states a
bunch of WANKers...I suspect the Brits had a hand in assigning us
these letters...

Lee K. Gleason N5ZMR
Control-G Consultants
gleason@mwk.com

Date: Fri, 11 Mar 1994 18:20:41 GMT
From: ihnp4.ucsd.edu!swrinde!emory!news-feed-2.peachnet.edu!ukma!rsg1.er.usgs.gov!dgg.cr.u
sgs.gov!bodoh@network.ucsd.edu
Subject: 800 number for QRZ CD-ROM @ $15
To: info-hams@ucsd.edu

A few weeks ago, there was a posting that offered a copy of the new QRZ
CD-ROM for $15. I ordered one but haven't gotten it, now I can't seem
to find the number. Anyone still have it? Thanks...

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

Date: Fri, 11 Mar 1994 19:51:19 +0000
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!pipex!d
emon!golflima.demon.co.uk!George@network.ucsd.edu
Subject: 800 number for QRZ CD-ROM @ $15
To: info-hams@ucsd.edu

The phone number on my QRZ disk is - +1 800 786-9907 but it may
not be what you want...73 from Rus. G6GLIn article
<1994Mar11.182041.22542@rsg1.er.usgs.gov>
bodoh@dgg.cr.usgs.gov "Tom Bodoh" writes:

> Newsgroups: rec.radio.amateur.misc
> Path: golflima.demon.co.uk!demon!pipex!howland.reston.ans.net!
> europa.eng.gtefsd.com!emory!news-feed-2.peachnet.edu!ukma!rsg1.er.usgs.gov!

> dgg.cr.usgs.gov!bodoh
> From: bodoh@dgg.cr.usgs.gov (Tom Bodoh)
> Subject: 800 number for QRZ CD-ROM @ $15
> Message-ID: <1994Mar11.182041.22542@rsg1.er.usgs.gov>
> Sender: news@rsg1.er.usgs.gov
> Organization: U.S. Geological Survey, Reston VA
> Date: Fri, 11 Mar 1994 18:20:41 GMT
> Lines: 11
>
> A few weeks ago, there was a posting that offered a copy of the new QRZ
> CD-ROM for $15. I ordered one but haven't gotten it, now I can't seem
> to find the number. Anyone still have it? Thanks...
>
> --
> ++
> + Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
> + USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
> + Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
> + "Welcome back my friends to the show that never ends!" EL&P +
> ++
>

--
Russell Lee

Date: Fri, 11 Mar 1994 18:23:27 GMT
From: world!dts@uunet.uu.net
Subject: <world|ftp>.std.com and ftp
To: info-hams@ucsd.edu

In article <763369646snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus)
writes:
>For the pickers of nits out there, this was from a usershell at Netcom.
>Bottom line, the ftp server at <something>.std.com is indeed up and working.
>I guess if you've logged in with a "-"prefix to suppress the logon message
>you miss the details and only get the access denied comment. Also, it is
>entirely NORMAL to get access denied to anonymous users on most systems.
>After all the system IS there for the "real" users. Anonymous is a freebie
>for guests. Kind of like that "special" window at the bank for special
>customers. But sometimes (when there aren't any) they'll take the regulars.
>
>73 es GE from Jeff
>
>/u1/jangus[150]=>> ftp world.std.com
>Connected to world.std.com.
>220 world FTP server (Version 6.19 Wed Nov 24 18:28:15 EST 1993) ready.
>Name (world.std.com:jangus): anonymous
>530-
>530-Sorry, there are currently too many FTP sessions connected to

>530-"world.std.com".
>530-
>530-The FTP archive is being moved to "ftp.std.com". Unlimited
>530-connections are allowed there, so please use it instead.
>530-
>530 User anonymous access denied.
>Login failed.
>ftp> quit
>221 Goodbye.
>/u1/jangus[151]=>> ftp wor ftp.std.com
>Connected to ftp.std.com.
>220 ftp FTP server (Version wu-2.1c(1) Sun Feb 13 14:46:20 EST 1994) ready.
>Name (ftp.std.com:jangus): anonymous
>331 Guest login ok, send your complete e-mail address as password.
>Password:
>230-
>230-Hello!
>230-
>230-This is the anonymous FTP area for world.std.com, a public access Unix
>230-system. Accounts directly on the system are available via telnet or
>230-direct-dial (617-739-9753, 8N1, V.32bis (14.4K), V.32 (9600), 2400, etc.),
>230-login as new (no password) to create an account. Accounts are charged
>230-at $5/mo+$2/hr or $20/20hrs/month, your choice. Grab the details in
>230-the world-info directory here if interested.

I think a lot of people are NOT reading this message carefully. This message
is simply an advertisement for the World online service. Rates are for logging
in as an interactive user (eg. dialup, telnet) and using the machine that
way.

Anonymous FTP is by its nature a FREE service.

the reason the service was moved from world.std.com to ftp.std.com is because
the usage level was having performance implications for PAYING customers.

If the operators of ftp.std.com see fit to limit the number of simultaneous
accesses, well that's their right. You'll find such no nearly every ftp site.

(I am a customer of world.std.com, not otherwise associated).

>230-
>230-
>230-Please read the file README
>230- it was last modified on Wed Apr 21 16:46:51 1993 - 324 days ago
>230 Guest login ok, access restrictions apply.
>ftp> pwd
>257 "/" is current directory.
>ftp> quit
>221 Goodbye.
>/u1/jangus[152]=>> exit
>
>

> Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
>Internet: jangus@skyld.grendel.com | a fanciful dimension to any
> US Mail: PO Box 4425 Carson, CA 90749 | story."
> Phone: 1 (310) 324-6080 | Peking Noodle Co.
>

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

Date: Fri, 11 Mar 1994 17:54:26 GMT
From: world!dts@uunet.uu.net
Subject: Best cars for mobile HF/VHF??
To: info-hams@ucsd.edu

In article <CMIACE.D9C@hpqmoea.sqf.hp.com> dstock@hpqmoca.sqf.hp.com (David Stockton)
writes:
>
> I'm happy with my choice, a Diesel powered Range-Rover derivative
>called a "Discovery"
>
> Give serious thought to Diesels, no ignition, no computers
>

And no emissions controls. :-(Diesel smoke is a suspension of carbon particles
impregnated with the byproducts of combustion, which is small enough to
enter your lungs and lodge in the lung walls. Once lodged all those combustion
byproducts leach out into your body. Diesel vehicles need dust traps at the
very least.

>
> David GM4ZNX
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>

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Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

Date: 10 Mar 94 23:25:09 GMT
From: nprdc!ihnp4.ucsd.edu!sdd.hp.com!vixen.cso.uiuc.edu!howland.reston.ans.net!news.intercon.com!news.pipeline.com!malgudi.oar.net!mailhost.interaccess.com!interaccess.com!hopken@network.ucsd.
Subject: For Sale Ads Here?
To: info-hams@ucsd.edu

Hi All. What's the feeling about posting personal ham radio equip
ads here? I have some stuff for sale (good equipment, not boat anchors)
but I hesitate to post an ad here if that's frowned on. Someone advise me.
--
==========
Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA

Date: 11 Mar 1994 17:47:55 GMT
From: ihnp4.ucsd.edu!swrinde!emory!europa.eng.gtefsd.com!howland.reston.ans.net!math.ohio-state.edu!magnus.acs.ohio-state.edu!csn!col.hp.com!jwc@network.ucsd.edu
Subject: Grounding and lightning protection
To: info-hams@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <2lo2ck$pod@dartvax.dartmouth.edu> Kenneth.E.Harker@Dartmouth.Edu (Kenneth E. Harker) writes:
: > I am going to be installing a VHF/UHF vertical base station
: >antenna on the roof of my fraternity house in the next week or two.
: >Before I do, however, I am really interested in learning about what
: >steps I can take to help protect the house against lightning. The
: >antenna is about 7 feet tall and the tip of the antenna will be about
: >40' off the ground.
: > Is there a book or other source of information that someone could
: >recommend to me? While I'm not terribly worried about this (there are
: >plenty of other structures nearby that are a lot taller than 40') I
: >would like to take whatever reasonable precautions I can.
: > Thanks.

: Here's something I posted a while back on this subject that may be
: helpful.

: In article <9209291528.AA03542@PCS.CNU.EDU> doughty@PCS.CNU.EDU (David Doughty) writes:
: >I have recently come into posession of a roof mounted tower (about 10 ft.
: > - has thrust bearing, uses guy wires attached to roof, etc.) and want to
: >mount it on the roof of my two story house. My problem is that the tower

: >will be one of the highest structures around, and is almost certain to be
: >struck by lightning sooner or later (at least I want to be prepared).
: >I would like to know the best way to ground the tower.
: >
: >In the ARRL handbook (and also the NEC - National Electrical Code) there
: >is a lot of discussion about protecting the feedline by grounding the shield
: >of the coax, using arrestors, switching them to ground when not in use etc.
: >There is also some discussion of grounding a REAL tower. But I haven't been
: >able to find much on roof towers. What I want to be sure (or at least as
: >sure as possible) of is that if the antenna/tower gets hit, the lightning
: >strike doesn`t arc through the house, etc.
: >
: >Some specific questions I have are:
: >
: >1. What size of ground lead(s) to use for the tower? I realize that
: >bigger is better but the cost of enormous cable is prohibitive. What
: >is reasonable if you EXPECT or PLAN on a direct hit?

: The NEC says number 8 solid is the minimum size for the downlead of
: a lightning rod. Consider this the smallest wire you can use. Since
: lightning is a pulse that has RF components through VHF, skin effect
: matters. A better downlead is 5 inch wide copper flashing run as straight
: as possible to ground, but in no case having a 90 degree or sharper
: bend in the path.

: >2. How many?

: If you use the correct size, and do the bonding correctly, one is
: sufficient. If you aren't going to be able to inspect the run
: frequently, you might consider paralleling a number 8 solid wire
: with the 5 inch strap so that if corrosion opens one connection,
: you will still have a better path to ground than through your
: roof.

Also concider using old RG-8 & RG-11 with centers & sheilds tied
together as grounding cables. Lots of this coax throwed away needlessly.

(John)

k
: >3. What paths do I run them? The obvious answer would be the shortest,

j
: except that the shortest path is on the opposite side of the house from
: the shack and the feedlines. Would the resulting 'cage' effect be good
: or bad?

: Normally, you want the shortest and *straightest* path to ground. However,
: ground loops can be disasterous. Make up your mind to establish a single
: ground point somewhere on your property and connect all ground runs to
: this one point. Make sure the utility grounds are also bonded to this
: point. Don't ever depend on earth conductivity to close a ground circuit
: and don't ever use a feedline shield as a ground conductor.

: It's ok to have multiple grounds, but they must tie to the single
: point ground via low inductance, high conductivity cabling in a
: *star* configuration, not in a daisy chain. Daisy chaining grounds
: is a recipe for disaster.

: Setting up a ground cage is an extreme measure of protection. To do
: it right is not simple. Doing it wrong can be dangerous. If you can't
: analyse all the current paths properly for ground loop effects, don't
: do it.

: Bring *all* cables into your shack via a "ground window", that includes
: power and telephone. A ground window is a single small area, usually a
: rack panel, copper plate, or the like, that each wire is attached to via
: an arrestor of the proper type for that kind of cable. The ground window
: is then connected to the master single point ground by a heavy strap or
: cable. This assures you that all cabling entering the shack will be at
: near the same potential during a strike (plus or minus the breakover
: voltage of the arrestors). With quality arrestors, you shouldn't ever
: have a voltage differential of more than 200-400 volts across your
: equipment. Most equipment will tolerate this kind of voltage for the
: few milliseconds required. Note that your entire shack may be elevated
: to several thousand volts above ground due to the resistive drop of
: your single ground lead, but as long as *every* part of the shack is
: elevated the same amount, no net current can flow.

: >3. Do I need to stand them off from the roof?

: It's generally not necessary, but it won't hurt. Remember that a direct
: lightning stroke will typically flow 4,000 amperes or more for several
: milliseconds. The wire can get quite hot. I've seen number 12 solid
: *vaporized* by a lightning stroke. That's why you want to use at least
: number 8 wire or heavy strap.

: >4. Do I need to attach to each leg of the tower?

: That depends on the tower construction. If the tower is welded, connecting
: to one leg is sufficient. If it is bolted or riveted, inspect it carefully
: for loose connections and use bond straps to make it a single conductor.

: >5. What about the guy wires?

: Generally, *don't* ground the guy wires. If the tower is going to carry
: an HF antenna, you'll likely want to break guys with insulators anyway
: to avoid pattern disturbances.

: >6. Anything else I should know?

: A single ground rod is not an effective ground in most soils. Use
: at least three no closer than 4 feet apart in a triangular arrangement.
: Bond them all together with your heavy strap. If you have *metal*
: underground water piping, tie to that too. Remember, *star* configuration.
: No ground should connect to another except at the *single* point
: connection. And no downlead should connect anywhere but at the single
: point.

: Always *mechanically* bond ground wires and straps. Don't depend on
: *any* soldered connection. Solder *will* melt when lightning strikes.
: The NEC says there should be *no* splices in a ground run. That's perhaps
: a bit extreme. A *good* mechanical and electrical splice should be ok,
: but rather safe than have the insurance company void your claim.

: >I know that there's no guarantee when it comes to lightning strikes,
: >but it is my family in the house and I want to be sure I have done
: >everything I can to protect them.

: That's a good attitude Dave. Lightning kills more people each year
: than any other weather related thing. Besides, the better ground
: field can help your HF signals *every* day.

: Gary KE4ZV

: --
: Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
: Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
: 534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
: Lawrenceville, GA 30244 | |

Date: Fri, 11 Mar 94 13:44:07 PST
From: ihnp4.ucsd.edu!swrinde!elroy.jpl.nasa.gov!nntp-server.caltech.edu!mustang.mst6.lanl.gov!newshost.lanl.gov!usenet@network.ucsd.edu
Subject: Re FT-726r for sale
To: info-hams@ucsd.edu

The FT-726r has found a good home with a Chicago family. Thanks to
all who responded.

Date: 11 Mar 1994 20:18:50 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!howland.reston.ans.net!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!wjturner@network.ucsd.edu
To: info-hams@ucsd.edu

References <CMD7Gw.2wo@usenet.ucs.indiana.edu>, <CMDD89.1pH@world.std.com>, <CMEG3M.GJ9@murdoch.acc.Virginia.EDU>re
Subject : Re: Definition of CW speeds

In article <CMEG3M.GJ9@murdoch.acc.Virginia.EDU> clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) writes:
>You've make quite a leap in going from PARIS to 50 units! What
>asumptions did you make about dash per dot ratio? And how many
>dots per space?

FYI--the accepted "correct" ratios are 3 to 1. Thus a dah is three times the length of a dit. This same ratio holds in the length of the "spaces" between dits and dahs and longer spaces between characters and then words. Adding this all up, using a dit as the basic length, you should get the word paris lasting 50 dits-lengths.

This is why peole who have some background in music generally have a cleaner fist--it's in the tripletts.

73, Will N0RDV/AE
--
Will Turner, N0RDV ----------
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov ----------

Date: 11 Mar 1994 20:28:53 GMT
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!wjturner@network.ucsd.edu
To: info-hams@ucsd.edu

References <2lnm9t$643@jericho.mc.com>, <1994Mar10.223223.13794@arrl.org>, <2lptqg$7b4@cville-srv.wam.umd.edu>ton.a
Subject : Re: 1x1 Callsigns?

In article <2lptqg$7b4@cville-srv.wam.umd.edu> ham@wam.umd.edu (Scott Richard Rosenfeld) writes:
>As for the request for a call like A4L, this can't be done because the US
>doesn't have the rights to these calls. I believe A1, A4, A5, and A6 are
>all allocated (can't remember exactly who, though). The US has allocations
>to "AA-AL."

My understanding was that they are not allocated. The only reason we can have N#XXX, W#XXX, or K#XXX is because the US has KAA-KAZ, NAA-NZZ, and WAA-WZZ, whereas whe only have AAA-ALZ. (If they are allocated, it is as a prefix, and thus a person may have A66XX in whatever place it is that has them, but there is *no* A6XX.)

--
Will Turner, N0RDV ----------
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov ----------

Date: 11 Mar 1994 19:56:13 GMT
From: ihnp4.ucsd.edu!pacbell.com!sgiblab!swrinde!emory!sol.ctr.columbia.edu!newsxfer.itd.umich.edu!news1.oakland.edu!vela.acs.oakland.edu!prvalko@network.ucsd.edu
To: info-hams@ucsd.edu

References <CMF7EE.Ly1@news.Hawaii.Edu>, <763281224snx@skyld.grendel.com>, <LEVIN.94Mar11103108@powell.bbn.com>d.um
Subject : Re: [News] Auctioning Rules set up by FCC

I worked in a ham radio shop back then and the FT-101 was the PREMIER radio for the 10 1/2 Meter crew. It was sold as receive only but was modified by clipping a little brown wire on the bandswitch.

I actually had an FT-101E a year or so ago. Sold it to a new novice,
probably could have got more for it if I sold it to a CBer.

73 =paul= wb8zjl

Date: 11 Mar 1994 20:01:59 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.msfc.nasa.gov!sol.ctr.columbia.edu!newsxfer.itd.umich.edu!news1.oakland.edu!vela.acs.oakland.edu!prvalko@network.ucsd.edu
To: info-hams@ucsd.edu

References <2kdqco$7lq@geraldo.cc.utexas.edu>, <2ke42t$144@transfer.stratus.com>, <2lqbck$rqj@meaddata.meaddata.com>bia.edu
Subject : Re: Dayton parking

I'm staying at the Radisson this year too. I was told they would be
running their own shuttle because their would be no bus service this
year.

The problem is not going to be WHERE to park but HOW to get near HARA!
I imagine that Shiloe Spring Road is going to be hellacious.

73 paul wb8zjl

End of Info-Hams Digest V94 #278
****

2920. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 08:56:04 UTC
From: smtp@zeus.USG.Sandy.NOvell.COM
Message-ID: <9403140904.AA23830@ns.Novell.COM>
Source record: 269771

```
From smtp Sat Mar 12 02:17 MST 1994 remote from zeus
Received: from ucsd.edu by ns.Novell.COM (4.1/SMI-4.1)
id AA08950; Sat, 12 Mar 94 02:21:20 MST
Received: from localhost by ucsd.edu; id TAA16423
sendmail 8.6.4/UCSD-2.2-sun
Fri, 11 Mar 1994 19:01:51 -0800 for info-hams-list
Received: from localhost by ucsd.edu; id TAA16377
sendmail 8.6.4/UCSD-2.2-sun
Fri, 11 Mar 1994 19:01:31 -0800 for info-hams-ddist
Errors-To: info-hams-relay@UCSD.EDU
Errors-To: info-hams-relay@UCSD.EDU
Content-Length: 29576
Content-Type: text
Sender: info-hams-relay@UCSD.EDU
Precedence: List
Message-Id: <199403120301.TAA16377@ucsd.edu>
Date: Fri, 11 Mar 94 19:01:28 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@UCSD.EDU>
Errors-To: Info-Hams-Errors@UCSD.EDU
Reply-To: Info-Hams@UCSD.EDU
Precedence: Bulk
Subject: Info-Hams Digest V94 #279
To: Info-Hams@UCSD.EDU

Info-Hams Digest Fri, 11 Mar 94 Volume 94 : Issue 279

Today's Topics:
1x1 Callsigns?
[News] Auctioning Rules set up by FCC
JARGON
Keyboards at testing sessions
ORBS$070.2L.AMSAT
ORBS$070.MICRO.AMSAT
ORBS$070.MISC.AMSAT
ORBS$070.OSCAR.AMSAT
ORBS$070.WEATH.AMSAT
TPK
WWV time station freq

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".
```

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 11 Mar 1994 21:54:16 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!col.hp.com!csn!news.den.mmc.com!news2!pogo.den.mmc.com!bou
tell@network.ucsd.edu
Subject: 1x1 Callsigns?
To: info-hams@ucsd.edu

In article <2lo1ii$g94@oak.oakland.edu> prvalko@vela.acs.oakland.edu (prvalko) writes:
>They should allow for ANY combination of legitimate US-amateur allocated
>calls. If I remember correctly, In the US, the call must BEGIN with "A,
>K, N, or W" then have a SINGLE DIGIT NUMBER and followed by at LEAST one
>letter.
>
>SO... W8A, would be OK.
>
>I already sent in a request for MY choice, NNN6N.
>
>Run it though your head in morse code then eat yer hearts out fellas!
>
>73 =paul= WB8ZJL

Mexican Hat Dance, right?
73, Russ (WD0FTF)

Date: Fri, 11 Mar 1994 21:07:06 GMT
From:
gatekeeper.us.oracle.com!sgiblab!barrnet.net!netnews.synoptics.com!news@decwrl.dec.com
Subject: [News] Auctioning Rules set up by FCC
To: info-hams@ucsd.edu

In article <CMF7EE.Ly1@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:

>
> Thought this might be of interest to everyone. If 11M goes up for bid
> lets each kick in a few bucks to win it back...
>
> Jeff NH6IL

So tell me, good buddy, where are all them there CB critters going to go?

> Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
>Internet: jangus@skyld.grendel.com | a fanciful dimension to any
> US Mail: PO Box 4425 Carson, CA 90749 | story."
> Phone: 1 (310) 324-6080 | Peking Noodle Co.

Maybe 14.313. Or 2M, used HT's are fairly cheap at a swap :)

Dave
wa6qwl

Date: 11 Mar 1994 14:38:44 -0800
From: ihnp4.ucsd.edu!agate!apple.com!apple.com!not-for-mail@network.ucsd.edu
Subject: JARGON
To: info-hams@ucsd.edu

ah301@yfn.ysu.edu (Jerry Sy) writes:

>In article <199402282109.NAA17392@ucsd.edu>,
>William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM wrote:

>> >use...it's XYL and it stands for ex young lady....(which I take great
>> >offense to as a deragatory remark (I am not an "XYL" because I am only 22
>> >years old! :-)) The term is used to refer to one's wife...(because most
>>

>is there a list of jargon and their meanings used by hams on 2m/440,
>terms like

>destinated
>very good
>fine business
>
>
>73s
>Jerry N3RKD

Best wishes-es. (73s)
Best best wishes-es. (Best 73s)

:-)

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

Date: 11 Mar 94 00:04:56 GMT
From: yale.edu!noc.near.net!news.delphi.com!gilbaronw0mn@yale.arpa
Subject: Keyboards at testing sessions
To: info-hams@ucsd.edu

>Nntp-Posting-Host: wpp1
>Organization: UNISYS
>X-Newsreader: Trumpet for Windows [Version 1.0 Rev B]
>
>In article <1994Mar8.143141.29301@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us
(Gary Coffman) writes:
>>From: gary@ke4zv.atl.ga.us (Gary Coffman)
>>Subject: Re: Keyboards at testing sessions
>>Date: Tue, 8 Mar 1994 14:31:41 GMT
>
>> Since most intercepted traffic is encoded, and most commercial
>>traffic heavily abbreviated and filled with "commercial codes", flawless

>>copy is mandatory or all meaning could be lost. That's what the FCC wants

>>on the test too, though the current amateur test doesn't require zero
errors,
>>just one minute out of five perfect copy, or the answers to the multiple
choice
>>questions as the case may be. That level of performance would wash you out
at
>>military or commercial levels of required accuracy.
>
>I seem to remember that back when I took my 13 wpm code test in the FCC
>offices in NYC, the receiving portion of the test required only one solid

>minute out of five or so. I don't remember whether the text was plain or
>code groups. Of course, there was also a sending test, using a straight
key.
>
>It was 1960 or 1961, I was in high school, and intimidated by all the
glory
>and grandeur of the Federal Gummint, so my memory may not be very accurate.

>The point is that, at least at that time, the FCC didn't require 100%
accuracy
>for the entire test session, just a burst.
>
>73,
>Bill.
>
>
>Bill Powers WY0Q <wilpwr@rsvl.unisys.com>
> <powe0040@gold.tc.umn.edu>
>UNISYS Corp.
>MS 4033 Phone: [612] 635-5267
>P.O. Box 64942 FAX: [612] 635-7523
>St. Paul, MN 55164-0942
>
That is the truth and always has been. You can still pas the test with one
minute of solid copy. If you don't get the 70% correct then they are to
check for a minute of solid copy. Either one will pass the test.

When I got mine the one miute solid copy of 5 was the only way. It was tough.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

Date: 11 Mar 94 14:11:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: ORBS$070.2L.AMSAT
To: info-hams@ucsd.edu

SB KEPS @ AMSAT $ORBS-070.N
2Line Orbital Elements 070.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX March 11, 1994
BID: $ORBS-070.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10
1 14129U 83058B 94069.18379542 -.00000210 00000-0 10000-3 0 2685
2 14129 27.1934 337.9178 6022504 160.8947 238.2860 2.05878778 80747
UO-11
1 14781U 84021B 94067.56924816 .00000314 00000-0 61190-4 0 6720
2 14781 97.7916 86.9836 0010793 229.7625 130.2638 14.69163339535534
RS-10/11
1 18129U 87054A 94067.01740430 .00000036 00000-0 22615-4 0 8808
2 18129 82.9209 43.6165 0010632 312.3195 47.7057 13.72332558336038
AO-13
1 19216U 88051B 94069.54851579 -.00000456 00000-0 10000-4 0 8926
2 19216 57.8718 263.9681 7210511 336.6114 2.6497 2.09726483 43942
FO-20
1 20480U 90013C 94067.40210310 -.00000055 00000-0 -49320-4 0 6670
2 20480 99.0229 238.3245 0540340 207.7414 149.3880 12.83223761191206
AO-21
1 21087U 91006A 94069.83595116 .00000094 00000-0 82657-4 0 4439
2 21087 82.9370 215.4726 0036191 0.5572 359.5617 13.74535665156075
RS-12/13
1 21089U 91007A 94067.45619162 .00000044 00000-0 30495-4 0 6706
2 21089 82.9185 86.1590 0030648 31.0404 329.2549 13.74036632154815
ARSENE
1 22654U 93031B 93338.80803910 -.00000087 00000-0 00000 0 0 2437
2 22654 1.4104 113.5274 2936576 161.9838 210.8642 1.42202044 2990
UO-14
1 20437U 90005B 94067.73687474 .00000061 00000-0 40486-4 0 9726
2 20437 98.5922 153.8649 0011592 122.8019 237.4277 14.29828748215238
AO-16
1 20439U 90005D 94067.72631072 .00000054 00000-0 37964-4 0 7727
2 20439 98.6003 154.9835 0011895 123.8347 236.3959 14.29883809215246
DO-17
1 20440U 90005E 94067.27061045 .00000070 00000-0 44036-4 0 7711
2 20440 98.6012 154.8241 0012085 124.8077 235.4243 14.30022491215195
WO-18
1 20441U 90005F 94067.73395059 .00000053 00000-0 37414-4 0 7733
2 20441 98.6000 155.2882 0012520 123.5482 236.6892 14.29998053215264
LO-19

```
1 20442U 90 5 G 94069.25806460 .00000090 00000-0 42470-4 0 7498
2 20442 98.6006 157.0275 0013027 119.1463 241.1023 14.30092955215490
UO-22
1 21575U 91050B 94067.16659976 .00000088 00000-0 44344-4 0 4736
2 21575 98.4399 143.6682 0006939 228.7234 131.3361 14.36896892138577
KO-23
1 22077U 92052B 94067.55219489 -.00000037 00000-0 10000-3 0 3680
2 22077 66.0788 130.6842 0011228 312.6441 47.3631 12.86285294 73847
AO-27
1 22825U 93061C 94067.73218374 -.00000005 00000-0 15777-4 0 2696
2 22825 98.6625 144.5201 0009388 138.6898 221.4999 14.27610714 23357
IO-26
1 22826U 93061D 94068.07086926 .00000012 00000-0 22619-4 0 2691
2 22826 98.6625 144.8782 0009958 137.9486 222.2467 14.27713554 23404
KO-25
1 22830U 93061H 94067.68367155 .00000069 00000-0 45175-4 0 2726
2 22830 98.5652 142.8126 0012170 107.8757 252.3739 14.28038885 23353
NOAA-9
1 15427U 84123A 94066.88516292 .00000110 00000-0 82384-4 0 7374
2 15427 99.0663 116.1273 0015423 142.3509 217.8744 14.13595676476034
NOAA-10
1 16969U 86073A 94066.89832448 .00000062 00000-0 44726-4 0 6358
2 16969 98.5122 78.9843 0012174 266.4859 93.4927 14.24870428388186
MET-2/17
1 18820U 88005A 94067.29466993 .00000084 00000-0 61342-4 0 2708
2 18820 82.5441 348.8449 0018009 100.6310 259.6879 13.84709361308395
MET-3/2
1 19336U 88064A 94068.41156909 .00000051 00000-0 10000-3 0 2678
2 19336 82.5399 34.2815 0017247 148.2501 211.9666 13.16965325270129
NOAA-11
1 19531U 88089A 94066.88127605 .00000094 00000-0 75422-4 0 5436
2 19531 99.1643 53.3477 0012787 59.3225 300.9204 14.12965184280912
MET-2/18
1 19851U 89018A 94067.39706232 .00000039 00000-0 21473-4 0 2691
2 19851 82.5168 224.2613 0014833 145.0615 215.1539 13.84358131253741
MET-3/3
1 20305U 89086A 94069.82198235 .00000044 00000-0 10000-3 0 02
2 20305 82.5590 337.9970 0007461 164.6095 195.5253 13.04416766210076
MET-2/19
1 20670U 90057A 94067.10485611 .00000024 00000-0 79036-5 0 7712
2 20670 82.5452 288.7639 0017373 69.7195 290.5827 13.84190594186635
FY-1/2
1 20788U 90081A 94069.86957440 -.00000212 00000-0 -11256-3 0 9146
2 20788 98.8400 93.1423 0013353 284.9032 75.0655 14.01313647179938
MET-2/20
1 20826U 90086A 94067.49962859 .00000037 00000-0 20302-4 0 7808
2 20826 82.5224 226.0766 0013416 336.1353 23.9178 13.83573999173830
MET-3/4
1 21232U 91030A 94067.54444297 .00000051 00000-0 10000-3 0 6782
2 21232 82.5364 240.7313 0014652 76.1408 284.1322 13.16460656138118
```

NOAA-12
1 21263U 91032A 94066.89915038 .00000123 00000-0 74395-4 0 9489
2 21263 98.6297 96.8623 0013055 165.7421 194.4128 14.22376467146137
MET-3/5
1 21655U 91056A 94067.38366476 .00000051 00000-0 10000-3 0 6851
2 21655 82.5547 187.9220 0014661 89.7250 270.5549 13.16827611123194
MET-2/21
1 22782U 93055A 94067.66059818 .00000046 00000-0 28539-4 0 2806
2 22782 82.5493 286.1063 0022417 143.3843 216.8845 13.83002355 26194
POSAT
1 22829U 93061G 94068.17748386 .00000070 00000-0 46048-4 0 2629
2 22829 98.6568 144.9950 0010522 125.3851 234.8327 14.28009726 23423
MIR
1 16609U 86017A 94070.24194089 .00048719 00000-0 63440-3 0 1701
2 16609 51.6441 317.2746 0014925 20.9171 339.2181 15.58120678460770
HUBBLE
1 20580U 90037B 94069.79166515 .00001109 00000-0 95809-4 0 4566
2 20580 28.4682 147.9860 0006415 138.1868 221.9207 14.90518485 14691
GRO
1 21225U 91027B 94069.68912255 .00005994 00000-0 13774-3 0 721
2 21225 28.4620 195.6665 0003925 176.6497 183.4127 15.40327704 41737
UARS
1 21701U 91063B 94067.64252385 .00002623 00000-0 25004-3 0 4858
2 21701 56.9829 201.9698 0004222 99.9238 260.2271 14.96479516135884
/EX

Date: 11 Mar 94 14:02:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: ORBS$070.MICRO.AMSAT
To: info-hams@ucsd.edu

SB KEPS @ AMSAT $ORBS-070.D
Orbital Elements 070.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH,TX March 11, 1994
BID: $ORBS-070.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94067.73687474
Element set: 972
Inclination: 98.5922 deg
RA of node: 153.8649 deg
Eccentricity: 0.0011592
Arg of perigee: 122.8019 deg
Mean anomaly: 237.4277 deg
Mean motion: 14.29828748 rev/day
Decay rate: 6.1e-07 rev/day^2

Epoch rev: 21523
Checksum: 339

Satellite: AO-16
Catalog number: 20439
Epoch time: 94067.72631072
Element set: 772
Inclination: 98.6003 deg
RA of node: 154.9835 deg
Eccentricity: 0.0011895
Arg of perigee: 123.8347 deg
Mean anomaly: 236.3959 deg
Mean motion: 14.29883809 rev/day
Decay rate: 5.4e-07 rev/day^2
Epoch rev: 21524
Checksum: 331

Satellite: DO-17
Catalog number: 20440
Epoch time: 94067.27061045
Element set: 771
Inclination: 98.6012 deg
RA of node: 154.8241 deg
Eccentricity: 0.0012085
Arg of perigee: 124.8077 deg
Mean anomaly: 235.4243 deg
Mean motion: 14.30022491 rev/day
Decay rate: 7.0e-07 rev/day^2
Epoch rev: 21519
Checksum: 265

Satellite: WO-18
Catalog number: 20441
Epoch time: 94067.73395059
Element set: 773
Inclination: 98.6000 deg
RA of node: 155.2882 deg
Eccentricity: 0.0012520
Arg of perigee: 123.5482 deg
Mean anomaly: 236.6892 deg
Mean motion: 14.29998053 rev/day
Decay rate: 5.3e-07 rev/day^2
Epoch rev: 21526
Checksum: 314

Satellite: LO-19
Catalog number: 20442
Epoch time: 94069.25806460
Element set: 749
Inclination: 98.6006 deg
RA of node: 157.0275 deg

Eccentricity: 0.0013027
Arg of perigee: 119.1463 deg
Mean anomaly: 241.1023 deg
Mean motion: 14.30092955 rev/day
Decay rate: 9.0e-07 rev/day^2
Epoch rev: 21549
Checksum: 287

Satellite: UO-22
Catalog number: 21575
Epoch time: 94067.16659976
Element set: 473
Inclination: 98.4399 deg
RA of node: 143.6682 deg
Eccentricity: 0.0006939
Arg of perigee: 228.7234 deg
Mean anomaly: 131.3361 deg
Mean motion: 14.36896892 rev/day
Decay rate: 8.8e-07 rev/day^2
Epoch rev: 13857
Checksum: 365

Satellite: KO-23
Catalog number: 22077
Epoch time: 94067.55219489
Element set: 368
Inclination: 66.0788 deg
RA of node: 130.6842 deg
Eccentricity: 0.0011228
Arg of perigee: 312.6441 deg
Mean anomaly: 47.3631 deg
Mean motion: 12.86285294 rev/day
Decay rate: -3.7e-07 rev/day^2
Epoch rev: 7384
Checksum: 318

Satellite: AO-27
Catalog number: 22825
Epoch time: 94067.73218374
Element set: 269
Inclination: 98.6625 deg
RA of node: 144.5201 deg
Eccentricity: 0.0009388
Arg of perigee: 138.6898 deg
Mean anomaly: 221.4999 deg
Mean motion: 14.27610714 rev/day
Decay rate: -5.0e-08 rev/day^2
Epoch rev: 2335
Checksum: 330

Satellite: IO-26
Catalog number: 22826
Epoch time: 94068.07086926
Element set: 269
Inclination: 98.6625 deg
RA of node: 144.8782 deg
Eccentricity: 0.0009958
Arg of perigee: 137.9486 deg
Mean anomaly: 222.2467 deg
Mean motion: 14.27713554 rev/day
Decay rate: 1.2e-07 rev/day^2
Epoch rev: 2340
Checksum: 336

Satellite: KO-25
Catalog number: 22830
Epoch time: 94067.68367155
Element set: 272
Inclination: 98.5652 deg
RA of node: 142.8126 deg
Eccentricity: 0.0012170
Arg of perigee: 107.8757 deg
Mean anomaly: 252.3739 deg
Mean motion: 14.28038885 rev/day
Decay rate: 6.9e-07 rev/day^2
Epoch rev: 2335
Checksum: 322

/EX

Date: 11 Mar 94 14:08:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: ORBS$070.MISC.AMSAT
To: info-hams@ucsd.edu

SB KEPS @ AMSAT $ORBS-070.M
Orbital Elements 070.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX March 11, 1994
BID: $ORBS-070.M
TO ALL RADIO AMATEURS BT

Satellite: POSAT
Catalog number: 22829
Epoch time: 94068.17748386
Element set: 262
Inclination: 98.6568 deg
RA of node: 144.9950 deg
Eccentricity: 0.0010522
Arg of perigee: 125.3851 deg

Mean anomaly: 234.8327 deg
Mean motion: 14.28009726 rev/day
Decay rate: 7.0e-07 rev/day^2
Epoch rev: 2342
Checksum: 309

Satellite: MIR
Catalog number: 16609
Epoch time: 94070.24194089
Element set: 170
Inclination: 51.6441 deg
RA of node: 317.2746 deg
Eccentricity: 0.0014925
Arg of perigee: 20.9171 deg
Mean anomaly: 339.2181 deg
Mean motion: 15.58120678 rev/day
Decay rate: 4.8719e-04 rev/day^2
Epoch rev: 46077
Checksum: 309

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94069.79166515
Element set: 456
Inclination: 28.4682 deg
RA of node: 147.9860 deg
Eccentricity: 0.0006415
Arg of perigee: 138.1868 deg
Mean anomaly: 221.9207 deg
Mean motion: 14.90518485 rev/day
Decay rate: 1.109e-05 rev/day^2
Epoch rev: 1469
Checksum: 321

Satellite: GRO
Catalog number: 21225
Epoch time: 94069.68912255
Element set: 72
Inclination: 28.4620 deg
RA of node: 195.6665 deg
Eccentricity: 0.0003925
Arg of perigee: 176.6497 deg
Mean anomaly: 183.4127 deg
Mean motion: 15.40327704 rev/day
Decay rate: 5.994e-05 rev/day^2
Epoch rev: 4173
Checksum: 315

Satellite: UARS
Catalog number: 21701
Epoch time: 94067.64252385

Element set: 485
Inclination: 56.9829 deg
RA of node: 201.9698 deg
Eccentricity: 0.0004222
Arg of perigee: 99.9238 deg
Mean anomaly: 260.2271 deg
Mean motion: 14.96479516 rev/day
Decay rate: 2.623e-05 rev/day^2
Epoch rev: 13588
Checksum: 331

/EX

Date: 11 Mar 94 14:00:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: ORBS$070.OSCAR.AMSAT
To: info-hams@ucsd.edu

SB KEPS @ AMSAT $ORBS-070.O
Orbital Elements 070.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH,TX March 11, 1994
BID: $ORBS-070.O
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94069.18379542
Element set: 268
Inclination: 27.1934 deg
RA of node: 337.9178 deg
Eccentricity: 0.6022504
Arg of perigee: 160.8947 deg
Mean anomaly: 238.2860 deg
Mean motion: 2.05878778 rev/day
Decay rate: -2.10e-06 rev/day^2
Epoch rev: 8074
Checksum: 333

Satellite: UO-11
Catalog number: 14781
Epoch time: 94067.56924816
Element set: 672
Inclination: 97.7916 deg
RA of node: 86.9836 deg
Eccentricity: 0.0010793
Arg of perigee: 229.7625 deg
Mean anomaly: 130.2638 deg
Mean motion: 14.69163339 rev/day

Decay rate: 3.14e-06 rev/day^2
Epoch rev: 53553
Checksum: 344

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94067.01740430
Element set: 880
Inclination: 82.9209 deg
RA of node: 43.6165 deg
Eccentricity: 0.0010632
Arg of perigee: 312.3195 deg
Mean anomaly: 47.7057 deg
Mean motion: 13.72332558 rev/day
Decay rate: 3.6e-07 rev/day^2
Epoch rev: 33603
Checksum: 280

Satellite: AO-13
Catalog number: 19216
Epoch time: 94069.54851579
Element set: 892
Inclination: 57.8718 deg
RA of node: 263.9681 deg
Eccentricity: 0.7210511
Arg of perigee: 336.6114 deg
Mean anomaly: 2.6497 deg
Mean motion: 2.09726483 rev/day
Decay rate: -4.56e-06 rev/day^2
Epoch rev: 4394
Checksum: 341

Satellite: FO-20
Catalog number: 20480
Epoch time: 94067.40210310
Element set: 667
Inclination: 99.0229 deg
RA of node: 238.3245 deg
Eccentricity: 0.0540340
Arg of perigee: 207.7414 deg
Mean anomaly: 149.3880 deg
Mean motion: 12.83223761 rev/day
Decay rate: -5.5e-07 rev/day^2
Epoch rev: 19120
Checksum: 274

Satellite: AO-21
Catalog number: 21087
Epoch time: 94069.83595116
Element set: 443
Inclination: 82.9370 deg

RA of node: 215.4726 deg
Eccentricity: 0.0036191
Arg of perigee: 0.5572 deg
Mean anomaly: 359.5617 deg
Mean motion: 13.74535665 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 15607
Checksum: 317

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94067.45619162
Element set: 670
Inclination: 82.9185 deg
RA of node: 86.1590 deg
Eccentricity: 0.0030648
Arg of perigee: 31.0404 deg
Mean anomaly: 329.2549 deg
Mean motion: 13.74036632 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 15481
Checksum: 302

Satellite: ARSENE
Catalog number: 22654
Epoch time: 93338.80803910
Element set: 243
Inclination: 1.4104 deg
RA of node: 113.5274 deg
Eccentricity: 0.2936576
Arg of perigee: 161.9838 deg
Mean anomaly: 210.8642 deg
Mean motion: 1.42202044 rev/day
Decay rate: -8.7e-07 rev/day^2
Epoch rev: 299
Checksum: 278

/EX

Date: 11 Mar 94 14:06:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: ORBS$070.WEATH.AMSAT
To: info-hams@ucsd.edu

SB KEPS @ AMSAT $ORBS-070.W
Orbital Elements 070.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX March 11, 1994
BID: $ORBS-070.W

TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94066.88516292
Element set: 737
Inclination: 99.0663 deg
RA of node: 116.1273 deg
Eccentricity: 0.0015423
Arg of perigee: 142.3509 deg
Mean anomaly: 217.8744 deg
Mean motion: 14.13595676 rev/day
Decay rate: 1.10e-06 rev/day^2
Epoch rev: 47603
Checksum: 316

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94066.89832448
Element set: 635
Inclination: 98.5122 deg
RA of node: 78.9843 deg
Eccentricity: 0.0012174
Arg of perigee: 266.4859 deg
Mean anomaly: 93.4927 deg
Mean motion: 14.24870428 rev/day
Decay rate: 6.2e-07 rev/day^2
Epoch rev: 38818
Checksum: 359

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94067.29466993
Element set: 270
Inclination: 82.5441 deg
RA of node: 348.8449 deg
Eccentricity: 0.0018009
Arg of perigee: 100.6310 deg
Mean anomaly: 259.6879 deg
Mean motion: 13.84709361 rev/day
Decay rate: 8.4e-07 rev/day^2
Epoch rev: 30839
Checksum: 339

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94068.41156909
Element set: 267
Inclination: 82.5399 deg
RA of node: 34.2815 deg
Eccentricity: 0.0017247

Arg of perigee: 148.2501 deg
Mean anomaly: 211.9666 deg
Mean motion: 13.16965325 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 27012
Checksum: 306

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94066.88127605
Element set: 543
Inclination: 99.1643 deg
RA of node: 53.3477 deg
Eccentricity: 0.0012787
Arg of perigee: 59.3225 deg
Mean anomaly: 300.9204 deg
Mean motion: 14.12965184 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 28091
Checksum: 310

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94067.39706232
Element set: 269
Inclination: 82.5168 deg
RA of node: 224.2613 deg
Eccentricity: 0.0014833
Arg of perigee: 145.0615 deg
Mean anomaly: 215.1539 deg
Mean motion: 13.84358131 rev/day
Decay rate: 3.9e-07 rev/day^2
Epoch rev: 25374
Checksum: 308

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94069.82198235
Element set: 0
Inclination: 82.5590 deg
RA of node: 337.9970 deg
Eccentricity: 0.0007461
Arg of perigee: 164.6095 deg
Mean anomaly: 195.5253 deg
Mean motion: 13.04416766 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 21007
Checksum: 295

Satellite: MET-2/19
Catalog number: 20670

Epoch time: 94067.10485611
Element set: 771
Inclination: 82.5452 deg
RA of node: 288.7639 deg
Eccentricity: 0.0017373
Arg of perigee: 69.7195 deg
Mean anomaly: 290.5827 deg
Mean motion: 13.84190594 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 18663
Checksum: 339

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94069.86957440
Element set: 914
Inclination: 98.8400 deg
RA of node: 93.1423 deg
Eccentricity: 0.0013353
Arg of perigee: 284.9032 deg
Mean anomaly: 75.0655 deg
Mean motion: 14.01313647 rev/day
Decay rate: -2.12e-06 rev/day^2
Epoch rev: 17993
Checksum: 310

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94067.49962859
Element set: 780
Inclination: 82.5224 deg
RA of node: 226.0766 deg
Eccentricity: 0.0013416
Arg of perigee: 336.1353 deg
Mean anomaly: 23.9178 deg
Mean motion: 13.83573999 rev/day
Decay rate: 3.7e-07 rev/day^2
Epoch rev: 17383
Checksum: 336

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94067.54444297
Element set: 678
Inclination: 82.5364 deg
RA of node: 240.7313 deg
Eccentricity: 0.0014652
Arg of perigee: 76.1408 deg
Mean anomaly: 284.1322 deg
Mean motion: 13.16460656 rev/day
Decay rate: 5.1e-07 rev/day^2

Epoch rev: 13811
Checksum: 286

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94066.89915038
Element set: 948
Inclination: 98.6297 deg
RA of node: 96.8623 deg
Eccentricity: 0.0013055
Arg of perigee: 165.7421 deg
Mean anomaly: 194.4128 deg
Mean motion: 14.22376467 rev/day
Decay rate: 1.23e-06 rev/day^2
Epoch rev: 14613
Checksum: 323

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94067.38366476
Element set: 685
Inclination: 82.5547 deg
RA of node: 187.9220 deg
Eccentricity: 0.0014661
Arg of perigee: 89.7250 deg
Mean anomaly: 270.5549 deg
Mean motion: 13.16827611 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 12319
Checksum: 325

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94067.66059818
Element set: 280
Inclination: 82.5493 deg
RA of node: 286.1063 deg
Eccentricity: 0.0022417
Arg of perigee: 143.3843 deg
Mean anomaly: 216.8845 deg
Mean motion: 13.83002355 rev/day
Decay rate: 4.6e-07 rev/day^2
Epoch rev: 2619
Checksum: 307

/EX

Date: Sat, 12 Mar 1994 05:05:21 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!howland.reston.ans.net!pipex!uknet!brunel!news@network.ucsd.edu

Subject: TPK
To: info-hams@ucsd.edu

Can someone tell me how easy they find TPK to use? I am helping a local
amateur improve his node (by switching to BPQ) and, whilst his RF knowledge is
good, he doesn't want to spend weeks learning how to drive some software!

Can TPK also operate as a PMS? I'd like to hear from anyone who has done
it, particularly BPQ.

73, Nick,

cs90nrs@brunel.ac.uk
g7ens@gb7hsn.gb.eu

Date: Fri, 11 Mar 1994 21:50:30 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!col.hp.com!csn!news.den.mmc.com!news2!pogo.den.mmc.com!bou
tell@network.ucsd.edu
Subject: WWV time station freq
To: info-hams@ucsd.edu

In article <2lnj0n$ekf@gaia.ucs.orst.edu> schottd@ucs.orst.edu (Derek Schott) writes:
>I am searching for some of the frequencies for this station.
>I need it sometime today, and I have no way of looking for it
>other than by computer. Could someone please email me a few
>of the operating frequencies of WWV; especially those that
>can be picked up easily on the West coast. Thnks...
>
>--
If all else fails, call (303) 499-7111 for the audio portion of WWV. Not
very useful as a frequency reference though :-)

73, WD0FTF Russ

Date: Fri, 11 Mar 1994 23:02:51 GMT
From: world!drt@uunet.uu.net
To: info-hams@ucsd.edu

References <2lnm9t$643@jericho.mc.com>, <1994Mar10.223223.13794@arrl.org>,
<2lptqg$7b4@cville-srv.wam.umd.edu>ton.a
Subject : Re: 1x1 Callsigns?

Scott Richard Rosenfeld (ham@wam.umd.edu) wrote:

: As for the request for a call like A4L, this can't be done because the US
: doesn't have the rights to these calls. I believe A1, A4, A5, and A6 are
: all allocated (can't remember exactly who, though). The US has allocations
: to "AA-AL."

Oh, well, there goes A1OP!

(Actually, I believe A1 as well as A0 cannot be allocated as a prefix.)

-drt

|David R. Tucker KG2S drt@world.std.com|

End of Info-Hams Digest V94 #279
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2921. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 08:56:11 UTC
From: smtp@zeus.USG.Sandy.NOvell.COM
Message-ID: <9403140941.AA27878@ns.Novell.COM>
Source record: 269772

```
From smtp Sat Mar 12 04:39 MST 1994 remote from zeus
Received: from ucsd.edu by ns.Novell.COM (4.1/SMI-4.1)
id AA10787; Sat, 12 Mar 94 04:43:37 MST
Received: from localhost by ucsd.edu; id AAA15959
sendmail 8.6.4/UCSD-2.2-sun
Sat, 12 Mar 1994 00:01:44 -0800 for info-hams-list
Received: from localhost by ucsd.edu; id AAA15931
sendmail 8.6.4/UCSD-2.2-sun
Sat, 12 Mar 1994 00:01:39 -0800 for info-hams-ddist
Errors-To: info-hams-relay@UCSD.EDU
Errors-To: info-hams-relay@UCSD.EDU
Content-Length: 25477
Content-Type: text
Sender: info-hams-relay@UCSD.EDU
Precedence: List
Message-Id: <199403120801.AAA15931@ucsd.edu>
Date: Sat, 12 Mar 94 00:01:37 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@UCSD.EDU>
Errors-To: Info-Hams-Errors@UCSD.EDU
Reply-To: Info-Hams@UCSD.EDU
Precedence: Bulk
Subject: Info-Hams Digest V94 #280
To: Info-Hams@UCSD.EDU

Info-Hams Digest Sat, 12 Mar 94 Volume 94 : Issue 280

Today's Topics:
1x1 Callsigns?
arld014 DX news
Best cars for mobile HF/VHF??
Daily Summary of Solar Geophysical Activity for 10 March
Guy Tower with Phillistran Non-metallic ?
Info on Alinco mods?
Looking For Converters
midwest micro
WARNING: Potential Satellite Anomaly Warning
WWV time station freq

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".
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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 11 Mar 1994 22:35:44 -0600
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!not-for-mail@network.ucsd.edu
Subject: 1x1 Callsigns?
To: info-hams@ucsd.edu

Will Turner, N0RDV, says:

>The US only has the
>first half of the 'A's, thus you can't have an A#XXX call. (Or A#XX, A#X)

I realize the callbook isn't the authority, but it show's that A0 and A1
prefixes aren't assigned to any other country. Since the US has AAA-ALZ
then it *might* be possible for the US to assign A0 and A1. Does anyone
know for sure (not just guessing, like me)?

Kris AA5UO
mraz@aud.alcatel.com

Date: 11 Mar 94 17:18:39 GMT
From: agate!howland.reston.ans.net!math.ohio-state.edu!cyber2.cyberstore.ca!nntp.cs.ubc.ca
!alberta!ve6mgs!usenet@ucbvax.berkeley.edu
Subject: arld014 DX news
To: info-hams@ucsd.edu

SB DX @ ARL $ARLD014
ARLD014 DX news

ZCZC AE12
QST de W1AW
DX Bulletin 14 ARLD014

Date: 11 Mar 1994 21:01:46 GMT
From: slinky.cs.nyu.edu!longlast.cs.nyu.edu!jackson@nyu.arpa
Subject: Best cars for mobile HF/VHF??
To: info-hams@ucsd.edu

|> Look at what the cops are driving. Ford Crown Victorias seem popular
|> with them, as do Chevy Caprices. Order your's with the same fleet codes
|> that they use and you'll have a car that works well with radios. (It'll
|> also have the heavy duty electrical system, cooling system, and suspension
|> of a cop car.) Get the same color scheme that they use for their unmarked
|> cars too, that way the antennas won't draw suspicion. (And you may avoid
|> some tickets.)

I had been thinking the same thing for quite a while, too. Only not for the
ability to work with radios, more because the Caprices look like they'll be

a comfortable ride and the antennas will look normal on them. In fact, I've
been trying to find the tiny antennas they have mounted on the roof immediately
above to rear window for scanner use. That'll definitely finish the image off.
Problem is, what are they usually tuned to? Of course, you could always get
a cellular lookalike 2m trunk lip mount to complement the roof mount.
--
Steven Jackson New York University
Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012
"Not in my head.. so I don't have to think.." -- Nik Fiend

Date: Thu, 10 Mar 1994 23:54:10 MST
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.msfc.nasa.gov!sol.ctr.col
umbia.edu!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!ve6mgs!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 10 March
To: info-hams@ucsd.edu

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

10 MARCH, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 10 MARCH, 1994

NOTE: Stratospheric warming continues to exist from central and northeastern
Siberia to Canada and the adjacent Arctic. Warm air is spreading
northeastwards. The temperature gradient is reversed between 60N and
the pole from 10 HPA upwards into the upper stratosphere.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 069, 03/10/94
10.7 FLUX=088.0 90-AVG=106 SSN=056 BKI=4444 4344 BAI=025
BGND-XRAY=B1.2 FLU1=2.1E+07 FLU10=2.1E+04 PKI=4465 4445 PAI=035
BOU-DEV=052,058,065,047,041,038,050,055 DEV-AVG=050 NT SWF=00:000
XRAY-MAX= B7.0 @ 0910UT XRAY-MIN= A7.2 @ 2355UT XRAY-AVG= B1.8
NEUTN-MAX= +002% @ 2005UT NEUTN-MIN= -002% @ 1125UT NEUTN-AVG= +0.1%
PCA-MAX= +0.3DB @ 2355UT PCA-MIN= -0.8DB @ 1850UT PCA-AVG= -0.2DB
BOUTF-MAX=55355NT @ 0234UT BOUTF-MIN=55305NT @ 1900UT BOUTF-AVG=55328NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+067,+000,+000
GOES6-MAX=P:+126NT@ 1757UT GOES6-MIN=N:-114NT@ 0718UT G6-AVG=+086,+027,-058
FLUXFCST=STD:090,090,095;SESC:090,090,095 BAI/PAI-FCST=020,015,015/030,025,020
KFCST=4454 4444 3454 4433 27DAY-AP=041,036 27DAY-KP=4556 5544 4544 6444
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MINSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 09 MAR 94 was 23.0.
The Full Kp Indices for 09 MAR 94 are: 4+ 6- 7- 5+ 5- 5- 5- 5-
The 3-Hr Ap Indices for 09 MAR 94 are: 34 72 111 56 42 37 39 37
Greater than 2 MeV Electron Fluence for 10 MAR is: 2.2E+09

SYNOPSIS OF ACTIVITY

Solar activity was very low with five optically uncorrelated B-class x-ray events observed this period. All regions are exhibiting slow decay. New Region 7688 (N18E75) was numbered this period.

Solar activity forecast: solar activity is expected to be at very low to low levels. Region 7685 (S08W40) appears to have the greatest potential of producing C-class activity.

STD: Moderate to high densities of high-energy electrons at greater than 2 MeV have been observed since approximately late on 08 March. This is at least the third recurrence of these high-energy electrons and are thought to be associated with the current coronal-hole related disturbance.

The geomagnetic field has been at mostly active to minor storm levels the past 24 hours. Periods of major storm levels were observed at high latitudes. Storm conditions are believed to be the result of a favorably positioned coronal hole.

Geophysical activity forecast: the geomagnetic field is expected to be at mostly active levels for the next two days. Periods of minor storm conditions can be expected during high latitude local nighttime. The field is expected to be mostly unsettled to active on day three.

Event probabilities 11 mar-13 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 11 mar-13 mar

A. Middle Latitudes
Active 25/25/25
Minor Storm 30/20/15
Major-Severe Storm 01/01/01

B. High Latitudes
Active 30/25/25
Minor Storm 35/30/25
Major-Severe Storm 10/01/01

HF propagation conditions continue to be moderately to occasionally strongly degraded for transpolar and transauroral

circuits due to the enhanced levels of geomagnetic and auroral activity. Similar conditions are expected over the next 24 hours before levels of activity begin to subside on 12 and 13 March. Expect degraded propagation through at least 13 March for high and polar latitude paths. Middle latitudes should see a return to more stable conditions on 12 and (particularly) 13 March, if levels of activity do indeed subside by then.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
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REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 10/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7684 S08W70 007 0010 BXO 04 002 BETA
7685 S08W44 342 0060 DSO 07 011 BETA
7687 N17W39 337 0000 AXX 00 001 ALPHA
7688 N18E75 223 0000 AXX 02 002 ALPHA
7680 S11W81 019 PLAGE
REGIONS DUE TO RETURN 11 MARCH TO 13 MARCH
NMBR LAT LO
7671 N11 191

LISTING OF SOLAR ENERGETIC EVENTS FOR 10 MARCH, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 10 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
10/A0022 B1838 N14E23 DSF

INFERRED CORONAL HOLES. LOCATIONS VALID AT 10/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
67 S39W43 S62W51 S39W83 S37W48 005 EXT NEG 008 10830A
68 N61E09 N22W30 N26W35 N64W19 322 EXT POS 011 10830A
69 S10E47 S18E45 N00E29 N06E31 269 ISO POS 004 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
09 Mar: 0116 0121 0130 B3.7
0459 0504 0508 B2.6
0659 0702 0704 B1.2
0825 0828 0831 B1.9
0856 0857 0906 SF 7686 N08W80

1018 1021 1025 B1.6
1813 1822 1837 B3.7
1851 1901 1908 B5.2
2009 2014 2019 B2.9
2038 2046 2103 B1.9
2133 2140 2152 B7.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7686: 0 0 0 1 0 0 0 0 001 (9.1)
Uncorrellated: 0 0 0 0 0 0 0 0 010 (90.9)

Total Events: 011 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

Date: 12 Mar 1994 03:37:33 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!vixen.cso.uiuc.edu!prairienet.org!k9cw@network.ucsd.edu
Subject: Guy Tower with Phillistran Non-metallic ?
To: info-hams@ucsd.edu

In a previous article, wstrahl@cbnewsg.cb.att.com (wayne.a.strahl) says:

>I am posting this query for a friend who is considering guying his
>Rohn 60' fold-over tower with Phillistran non-metallic guy cable in
>order to reduce interaction with his low-band slopers and Mosley
>PRO-57A that is mounted on it.

A year ago, I installed a 58 foot Rohn foldover tower with steel guys at
the hinge (31 feet) and Phillystran at the top. It works great! Until
I put the guys on the upper half, it would really move about in the wind
out here in the country. The Phillystran kept the top stable and it does
not effect the two inverted V's hanging off the tower.

Nice stuff...

73, Drew K9CW

He presently has unbroken lengths
--
---------------------------------------------------------------*
| Andrew B. White K9CW | internet: k9cw@prairienet.org |
| ABW Associates, Ltd. | phone/fax: 217-643-7327 |
---------------------------------------------------------------*

Date: Sat, 12 Mar 1994 00:38:45 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!europa.eng.gtefsd.com!lib
rary.ucla.edu!csulb.edu!csus.edu!netcom.com!kld.slip.netcom.com!user@network.ucsd.edu
Subject: Info on Alinco mods?
To: info-hams@ucsd.edu

In article <1994Mar10.204543.1362@earlham.edu>, georges@earlham.edu wrote:

> I recently bought a 2nd hand Alinco DJ-F1T hand held. The manual says
> that it can be modified to do aeronautical band AM between 118 MHz and 130
> MHz
> Also, how complicated and ticklish are such mods?
>
> Any help/ideas/opinions welcomed.
>
>
> --George Silver
> Director of Computing
> Earlham College
> georges@earlham.edu

I own and modified two alinco radios a 590 & 560. I had the benefit of
paperwork I got from my local dealer, but when I opened the radios I found
the jumpers that were to be cut were EXTREMELY obvious. They were loops of
orange wire about 1/4 to1/2 inch long connecting two points on a circuit
board. They were the only such wires on the board. I would suspect that if
you open your radios you'll find the same sort of thing.

--
Keith Dicker N6CKT

Date: Sat, 12 Mar 1994 01:53:01 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!torn!news.ccs.queensu.ca!eleceng.ee.QueensU.CA!toloo@network.ucsd.edu
Subject: Looking For Converters
To: info-hams@ucsd.edu

Hello:
I am looking for the circuit that can change the
reception bands of receivers (shortwave and/or FM)
by modulating the signals that are outside the reception
band.

Regards

Mansour

Date: 11 Mar 1994 22:29:51 GMT
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!agate!howland.reston.ans.net!torn!nott!cunews!freenet.carleton.ca!freenet3.scri.fsu.edu!freenet2.scri.fsu.edu!henryf@network.ucsd.edu
Subject: midwest micro
To: info-hams@ucsd.edu

I am thinking about purchasing a clone from midwest micro. Does anybody
have experience with them? How is their customer service?? How about the
quality of their engineering?? Thanks.

Date: Fri, 11 Mar 1994 00:14:12 MST
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!sol.ctr.columbia.edu!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!ve6mgs!usenet@network.ucsd.
Subject: WARNING: Potential Satellite Anomaly Warning
To: info-hams@ucsd.edu

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POTENTIAL SATELLITE ANOMALY WARNING

ISSUED: 05:00 UT, 11 MARCH

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ATTENTION:

Moderate to high fluxes of high energy electrons at greater than 2 MeV
have been observed over the last 48 hours. Electrons became enhanced during
the mid-to-late part of 08 March and have been at particularly strong levels

over the last 24 hours. Total fluence for the event thus far is running
around 3.5E+09 electrons/cm^2-day-sr. If these fluences continue (and they
are expected to), some geosynchronous satellites may see charging-related
anomalies.

Electron fluence reached a new maximum today, at 2.2E+09 el/cm^2-day-sr.
This daily fluence value exceeds all other daily fluence values associated
with this disturbance over the last several months.

Based on recurrence, this electron enhancement should continue for
another 10 to 12 days. Updates will be released, as necessary.

** End of Warning **

Date: Fri, 11 Mar 1994 13:45:13 GMT
From: sgi!odin!chuck.dallas.sgi.com!adams@decwrl.dec.com
Subject: WWV time station freq
To: info-hams@ucsd.edu

In article <Anthony_Pelliccio-100394124830@138.16.64.25>, Anthony_Pelliccio@brown.edu
(Tony Pelliccio) writes:
|> In article <2lnj0n$ekf@gaia.ucs.orst.edu>, schottd@ucs.orst.edu (Derek
|> Schott) wrote:
...stuff deleted...
|> 5.000, 15.000 and 20.000 are the ones I'm familiar with.....
|>
|> --
|> == Anthony_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)
|> == Box 1908, Providence, RI 02912 Tel. (401) 863-1880
|> == All opinions expressed are those of the individual, and not those
|> == of Brown University.

What!? You missed 10.000000000000 MHz, the most important one, IMHO. :-)

dit dit
--
Chuck Adams K5FO CP-60
adams@sgi.com

Date: (null)
From: (null)
SB DX ARL ARLD014
ARLD014 DX news

The items in this week's bulletin are courtesy of Rolf, DL7VEE, the
Ohio/Penn DX Bulletin, the Yankee Clipper Contest Club PacketCluster
network and Contest Corral in QST. Thanks.

PRATAS ISLAND. The latest news is that the planned DXpedition for
this month has been scrubbed.

LACCADIVE ISLANDS. VU7LI continues both his geological surveys and QRP operation for a few more weeks.

KERGUELEN ISLAND. Listen for Pierre, FT5XJ, on 14188 kHz around 0330 and 1600z.

NEPAL. Equipment donations by DJ6SI and DJ6JC, with the help of EUDXF, DL9WVM and WB6ZUC, have put Satis, 9N1AA, and Surish, 9N1HA, on the air. QSL via PO Box 4292, Kathmandu, Nepal.

TONGA. Bob, W7TSQ, is island hopping as A35SQ around the main island of Tonga, much to the delight of IOTA chasers. He should be active until March 15. QSL via W7TSQ.

NORTHERN COOK ISLANDS. Amy, ZK1AT, has been on 3787 kHz at 0630z, 7205 kHz around 0715 and 0900, 14195 kHz at 0430z, 18150 at 2200, and 24950 at 2315. QSL via WB6EQX.

FERNANDO DE NORONHA ISLAND. Peter, PY5CC, is QRV as PY0FM until April 1. He prefers SSB, 160 and 6 meters, but also operates some CW and satellites. QSL his home call.

FRANZ JOSEF LAND. 4K2MAL has been quite active lately. Check 10104 kHz at 2230z and 0400z, 18072 kHz at 1645z, 14182 kHz at 1415z, and 7004 kHz around 0245z.

GUYANA. Larry, 8R1/N4VA, should be active for another week. His on the air times are fluid, so listen to the 20 and 15 meter IOTA frequencies, 14260 and 21260 kHz, for details.

NORTHERN MARIANA ISLANDS. JA1CMD will sign KH0/JA1CMD from March 27 to April 1, mainly on 80 and 40 meter CW. QSL to CBA.

COCOS ISLAND. Members of the OKDXA are planning a big TJI9 DXpedition for May.

THIS WEEKEND ON THE RADIO. Both the Kentucky and Wisconsin QSO Parties are this weekend. The Kentucky event, sponsored by the Paducah ARA, is from 1500z March 12 to 0300z March 13, and 1500z to 2400z March 13, both phone and CW.

The Wisconsin Party is sponsored by the West Allis RAC and runs from 1800z March 18 to 0100z March 14, both CW and phone.

The exchange for both events is signal report, state, province or country. Kentucky and Wisconsin stations will send signal report and county for their exchange. Full details/rules appear on page 111 of February QST.
NNNN
/EX

Date: 12 Mar 1994 03:29:01 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!sol.ctr.columbia.edu!newsxfer.itd.umich.edu!news1.oakland.edu!vela.acs.oakland.edu!prvalko@network.ucsd.edu

To: info-hams@ucsd.edu

References <2lnm9t$643@jericho.mc.com>, <2lo1ii$g94@oak.oakland.edu>,
<1994Mar11.215416.5960@news2.den.mmc.com>ch.e
Subject : Re: 1x1 Callsigns?

Gee Russ... can't get anything past you now, can we? :-)

yup.

3's as in seven thirds =paul= wb8zjl

Date: Fri, 11 Mar 1994 13:53:38 GMT
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!convex!cnn.exu.ericsson.se!ericom!eua.ericsson.
se!sunic!psinntp!psinntp!laidbak!tellab5!jwa@network.ucsd.edu
To: info-hams@ucsd.edu

References <CMCruE.8n6@ucdavis.edu>, <2li7a8$sj6@news.acns.nwu.edu>,
<CMDvpx.AJp@news.Hawaii.Edu>co
Subject : Re: Sound Blaster stupidity

In article <CMDvpx.AJp@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman)
writes:
>In article <2li7a8$sj6@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan)
writes:
>>In article <CMCruE.8n6@ucdavis.edu>,
>>Daniel D. Todd <ez006683@chip.ucdavis.edu> wrote:
>>>Jeffrey Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:
>>>
>>>: But keep in mind that they're NOT ads because the item is not for sale
>>>: yet (even though the price was posted for us).
>I was being facetious!
>>>I've seen this argument posited before, I'm not sure if it's real or
>>>not.

Anyone who thinks that the non-existence of a product means that
>>>ads for it are not advertisements should look at the last couple months
>>>of QST. Lots of companies advertise before the product is actually
>>>available. (Sorta like President Clinton and the health care program)
>>
>>Indeed. I think that they are called `Teasers' - a common marketing
>>ploy. It is used to signal prospective customers and competitors. To
>>competitors: better watch out, I am going to come out with this new product.
>>It is a `territorial' thing. Like dogs marking the fire hydrant.
>>
>Jeff NH6IL

I'm just a "functional illiterate" electronic tech. I'm not
much of a business man. However, I do know one thing. All of
this hullabaloo about the Hamblaster means exposure and that
what advertisers want. Just talking about is a form of

advertising. So whose the bad guy?

Jack Albert WA9FVP Fellow Radio Hacker
Tele (708) 378-6201
Tellabs Operations, Inc. FAX (708) 378-6721
1000 Remington Blvd. jwa@tellabs.com
Bolingbrook, IL 60440

"You can't please everyone so you have to please yourself"

Rick Nelson

Date: 11 Mar 94 16:09:28 GMT
From: agate!howland.reston.ans.net!math.ohio-state.edu!news.acns.nwu.edu!ftpbox!mothost!lm
psbbs!NewsWatcher!user@ucbvax.berkeley.edu
To: info-hams@ucsd.edu

References <2lnm9t$643@jericho.mc.com>, <CMGtpo.4t9@cup.hp.com>,
<CMGxq7.F0L@wang.com>news.
Subject : Re: 1x1 Callsigns?

In article <CMGxq7.F0L@wang.com>, dbushong@wang.com (Dave Bushong) wrote:

> jholly@cup.hp.com (Jim Hollenback) writes:
>
> >Bob Levine (levine@mc.com) wrote:
> >: Has anyone seen anything in print about whether the vanity
> >: callsign program (someday) might allow 1x1 calls?
>
> >: (for info, a 1x1 is like K1X)
>
> >No, but I've heard ther is a 2X1 ... JY1
>
> Wouldn't that be a "two by nothin'?" Mine (KZ1O) is a 2X1, so if
> the 'o' were dropped, it would be a 2X
>
> --
> Dave Bushong, Wang Laboratories, Inc.

Well, guys, don't forget two crucial pieces of information about that call:
1) It is not a US callsign, it is Jordan, in the middle east;
2) JY1 happens to be King Hussein, who has done much to promote amatuer
radio in the middle east and throughout the world. He is also the ruler of
those issuing callsigns. Therefore he gets to pick the shortest and most
prestigious call for himself. His wife Queen Noor has the call JY1AA.

FYI, King Hussein visits the USA regularly, including both the Cleveland
Clinic and Mayo Clinic for health care. He has been heard locally on the
bands during his visits, and I hope to hear him speak some day at an
amateur club meeting.

--
Karl Beckman, P.E. < STUPIDITY is an elemental force for which >
Motorola Comm - Fixed Data < no earthquake is a match. -- Karl Kraus >

The statements and opinions expressed here are not those of Motorola Inc.
Motorola paid a marketing firm a huge sum of money to get their opinions;
they have made it clear that they do not wish to share those of employees.

Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI

End of Info-Hams Digest V94 #280
****

2922. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 08:57:26 UTC
From: smtp@zeus.USG.Sandy.NOvell.COM
Message-ID: <9403140907.AA24074@ns.Novell.COM>
Source record: 269773

```
From smtp Sat Mar 12 21:41 MST 1994 remote from zeus
Received: from ucsd.edu by ns.Novell.COM (4.1/SMI-4.1)
id AA07410; Sat, 12 Mar 94 21:46:40 MST
Received: from localhost by ucsd.edu; id SAA25247
sendmail 8.6.4/UCSD-2.2-sun
Sat, 12 Mar 1994 18:32:18 -0800 for info-hams-list
Received: from localhost by ucsd.edu; id SAA25236
sendmail 8.6.4/UCSD-2.2-sun
Sat, 12 Mar 1994 18:32:15 -0800 for info-hams-ddist
Errors-To: info-hams-relay@UCSD.EDU
Errors-To: info-hams-relay@UCSD.EDU
Content-Length: 25868
Content-Type: text
Sender: info-hams-relay@UCSD.EDU
Precedence: List
Message-Id: <199403130232.SAA25236@ucsd.edu>
Date: Sat, 12 Mar 94 18:32:14 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@UCSD.EDU>
Errors-To: Info-Hams-Errors@UCSD.EDU
Reply-To: Info-Hams@UCSD.EDU
Precedence: Bulk
Subject: Info-Hams Digest V94 #281
To: Info-Hams@UCSD.EDU

Info-Hams Digest Sat, 12 Mar 94 Volume 94 : Issue 281

Today's Topics:
**For Sale** MFJ-948 Antenna Tuner & Astron RS-20A
* Computer/Ham Radio Flea Market - April 10, 1994
1x1 calls
1x1 Callsigns?
Best cars for mobile HF/VHF??
Daily Summary of Solar Geophysical Activity for 11 March
Diesel or Taurus fr HF/VHF mobile??
Guy Tower with Phillistran Non-metallic ?
Looking for "Stabilant 22" contact cleaner
need extra class book and tape recommendation
Need LA5VK's address
Russian Robinson Club

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.
```

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sat, 12 Mar 1994 14:33:52 UNDEFINED
From: ihnp4.ucsd.edu!usc!sol.ctr.columbia.edu!hamblin.math.byu.edu!news.byu.edu!cwis.isu.edu!mica.inel.gov!nas_26.tis.inel.gov!ojg@network.ucsd.edu
Subject: **For Sale** MFJ-948 Antenna Tuner & Astron RS-20A
To: info-hams@ucsd.edu

Since a person has been writing me that it is not appropriate to post personal
equipment "For Sale" in this area, if interested, look in rec.radio.swap. It
appears that this individual feels that he owns this rec area and I only hope
that he is writing to all who post their ham gear (and computers) the same as
he has been bothering me.

I only posted in this area since I noted that other equipment was posted.
For all email, write to:

ojg@tis.inel.gov or GREENBJC@inel.gov

73's

Date: Sat, 12 Mar 1994 15:00:56 EDT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!newsserver.jvnc.net!jvnc.net!Gerry_Jurrens%walnut.prs.k12.nj.us@network.ucsd.edu
Subject: * Computer/Ham Radio Flea Market - April 10, 1994
To: info-hams@ucsd.edu

Trenton, New Jersey Amateur Radio/Computer Flea Market
HAMCOMP '94
Sunday April 10, 1994

Sponsored by the Delaware Valley Radio Association, HAMCOMP '94 is in a
new location, Trenton State College Campus, on Route 31 in Ewing Township
approximately one mile south of Exit 4 of Interstate I-95. Talk-in
frequencies are 146.67 (-600)--through the W2ZQ repeater--and 146.52
simplex.

Vendor setup begins at 6AM. Doors are open to the general public from
8AM to 1 PM.

Indoor table spaces in the nearly 20,000 square foot Student Recreation
Center are available for $20 each. This fee includes one general admission
ticket worth $5. There are about 100 outdoor tailgating spaces available
at $12 each including your admission ticket. General admission is $5.

Parking is free, and the facilities are handicapped accessible (barrier
free). Food and refreshments are available.

Amateur Radio examinations will be offered. For further information on
testing, please contact Don Wright, AA2F, in Pennington, at (609) 737-1723.

To reserve a table or tailgating space, please call the DVRA Hotline at
(609) 882-2240 and leave your name, number and best time to call back.
Someone will return your call as soon as
possible.

****
****
Please feel free to forward this to other applicable newsgroups as this is
the only one I have access to currently. Thanks,
Best 73,

Gerry Jurrens N2GJ

-----Princeton Regional Schools takes no responsibility for the
accuracy or content of the above message.

Date: 12 Mar 94 23:49:13 GMT
From: news-mail-gateway@ucsd.edu
Subject: 1x1 calls
To: info-hams@ucsd.edu

A2 through A9 calls do not belong to the US but to other countries. I
believe the 1x1 calls starting with N are already assigned to aircraft.
(Note I said the 1x1 ones!) I am certain the 1x1 starting with W
are also assigned. You can forget getting a 1x1 call.
--
David L. Wilson INTERNET: dwilson@s850.mwc.edu
Phone: (703)898-1084 (H) Amateur callsign: AC4IU G.S.: FM18fg

---

Date: Sat, 12 Mar 1994 19:30:38 GMT
From: ihnp4.ucsd.edu!galaxy.ucr.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!tcj@net
work.ucsd.edu
Subject: 1x1 Callsigns?
To: info-hams@ucsd.edu

Bob Wilkins N6FRI (rwilkins@ccnet.com) writes:

> Todd Jonz (tcj@netcom.com) wrote:
>
> > Ed Hare (KA1CV) (ehare@arrl.org) writes:
> >
> > > Well, I want *my* call to be "K".
> >
> > Golly, Ed, you must be one of those long-winded types.
> > Would you settle for something a little shorter -- like
> > maybe "N"? ;-)
>
> I considered upgrading to extra just so I could get the shorter call

> "N". But then I realized that I would be left out of all the nets.
> Our local ares-races nets call the roll by suffix.

Good point, Bob. I guess you'd have to operate portable if you wanted a suffix. And if you wanted to keep your call as short as possible, I'd suggest Italy so that you could check into your ARES net as N/I. Of course, if it's a two meter net you'd better take a *BIG* beam with you.

> I would not be called when the sixes are listed for that rare island
> dx.

Since you'll be in Italy for the ARES net, your best bet would probably be to head down to Libya and operate as N/5A for the DX nets and wait for them to call for fives. But then I guess that would make *you* the DX, wouldn't it?

BTW, did we decide on the nomenclature for these calls. Are they 0x0's? ;-)

Todd, KB6JXT

Date: 12 Mar 1994 15:36:12 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.umbc.edu!haven.umd.edu!cv
ille-srv.wam.umd.edu!adam@network.ucsd.edu
Subject: Best cars for mobile HF/VHF??
To: info-hams@ucsd.edu

In article <1994Mar11.135613.16379@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
>Look at what the cops are driving.

Good idea, Gary. Just don't forget to leave off the whitewalls!

-N3NKI

Date: Sat, 12 Mar 1994 09:45:22 MST
From: ihnp4.ucsd.edu!swrinde!emory!sol.ctr.columbia.edu!newsxfer.itd.umich.edu!nntp.cs.ubc
.ca!alberta!ve6mgs!usenet@network.ucsd.edu
Subject: Daily Summary of Solar Geophysical Activity for 11 March
To: info-hams@ucsd.edu

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

11 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 11 MARCH, 1994

NOTE: Stratospheric warming continues over Asia, Alaska, Canada, and the
adjacent Arctic region. Temperature gradient is reversed between 60N
and the pole from 10 HPA upwards into the upper stratosphere.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 070, 03/11/94
10.7 FLUX=088.1 90-AVG=106 SSN=066 BKI=4444 4334 BAI=024
BGND-XRAY=A9.1 FLU1=2.0E+07 FLU10=2.3E+04 PKI=5555 4434 PAI=037
BOU-DEV=065,063,056,050,046,027,021,045 DEV-AVG=046 NT SWF=00:000
XRAY-MAX= B3.8 @ 0049UT XRAY-MIN= A6.2 @ 0010UT XRAY-AVG= B1.2
NEUTN-MAX= +002% @ 2330UT NEUTN-MIN= -003% @ 2009UT NEUTN-AVG= +0.0%
PCA-MAX= +0.8DB @ 0700UT PCA-MIN= -0.6DB @ 1510UT PCA-AVG= +0.2DB
BOUTF-MAX=55354NT @ 0218UT BOUTF-MIN=00000NT @ 1706UT BOUTF-AVG=55281NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+069,+000,+000
GOES6-MAX=P:+138NT@ 1833UT GOES6-MIN=N:-107NT@ 1707UT G6-AVG=+088,+022,-051
FLUXFCST=STD:090,095,095;SESC:090,095,095 BAI/PAI-FCST=015,015,015/030,025,020
KFCST=2114 4121 2114 4111 27DAY-AP=036,028 27DAY-KP=4544 6444 4335 4554
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MINSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 10 MAR 94 is not available.
The Full Kp Indices for 10 MAR 94 are: 4o 4- 6- 5- 4+ 4+ 4o 5-
The 3-Hr Ap Indices for 10 MAR 94 are: 30 24 62 41 33 35 29 38
Greater than 2 MeV Electron Fluence for 11 MAR is: 2.3E+09

SYNOPSIS OF ACTIVITY

Solar activity was very low with only a short series of
uncorrelated, small B-class x-ray bursts. Region 7689 (S11W38)
was numbered today.

Solar activity forecast: solar activity is expected to be
very low to low. Regions 7685 (S08W57) and 7688 (N16E60) have
slim chances of producing isolated C-class flares.

The geomagnetic field has been at mostly active levels
for the past 24 hours. Minor to major storm levels were
observed at high latitudes. Energetic electron fluxes
(Gt 2 mev) were at high to very high levels during the period.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled to active for the next 24 hours then
mostly unsettled for the remainder of the period. High latitudes
should continue to see minor storm levels tapering off to
unsettled to active by the end of the forecast period.

Event probabilities 12 mar-14 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 12 mar-14 mar

A. Middle Latitudes
Active 20/20/20
Minor Storm 20/20/20
Major-Severe Storm 05/05/05

B. High Latitudes
Active 20/20/20
Minor Storm 25/25/25
Major-Severe Storm 05/05/05

HF propagation conditions were below normal over most
regions. MUFs continue to be depressed by up to about 35
percent. Propagation was worst for transauroral circuits.
Similar conditions are expected over the next 24 to 48 hours
before conditions begin improving. The transition from
degraded propagation to near-normal propagation is expected to
be a gradual process covering at least several days.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 11/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7684 S08W82 007 0000 BXO 02 002 BETA
7685 S08W57 342 0060 CAO 07 007 BETA
7687 N18W52 337 0000 AXX 00 001 ALPHA
7688 N18E60 225 0030 CRO 08 005 BETA
7689 S11W38 323 0000 AXX 00 001 ALPHA
REGIONS DUE TO RETURN 12 MARCH TO 14 MARCH
NMBR LAT LO
7671 N11 191

LISTING OF SOLAR ENERGETIC EVENTS FOR 11 MARCH, 1994

A. ENERGETIC EVENTS:
BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 11 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 11/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
10 Mar: 0007 0012 0019 B4.0
0025 0028 0032 B4.3
0749 0757 0805 B6.4
0847 0909 0917 B7.0
2234 2243 2257 B2.6

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 005 (100.0)

Total Events: 005 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

Date: 11 Mar 1994 19:29:39 -0500
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!wupost!udel!news.udel.edu!brahms.udel.edu!
not-for-mail@network.ucsd.edu
Subject: Diesel or Taurus fr HF/VHF mobile??
To: info-hams@ucsd.edu

I got a variety of responses for a car which would be good for 100 watts
or so of HF and 50 or so of 2 meter and 440 radio. Criteria were lack of
interference from car into receiver and from transmitter into auto
electronics.

Diesels and the Taurus were among those favored. Anyone else have comments
on these choices.

Tnx agn Bob

--
Bob Penneys, WN3K Frankford Radio Club Internet: penneys@pecan.cns.udel.edu
Work: Ham Radio Outlet (Delaware) (800) 644-4476; fax (302) 322-8808
Mail at home: 12 East Mill Station Drive Newark, DE 19711 USA

Date: Fri, 11 Mar 1994 13:45:27 GMT
From: ihnp4.ucsd.edu!usc!sol.ctr.columbia.edu!jabba.ess.harris.com!mlb.semi.harris.com!con
trols.ccd.harris.com!drs@network.ucsd.edu
Subject: Guy Tower with Phillistran Non-metallic ?
To: info-hams@ucsd.edu

: Does anyone out there use the Phillistran guy material and can
: relate their experiences ?

I use phillistran on my 38 foot (soon to be 58 or 68 foot) tower. I feel
that it is OK but I still feel more secure with steel cable that doesn't
give at all. I use the smaller size. In raising the height of my tower I
decided to go with steel cable. I use the Phillistran as guying for my
--

| Doug Snowden |
| Harris Controls Division, |
| Melbourne, Florida 32901 |
| email: drs@ccd.harris.com |
| Amateur Call: N4IJ |
----
secret message follows:

--- --- o o o o o o --- ---

Date: Sun, 13 Mar 1994 01:41:33 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!newsserver.jvnc.net!yale.edu!noc.near.ne
t!inmet!panther!leber@network.ucsd.edu
Subject: Looking for "Stabilant 22" contact cleaner
To: info-hams@ucsd.edu

> Does anyone know where I can get my hands on "Stabilant 22" contact cleaner?
> A mail-order source would be ideal.

Stabilant 22 is available from:

Soft Solutions
907 River Road, Suite #98
Eugene, OR 97404
Phone: 503-461-1136
Fax: 503-461-2005

Soft Solutions is a Service and Parts supplier for Macintosh computers.
The brochure I have (about a year old) lists it in a prediluted formula
(4:1 dilution with an ispropyl alcohol carrier) at $36 for a 15ml container.
(Phew! Don't spill it!)

Cheers,
Tom Leber
N3QKV
--

Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
"Smother technology and it rebels." - Max Headroom

Date: Sat, 12 Mar 1994 17:36:14 -0500
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!utah-morgan!hellgate.utah.edu!cc.usu.edu!sy_j.p
gh.wec.com!user@network.ucsd.edu
Subject: need extra class book and tape recommendation
To: info-hams@ucsd.edu

I am thinking of upgrading to extra, any recommendations as to
which book, tapes, software (mac or pc) to use as study guide ?

please email response if possible
thanks in advance

jerry
N3RKD

Date: 12 Mar 1994 16:36:42 -0800
From: ihnp4.ucsd.edu!agate!apple.com!apple.com!not-for-mail@network.ucsd.edu
Subject: Need LA5VK's address
To: info-hams@ucsd.edu

tomrune@mac_inge (Tom Rune Lauknes) writes:

>The reason why I ask is that LA5VK will be the manager
>for the "dx'pedition", and I want to know if he is in the
>newest call-book.

LA5VK is listed in the '94 callbook as Inge Johan Lauknes, Oldersneia 10,
N-9100 Kvaloysletta.

LA1BJA is not in the callbook.

P.S.: Tom, your return address don't seem to work for me
(ratatosk.uninett.no claims circular address).

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

Date: Sat, 12 Mar 94 14:38:32 +0300
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!EU.net!news.eunet.fi!news.spb.su!KremlSu
n!kiae!relcom!demos1!dnews-server@network.ucsd.edu
Subject: Russian Robinson Club
To: info-hams@ucsd.edu

Hello ALL

The radio amateurs-travellers club named "Russian Robinson
Club" interested in world island program - IOTA is applied
to separate radioamateurs, associations, funds and also
clubs, interests of which are equally connected to the
above mentioned club.
The club "RRC" (Russian Robinson Club) created at the
beginning of 1993 rendered support in organization more
than ten island arctic DX' pedition in 1993, two of which
are NEW IOTA:
4K2RRC (EU 019), 4K3RRC (EU 082), 4K4RRC (AS 005), 4K5RRC
(AS 025), 4K3GW (EU 161), 4K3WQ (EU 162), 4K3/RW3GW
(EU 082), 4K3/RA1ZA, 4K3/RA1WQ, UW1ZZ/A (EU 082), UW1ZZ/A
(EU 161), 4K4DV (AS 029).
During this year Russian island national diploma program
(RRA) has been developed like national island program of
Italy (IIA), Spain (IDEA), France (DIFM), Portugal (DIP),
Polska (SP IOTA A).
Competitors of this program have receive already more than
150 diplomas. We greatly hope that interest to Russian
national island "RRA" will be increased every year. Besides
it a list with separate numbering of Russian islands
according to "RRA" has been developed already.
Club "RRC" publishes magazin - report every quarter which
informers about members of this club; last island, polar and
sea expedition (.../mm); IOTA - News; database of Russian
island stations, antarctic station (4K1); diplomas and other
news.
Every Sunday at 08:00 utc 14.120 +/- QRM this club organizes
different discussions.
The club "RRC" includes a great number of polar explorers,
islanders, navigators which had a lot of expedition to
islands, Antarctica (4K1) and (.../mm). Besides it there is
a lot of radioamateurs interested in IOTA and "RRA".
At present this club experiences a great financial problems
for arranging expeditions to Russian islands and other places.
There are wonderful opportunities to visit many islands among
which rare available and desert, which are of great interes-
ting opportunities and suggestions.

This club has many problems with industrial radio equipment which is sometimes necessary in expeditions. Now many of radioamateurs work with home-made apparatus which often break at unsuitable moment. Sometimes there are rare possibilities to visit islands of Arctic and Antarctic basin. The club has a wonderful developed diploma program but financial means are greatly need for its realization.
Council of "RRC" applies to sponsor, radioamateurs, organizations, associations, funds and clubs to render any financial support in carrying out islands expeditions.
We shall also be thankful to all who give us any used (second-hand) industrial radio equipment for its further using in different expedition.
In all cases any sponsor will receive a description of events, photos, slides or videofilm from the participants of DX' peditions.
The sponsors indicate in their agreement what they want to have in return for their financial support or equipment. All those who will render any support in any cases they'll be free of charge subscribers of our magazine-report "Russian Robinson News". "RRC" invites all interested HAMs from different countries of the world to arrange joint expedition to the islands of Russia.

"RRC" can help to arrange any visit to any island of Russia and to settle all organization problems. Wait for your suggestions !

Address of head quarters: P. O. Box 3, 398000, Lipetsk, Russia.

UTC Ltd, (RRC), 218 Goddard Row, Newport
RI - 02840, USA

I1HYW (RRC), Gianni Varetto, P. O.
Box 1,10060, Pancalieri, (Torino),
Italy.

Internet: rv3gw@lttsco.lipetsk.su
Our best Robinson wishes ! de: RW3GW - V. Sushkov

Albert, RV3GW, 73!
--
Albert (RV3GW)
< ***** Russian Robinson Club, #34 ***** >
pse will send only personal E-mail addr.

Date: 12 Mar 1994 12:20:40 -0800
From: ihnp4.ucsd.edu!usc!yeshua.marcam.com!charnel!olivea!apple.com!apple.com!not-for-mail
@network.ucsd.edu
To: info-hams@ucsd.edu

References <2lnm9t$643@jericho.mc.com>, <1994Mar10.223223.13794@arrl.org>,
<tcjCMJHM5.vJ@netcom.com>m

Subject : Re: 1x1 Callsigns?

tcj@netcom.com (Todd Jonz) writes:

>Ed Hare (KA1CV) (ehare@arrl.org) writes:

> > Bob Levine (levine@mc.com) wrote:
> >
> > > Has anyone seen anything in print about whether the vanity
> > > callsign program (someday) might allow 1x1 calls?
> >
> > Well, I want *my* call to be "K".

>Golly, Ed, you must be one of those long-winded types. Would you settle for
>something a little shorter -- like maybe "N"? ;-)

How often have you heard such exchanges:

DX: QRZ contest, this is Lima One Delta

US: (huh??) Your call again?

DX: L1D

US: (geez, a new one...) WB0X

DX: Station WB0X something?

US: Willy Baker Zero X-ray.

DX: Willy Baker Zero X-ray, full call please...

Aren't you glad you have a traditional call? Don't you wish
everyone else have them too? :-)

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

Date: Sat, 12 Mar 1994 15:00:42 GMT
From: ihnp4.ucsd.edu!swrinde!emory!wa4mei!ke4zv!gary@network.ucsd.edu
To: info-hams@ucsd.edu

References <1994Mar11.141356.16549@ke4zv.atl.ga.us>, <2lqasc$31u@hp-col.col.hp.com>,
<2lsb0f$9dg@charm.magnus.acs.ohio-state.edu>
Reply-To : gary@ke4zv.atl.ga.us (Gary CoffFrom info-hams-relay@ucsd.edu Sat Mar 12
12:32:44 1994
Received: from network.ucsd.edu by ucsd.edu; id MAA01309
sendmail 8.6.4/UCSD-2.2-sun via ESMTP
Sat, 12 Mar 1994 12:32:42 -0800 for <info-hams-digest@ucsd.edu>
Received: from localhost by network.ucsd.edu (8.6.4/UCSDGENERIC.4)
id LAA14141 to info-hams-digest@ucsd.edu; Sat, 12 Mar 1994 11:58:11 -0800
Received: from USENET by network.ucsd.edu with netnews
for info-hams-digest@ucsd.edu (info-hams@ucsd.edu);
contact usenet@network.ucsd.edu if you have questions.

To: info-hams@ucsd.edu
Date: 12 Mar 1994 11:31:02 -0800
Message-ID: <2lt59m$o4i@apple.com>
Organization: Apple Computer, Inc., Cupertino, California
From: ihnp4.ucsd.edu!agate!apple.com!apple.com!not-for-mail@network.ucsd.edu
Sender: info-hams-relay@ucsd.edu
References: , <2lgpic$2i2@search01.news.aol.com>ate
Subject: Re: Why no 10 meter activity??

paulg105@aol.com (PaulG105) writes:

>Why is there no 10 meter activity?? Is it because of the band openings? If
>so, how do you know when the openings are good?? 10 meters seems to have
>become or is a dead band.

You would have found lots of 10m phone activity into South America
and the Pacific during the March 5 weekend (ARRL DX contest).

My log shows P4, PJ9, YV, ZP, V2, XE, LU, PY, KH6, CE, VP2V, V7,
KL7, T30, HP, HI, KP4, KG4, JA and CX on 10 meters phone last Sunday.

Granted, 15m and 20m were better into the rest of the world that
weekend, but 10m is far from "dead" yet. Maybe next year :-).

73

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

End of Info-Hams Digest V94 #281
****

2923. 9k6 + TH75E/Alinco DR570E

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 11:01:36 UTC
From: pethyvar@utu.fi
Message-ID: <CMnIMo.5sw@utu.fi>
Source record: 269774

HI OM!

Is there possibilities to get Kenwood TH75E or Alinco DR570E work
with 9600bps G3RUH ??

73 de Petri OH1MVH

--

Petri Hyv{rinen e-mail:pethyvar@polaris.utu.fi
Rakuunatie 60D37 packet:OH1MVH@OH1RBU.FIN.EU
20720 TURKU

2924. Re: PY0FM and 6Y5IC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 11:19:53 UTC
From: michaela@freenet2.scri.fsu.edu
Message-ID: <2m1h8p$sde@freenet3.scri.fsu.edu>
Source record: 269775

I talked to him briefly on 17-meters earlier this week. The
QSL route was definitely via PY5CC.

Michael Christie, K7RLS
Crawfordville, Florida

2925. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 13:27:47 UTC
From: root@jackatak.raider.net
Message-ID: <19i7ic1w165w@jackatak.raider.net>
Source record: 269776

jholly@cup.hp.com (Jim Hollenback) writes:
> Bob Levine (levine@mc.com) wrote:
> : Has anyone seen anything in print about whether the vanity
> : callsign program (someday) might allow 1x1 calls?
> : (for info, a 1x1 is like K1X)
> No, but I've heard ther is a 2X1 ... JY1
But, Jim. That's a 2x0! ;^) *AND* there's TWO of them:
JY1 and his spouse JY2
But then, he makes the rules, so his call can be anything he wants as
long as it conforms to the basic ITU allocations...

Thanks for the chuckle.
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

2926. Amateur Radio Newsline #865 11 Mar 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 13:30:04 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <SR6XjGG8yLEK057yn@dorsai.dorsai.org>
Source record: 269777
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text is transcribed from the audio service by Dale Cary, ND0AKO, and is first published in The Radio & Electronics Round Table on the Genie Online System.

An archive of previous Newsline transcriptions are available in the Genie software library. Sorry, there is no FTP site currently available, however they may be extracted from the rec.radio.info newsgroup archive at OAK.oakland.edu and other SIMTEL mirror FTP sites.

If you have any comment, suggestion, or news item you would like to submit, send them via E-Mail to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. You can contact Newsline at +1 805-296-7180. It is a combination answering and FAX machine, if you have a FAX to send, wait for the voice prompt and press your fax-send button.

All other information and disclaimers are in the text header below.

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NEWSLINE RADIO - CBBS EDITION #115 - POSTED 03/12/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newsline is posted on this CBBS twice monthly. For current information updates, please call

Los Angeles..... (213) 462-0008
Los Angeles (Instant Update Line)..... (805) 296-2407
Seattle..... (206) 368-3969
Seattle..... (206) 281-8455
Tacoma..... (206) 927-7373
Louisville..... (502) 894-8559
Dayton..... (513) 275-9991
Chicago..... (708) 289-0423
New York City..... (718) 353-2801
Melbourne, FL..... (407) 259-4479

For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

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For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

****

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[865]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory and is not *
* transmission over amateur radio. Repeat, not for broadcast. *
* This is just a reminder that the address for the Newsline *
* Support Fund is Newsline, in care of Dr. Norm Chalfin, *
* K6PGX, Post Office Box 463, Pasadena, CA 91102. Again, and *
* as always, we thank you. That ends the closed circuit with *
* Newsline report number 865 for release on Friday, 03/11/94 *
* to follow. *
* *
* *

The following is a QST

The government is going back into court to try and set standards for what is deemed indecent on the air and a Chicagoland ham is a life saving hero.

*****
GOVERNMENT APPEALS INDECENCY RULING

A Washington D.C. federal appeals court will give the government another chance to argue that its ban on indecent programming on broadcast and cable television doesn't violate free speech.
According to the Los Angeles Times, the U.S. Court of Appeals for the District of Columbia Circuit, in orders dated Wednesday February 15 and released Friday February 18 said it will reconsider rulings that struck down the federal regulations as unconstitutional.
Last November 23, a three judge panel of the court had thrown out an FCC rule that banned indecent TV and radio broadcasts between 6 a.m. and midnight. That ruling said the regulation was an unconstitutionally broad encroachment on free speech. A finding in the governments favor will make it easy to prosecute anyone using foul language on the radio including potty mouth hams.

*****
FCC AND ARRL TO PROTECT JAMMER HUNTER IDENTITY

The ARRL and the Field Operations Bureau of the Federal Communications Commission have signed a new agreement concerning the use of amateur volunteers in the area of rules enforcement. The new accord adds an condition to protect the identities of Amateur Auxiliary members when the FCC institutes an enforcement proceeding involving information provided by the leagues Amateur Auxiliary.
The agreement is a revised and expanded version of one entered into in 1984 between the ARRL and the FCC. It spells out the roles of amateurs as trained and registered official observers, as well as the role of the Field Operations Bureau.
While the new arrangement continues to place the responsibility for initial information gathering at the local level, it also specifies a more centralized system for presenting information to the government in cases where enforcement action is requested. This will be accomplished between the Office of the Chief of the Field Operations Bureau and the league's Washington, DC office.
The volunteers will continue to be known as the ARRL Amateur Auxiliary to the Field Operations Bureau. The FOB also agrees to assist the ARRL in the training of volunteers and in publicizing the objectives and accomplishments of the program.
The bottom line is that jammers, foul mouths and other sources of interference had better watch out since members of the Amateur Auxiliary are probably already at work. The good guys now have

the same protection the bad guys have had for years -- anonymity. They will never know who the jammer hunters are but their work will pay off when an FCC inspector comes knocking their your door or a letter containing a notice of violation and a heavy fine shows up in the mail.
The new agreement became effective on February the 26th.

*****
CALL SIGN PLAN EXTENDED

The FCC has also granted an ARRL a request to extend the comment deadline in its vanity call sign proposal as outlined in Personal Radio Docket 93-305. The comment deadline has been extended to April 21st the reply comment deadline was extended to May 23rd.
The Commission's Notice of Proposed Rule Making was released December 29, 1993, with an original comment deadline of March 7, 1994. The League said more time was needed for response because of the importance of the proposal to amateurs and therefore the need to ensure fairness in whatever system was adopted.
In granting the League's request the FCC said that it believes it is desirable that the record be as complete as possible and that it reflect the views of the amateur community.
More on both of these stories in future Newsline reports.

*****
C-QUAM NAMED AM STEREO STANDARD

Its has only taken a decade for the FCC to finally decide to name the Motorola C-Quam system to be the national standard for stereo broadcasting on the AM broadcast band. The commission first authorized AM stations to broadcast in stereo back in 1982. At that time the agency declined to single out a single stereo system from the five competing systems available at the time. Instead it said that it wanted to let market forces to determine the course of AM stereo development.
The field of contenders quickly narrowed to two contenders. The Motorola C-Quam system and another developed by Kahn. In 1988 the FCC reaffirmed its decision not to mandate an AM stereo standard. It did note that the marketplace seemed to be converging toward C-Quam as the defacto standard.
But congress, recognizing the loss of revenues to the nations manufacturing and sales refused to wait. It wanted an AM stereo standard that the United States could market to the world. As a result, the 1992 Telecommunications Authorization Act directed the FCC to adopt a single AM stereo broadcasting transmission standard. It took almost another two years, but in January of this year the Motorola system was officially chosen.
Stations broadcasting using the Kahn system will soon have to cease using it. They will have the option of switching over to the Motorola C-Quam system or reverting to monaural operation.

For consumers who bought those truly rare AM stereo receivers, particularly those that receive other than the C-Quam system, you now own a piece of communications history. A part of history that did not survive in the AM stereo marketplace.

*****
Ham Radio Helps Save A Life

Now the story of a ham radio rescue as reported on the Genie information service. When Scott Montgomery, N9GLL, left for work last December 16th he didn't expect anything other than the usual--heavy traffic. But on passing a shopping mall he noticed a small car parked with its hazard lights blinking. Its door was wide open and an elderly man in the driver's seat was leaning back in an awkward position.
The driver apparently couldn't talk, but gestured repeatedly toward his chest. Scott correctly interpreted that the man was having difficulty in breathing, which is one sign of a possible heart attack. So he radioed his dad, K9DQU with "Priority Traffic." On establishing contact he told Jack Montgomery that an ambulance was needed quickly at the scene.
Jack called 911 requesting an ambulance and was transferred to the Chicago Fire Department. Scott stayed at the scene to pin-point the ambulance's destination.
When the paramedics arrived, they went to work on the sick man immediately. The ambulance driver radioed for a Fire Department engine company to help with needed additional manpower. At his request, Scott watched for and waved the engine company into position at the scene. Eventually, the engine company radioed the Chicago police to secure the sick man's vehicle, since obviously he was in no position to drive at all.
Before he left the scene, both the fire engine company personnel and paramedics praised Scott for his assistance to a citizen in need. This, because there seemed no reason to doubt that Scott Montgomery, N9GLL may well have saved the mans life.

*****
NARA

NARA, the National Amateur Radio Association says that its not as big as some of the rumors say, but it is showing the steady growth patterns it had anticipated. NARA was the brainchild of entrepreneur Donald Stoner, W6TNS who noticed that there was a gap that the ARRL was not filling, so he jumped in to fill the breach.

"We've done very well. We have about 7,500 members now. Our goal, I don't think it is overly optimistic to get 10,000 this year." Donald Stoner, W6TNS, NARA President.

Stoner says that the goals of NARA are fairly modest but defiantly attainable in his eyes.

"We, as you know, we are not anti league. We work, we actually stick to the beginners end of things. The league has to be all things to all hams. That makes their job much more difficult. Where all we have to do is help the beginner and aim our efforts towards the beginner." Donald Stoner, W6TNS, NARA President.

Stoner says that NARA not only supports the American Radio Relay League but he considers it as a membership feeder to the League as newcomers gravitate toward higher levels of sophistication in their ham radio careers.

*****
CLONED PAGERS

Illegally cloned pagers is the latest trick being used by drug dealers to avoid detection. The clones piggy-back on the pager numbers of legitimate users, preventing law enforcement agencies from eavesdropping on their illegal activities. The owners of the legitimate pagers may notice an increase in the number of pages they are receiving, but the strange codes displayed appear to be nothing but gibberish. Most pager users simply figure that a glitch has taken place in the pager dispatch system. The street price of an illegally cloned pager is in the area of seventy five to a hundred dollars, according to law enforcement officials.

*****
YAESU SPACE CAMP

Amateur radio has taken another step closer to the stars by reaching out to young people in Alabama. Beginning this summer, kids attending Space Camp in Huntsville will get an up-close demonstration of amateur radio. The program is the idea of a leading amateur radio equipment manufacturer.
Space Camp is an extremely popular activity for young people. Each year thousands of children go through a variety oft simulations and training courses. Its all designed to teach kids space travel and what being an astronaut is being like. Space Camp students are about to be exposed to amateur radio. Yaesu USA is donating equipment for two amateur radio stations at space camp. Kevin Karamanos, WD6DIH, manages National Sales for Yaesu Radio products.

"Every year we go to the show in Huntsville, Alabama, which is quite a big show in the southern part of the country and we usually go to the space camp for one day every year. We saw how many kids came through there and thought we would like to send our kids through there. Wouldn't it be great to teach kids about ham radio along with the space program." Kevin Karamanos, WD6DIH, National Sales for Yaesu USA.

Yaesu is providing equipment for a satellite and HF station. Huntsville hams will operate the equipment and will explain amateur radio to the children. Space Camp students will end up talking with astronauts in space.

"The goal is, when the orbiting space station eventually gets in the air. The future hams and future astronauts that go through and train here, the young hams. They can go ahead and operate and talk to the astronauts and pass some of the time away. So it is a good benefit for both." Kevin Karamanos, WD6DIH.

Space camp students will enjoy state-of-the-art technology, courtesy of Yaesu. Karamanos says the equipment supplied to the Space Camp stations will be Yaesu's latest--and greatest. Nor does the company's commitment to the nations youth end there. Yaesu is again serving as the corporate underwriter to the Westlink Report Young Ham of the Year award scheduled for presentation in early June.

*****
DX

In DXpedition news, word that an operation is being probable for Cocos Island beginning May 20th. A group is planning an all bands plus satellite and 6 meters operation. They will concentrate on CW, satellite and RTTY with QSL's will be handled by OKDXA. A list of operators will be published in the near future.

*****
HAM NEWS AND VIEWS

If you are planning to attend the 1994 Dayton Hamvention we want to invite you to come and also be a part of the biggest ham radio news seminar ever held. The two hour and fifteen minute session is titled "Ham News and Views from Around the World". Its a joint presentation of RAIN -- the Chicago based Radio amateur Information Network and of Newsline. The session runs from 2:45 to 5:00 PM eastern time on Saturday April 30th, and the guest list is truly the who's who in amateur radio news and information.
Jim Davis, KU8R, will be moderating the session with Hap Holly, KC9RP of RAIN and our own Newsline producer Bill Pasternak, WA6ITF as part of the panel. The star-studded guest list includes Jim Meachen, ZL2BHF from New Zealand. Jim is the president of the New Zealand Amateur Association of Radio Transmitters and hosts several ham radio bulletin services down under. And flying in from the United Kingdom is Peter Chadwick, G3RZP. Peter is the immediate past president of the Radio Society of Great Britain and the moderator of their GB2RS official bulletin service. While not with us in person, Hans van der Gronnendaal, ZS6AKV will be with the group through the magic

of videotape to tell us about ham radio bulletin services in his part of the world.
Three other United States services will be represented as well. Scheduled to appear are Len Winkler, KB7LPW who hosts "Ham Radio and More" out of Phoenix Arizona, George Bowen, N2LQS of the satellite delivered "This Week in Amateur Radio" from Albany New York and Dave Marthouse, N2AAM of Spectrum.
Never before has a group like this been assembled for as wide ranging a presentation as "Ham News and Ham Views from Around the World". It takes place on Saturday, April 30th from 2:45 to 5:00 PM Eastern time in Meeting Room 2 at the 1994 Hamvention in Dayton. We hope to see you there.

*****
For this week, that's all from the Amateur Radio Newsline.
You can write to us at Post Office Box 463 in Pasadena, CA 91102.

* * * Newsline Copyright 1994 all rights are reserved. * * *
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2927. Re: Grounding and lightning protection

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 13:33:41 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar14.133341.1618@ke4zv.atl.ga.us>
Source record: 269578
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

In article <pcant-130394120419@animation.mta.ca> pcant@mta.ca (Paul Cant) writes:
>In article <1994Mar12.150042.22113@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us
>(Gary Coffman) wrote:
>> EXCERPT
>> Now remembering that 20 Coulombs have to be dissipated, the following
>> formula tells how long that would take.
>>
>> T = 3600*Q*I
>>
>
>Remember that Amperes are the same as Coulombs per second. So the correct
>formula is
>
>I = Q/T and we get T = Q/I = 20/0.1 = 200 seconds, if we use the
>suggested current value of 100 mA.

Mea Culpa, I grabbed that bit from _Mobile Radio Technology_ Oct 88 pp26,
and didn't proof it. You're right. I copied the formula incorrectly, and
was caught off guard by the author's non-standard use of ma to mean
microampere. Once I did a dimensional analysis, I found that the number
was in coulomb^2/hr which is fairly meaningless in this case.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2928. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 13:35:47 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar14.133547.1702@ke4zv.atl.ga.us>
Source record: 269579
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

In article <1994Mar13.164244.26464@mnemosyne.cs.du.edu> jmaynard@nyx10.cs.du.edu (Jay Maynard) writes:
>In article <1994Mar11.135613.16379@ke4zv.atl.ga.us>,
>Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
>>Look at what the cops are driving. Ford Crown Victorias seem popular
>>with them, as do Chevy Caprices.
>
>There's a brand new '94 Crown Vic with police package sitting in my driveway
>as I type this, courtesy of the EMS I run with. All I can say is...WOW!!!
>(Unfortunately, I have to pass it along at the end of my shift...)

Nice car, even if it is a Ford. :-)

>> Order your's with the same fleet codes
>>that they use and you'll have a car that works well with radios.
>
>I thought mere mortals couldn't buy cars with those fleet codes.

The dealers don't care, wave money in their faces and they'll order
anything in their book.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2929. Re: Definition of CW speeds

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 13:36:48 UTC
From: root@jackatak.raider.net
Message-ID: <2NJ7ic2w165w@jackatak.raider.net>
Source record: 269580
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

clh6w@faraday.clas.Virginia.EDU (Carole L. Hamilton) writes:

> You've make quite a leap in going from PARIS to 50 units! What
> asumptions did you make about dash per dot ratio? And how many
> dots per space?

Actually, I'd say *you* are the one who has made the leap (and bound?)... ;^)

For the best and most lucid description of character formation and
timing (what you refer to as dash-dot [sic] ratio) I suggest you read
the very excellent documentation that comes with SuperMorse... it is
truly worth the shareware fee, JUST for the docs and the treatise on
timing...
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

2930. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 13:42:43 UTC
From: root@jackatak.raider.net
Message-ID: <wXJ7ic3w165w@jackatak.raider.net>
Source record: 269581

rwilkins@ccnet.com (Bob Wilkins n6fri) writes:
> Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:
> : Based on how some people view me, I'm gonna sign up for A6H.
> : It's look good on the car too.
>
> Someone else we know might like ah6fu
[....snip.....]

Ah, hate to get technical here, it is just r.r.a.misc, but we do NOT have the entire block of "A" calls... just AAA-ALZ. Hence A6H belongs to another land...United Arab Emirates, and i DO not see the Sheik giving that up to a US 6-lander!

A side note: a certain ham was issued KB4FU, and proudly got a callsign tag for his car. Someone in a supermarket commented to his wife, and suddenly he realized the potential for abuse of his callsign, phonetically speaking.

He quacked and fussed, and sent the call back to the FCC (for repairs?) and demanded a new callsign to replace the "obsene" one first issued...

Those who believe the FCC and the "Higher Power" have no sense of humor read on: Presently, there appeared on the gent's doorstep another envelope from Gettysburg... he tore it open and found....

KB4 _T_ough _S_hit! ;^)
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

2931. Re: Diesel or Taurus fr HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 13:49:50 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar14.134950.1991@ke4zv.atl.ga.us>
Source record: 269582
Cross-posted to:
rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

In article <CMM3ro.BLM@world.std.com> dts@world.std.com (Daniel T Senie) writes:
>In article <1994Mar13.134356.26825@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>People often say to buy a diesel because it won't generate any RFI. I wish
>>they could have owned my diesel Nissan pickup. It had the most horrendous
>>RFI I've ever experienced in a vehicle. There was a severe popping noise,
>>similar to really severe ignition noise, any time the engine was running.
>>I could disconnect the alternator belt and the battery (after starting the
^^^^^^^^^^ ^^^^^^^^^^^^^^^ ^^^^^^^
>>engine), and the noise was still there with no vehicle electrical equipment
>>operating at all. It got into everything from the entertainment radio to
>>HF, VHF, and UHF ham gear.
>
>Ignition noise is often NOT the problem. It is very possible that the
>engine used fuel injection (solenoids, square wave pulses), an electronic
>fuel pump (my Pathfinder has a noise problem from the fuel pump), and
>a computer system. So getting a diesel is not likely to be a big help. Now
>in the old days of mechanical fuel pumps, carbs, etc. it might have been
>fine...

This was a *real* mechanical injection diesel engine. With *all* electrical systems disconnected, it still made the pseudo-ignition noise. The best guess we could come up with was that the plasma formed by combustion was somehow shock exciting something and causing it to radiate. We considered static discharges due to the rotating machinery, but we bonded *everything*, including finger stock on the crank and cam, and on the injection pump cam, and we put anti-static brushes on the clutch, all without making it go away. So I don't think that was it. It would sit there at idle in the shop and tear up every radio in the place with absolutely *no* electrical equipment operating on the vehicle. A real puzzle.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2932. Re: 1296 Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 13:55:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar14.135500.2083@ke4zv.atl.ga.us>
Source record: 269583
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

In article <2lvrkq$jpo@newshost.lanl.gov> ggs@lanl.gov writes:
>
>I just bought my first 1296 rig and naturally have no
>antenna. I am looking for input on what to get and/or
>wanting to buy one. I have hade recommended to the the
>loop Yagi from Down East Microwave. Opinions and offers
>will greatly appreciated.

I use the Down East Microwave loop yagis. They work fine.
I've also tried a 4 foot dish with dipole and reflector
feed. That works pretty good too, but the wind load is
considerably higher.

If you don't need that much antenna gain, Comet makes a cute
little yagi for 1296 that can be just the trick for making
a path that a vertical won't hack.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

2933. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 13:55:58 UTC
From: root@jackatak.raider.net
Message-ID: <ZJk7ic4w165w@jackatak.raider.net>
Source record: 269584

ehare@arrl.org (Ed Hare (KA1CV)) writes:
> Actually, international agreements and regulations do not
> allow a 1X1 format; 1X2, 2X1, 2X2, 1X3 or 2X3 only,
> JY1 notwithstanding. :-).
Oh? What about M1C?
73
Jack, W4PPT/Mobile (75M SSB 2-letter WAS #1657 -- all from the mobile! ;^)

+--*--+
Jack GF Hill	Voice: (615) 459-2636 - Ham Call: W4PPT
P. O. Box 1685	Modem: (615) 377-5980 - Bicycling and SCUBA Diving
Brentwood, TN 37024	Fax: (615) 459-0038 - Life Member - ARRL
root@jackatak.raider.net - "Plus ca change, plus c'est la meme chose"
+--*--+

2934. Re: Best truck/sport util for HF/VHF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 14:19:40 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar14.141940.2305@ke4zv.atl.ga.us>
Source record: 269585
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <2m0die$7t5@brahms.udel.edu> penneys@brahms.udel.edu (Robert Penneys) writes:
>Thanks for your input on cars etc. so far.
>
>I have narrowed my thinking to a small pickup or sport utility such as
>Bronco, Trooper, etc., probably 86 to 91.
>
>I am told that American cars have less solid state devices to go awry
>due to RF from HF or VHF rigs, that Ford seems to be a good choice, that
>Japanese vehicles may be more susceptible to RF.
>
>Again, besides physical comfort (my back) criteria include lack of problems
>from car to rig and vice versa, and other normal concerns.

Well if it's a sport utility that you want, the Jeep Cherokee or Jeep Comanche pickup are hard to beat. The ride and bucket seats are *much* better than the Blazer (I've got a Blazer too, and the seats suck, plus it pitches a lot on rough roads.) or Bronco (another rough rider). My Jeep is electrically quiet except for a bit of alternator whine that I fixed with a choke, and the computer puts out a spur on 145.01 MHz. A couple of suppression capacitors and a bit of shielding fixed that. Mine is an 87 with 108,000 miles on it. My only expenses have been a bad oxygen sensor, a bad ignition sensor, and tires, gas, and oil. It's been a rock solid vehicle with a *great* ride for a 4x4.

I run radios in the Blazer too, and haven't had any serious electrical interference problems with it either. It's got 135,000 miles on it, and besides gas, oil, and tires, I've had to replace the shocks, water pump, and the entire HEI ignition. Not bad really. But the springs in the seats are shot (not that they were ever great) and it'll kill your back on a trip. The 94s have *much* better seats with good lumbar and lateral support. I've been eyeing them lately.

The company has some Broncos and Explorers. They've been radio hell. Noisy in-tank fuel pumps, ignition noise, alternator whine, gas *gauge* noise, injector noise, etc, etc, etc. We've pretty much tamed them, but it was a major job. If Ford built them the way they build police grade Crown Victorias, there would have been no problem. We've got several of them too, and they're dead quiet.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary

Lawrenceville, GA 30244 | |

2935. Re: ITU zone and CQ area?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 14:31:18 UTC
From: rrossi@vnet.IBM.COM
Message-ID: <199403141440.GAA24663@ucsd.edu>
Source record: 269586

I live in Northwestern Vermont and want to include my ITU zone
and CQ area on my QSL cards, but I don't know what they are?
Can someone tell me or point me to a place to look?

BTW...TNX to those who responded to my noise blanker query. The
blanker could do me some good. The 'static' I was refering to
was a popping caused by my downstairs TV. I thought at first it
was my computer as my wife generally has them on at the same time.
I need to check out the TV for shielding, etc...

TNX es 73 de N1PBT/AE

Ron Rossi

/===/
/ IBM Microelectronics Internet: rrossi@vnet.ibm.com /
/ H/P ASIC SRAM Design VNET: RROSSI at BTVLABVM /
/ Dept N93 Bldg 861-2 Voice: 802/769-7477 /
/ 1000 River Road RF: N1PBT/AE /
/ Essex Junction, VT 05452-4299 /
/ /
/ "I work for IBM, I don't represent its views!" /
/ /
/===/

2936. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 14:42:42 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2m1t52$rlq@news.acns.nwu.edu>
Source record: 269587

In article <2m0b2h$dn7@ivy.bga.com>, Buddy Brannan <davros@bga.com> wrote:
>OK, since everyone else is dreaming of confusing calls, how about if I get:
>W5HSI
>
>Try sending that one in cw, with a paddle, especially at hi speed.

Actually, that is not a bad call at all, except may be for code tyros.
I think that:
calls ending in k
calls with solitary dits that may be easily lost in fading/qrn
are much worse as even seasoned operators get them confused. Examples
are k9xxk or wb9eee.

When I got aa9ch, I naively thought that I would have a lot of confusion
with aa9cs. Not at all. What has caused a problem is that aa8ch,
w9ch, k2ch, k6ch are all cw active. Try working a pile up with aa9ch
call and couple of other ch thrown in.

Rajiv
aa9ch
r-dewan@nwu.edu

2937. Daily Summary of Solar Geophysical Activity for 13 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 15:03:36 UTC
From: oler@rho.uleth.ca
Message-ID: <9403141503.AA11081@rho.uleth.ca>
Source record: 269588
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

13 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 13 MARCH, 1994

NOTE: Stratospheric warming continues to exist over Siberia, the polar
region, and Greenland. Temperature gradient is reversed between 60N
and the pole at 10 HPA and above.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 072, 03/13/94
10.7 FLUX=090.1 90-AVG=106 SSN=060 BKI=4524 3324 BAI=021
BGND-XRAY=B1.1 FLU1=1.9E+06 FLU10=2.4E+04 PKI=5534 3334 PAI=022
BOU-DEV=069,081,019,046,029,031,017,042 DEV-AVG=041 NT SWF=00:000
XRAY-MAX= B6.6 @ 0628UT XRAY-MIN= A8.2 @ 2330UT XRAY-AVG= B1.5
NEUTN-MAX= +003% @ 1845UT NEUTN-MIN= -002% @ 1655UT NEUTN-AVG= +0.1%
PCA-MAX= +0.2DB @ 2345UT PCA-MIN= -0.3DB @ 0840UT PCA-AVG= +0.0DB
BOUTF-MAX=55364NT @ 0355UT BOUTF-MIN=55310NT @ 1817UT BOUTF-AVG=55335NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+068,+000,+000
GOES6-MAX=P:+133NT@ 1815UT GOES6-MIN=N:-130NT@ 0331UT G6-AVG=+089,+026,-052
FLUXFCST=STD:090,090,095;SESC:090,090,095 BAI/PAI-FCST=015,015,015/020,015,010
KFCST=2213 4122 2214 5111 27DAY-AP=028,018 27DAY-KP=4443 3544 4333 5333
WARNINGS=*GSTRM
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 12 MAR 94 was 32.1.
The Full Kp Indices for 12 MAR 94 are: 4o 4+ 6o 5o 5o 3o 4- 4-
The 3-Hr Ap Indices for 12 MAR 94 are: 29 34 80 46 46 16 25 24
Greater than 2 MeV Electron Fluence for 13 MAR is: 1.6E+09

SYNOPSIS OF ACTIVITY

Solar activity was very low. No activity beyond a B4/SF
flare in Region 7690 (S15W68) occurred.

Solar activity forecast: solar activity is expected to be
very low to low. Region 7688 (N18E33) has the best chance for
C-class activity.

The geomagnetic field has been at unsettled to active
levels for the past 24 hours. High latitude stations reported
occassional minor storm levels. Energetic electron fluxes
(GT 2 MeV) have receded to moderate levels.

Geophysical activity forecast: the geomagnetic field is
expected to be mostly unsettled for the entire forecast period.
High latitude stations may still experience active levels for
the next 24 hours.

Event probabilities 14 mar-16 mar

Class M 01/05/05
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 14 mar-16 mar

A. Middle Latitudes
Active 25/25/25
Minor Storm 25/15/15
Major-Severe Storm 05/05/05

B. High Latitudes
Active 20/35/25
Minor Storm 30/15/15
Major-Severe Storm 10/05/05

HF propagation conditions were below-normal, but slowly
improving over the high and polar latitude regions. Middle
latitude paths were returning to near-normal values today.
High and polar latitudes should return to near-normal values
(with sporadic periods of minor night-sector signal
degradation) by about 15 or 16 March.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 13/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7685 S08W83 342 0040 HSX 02 002 ALPHA
7688 N19E33 226 0110 DAO 08 010 BETA
7689 S10W65 324 0010 BXO 04 003 BETA
7690 S14W69 328 0010 BXO 07 005 BETA
7687 N18W79 338 PLAGE
REGIONS DUE TO RETURN 14 MARCH TO 16 MARCH
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 13 MARCH, 1994

A. ENERGETIC EVENTS:

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 13 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 13/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
12 Mar: 0009 0013 0015 B2.0
0603 0609 0611 B2.7
0736 0743 0747 C1.1
1000 1004 1009 B2.9
1253 1303 1313 B3.0 SF 7688 N17E53
1726 1734 1744 B3.2
1914 1934 1944 B3.0
2044 2050 2100 B5.4
2336 2341 2347 B3.1

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7688: 0 0 0 1 0 0 0 0 001 (11.1)
Uncorrellated: 1 0 0 0 0 0 0 0 008 (88.9)

Total Events: 009 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
12 Mar: 0009 0013 0015 B2.0 III
1253 1303 1313 B3.0 SF 7688 N17E53 III
1914 1934 1944 B3.0 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the

x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

2938. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 15:36:23 UTC
From: flanagan@niagara.Tymnet.COM
Message-ID: <9403141536.AA02174@niagara.Tymnet.COM>
Source record: 269589

```
Path: tymix.Tymnet.COM!niagara!flanagan
From: flanagan@niagara.Tymnet.COM (Dick Flanagan)
Newsgroups: rec.radio.swap
Subject: Classic Drake Station
Date: 14 Mar 1994 01:10:02 GMT
Organization: Libelle Productions, Minden, Nevada, USA
Lines: 9
Distribution: world
Expires: 3 Apr 94
Message-ID: <2m0dha$nb7@tymix.Tymnet.COM>
NNTP-Posting-Host: niagara.tymnet.com
Summary: New Condition B-Line For Sale
Keywords: drake for sale

DRAKE TIME CAPSULE--Still in original factory boxes. R-4B,
T-4XB, SP-4, MS-4, C-4, L-4B, MN-2000. Used ten hours, in
boxes ever since. New condition. $1800 + shipping. Will
trade for mint TS-940S/AT with spkr, desk mic, filters.
W6OLD, 1044 Wisteria Drive, Minden, NV 89423.
--
Dick Flanagan, W6OLD dick@libelle.com
Libelle Productions, Minden, NV, USA MCI Mail: 412-2140
Voice: +1 702 782 0806 GEnie: FLANAGAN
```

2939. Re: Wanted: seller space at Dayton

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 15:51:27 UTC
From: nick@cs.unc.edu
Message-ID: <2m215vINNfat@altairhp.cs.unc.edu>
Source record: 269590
Cross-posted to: rec.radio.amateur.misc,rec.radio.swap

I sent in my money on time, but haven't heard anything back from Dayton.
Has anyone received tail-gate space assignment yet ??

Nick "Mr Heathkit" KD4CPL

2940. Re: CAN WE SELL STUFF HERE?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 15:57:14 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CMnwBF.ECt@ucdavis.edu>
Source record: 269591

Gilbert Baron (gilbaronw0mn@delphi.com) wrote:
Er, Gil, I sadi this, not Kenneth Harker.
: >happens in the newsgroups, if you think it's bad now AOL is now on the
: >newsgroups another million newbies in one fell swoop.

: I suppose you are mad at both AOL and Delphi. I say hooray and the more the
: merrier. At least I don't quote entire messages and quotes fo quotes as do a
: lot of the so called experienced old timers here from edu sites.
: Often even the headers are qutoed. I think that there is room for all. The
: more access, the more information. If people don't follow good procedure
: then just inform them gently and most will change.
Actually, I think it is great the both AOL and Delphi are getting access,
I gave a presentation to our Radio club about internet access through the
major providers in the hopes of getting a few of our hams involved. There
are two reasons I am a bit apprehensive about "a million newbies in one
fell swoop" number one is that there is less of an opportunity for these
people to learn netiquette before posting and many of them don't lurk for
two or three months before jumping in with both feet, a side effect of
paying for your first account I suppose. The second reason is that as the
internet becomes more and more crowded it is possible that some of the
commercial sites that provide free services to many of us in exchange for
understanding that this is supposed to be experimental may be forced to
stop due to extremely high loads. I am not suggesting that it is bad to
get as many people connected and educated as possible I am just a little
apprehensive.

cheers,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2941. Re: 1296 Antenna

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 16:01:47 UTC
From: phil@hansen.ncd.com
Message-ID: <2m21pb$3tl$1@rosebud.ncd.com>
Source record: 269592
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.antenna

It depends on what you are going to do with your radio....

If you are going to work SSB, then one of the loop antennas is probably a good bet. The other choice is to get one of the antennas from Diamond or Comet.

I have been using antennas from these companies for years. I have two 1.2 GHz repeaters and the Comet antennas have been in service on the mountains for years.

I especially like the 1218G for my repeaters. They are single section design and work great at 3600 feet. For home use, I like the Comet CX-903. It is a tri-band antenna (2M, 70cm, & 23cm). Feed it with low loss coax, either 9913 or hardline (I use 1/2 Andrew hardline at home, at the repeater sites, I use 7/8" Andrew hardline).

Phil
de kj6nn

2942. Rassian Robinson Award

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 16:10:42 UTC
From: "Albert I. Sushkov" <rv3gw@lttsco.lipetsk.su>
Message-ID: <AA2o8XjCc7@lttsco.lipetsk.su>
Source record: 269594

```
>From postmaster Fri Mar 11 19:40:06 MSK 1994
Status: O

The Russian Robinson Club issued diploma

" RUSSIAN ROBINSON AWARD " .

This diploma is issued for QSO/SWL with amateurs on island
belonged to Russia. The diploma has got 3 classes:

1 class: 20 different stations on 10 different islands.
2 class: 16 different stations on 8 different islands.
3 class: 10 different stations on 6 different islands.

Each QSO counts double for HAMs or SWLs located on island.
Date of QSO, bands and modes are not limited.

Fee of each class is 12 IRC or 6 US dollars, fee of list
of Russian islands with their numbers ( RRA list ) is 2 IRC
or 1 US dollar or equivalent.

Send GCR list and QSL photocopy by registered letter and fee
to award manager RW3GW via RRC Headquarters in the USA:

"UTC, Ltd", (RRC), 218 Goddard Row, Newport, RI-02840, USA

or: " RRA " Manager RW3GW V. Sushkov.
via ( I1HYW, box1, 10066, Panealieri, Italy)

--
Albert ( RV3GW )
< ***** Russian Robinson Club, #34 ***** >
pse will send only personal E-mail addr.
```

2943. PS/2 into Repeater Controller

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 16:34:12 UTC
From: a4q4@jupiter.sun.csd.unb.ca
Message-ID: <1994Mar14.163412.24670@jupiter.sun.csd.unb.ca>
Source record: 269595

I have a PS/2 Model 30 sitting idle on my desk.....I have no hard drive for
it, so I'm looking for a possible application for it. I'd like to know
if anyone has any information on how I might change this unit into a
repeater controller.

Don Trynor VE9NZ

--

Donald J. Trynor EE	" I`ve got a strong urge to fly...
University of New Brunswick	...but I've got no where to fly to."
A4Q4@JUPITER.SUN.CSD.UNB.CA	

2944. Re: Best truck/sport util for HF/VHF?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 16:41:17 UTC
From: levin@bbn.com
Message-ID: <LEVIN.94Mar14114117@medea.bbn.com>
Source record: 269596
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <1994Mar14.141940.2305@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
Well if it's a sport utility that you want, the Jeep Cherokee or Jeep Comanche pickup are hard to beat. . . .

Without commenting on their suitability for radio (and I know at least one person who has had a large HF station in a Jeep), in this part of the country (Northern New England) used Jeeps have been known as cars to avoid due to the amount of rust they develop. This is not an issue in the southwest, and I doubt they use much salt on the roads in the Atlanta area. Your mileage (sorry) may vary.

/JBL KD1ON
=
Nets: levin@bbn.com |
pots: (617)873-3463 | "I gotta go."
KD1ON (@KB4N.NH.USA) | -- I. Shoales

2945. Re: Help with FTPing!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 17:06:22 UTC
From: ggs@lanl.gov
Message-ID: <2m22fk$9e@newshost.lanl.gov>
Source record: 269597

In article <29B8E6C7A0619B05@snypotvx.bitnet>,
<COLERK%snypotvx.BITNET@CUNYVM.CUNY.EDU> writes:
> Path:
newshost.lanl.gov!ncar!gatech!howland.reston.ans.net!cs.utexas.edu!swrinde!ihnp
4.ucsd.edu!network.ucsd.edu!news-mail-gateway
> From: COLERK%snypotvx.BITNET@CUNYVM.CUNY.EDU
> Newsgroups: rec.radio.amateur.misc
> Subject: Help with FTPing!
> Date: 11 Mar 94 10:41:00 GMT
> Organization: ucsd usenet gateway
> Lines: 13
> Message-ID: <29B8E6C7A0619B05@snypotvx.bitnet>
> NNTP-Posting-Host: ucsd.edu
> Originator: daemon@ucsd.edu
>
> Gile
> as a .ZIP but cannot UNZip it...I ALWAYS get "WARNING!" file fails CRC check
or

It is very simple type binary at the FTP prompt before making the transfer.
You have been transferring in ascii compressed files are by definition
binary. Have fun 73 Gerald Schmitt KC5EGG

2946. Re: Diesel or Taurus fr HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 17:07:51 UTC
From: edleslie@apogee.ccs.yorku.ca
Message-ID: <CMnzL4.5wx@newshub.ccs.yorku.ca>
Source record: 269598
Cross-posted to:
rec.radio.amateur.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: systems disconnected, it still made the pseudo-ignition noise. The best
: guess we could come up with was that the plasma formed by combustion was
: somehow shock exciting something and causing it to radiate. We considered
: static discharges due to the rotating machinery, but we bonded *everything*,
: including finger stock on the crank and cam, and on the injection pump
: cam, and we put anti-static brushes on the clutch, all without making it
: go away.

For a wild shot, could there have been a Piezo-electric (sp?) effect taking
place with the ignitors or some such thing (i.e. the shock wave from
combustion causing a piezo-electric discharge)?

73 de Ed/VE3ZVZ

2947. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 17:25:52 UTC
From: c2xjcb@kocrsv01.delcoelect.com
Message-ID: <1994Mar14.172552.7310@kocrsv01.delcoelect.com>
Source record: 269599
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

In article <1994Mar11.135613.16379@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
> In article <2lor4d$krj@brahms.udel.edu> penneys@brahms.udel.edu (Robert Penneys) writes:
> >I need to replace a car and want one which 100 watts or so of HF and 50 watts
> >or so of 2 meters or 440 will not interfere with the electronics af the
> >vehicle. Nor do I want ignition or other noise beyond the bare minimum.
> >
> >In consideration are four door sedans from the size of a Corolla up to that
> >of a Taurus. or perhaps a minivan or small pickup. Replacing a Ford
> >Aerostar.

My '94 Chevy Lumina Euro seems OK for HF; I'd planted my Kenwood
TS-140 on the passenger seat the other day, and had NO problems.
75W out on 20M thru the cigarette lighter; OK, large capacitor and
ferrite torroid on power lines, left over from my '88 Grand Am whose
"Driver Information Center" didn't like the 20M band :-). Couldn't
even find the "birdies" from the Engine Control Module's uP!

The only discernable "noise" is a small bit of hash from the fuel pump,
and a lot of hash when raising/lowering the power windows. I suspect
a simple LCL Pi filter on the fuel pump harness (near the fuel pump)
would take out the noise, but so does the noise blanker on the radio.

BTW:
Not to make this a big sale pitch for GM, but we do a LOT of RFI
testing on our cars to make sure that they neither corrupt nor get
corrupted by ham rigs. Stop by the GM booth at the Dayton HamVention
and we can talk some more . . .
--
James C. Bach Ph: (317)-451-0455 The views & opinions expressed
Advanced Project Engr. GM-NET: 8-322-0455 herein are mine alone, and are
Powertrain Strategy Grp Amateur Radio: WY9F NOT endorsed, sponsored, nor
Delco Electronics Corp. Just say NO to UNIX! encouraged by DE or GM.

2948. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 17:32:59 UTC
From: c2xjcb@kocrsv01.delcoelect.com
Message-ID: <1994Mar14.173259.7916@kocrsv01.delcoelect.com>
Source record: 269600
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

In article <CMIHqr.IAK@world.std.com>, dts@world.std.com (Daniel T Senie) writes:
> >
> > Give serious thought to Diesels, no ignition, no computers
> >
>
^^^^^^^^^^
! WRONG !

We've been building diesel engine controllers for many many years.

In fact, we've got an engine controller for LP-fueled fork-lifts!

And we've got a controller for marine applications; one of them even
got submerged (with the boat) in salt-water for 10 weeks, and after
they dredged-out the boat (and cleaned-up the engine) the engine
started on the 1st-crank with THAT controller. But I digress.

There are several diesel models with computers controlling the
electronically controlled transmissions!

And what about the instrument cluster, CD player/Radio, etc.?
--
James C. Bach Ph: (317)-451-0455 The views & opinions expressed
Advanced Project Engr. GM-NET: 8-322-0455 herein are mine alone, and are
Powertrain Strategy Grp Amateur Radio: WY9F NOT endorsed, sponsored, nor
Delco Electronics Corp. Just say NO to UNIX! encouraged by DE or GM.

2949. Re: CAN WE SELL STUFF HERE?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 17:50:30 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2m2856$ju2@network.ucsd.edu>
Source record: 269601

>Gilbert Baron (gilbaronw0mn@delphi.com) wrote:
>: >happens in the newsgroups, if you think it's bad now AOL is now on the
>: >newsgroups another million newbies in one fell swoop.

A large part of the problem is that these services offer "free trial memberships" and allow posting - thus you get people who go out and buy a modem, get on-line, post a blatantly offensive advertisement to non-commercial groups, and then go away, having used up their free trial. Not much we can do about that person; he's gone.

We have a similar problem here at the University each year as freshmen get their new computer access. Luckily more and more of them have some experience with computer networks when they arrive, but even so, that experience was gained at the expense of someone somewhere.

AOL, Delphi, Prodigy, and so on are just the latest instances of the newbie problem. Perhaps because the users of those systems are PAYING for their access it's harder to say to them "no posting until you know what you're doing!".
- Brian

2950. Help with FTPing!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 18:43:26 UTC
From: William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM
Message-ID: <9402147636.AA763670606@smtpgty.anatcp.rockwell.com>
Source record: 269602

Roger asks:

Greetings...you'll have to excuse my lack of knowledge when it comes to using FTP procedures....haven't been at this long....using FTP I login to FUNE.FI, no problem there...once I find a .ZIP file I want I ask it to GET the file... again no problem, the program is sent to my local mainframe...I log off of the FTP address and go to the local mainframe and ask to send...I receive the file as a .ZIP but cannot UNZip it...I ALWAYS get "WARNING!" file fails CRC check or "has bad table"....on the local mainframe we have to use KERMIT to transfer files...or at least that is what I was told....like I said, I'm new at this so please exucuse my lack of knowledge associated with using FTP procedures...I thank you in advance for any information I might receive. <snip>

You need to transfer the file as a binary, to do this, invoke the "bin" (binary) command before the "get" command. If you are transferring several binary files, you only need to issue the "bin" command before the first one, it is a toggle to binary mode. Otherwise, the default file transfer mode is ascii. That should fix your problem. You may also want to make sure you have pkunzip 2.04 rather than an earlier version, since you can not unzip a file zipped with 2.04 with an old unzip.

73

Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI
(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com
---
Who are you? * I am number 2. * Who is number 1? * You are number 6.

2951. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 19:22:52 UTC
From: dearnshaw@worldbank.org
Message-ID: <1994Mar14.192252.23277@worldbank.org>
Source record: 269603

In article <2lqm7q$qi5@slinky.cs.nyu.edu> jackson@longlast.cs.nyu.edu (Steven Jackson) writes:
>|> Look at what the cops are driving. Ford Crown Victorias seem popular
>|> with them, as do Chevy Caprices. Order your's with the same fleet codes
>|> that they use and you'll have a car that works well with radios. (It'll
>|> also have the heavy duty electrical system, cooling system, and suspension
>|> of a cop car.) Get the same color scheme that they use for their unmarked
>|> cars too, that way the antennas won't draw suspicion. (And you may avoid
>|> some tickets.)
>
>I had been thinking the same thing for quite a while, too. Only not for the
>ability to work with radios, more because the Caprices look like they'll be
>a comfortable ride and the antennas will look normal on them. In fact, I've
>been trying to find the tiny antennas they have mounted on the roof immediately
>above to rear window for scanner use. That'll definitely finish the image off.
>Problem is, what are they usually tuned to? Of course, you could always get
>a cellular lookalike 2m trunk lip mount to complement the roof mount.
>--
>Steven Jackson New York University
>Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
>jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012
> "Not in my head.. so I don't have to think.." -- Nik Fiend
>

Yea, but who wants to be seen in an LTD or Caprice - dead or alive?

2952. Re: 2m/70cm stub duck wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 19:23:13 UTC
From: levine@mc.com
Message-ID: <2m2dj1$d6g@jericho.mc.com>
Source record: 269604
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

```
-->You might try to obtain a yaesu 470 antenna. Order from yaesu as a
-->replacement part. The 530 antenna is well known around here as a designer
-->dummy-load. The single band antennas will always perform better than the
-->dual-band compromisers.
-->
-->Bob
-->
-->
-->--
--> Bob Wilkins work bwilkins@cave.org
--> Berkeley, California home rwilkins@ccnet.com
--> 94701-0710 play n6fri@n6eeg.#nocal.usa.noam

Maybe you mean the very early ones that Yeasu shipped.

The more recent one supplied with the FT530 seems to work
very nicely. I'd say it is second only to the Diamond R77
in my collection. That one seems to be king of the duckie
dual banders.

---
------------------------------------------------------------
Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599
------------------------------------------------------------
```

2953. Re: 4-1000A Chimney

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 19:26:52 UTC
From: alanb@sr.hp.com
Message-ID: <CMo60u.3vt@srgenprp.sr.hp.com>
Source record: 269605

Jack GF Hill (root@jackatak.raider.net) wrote:
: alanb@sr.hp.com (Alan Bloom) writes:
: > Don Turner (don.turner@eabbs.com) wrote:
: > : Hi Guys: I need a chimney for my 4-1000A tube. The Eimac part number
: > : is SK-506. If any of you are will to let go of one of these, leave a
: > : message. .....Don Turner WA6WRX
: >
: > I know that a Coleman lantern globes work perfectly for 3-1000's. Not sure
: > if they work with 4-1000's. They are much cheaper than Eimac chimneys.
: Good thought, Al! Never tried that myself, but a fairly easy
: substitute is a LARGE Pickel jar... fire a string around the
: "bottom/top" and POOF! A chimney! ;^)

You want to be careful what kind of glass you use. Coleman lantern globes
are heat-resistant, so are a good choice for a tube chimney.

They are just the right size, too!

AL N1AL

2954. Re: PS/2 into Repeater Controller

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 19:32:36 UTC
From: Anthony_Pelliccio@brown.edu
Message-ID: <Anthony_Pelliccio-140394143004@138.16.64.52>
Source record: 269606

In article <1994Mar14.163412.24670@jupiter.sun.csd.unb.ca>,
a4q4@jupiter.sun.csd.unb.ca (D.J.Trynor EE) wrote:

> I have a PS/2 Model 30 sitting idle on my desk.....I have no hard drive for
> it, so I'm looking for a possible application for it. I'd like to know
> if anyone has any information on how I might change this unit into a
> repeater controller.
>
> Don Trynor VE9NZ

Actually it could be done. You'll need some sort of card that will allow
you to control relays, etc. They sell them in some of the engineering
magazines for roughly $200.

The software end wouldn't be too complicated either, and with a hard drive
it'd be one kick-butt controller. Hell.. think of the mods you could make!

Tony
--
== Anthony_Pelliccio@Brown.edu (Tony Pelliccio, KD1NR)
== Box 1908, Providence, RI 02912 Tel. (401) 863-1880
== All opinions expressed are those of the individual, and not those
== of Brown University.

2955. Re: Definition of CW speeds

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 19:40:00 UTC
From: alanb@sr.hp.com
Message-ID: <CMo6Mp.48K@srgenprp.sr.hp.com>
Source record: 269607
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy

William J Turner (wjturner@iastate.edu) wrote:

: FYI--the accepted "correct" ratios are 3 to 1. Thus a dah is three times the
: length of a dit. ...

: This is why peole who have some background in music generally have a cleaner
: fist--it's in the tripletts.

When you include the space between elements, the dash/dot ratio is 2:

Dot Dash

XXXXX XXXXXXXXXXXXXX XXXXXetc.........
<-1-><-1-><------3------><-1->
<----2---><--------4--------->

A string of dots has twice the number of elements per second as a
string of dahs. So I like to think of dots as (stacatto) quarter notes
and dahs as half notes. No triplets required!

AL N1AL

2956. Re: Grounding and lightning protection

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 19:57:50 UTC
From: alanb@sr.hp.com
Message-ID: <CMo7GF.4sy@srgenprp.sr.hp.com>
Source record: 269608
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

[re: do lightning rods prevent lightning hits]

: This is a common misconception, and a few companies have made good
: livings feeding this error. But the FAA put it to rest with their
: field tests in Florida. They set up a series of towers, ...

Gary, do you have the literature reference for that study? I'd like
to read it.

: Now remembering that 20 Coulombs have to be dissipated, the following
: formula tells how long that would take.

: T = 3600*Q*I

There's a typo in the above equation -- the units don't work out.
(Seconds don't equal coulombs * coulombs/sec) Also, to convert from
seconds to hours you divide by 3600. I think the equation should be:

T = (Q/I) / 3600

AL N1AL

2957. Mods for FT-416

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 20:34:43 UTC
From: trb@cray.com
Message-ID: <trb-140394143114@bexar.cray.com>
Source record: 269609

Would some kind sole please mail/post any/all mods for a Yaesu FT416...
Or let me know where I can get them.... (ftp.std.com didn't have any)

Many thanx,
- Tom Baltz
trb@cray.com

2958. CAN WE SELL STUFF HERE?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 20:40:00 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199403142051.MAA18115@ucsd.edu>
Source record: 269610

>are two reasons I am a bit apprehensive about "a million newbies in one
>fell swoop" number one is that there is less of an opportunity for these
>people to learn netiquette before posting and many of them don't lurk for
>two or three months before jumping in with both feet, a side effect of
>paying for your first account I suppose. The second reason is that as the

This is sorta like the burst we've seen in amateur radio with the Technician license.

Big jump of new people and not enough "old guys" running around to do the introductions....what it means is that we get to find out if "netiquette" is up to the task. if it works well for most it will continue pretty much the way it is, if it's not, it will "change" and either improve or degrade.

It's like the rear guard still fighting the battles over the use of the word "destinated" - usually by replacing it with something a lot more wordy that means "arrived".

bill wb9ivr

2959. HELP: Hallicrafters Model S-76. SSB no good!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 20:52:38 UTC
From: cropley@cbnewsf.cb.att.com
Message-ID: <CMo9zq.Jvo@cbfsb.cb.att.com>
Source record: 269611

This weekend my Brother-in-law "dug-out" (literally) a SW radio
Hallicrafters S-76. It is a 9 tube unit double conversion Superhetrodyne
receiver.

I threw on a single long wire (will improve this later) and turned it on
lo and behold it warmed and started to work. My B-in-L estimated that the
unit wasn't powered up for AT LEAST 15 years .

I jumped to the 80 meter band and recieved CW fine. however when I went up
in the band to do SSB I go lots of signals but they were all distorted/muffled

The unit has a switch for either CW or AM reception. The manual says that if
I use the narrowest (sharp) filter and tune in the station then switch to
the widest filter it will then be ok for SSB reception.

The afore mention switch engages a BFO when switched to CW mode, but I
didn't read anything about AM.

Has anyone used one of these old birds?? Has modern technology of todays
transmitters made this units SSB or Psuedo-SSB capabilities a thing for
the muesum shelf (although it work fine for CW!!)? Maybe something is lacking
due to age or lack of use??

Many thanks for reading

Andy Cropley

cropley@cbnewsf.att.com

2960. Re: Alliance 5-wire Rotor Motor Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 21:11:57 UTC
From: kerry@Ingres.COM
Message-ID: <1994Mar14.211157.27611@pony.Ingres.COM>
Source record: 269612
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <CSLE87-100394170722@145.39.1.10> CSLE87 (Karl Beckman) writes:
>In article <1994Mar10.145901.65354@yuma>, galen@picea.CFNR.ColoState.EDU
>(Galen Watts) wrote:
>
>> I've accquired an Alliance rotor motor with no control box. The rotor
>> takes 5 wires, has the rotating mast thru the body and the mast top clamp
>> on the side of the case. I've been told this style is often used as an
>> altitude rotor on Satellite setups.
>> Questions:
>> 1. What voltage does it take to turn the motor? AC or DC?
>
>24 VAC, about 40 watt xfmr (to be safe for more than 2% duty cycle). You
>drive one motor lead directly against ground and the other through a
>capacitor of about 10 mfd at 200 VAC.
>

Anyone have experience running a rotator with a power inverter?

The specific question is will one of the smaller rotors work with the
$100/200W units? Primary interest is use a backup power supply (marine
battery) for emergency services. I know that some of the cheaper
inverters only put out square waves. Does this cause a problem?

Thanks in advance.

forward, or email
kerry@ingres.com

2961. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 21:43:55 UTC
From: reid@ucs.indiana.edu
Message-ID: <reid.673.763681435@ucs.indiana.edu>
Source record: 269613

My VW Diesel (now long gone) was an excellent radio platform. It was almost noise-free (slight alternator whine), and had a huge battery. Using LORAN-C (which is very noise-sensitive) in the Diesel was no problem.

Almost everything in my '93 Toyota truck makes RFI, including the cruise control, heater fan and wipers. The major problem I've found with new cars (with the possible exception of vans) is that there's no place to mount radios.

--

Frank reid@ucs.indiana.edu W9MKV

2962. Re: PS/2 into Repeater Controller

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 21:48:41 UTC
From: trier@slc6.ins.cwru.edu
Message-ID: <2m2m3p$4n@usenet.INS.CWRU.Edu>
Source record: 269614

In article <Anthony_Pelliccio-140394143004@138.16.64.52>,
Tony Pelliccio <Anthony_Pelliccio@brown.edu> wrote:
>Actually it could be done. You'll need some sort of card that will allow
>you to control relays, etc.

Plug them into the parallel port. Optoisolation is a good idea, but
beyond that, control is pretty direct. The serial port control lines
are also handy.

Stephen

--
Stephen Trier KB8PWA "It don't mean a thing if it ain't got that
Other: trier@ins.cwru.edu certain je ne sais quois."
Home: sct@po.cwru.edu - Peter Schickele

2963. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 21:54:12 UTC
From: jskohl@pacbell.com
Message-ID: <1994Mar14.225707.2345@PacBell.COM>
Source record: 269615

In article <1994Mar10.223223.13794@arrl.org>, <ehare@arrl.org> writes:
> Newsgroups: rec.radio.amateur.misc
> Path:
pacbell.com!sgiblab!wetware!spunky.RedBrick.COM!psinntp!psinntp!arrl.org!ehare
> From: ehare@arrl.org (Ed Hare (KA1CV))
> Subject: Re: 1x1 Callsigns?
> References: <2lnm9t$643@jericho.mc.com>
> Organization: American Radio Relay League
> Date: Thu, 10 Mar 1994 22:32:23 GMT
> X-Newsreader: TIN [version 1.2 PL2]
> Message-ID: <1994Mar10.223223.13794@arrl.org>
> Lines: 19
>
> Bob Levine (levine@mc.com) wrote:
>
> : Has anyone seen anything in print about whether the vanity
> : callsign program (someday) might allow 1x1 calls?
>
> : (for info, a 1x1 is like K1X)
>
> Well, I want *my* call to be "K".
>
> Actually, international agreements and regulations do not
> allow a 1X1 format; 1X2, 2X1, 2X2, 1X3 or 2X3 only,
> JY1 notwithstanding. :-).
>
> 73 from ARRL HQ, Ed
> --
> Ed Hare, KA1CV, ARRL, 225 Main St, Newington, CT 06111 203-666-1541
> Laboratory Supervisor, Product Testing, RFI ehare@arrl.org
> My electronic posts and email do not necessarily represent the policy
> of the, ARRL, but I can probably get in trouble for them anyway!
How about some information on what the vanity callsign program is and what
stage of proposal or reality is it. Does that mean I could get back an
old call I held if it hasn't been reassigned??

Jeff

2964. Parts for Heathkit???

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 23:08:14 UTC
From: mladair@mtu.edu
Message-ID: <2m2qou$b1r@pace2.cts>
Source record: 269616

From my understanding of things, Heatkit as we knew is is out of business. Is there a source where I can pick up replacement parts for one of their kits? Specifically the 51-120 Audio Transformer.

Thanks!

Matt Adair
mladair@mtu.edu

2965. IPS Daily Report 14 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 23:21:05 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar14.232105.21011@ips.oz.au>
Source record: 269617
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 14/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 14 MARCH AND FORECAST UP TO 17 MARCH

No warning is current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 087/030

1B. SOLAR FORECAST
15 March 16 March 17 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : unsettled to active

Estimated Indices : A K Observed A Index 13 March
Learmonth 20 3432 4434
Fredericksburg 18 21
Planetary 25 22

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
15 Mar 15 Unsettled to active.
16 Mar 12 Unsettled.
17 Mar 10 Quiet to unsettled.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
14 Mar normal normal fair-normal

PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
15 Mar normal normal fair
16 Mar normal normal fair
17 Mar normal normal fair
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were slightly above predicted monthly values

Observed T index for 14 March: 45

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
15 Mar 35 Near predicted monthly values.
16 Mar 40 Near predicted monthly values.
17 Mar 40 Near predicted monthly values.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au |PO Box 5606
tel: +61 2 4148329 |West Chatswood NSW 2057
fax: +61 2 4148331 |AUSTRALIA

2966. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-14 23:35:58 UTC
From: glyle@marie.seas.ucla.edu
Message-ID: <1994Mar14.233558.12700@enterprise.rdd.lmsc.lockheed.com>
Source record: 269618
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

In article <2lor4d$krj@brahms.udel.edu>, penneys@brahms.udel.edu (Robert Penneys) writes:
|> I need to replace a car and want one which 100 watts or so of HF and 50 watts
|> or so of 2 meters or 440 will not interfere with the electronics af the
|> vehicle. Nor do I want ignition or other noise beyond the bare minimum.
|>
|> In consideration are four door sedans from the size of a Corolla up to that
|> of a Taurus. or perhaps a minivan or small pickup. Replacing a Ford
|> Aerostar.
|>
|> Will listen to all viewpoints. Tnx a million. Bob
|> --
|> Bob Penneys, WN3K Frankford Radio Club Internet: penneys@pecan.cns.udel.edu
|> Work: Ham Radio Outlet (Delaware) (800) 644-4476; fax (302) 322-8808
|> Mail at home: 12 East Mill Station Drive Newark, DE 19711 USA

My father uses a TS 50 and an IC901 in his taurus. only noise is slight alt whine on the 901. Only effect caused by xmitting is changing the speed of the key-in-ignition chime when xmitting on 440. He's happy with car.

Of course I hold onto my old 71 VW bus. Point ignition, generator, etc. all waay in the back, entire body grounded, lotsa room for rigs, etc. I'd hate to lose that car!

George Lyle, N7TNJ/6

2967. Re: need extra class book and tape recommendation

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 04:04:10 UTC
From: "Neil D. Friedman" <ndfriedman@delphi.com>
Message-ID: <Ra+PQUi.ndfriedman@delphi.com>
Source record: 269619

Jerry Sy <ah301@yfn.ysu.edu> writes:

>I am thinking of upgrading to extra, any recommendations as to
>which book, tapes, software (mac or pc) to use as study guide ?

ARRL Extra Class license study guide
ARRL high-speed tapes

..Neil, N3DF

2968. Re: HELP: Hallicrafters Model S-76. SSB no good!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 04:14:26 UTC
From: alanb@sr.hp.com
Message-ID: <CMouG3.KB4@srgenprp.sr.hp.com>
Source record: 269620

andrew peter.cropley (cropley@cbnewsf.cb.att.com) wrote:
: This weekend my Brother-in-law "dug-out" (literally) a SW radio
: Hallicrafters S-76. It is a 9 tube unit double conversion Superhetrodyne
: receiver. ...

: I jumped to the 80 meter band and recieved CW fine. however when I went up
: in the band to do SSB I go lots of signals but they were all distorted/muffled

: The unit has a switch for either CW or AM reception. The manual says that if
: I use the narrowest (sharp) filter and tune in the station then switch to
: the widest filter it will then be ok for SSB reception.
:
: The afore mention switch engages a BFO when switched to CW mode, but I
: didn't read anything about AM. ...

You are probably overdriving the detector. With the BFO on, the AGC
doesn't work, so the incoming signal can easily overdrive the detector.
(It's not a problem on CW since distortion doesn't affect copyability.)
Try turning down the RF gain control.

AL N1AL

2969. Re: need extra class book and tape recommendation

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 04:28:52 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CMov45.2y7@ucdavis.edu>
Source record: 269621

Jerry Sy (ah301@yfn.ysu.edu) wrote:
: I am thinking of upgrading to extra, any recommendations as to
: which book, tapes, software (mac or pc) to use as study guide ?
I just took 3b and 4a this weekend. I went to look at the available exam prep books today (neat coincidence). Anyway the W5yi stuff was really nothing but the questions and answers with just a little bit about the reasons or process. The AMECO books were slightly more indepth with regard to the answers. The ARRL book was definitly the way to go. It is organized with all the theory and regs in the front of the books with the appropriate questions listed at the end of the section so you can look at the exact questions.

I bought the ARRL book. Can't give a recommendation for tapes though, I am trying to use Super Morse. Still haven't passed 1b or 1c yet.

cheers,
Dan
--
--
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
--
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *
--

2970. TX Amp for 20 mtrs QRP rigs.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 06:21:14 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Mar15.142114.1@ntuvax.ntu.ac.sg>
Source record: 269622
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Hi,

Need recommendation for a small TX amp kit which takes about 4 watts output from my QRP rig and puts out 20-30 watts with
built in T-R switching (preferably solid-state T-R) and runs off 12-13.8v DC power supply. Must be small so I can fit it into my
existing rig's casing. Should be something similar to the QAMP-20 from Ramsey Hobby kits. BTW, this is for 20 meters. Tks.

73,
Daniel

2971. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 10:00:46 UTC
From: WOLF KOEHLER <WKOEHLER@ESOC.BITNET>
Message-ID: <94074.100046WKOEHLER@ESOC.BITNET>
Source record: 269623

The use of prefixes A0 and A1 would require an additional allocation
by the ITU of blocks A0A-A0Z and A1A-A1Z to the United States.
This is unlikely since it is a policy of the ITU not to allocate
callsign blocks containing figures 0 and 1.
There is an analogy:
While Germany has DAA-DRZ, we will never have D0 or D1 callsigns,
even thoughprefixes D2, D4 and D6 are in use (by other countries,
though).
So you can drop that idea. 1x1 callsignon the other hand are of course
possible; it's entirely in the hands of the national authorities.
So keep on pressing the FCC.

73, Wolf.
DL3ZBJ, AB6EL, VK6BGV.

2972. Index to the rec.radio.amateur.* Supplemental Archives

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 12:00:21 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/ham-radio/archives-1-763732810@unomaha.edu>
Source record: 269624
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.2.1.2
Archive-name: radio/ham-radio/archives

The following is a list of informational files for this newsgroup
available via anonymous FTP from ftp.cs.buffalo.edu or the Australia/
Asian-Pacific mirror at grivel.une.edu.au.

Questions to bowen@cs.buffalo.edu

1750m.band - misc info on the 1750m band
222xvtr.zip - PostScript code for KH6CP no-tune 222-MHz transverter
8085sys.zip - 8085 system software, from QEX 11/93 and 12/93
alinco_180t_mod - Alinco 180T modification for a TNC connection
ampr_coordinators - coordinators for packet IP addresses
antenna_refs - references for articles about antenna designs
antique_radio_info - misc info about antique radio collecting
arrl-logo.ps - ARRL logo in PostScript format
arrl_bib - bibliographies from ARRL literature (ASCII format)
arrl_digital_minutes - Minutes of the ARRL committee on digital comm.
arrl_fo_jobs - descriptions of some ARRL Field Organization jobs
arrl_info_service - announcement of the ARRLs trial information service
bbs_interface_specs - specifications for message passing protocol
cal_pd_freq - California police frequencies
callbook.tar.Z - sources for the marvin callsign server v1.3
canadian.Z - Canadian ham database in FCC format
carpet.loop.2 - Antenna for apartments and small spaces
clubcalls.Z - database of US ham clubs
comb6.zip - HF Propagation Predication program
docket_91-36 - information regarding the proposed scanner regs
dxcc-k2di - ARRL DXCC country list
dx_w2iol.dat - data for all country prefix, position, etc
dx_w2iol.doc - documentation for the above database
element_credit - rules about VE credit for earliers exams
elmers_admin - information about the elmers list (see below)
elmers_index - quick reference index of elmers
elmers_list - list of elmers on the network
exam_ops - info on exams and exam opportunities
faq_callsign - frequently asked questions about the callsign server
faq_ham_1 - frequently asked questions about ham radio (pts 1)
faq_ham_2 - frequently asked questions about ham radio (pts 2)
faq_ham_3 - frequently asked questions about ham radio (pts 3)
faq_packet - frequently asked questions about packet radio
faq_shortwave - frequently asked questions about shortwave
fcc_part_97_1 - text of the FCC part 97 amateur regulations (part 1)
```

fcc_part_97_2 - text of the FCC part 97 amateur regulations (part 2)
fcc_part_97_3 - text of the FCC part 97 amateur regulations (part 3)
fft.com - EGA/VGA DOS command for spectral display (QST 1/92)
ffth.com - Hercules DOS command for spectral display (QST 1/92)
field_day_92 - field day rules for 1992
florida_antenna - Florida State antenna law info
guide2newsgroups - description of USENET newsgroups dedicated to radio
ham_sat_sum - summary of information needed to get on satellite
hams_on_usenet - list of ham operators and e-mail addresses on the net
hamstacks - information about the question pool stacks
handicap_waiver - info on obtaining a handicapped test waiver
hf_rigs - QST reviews of available HF rigs
ht_info - general information about commercial hand helds
icom_ic_w21at_mods - increases the number of bands on an Icom IC W21AT
intro_to_swl - info for aspiring short wave listeners
intro_to_scanners - info for aspiring scanner listeners
jlem.zip - Program, w/source, for 2kx8 ROM emulator (QEX 1/93)
j-poles - description of j-pole antenna made from twin-lead
lead_acid_batteries - essay on lead-acid batteries
license_plates - guide to ham calls on license plates
logos - PostScript logos for various ham organizations
mail_order - a database of electronic mail order shops
manufacturers - names and addresses of ham gear manufacturers
mav11.ps - postscript image of MAV-11 amplifier PCB (QEX 9/93)
mlhacker.zip - newsletters about the MiniSport Laptop Hacker
mods - directory containing radio modifications
motorola_ge_service_man - how to get service manuals for Motorola and GE rigs
nasa_select - places where you can hear NASA SELECT broadcasts
new_packeteers - helpful essays for new packeteers
newcomers - tips and hints for those new to amateur radio
nprm_93-85_text - text of docket 93-85 (message forwarding systems)
nprm_93-305_text - text of docket 93-305 (vanity call system)
packet_clubs - organizations you can get more packet info from
packet_gateways - list of gateways from packet to Internet
packet_header_standard - description of BBS message header standards
packet_misc - miscellaneous packet info
packet_software - list of packet software versions
phone_bbs_list - phone BBSs for ham related issues/software
pio_handbook - ARRL Public Information Officer's Handbook
pr_docket_92-136 - text of FCC PR Docket 92-136
qex1193.ps - Postscript image of 13cm preamp board, 11/93 QEX "RF"
qexfq194.zip - Pascal program for PC frequency counter, Jan 1994 QEX
qsl_bureau1 - information about the ARRL QSL bureau
qsl_bureau2 - "what should I do if" list for the QSL bureau
qst_prodrev - index of ARRL product reviews in QST
quest_pool_novice - novice question pool - good after 7/1/93
quest_pool_technician - technician question pool - good after 7/1/93
quest_pool_general - general question pool - good before 6/30/94
quest_pool_advanced - advanced question pool - good before 6/30/95
quest_pool_extra - extra question pool - good before 6/30/96

rfi_tips - good posting about RFI
sol_geo_data - desciption of daily solar geophysical broadcasts
sol_terra_terms - glossary of solar-terrestrial terms
sstv_wefax_info - general help for SSTV and WEFAX users
tasm.zip - table-driven assembler for weavrdsp.zip file
txt2eprm.zip - morse code ID generator programming utility (QEX 2/94)
usenet_purchases - tips on buying and selling via USENET
vlf_elf_references - references for info on VLF and ELF radio
weavrdsp.zip - src to "Weaver Method Modulator Using DSP" (QEX 9/93)

For readers of this newsgroup both new and experienced, these files are a de-facto "Required Reading List" to provide definitive answers and pointers to other sources for questions that come up in this forum.

This is also your archive, so any additional articles, guides, or small PostScript graphics that you feel would enhance this collection are most welcome. Submit to Devon via his E-mail address above.

Thanks go to Devon Bowen, KA2NRC, for providing diskspace and maintaining these valuable archives, as well as all the authors who wrote and submitted the information contained in them.

Additional archives out there that have /pub/ham-radio directories are encouraged to "mirror" these files to provide redundant storage for these documents. Some of these sites (which may or may not mirror ftp.cs.buffalo.edu) include:

ucsd.edu /hamradio
nic.funet.fi /pub/ham
/pub/dx
csseq.cs.tamu.edu /ham-radio
suntan.tandem.com /hamradio
col.hp.com /packet
ftp.cs.buffalo.edu /pub/ham-radio
bubba.business.uwo.ca /hamster/ham
/hamster/tcpip
/hamster/mods
/hamster/view
vax.cs.pitt.edu /pub/arrl8
/pub/ka9q
/pub/ncpa
/pub/tnc2
brolga.cc.uq.oz.au /pub/ka9q
tomcat.gsfc.nasa.gov /public
helios.tn.cornell.edu /pub
wuarchive.wustl.edu /mirrors/msdos/hamradio
/mirrors/msdos/packet
/mirrors/msdos/ka9q-tcpip
/mirrors/cpm/hamradio
/mirrors/cpm/packet
/mirrors/misc/hamradio
/mirrors/misc/packet

/mirrors/misc/ka9q-tcpip
gatekeeper.dec.com /pub/net/ka9q
sun.soe.clarkson.edu /pub/ka9q
sics.se /archive/packet
/pub/packet-incoming
sabrina.dei.unipd.it /pub/hamradio
uhunix2.uhcc.Hawaii.Edu /incoming/ham-radio
caticsuf.cati.csufresno.edu /pub/ham-radio
ftp.waseda.ac.jp /pub/toumon/ham-radio
garfield.catt.ncsu.edu /pub/hamradio
plan9.njit.edu /pub/hamradio
sunee.uwaterloo.ca /pub/radio
grivel.une.edu.au /pub/ham-radio
uxc.cso.uiuc.edu /pub/ham-radio
iraun1.ira.uka.de /pub/ham-radio
nic.switch.ch /software/hamradio
/software/mac/ham-radio
iesd.auc.dk /ham-radio
akutaktak.andrew.cmu.edu /aw0g (softkiss-mac)
gandalf.umcs.maine.edu /pub/ham-radio # ls -l NO !)
rtfm.mit.edu /pub/usenet/news.answers/radio
tamu.edu /pc-sig
ftp.geo.brown.edu /pub/hamradio
ns.risc.net /ham-radio
ftp.std.com /pub/hamradio
ftp.fidonet.org /pub/fidonet/ham
ftp.halcyon.com /pub/fidonet/ham
ftp.fcc.gov /pub

Questions about FTP mirroring and access to appropriate software should be directed to me, or do an Archie search on the keyword "mirror."

For those without FTP access (and only those without FTP access, please), there is an FTP mail server at ftpmail@decwrl.dec.com. Send the word "HELP" to this address for more information.

Additional documents on Usenet and other newsgroups may be obtained from rtfm.mit.edu via anonymous FTP or via mail server (send the word "HELP" to mail-server@rtfm.mit.edu).

The American Radio Relay League has recently made available a mail-server to distribute many of their informational documents in electronic form. Send E-mail to info@arrl.org with "HELP" in the message body for more information. These files are also mirrored on ftp.std.com.

Yet another mail-server has been made available by Steve Harding, KA6ETB. Send E-mail to ham-server@grafex.sbay.org with "HELP" in the message body for more information.

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

2973. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 12:01:57 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-763732909@unomaha.edu>
Source record: 269625
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

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Posted-By: auto-faq 3.2.1.2
Archive-name: radio/personal-intro
Revision: 1.5 12/18/93 14:15:53
Changes: new mailing lists, .packet rmgroup, and .policy updates

(Note: The following is reprinted with the permission of the author.)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 18 September
1993 to add the mailing lists for the new rec.radio.amateur newsgroups, to
note the rmgroup of rec.radio.amateur.packet, and to officially retire some
(in)famous threads of discussion on rec.radio.amateur.policy.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
arrangement, but one was that the system was not supposed to be used for
commercial purposes. Since one of hams' favorite pastimes is swapping
gear, it was natural for hams to post messages about equipment for sale
to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use
restriction, and after some argument, a group was created specifically
```

for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize

this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, should be removed by September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas,

commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
===========================

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

2974. Info Req. OMEGA SYSTEM

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 12:25:06 UTC
From: mabboux@vcnam.cnam.fr
Message-ID: <2m49f2$j19@sheckley.cnam.fr>
Source record: 269626

Hi!

I need regular information on the OMEGA SYSTEM ,
(10 kHz world wild interferometric radio localization network).

Where can I obtain information, as like on/off station/channel activity
or power modification .

Thanks for advance .

Bruno Mabboux .

2975. frequency exchange

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 12:26:20 UTC
From: jamoran@dtr.stat.com
Message-ID: <L3a9ic1w165w@dtr.stat.com>
Source record: 269627

is there anyone who wants to trade radio frequencies. I have both scanner and shortwave equipment and would like to trade frequency lists with anyone interested. either e-mail or snail at JA MORAN po box 25506 tempe, az 85285. I have a database with 8000 shortwave frequency entries and one with about 18000 scanner entries. need local police or highway patrol frequencies, ?? JOHN

--
jamoran@dtr.stat.com (John moran)
Data Terminal Ready BBS +1 602 993 4753

2976. ICOM IC-728 MODS?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 12:57:20 UTC
From: mdibella@bu.edu
Message-ID: <2m4bbg$196@news.bu.edu>
Source record: 269628

does anyone happen to know if there are any mods available for the IC-728??

2977. ARLB026 Phone interference survey

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 14:59:36 UTC
From: w1aw-list-approval@WORLD.STD.COM
Message-ID: <$arlb026.1994@ampr.org>
Source record: 269629
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB QST @ ARL $ARLB026
ARLB026 Phone interference survey

ZCZC AG90
QST de W1AW
ARRL Bulletin 26 ARLB026
From ARRL Headquarters
Newington CT March 14, 1994
To all radio amateurs

SB QST ARL ARLB026
ARLB026 Phone interference survey

'Phone interference survey

The FCC has released the results of a telephone interference survey just completed. 35 FCC field offices each picked three random cases of telephone interference on record and then visited the scene. The transmitting stations included 47 Citizens Band; 27 Amateur; 23 AM broadcast; 10 FM broadcast; and one international broadcast station.

At the location experiencing interference, the FCC's Field Operations Bureau personnel would first test the telephones on site, and then test their own ''bulletproof'' telephones, as well as several commercially available filters. 241 different telephones were tested.

Among the FCC's conclusions was that transmitter power did not seem to be a significant factor; they said that 10 watts or less caused telephone interference in one-third of the cases.

The FCC also said that filters worked only one-third of the time. ''Manufacturers can design telephones to be interference free,'' the Commission said, citing its bulletproof telephones, which were immune from interference ''virtually all of the time.''

The FCC said that it hopes that the survey will encourage affected parties ''to productively address and resolve this problem.''

If you would like a copy of the survey, which includes a list of telephone models checked, send an SASE with two units of first class postage to the Technical Information Service at ARRL HQ.
NNNN
/EX

2978. Re: Filter Shape Factor?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 15:04:16 UTC
From: wosborne@nmsu.edu
Message-ID: <17313.wosborne@nmsu.edu>
Source record: 269630

On 13 Mar 1994 05:11:08 GMT, Chris Magnuson wrote:

> What does the shape factor spec of a filter indicate? I assume something
> about passband/stopband transition or some such?
>
> Thanks,
> Chris Magnuson
> chrism@col.hp.com

The shape factor is the ratio of the bandwidth at the 60 db points to the bandwidth at the 3 or 6 db points. Some people also use the 80 dB down point instead of the 60. In ham world the most often used defination is 60 dB to 6 db points as it gives the best numbers hihi.

2979. Re: noise blankers

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 15:07:14 UTC
From: hellman@cbnewsm.cb.att.com
Message-ID: <CMpoo5.3MK@cbnewsm.cb.att.com>
Source record: 269631

> Well, as the guy who first called the Ten Tec noise blanker a decorative
> knob... I'd like you all to know I happily sold my TS-440s and kept the
> Corsair because the Corsair was a much, much better, functional RADIO!
>
> Now if THAT doesn't stir the pot... nothing will.
>
> 73 paul wb8zjl

Without dipping into that pot, the need for a noise blanker has nothing
to do with the rest of the RADIO! Occasionally, and fortunately for
only short periods, external pulsed noise appears and my noise blanker
is very effective. I thought you asked if they were of any use.
If you never needed one, consider yourself fortunate. If yours didn't
work, at least the rest of your RADIO works well.

Shel Darack WA2UBK

2980. Tickling the Ether

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 15:37:23 UTC
From: greg@netcom.com
Message-ID: <gregCMpq2C.BqF@netcom.com>
Source record: 269632

Sunday night, the weekend nearly over, I finally found time to descend the cellar stairs into the shack. There's still a novelty in stepping into what is for me, after near 20 years of hamming, my first dedicated radio-room.

I sat down just about in time to hear the higher-frequency bands fade and die.

One of the treats of escaping condminium life is that even my temporary antenna, a fairly low random-length wire strung to a tree for the winter, is long enough for work down to 160 meters.

So, after demonstrating once again that the old Drake 7 line can work just about anything it can hear, and not struggle on the receiving end either, I was itching for something a little different.

It was then I spied on the shelf a somewhat shopworn HW8, which I picked up for $35 at a shop specializing in used boating gear. I set it on top of the 'big' rig, and hooked up the antenna. And I took being able to quickly lay my hands on the power cord as a good omen.

Plugged in the power supply and switched on. Hmmm. No dial light. What's wrong? Oh. It doesn't *have* a dial light.

Forty meters was the usual disaster (why do I even check?) of broadcasting carriers. So I headed for the 80-meter Novice band, to see what was around.

So I headed for the 80-meter Novice band, to see what was around. After figuring out which transmatch to use, and hooking the 'just wrong' length of wire thereto, and dipping the SWR flat, it became obvious that there was a good deal around.

Now, running a DC receiver requires that you operate it, unlike the infinite-dynamic-appliances upon which the transceiver was sitting. The stronger signals required lowering the RF gain, so that they didn't sound all ragged. And I remembered something about which side of a signal to tune on... ...check the manual, whose pages are rust-stained from the staples having rusted during the rig's life on a boat. Oh, yes, tune on the HIGH side of zero beat, otherwise you'll be a kHz or so away from the person you're calling.

Okay, here goes. A nice loud station calling CQ. Don't know how loud, 'cause there's no S-meter, but I have to turn the RF gain way down, so that must mean he's S9! And a VE3 at that!

A quick call, and by gosh he heard my 2.5 watt whistle! He's in North Bay, which is quite a bit farther north and quite a lot colder than where I am. Both of us hear our XYL's calling us after 10 minutes or so, seemingly simultaneously (how does that work?). I can't hear it as well through the high-impedence headphones, but it was definitely something. My VE3 appends /QRP to the end of my call sign, which strikes me as kind of neat. It's fun to have someone else do your bragging, even though basic physics is nothing to brag about.

The contact renewed my appreciation for a really good receiver, since the band was kind of crowded. Though it does my heart good, every one of those signals had not one but two images in the passband, and audio filtering only served to make those images narrower, not to eliminate the extra one! So the gentleman above me had no reason to realize that he was QRMing my contact, and had every right to be a kHz up from where my friend and I where talking. So, ironically, it was the QRP station that had the problem copying the QRO station this time!

After checking on the call (something about bringing the laundry up) from upstairs, I decided to try again.

Tuning up and down, I hear a loud QRL? I sometimes, working QRP, will camp on a frequency where I hear someone tuning up, or getting ready to transmit intelligence, as four out of five times, a CQ is the very next thing that happens. And this fellow was a true gentlemen, calling QRL? several times with a few seconds of listening in between.

Sure enough, the CQ followed. An N2, right in New Jersey. 80 meters offers something that the higher bands don't... ...it allows contact between people who are local enough to one another to make the occasional eyeball QSO possible. That's how friendships get made. It's a good band. There was a time, before VHF and repeaters, that it was the main place where such things happened.

Ed also had no problem hearing my night-light-sized signal. He had been sending CQ at about 18 WPM, so I answered him a tick slower. That's my usual habit in the Novice bands, knowing that many people send, especially their CQs, a bit faster than they can actually receive.

Well, he had no problem. He saw my 15WPM and raised me 5, and now I was pushing my own rusty code speed's limits. But I held on.

I even resisted the temptation to toss my key out the window when he said "I HVE BEEN A HAM FER ABT 5 WKS NW ES U R MY 1ST NJ CONTACT."

So here I was, engaged in an Extra-Class speed CW QSO with a five-week Novice! It was also obvious that he, like me, was pounding away on a straight key. Not because he did a bad job of it, but you can tell when someone is using a device where it is possible to produce other than a 3:1 ratio. And towards the end of the half-hour QSO I could hear the fatigue in his arm. That kind of endurance isn't something you get in five weeks.

I said "WOW! 5 WKS AND ALRDY 20 WPM. U MUST BE A NATURAL."

"NO NATURAL. BEEN PRACTICING FER GENERAL TEST," he says.

"GO TAKE THE TEST. UR READY," I told him.

He asked me not to tell his XYL that I had a $35 rig that worked, or his funds would be cut off. So I agreed.

When we parted, I told him "BCNU ON 75 OR 160 METER SSB VY SOON I THINK."

As I headed upstairs, I reflected on this gentleman's talent and interest, and decided there's hope for ham radio, even ham radio as we knew it, after all. Of the dozen or so QSOs I've had down in the Novice CW bands over the last couple of weeks, fully half of these guys actually knew how to rag-chew and to talk about more than "UR RST RST 579 579 HR IN HAMTOWN HAMTOWN. NAME IS JOE JOE. SO HW CPY ES 73 SK"

Perhaps the other half, once they get over being nervous, will also learn.

I think I'll be on 80 CW tonight.

73

Greg

2981. Re: Why no 10 meter activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 16:21:02 UTC
From: brunob@hpldsla.sid.hp.com
Message-ID: <121020037@hpldsla.sid.hp.com>
Source record: 269633

We are approaching Sunspot minima and MUF during this period of time is
at his low. Now is a time of real DX hunting with endles time spining
the dial of RX to be rewarded with unexcpected new country.
With beam you may have better chances especialy in south to north direc.
however be pationed and perssistent - in another 2 to 3 years 10 will be
back in all his glory. Follow the sunspot # on WWV or beter observ by
yourself with appropriate equipment - sun filters - since you can get
blind without them.
from the log of AA6AD

2982. Re: need extra class book and tape recommendation

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 16:52:14 UTC
From: kleite@sentry.ndhm.gtegsc.com
Message-ID: <kleite-150394115215@157.176.173.2>
Source record: 269634

In article <ah301-120394173614@sy_j.pgh.wec.com>, ah301@yfn.ysu.edu (Jerry Sy) wrote:

> I am thinking of upgrading to extra, any recommendations as to
> which book, tapes, software (mac or pc) to use as study guide ?

KL> Jerry,
KL> I would go to Radio Shack and purchase the new Gordan West's Extra class study guide ...I just recently this past weekend past my Extra with the help of this book and some hyperstack's for the macintosh. I have also used his Advanced bookand found it very helpful .....

****
Keith J Leite KA1AQB
AX25 - KA1AQB @ WA1PHY.#EMA.MA.USA.NA
AMPR - ka1aqb@switch.sema.ampr.org
Internet - kleite@sentry.ndhm.gtegsc.com

****

2983. New FTP site

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 17:44:06 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCMpvxK.33I@netcom.com>
Source record: 269635
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner,alt.radio.scanner,rec.radio.info

BOSTON AMATEUR RADIO CLUB ANNOUNCEMENT

FOR IMMEDIATE RELEASE
FROM: Scott Ehrlich, Software Librarian

FOR FURTHER INFORMATION, CONTACT: Scott Ehrlich, WY1Z
Tel: (617) 373-4198

PLEASE DISTRIBUTE AS WIDELY AS POSSIBLE

MARCH 15, 1994

WORLD HAM RADIO ARCHIVES MOVES TO OAKLAND

Due to a recent policy change from Software Tool and Die's
Internet computer system, the World, the ham radio archives from
World have moved to the very well-known anonymous FTP site of
oak.oakland.edu (141.210.10.117).

The directory on Oakland where the files will be locate will remain:
/pub/hamradio.

The Oakland FTP site permits a maximum of 400 simultaneous
anonymous FTP connections, so there should be plenty of space for
everyone to access what they want, when they want.

The directory structure on Oakland will remain the same as it was
on World.

If you have any questions, please feel free to contact me.
My e-mail address is: wy1z@netcom.com.

73 de WY1Z

--
```
==========================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
==========================================================================
```

2984. SCDX 2196

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 17:57:41 UTC
From: p00489@psilink.com
Message-ID: <$scdx2196.1994@ampr.org>
Source record: 269636
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.info

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::::::::::::::::::::::::::::::::::::
:: MediaScan ::
:: SWEDEN CALLING DXERS ::
:: from Radio Sweden ::
:: Number 2196--March 15, 1993 ::
::::::::::::::::::::::::::::::::::::
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Satellite, shortwave and other electronic media news from Radio Sweden.

This week's bulletin was written by George Wood.

Packet Radio BID SCDX2196

All times UTC unless otherwise noted.

NORDIC MEDIA NEWS:

STOCKHOLM INTERNATIONAL--When the new Radio Sweden schedule goes into effect on March 27th, Radio Sweden is also officially launching Stockholm International on our FM transmitter on 89.6 MHz. The head of the Radio Sweden English Service, Sarah Roxstrom, discussed Stockholm International in today's edition of "MediaScan". For those of you who missed the program...

The channel currently carries a motley collection of programming from Radio Sweden in various languages (English, German, Russian, Swedish, Estonian, and Latvian), the immigrant programs department in many languages (Finnish, Greek, Serbo-Croatian, Macedonian, Slovenian, Assyrian, Spanish, Turkish, Polish, Albanian, and Arabic), and from domestic radio. Sarah Roxstrom:

"The idea now is to give this channel a new profile, more as a service to foreign visitors. This would mean extending the English and probably German programming. At the moment we broadcast an hour of the BBC World Service every morning between 6:00 and 7:00 AM local time. That's half an hour of "Newshour" at the moment, and half an hour of "Europe Today".

"From the 27th of March we're going to be broadcasting an hour and a half of "Morning Edition" from National Public Radio every day between 13:00 and 14:30 local time. That will be followed by the regular half hour from Radio Sweden in English. Because we're a local station, concentrating on Sweden and the other Nordic countries, we want to give our listeners the chance to hear world news from the BBC and from NPR."

When Sweden introduces Digital Audio Broadcasting, scheduled for 1995, Stockholm International will be one of the national channels in the DAB stream.

WORLD RADIO NETWORK--We're getting National Public Radio through the World Radio Network, which provides satellite channels in Europe and North America for international broadcasters in English, including Radio Sweden. WRN's Karl Miosga was also in today's program, where he announced that WRN is changing its audio subcarrier on Astra. The transponder will remain MTV's transponder 22, but on April 1 the audio will officially shift from 7.74 to 7.38 MHz. Tests will begin on the new audio frequency on around March 25th. The change is because many older satellite receivers don't reach 7.74 MHz audio.

Besides Stockholm International, WRN programming is also carried over Radio Finland's Capital FM in Helsinki on 103.7 MHz. In addition to Radio Finland, Capital FM rebroadcasts NPR and Radio Australia from WRN, as well as VOA, Deutsche Welle, and Radio France International. Cable systems in Europe relaying WRN include one in Croydon in the UK, and systems in Amsterdam and Dublin will be adding WRN at the end of March.

In North America a number of public radios stations will be carrying WRN programming.

Back here in Europe, WRN is working on adding a German service.

RADIO SWEDEN--When our new Radio Sweden schedule goes into effect on March 27th, we'll be available via WRN in Europe on MTV's Astra transponder 22, audio soon to be 7.38 MHz, at 20:00 hrs UTC, and to North America on the ASC-1 satellite, on SCOLA's transponder 23, audio 6.2 MHz, at 20:00 and 00:00 hrs UTC.

We'll also continue to be available in Europe on our own Astra channel, on the Sky Movies Gold transponder number 26, audio 7.74 MHz, at 16:15, 17:30, 21:30, and 22:30 hrs UTC and weekends at 20:30 hrs.

For those of you listening on shortwave, we'll be on the air to Europe at those times on 1179 and 6065 kHz, along with 9655 and 15390 kHz at 17:30, and 9655 kHz at 21:30 hrs. The 17:30 and 20:30 hrs broadcasts should also be audible in parts of Africa and the Middle East.

Our North American schedule will be at 12:30 and 13:30 hrs on 15240 and 17870 kHz and at 02:30 and 03:30 hrs on 6040 and 9850 kHz.

Latin American listeners can tune in at midnight 30 hours on 6065 and 9850 kHz.

We'll be broadcasting to Asia and the Pacific at 11:30 hrs on 13775, 15120, and 15240 kHz, at 23:30 hrs on 11910 kHz, and at 01:30 hrs on 9695 and 11695 kHz.

SIRIUS--Sweden's new Sirius satellite has begun testing from its new position alongside the Tele-X satellite at 5 degrees East. Sweden's TV 4, which is regularly on Tele-X, is also being relayed, as a test, on Sirius, on 11.932 GHz. And the Tele-X sound carriers, including Radio Sweden, are along as well. There have been tests in PAL on 12.015 GHz, and now there's a D2-MAC test pattern on 12.092 GHz.

Speculation continues about what stations may appear on Sirius. Can the Swedish Space Corporation lure Scansat to move its various TV3 and TV1000

channels from Astra? (Which would undoubtedly anger many Scandinavian Astra dish owners.) Bertil Sundberg speculates in "Paa TV" magazine that Scansat's FilmMax might consider moving from its location on distant Intelsat 601.

The feared interference between Sirius and Norway's Thor, located nearby at 1 degree West, and using the same frequencies, has not appeared (at least on my 1.2 meter dish, there might be more of a problem on smaller dishes).

FINLAND--All local radio licences in Finland are up for renewal this year. There are plans to build networks, and the national commercial TV network MTV (NOT the American music video network) has applied for a national radio licence. Currently Finland has no national commercial radio. (Kauto Huopio and FNB)

EUROPEAN MEDIA NEWS:

RADIO--There's a proposal for a new instore radio service for McDonalds. So far there's no indication where it might appear. But a radio station scheduled to appear on the CMT transponder on Intelsat 601 on 7.38 MHz has been delayed until May. It could be for McDonalds. (James Robinson)

There's a new radio station called "Arabic Radio" on MBC's transponder on Eutelsat II-F1, on 7.38 and 7.56 MHz. (James Robinson)

A radio station called "N-joy" is scheduled to begin on Premiere's Astra transponder 17 on 7.38 and 7.56 Mhz on April 4th at 16:44 hrs local time. (James Robinson)

CNN--CNN has appeared with a strong signal at 21.5 degrees East on 11.095 GHz. (Spyros Abatielos, Greece) Very curious. Eutelsat I-F5 is in this position, in an inclined orbit. Anyone else find this transmission?

ARIANE--The failure of the Ariane 63 launch, carrying the Turksat 1 and Eutelsat II-F5 satellites, was due to cooling problems and a faulty bearing. Alterations to equipment are now underway to prevent the re-occurence of such a problem, but this will mean that this year's launch schedule will not resume until the beginning of June.

This means that Astra 1D will not launch until December this year as a result of the Airane problems. The satellite was originally set for a September launch, but this will now not happen, putting a spanner in the works of a number of broadcasters who were counting on a successful launch on-time.

It is reported that all available transponders on Astra 1D have already been booked, although further details are yet to emerge. ("Skyguide")

QVC--The home shopping channel QVC, having lost its bid to buy Paramount in the US, is now said to be planning to expand into European markets. Clarification of the legal situation would, however, be required from the European Union. The current position is that teleshopping channels are prohibited unless they broadcast to one member state only. ("Skyguide")

QVC is currently part of the Sky Multi-Channels package. There are those who wonder why on earth such a channel bothers to scramble its signals?

NO NICK--Unconfirmed reports suggest that Sky and Viacom have dropped plans to launch Nick At Nite, advertised as part of the Sky Multi-channels package. Earlier reports suggested that the channel had been delayed due to problems with program rights and acquisitions.

In the event that the channel is dropped, at least for 1994, it is likely that the Travel Channel, already broadcasting on Intelsat 601, will be offered time on Astra and will join the multi-channels package to replace Nick at Nite.

In this event, the only apparent spare time is the 6:00 AM to 7:00 PM British time on JSTV's transponder 24, or the currently vacant (and Sky-owned) Transponder 47, which could be a more likely option. (Transponder 24 is now showing a new Astra promo tape in several languages during the spare hours.)

The Travel Channel currently broadcasts midday to midnight on Intelsat, so while there is enough time available on transponder 24 to carry the channel in its entirety, the time-shift could be a problem for the channel. ("Skyguide")

CHINESE CHANNEL--The Chinese Channel has announced that it will launch its European service on Astra on March 18, although it refuses to tell anyone which transponder it will launch on. ("Skyguide")

SKY SPORTS--Sky has temporarily shelved plans for Sky Sports Two (again) by transferring football matches which clash with the current West Indies cricket coverage to Sky One. The move is partially for technical reasons, namely the difficulty in getting viewers to re-tune their receivers, but primarily for marketing reasons. The soccer matches on Sky One are achieving very respectable ratings, and is
likely to bring an increased number of new subscribers to Sky Sports. ("Skyguide")

SKY FREEBIES--While the soccer is screened on Sky One, all the Sky Multi-channels broadcast in soft videocrypt mode, so a viewing card is not required. Again, this is partially for technical reasons (there are some Sky Sports subscribers who do not take multichannels), but also with the marketing intention of capturing the die-hard viewers who have not taken up a subscription to multichannels. ("Skyguide")

SKY MOVIES FREEBIES--Sky's promised preview weekend for non-movie subscribers, delayed from its original date in February, has now been announced for the weekend of April 9 and 10. The previous attempt had to be cancelled due to the objections of several major movie distributors. Presumably these difficulties have been ironed out, since Sky intends to "give away" a number of major movies in the April weekend, including Wayne's World, Cape Fear, Lethal Weapon 3, Alien 3, Edward Scissorhands and Star Trek 6. Sky Movies Gold will apparently not be included in the promotion. ("Skyguide")

INTELSAT--United Artists, provider of a number of television channels for the cable television industry in the UK, has announced that it will cease its conventional PAL broadcasts of Wire TV and The Parliamentary Channel in May, in favor of a digitally compressed service.

The channels will share just one transponder on Intelsat 601, thus saving UA some GBP 1.2 million a year in transponder and uplink rental. While cable operators will have no trouble obtaining suitable digital decompression equipment, (UA would be able to afford to give it away since it is saving so much money on transponder rental) home viewers are likely to be very much left out in the cold. ("Skyguide") Wire TV is already broadcasting coded, using the SAVE system, and shares its current transponder with the Learning Channel.

EURONEWS--Euronews, the troubled pan-European news channel, is in danger of being closed down because of spiralling costs and dwindling viewer levels. The channel faces impending competition from a news service planned by TF1. TF1 is to launch its news channel on June 24th. Jean-Pierre Elkabbach, chairman of France Television, has held initial talks with ARD in Germany. France Television said that ARD should invest in the channel and provide German-language news material. Discussions have also been held with RAI in Italy to operate on a similar basis. ("Satnews")

EUROPEAN CABLE TV ALLIANCE--A major pan-European cable television joint venture has been formed by Philips Media and United International Holdings Inc. An agreement in principle has been made to operate pan-European cable television services.

Philips currently has cable TV interests in Germany, the Netherlands, Belgium, France and Austria, and United has interests in Norway, Sweden, Ireland, Hungary and Malta. Cable services belonging to United in Israel will also be brought into the venture.

Out of the combined cable services, more than 1.5 million of the 2.5 million homes that are passed for service are connected and paying monthly subscriptions. The joint venture will be the largest privately-owned, multi-channel subscription TV company in Europe.

The alliance, subject to regulatory approval, will be concluded by the autumn. ("Satnews")

UKRAINE--A weekly 50 minute program from the Ukraine will be carried every Friday via the Ghorizont at 11 degrees West. This has been monitored between 22:50 and 23:42 hrs following OITV programming from Ostankino Channel 1 TV from Moscow on C-band 3675 MHz. (BBC Monitoring)

NORTH AMERICAN MEDIA NEWS:

INTERACTIVE TV--A well-publicised trial of futuristic cable television services has been delayed by Time Warner for six months as the technology is still not ready.

A spokesman for Time Warner Cable said that a trial of interactive television will be delayed until October at the earliest in Orlando. The planned Full Service Network trial is delayed due to refinements within the set-top control box and network computer software. But the company believes that it will still be providing service to more than 4,000 homes by the year-end, and 80 percent of its 7.8 million customers by 1998.

While Time Warner delays its service, AT&T, TCI and US West are extending an existing trial of Viewer-Controlled Cable TV until the end of June, adding a range of new features in a bid to gauge user feedback. The companies said that a number of operational changes will be made to the pay-per-view and video-on-demand cable television
service.

One of the new services will be a personal intermission service, whereby a customer can halt a video programme for 15 minutes at a time, rejoining the programme on another channel later. New programming will also be added to the service to assess whether customers are influenced by greater programming and technology changes. Trials of the network have been ongoing since 1992. ("Satnews")

LATIN AMERICAN MEDIA NEWS:

RADIO--The first Christian radio network via satellite in Latin America, ALAS, will soon begin technical tests, using an Intelsat 6 satellite (presumeably C-band on Intelsat 601 at 27.5 degrees West or Intelsat 605 at 24.5 degrees West). (HCJB via BBC Monitoring) Previous reports have indicated ALAS would use digital encryption, unfortunately denying HCJB reception to TVRO owners in the Americas.

ASIAN MEDIA NEWS:

INDIA--All India Radio is planning to introduce 20 radio channels, via 5 transponders on Insat 2B. Twelve of these channels will be earmarked for regional languages. (BBC Monitoring)

PUBLICATIONS:

The new edition of Radio Sweden's booklet "Communciations in Space: The DXers Guide to the Galaxy" is now available free of charge. Just write to Radio Sweden, S-105 10 Stockholm, Sweden. You can also send a fax. After the international access code from your country, the number is: 468-667-6283.

Sweden Calling DXers is the world's oldest radio program about international broadcasting. Radio Sweden has presented this round-up of radio news, features, and interviews on Tuesdays since 1948. It's currently broadcast on the first and third Tuesdays of the month.

Radio Sweden broadcasts in English (beginning Mar. 27):

Europe and Africa:

16:15 hrs on 1179 and 6065 kHz
17:30 hrs on 1179, 6065, 9655, and 15390 kHz
20:30 hrs on 1179, 6065 and 9655 kHz
21:30 hrs on 1179 and 6065 kHz, and
22:30 hrs on 1179 and 6065 kHz

Middle East and Africa:

17:30 hrs on 6065, 9655, and 15390 kHz
20:30 hrs on 6065 and 9655 kHz

Asia and the Pacific:

11:30 hrs on 13775, 15120, and 15240 kHz
23:30 hrs on 11910 kHz and
01:30 hrs on 9695 and 11695 kHz

North America:

12:30 and 13:30 hrs on 15240 and 17870 kHz
02:30 and 03:30 hrs on 6040 and 9850 kHz

South America:

00:30 hrs on 6065 and 9850 kHz

The broadcasts at 16:15, 17:30, 21:30, and 22:30 hrs (and weekends at 20:30) are also relayed to Europe by satellite:

Astra 1B (19.2 degrees East) transponder 26 (Sky Movies Gold/TV Asia/Adult Channel) at 11.597 GHz, audio subcarrier at 7.74 MHz,

Tele-X (5 degrees East) (TV4 transponder) at 12.207 GHz, audio subcarrier 7.38 MHz.

Radio Sweden is also relayed to Europe via the World Radio Network on MTV's transponder 22 on Astra, audio 7.38 MHz, daily at 20:00 hrs UTC.

Radio Sweden can also be heard on WRN's North American service on ASC-1, on SCOLA's transponder 23, audio 6.20 MHz, daily at 00:00 and 20:00 hrs.

Contributions can be sent to DX Editor George Wood by fax to +468-667-6283, from MCI Mail or CompuServe to the CompuServe mailbox 70247,3516, from Internet to 70247.3516@compuserve.com, or to SM0IIN at the packet radio BBS SM0ETV.

Reports can also be sent to:

Radio Sweden
S-105 10 Stockholm
Sweden

Contributions should be NEWS about electronic media--from shortwave to satellites--and not loggings of information already available from sources such as the "World Radio TV Handbook". Clubs and DX publications may reprint material as long as MediaScan/Sweden Calling DXers and the original contributor are acknowledged, with the exception of items from BBC Monitoring, which are copyright.

We welcome comments and suggestions about the electronic edition, Sweden Calling DXers, and our programs in general.

Thanks to this week's contributors Good Listening!

2985. FM, TV, video, Belgium

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 18:36:47 UTC
From: alex@fractal.mech.tohoku.ac.jp
Message-ID: <ALEX.94Mar15183647@fractal.mech.tohoku.ac.jp>
Source record: 269645

Can anybody tell me
FM diapason, TV and video standards used
in Brussels, Belgium?

Please, reply me directly to alex@fractal.mech.tohoku.ac.jp

Alex Tretyakov

Coming to Brussels from Japan

2986. Re:best cars for rfi

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 20:25:51 UTC
From: hellman@cbnewsm.cb.att.com
Message-ID: <CMq3FD.Cyw@cbnewsm.cb.att.com>
Source record: 269637

Our 1991 Toyota Corolla and 1992 Mercury Sable are clean on 2 mtrs.
I was advised by others to have the dealer install a filter available
on request at no charge from Ford (Mercury). I have not heard any
noise, so I guess they did it as requested.

(The Corolla is more fun to drive. The Sable is nice and comfortable
on the highway but you have to enjoy poor handling :-).)

2987. best cars for rfi

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 20:28:51 UTC
From: hellman@cbnewsm.cb.att.com
Message-ID: <CMq3K7.D2H@cbnewsm.cb.att.com>
Source record: 269638

Woops, sorry. I forgot to sign the posting on the
'91 Corolla and '92 Sable

Shel Darack WA2UBK
dara@physics.att.com
.

2988. Re: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 21:21:30 UTC
From: uri@watson.ibm.com
Message-ID: <2m58sq$12hg@watnews1.watson.ibm.com>
Source record: 269639
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <2m4sff$423@doc.cc.utexas.edu>, kreblon@doc.cc.utexas.edu (Bob Nagy) writes:
> Ken..I own the 850..The reliability is better on the 990...

I beg to differ! I'm quite pleased with the reliability of
my FT-990 <knock-knock on the wood! :-> 'cause so far it
didn't give me a single problem, nor to anybody of my
friends, who seeing my 990 chose to buy similar rig
for themselves.

> The scaf filter is no great schucks...

??? I use/like this filter A LOT, on all manual modes.

> Difficult decision..
> But Id trade my 850 for a 990 in a minute because of overall
> quality. (also if 990 uses 24 volt finals..TX is better)

(:-)
--
Regards,
Uri. uri@watson.ibm.com scifi!angmar!uri

<Disclaimer>

2989. Re: Diesel or Taurus fr HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 21:59:00 UTC
From: serafin@metronet.com
Message-ID: <CMq7qD.EEE@metronet.com>
Source record: 269640

In article <1994Mar15.143508.8094@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.UUCP> wrote:
>In article <CMnzL4.5wx@newshub.ccs.yorku.ca> edleslie@apogee.ccs.yorku.ca (Ed Leslie)
writes:
>>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

>>For a wild shot, could there have been a Piezo-electric (sp?) effect taking
>>place with the ignitors or some such thing (i.e. the shock wave from
>>combustion causing a piezo-electric discharge)?
>
>Good guess, but we disconnected the glow plugs as one of our first
>steps.

I wouldn't necessarily rule out the glow plugs unless you actually removed
them.

2990. Re: noise blankers

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 22:17:00 UTC
From: hellman@cbnewsm.cb.att.com
Message-ID: <CMq8KM.F6M@cbnewsm.cb.att.com>
Source record: 269641

A
In article <POPOVICH.94Mar15103708@prince.cs.columbia.edu>,
popovich@prince.cs.columbia.edu (Steve Popovich) writes:
>
> Well, the noise blanker on the old Kenwood TS-830S is definitely a
> "decorative knob". No matter how much I twiddle the one our club has,
> it doesn't do a thing about the static crashes on 40 and 80 meters at
> night. Isn't that the kind of noise they're supposed to be FOR?
> -Steve

Steve: static crashes caused by lightening are broadband noise and will
not be removed by a noise blanker. Noise blankers work well on repetitive
pulses. Try turning on an scr that's broadcasting pulses. The noise
blanker should attenuate it. When that kind of noise drowns out signals,
the noise blanker on my TS440 removes it so effectively that I have to
occasionally turn off the blanker to see if the noise is still there.
On the other hand, the blanker won't take out the spark generated noise
from an electric mixer. I believe that most of the noise sources I
hear come from neighboring homes and usually they only last a few minutes.
Usually, the blanker works like magic. Sometimes it doesn't help at all.
73 Shel Darack WA2UBK dara@physics.att.com

2991. Re: QSL route for T30JJ

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-15 23:24:05 UTC
From: kchen@apple.com
Message-ID: <2m5g2l$r5o@apple.com>
Source record: 269642

allanw@fc.hp.com (Allan Weaver) writes:

>Does anyone know the QSL route for T30JJ operating from Tarwa(?)
>Island in the Marshalls in the South Pacific?

Prof. AA5BT told me it is via JR2KDN.

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

2992. Re: FT-530 Receive Proble

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 00:02:49 UTC
From: sadams@eis.calstate.edu
Message-ID: <2m5ib9$t4a@eis.calstate.edu>
Source record: 269643

leber@panther.warm.inmet.com (Thomas Leber) writes:
> >Our local ham store (North Olmstead Amateur Radion Depot, North Olmsted
> >Ohio) stated last week that they automatically return all 530s to Yaesu
> >for the mod to cure this. They install it free and turn the radio around
> >in less than a week.
>
> Well, I don't know if we're talking about the exact same problem, but
> mine has been back to Yaesu twice, and has had all of the latest factory
> fixes applied, but still exhibits these symptoms.
>
> -Tom

Mine just came back last week. Fixed the code squelch problem and
something about a new VFO knob??
But it still exhibits the problem you described above.

Steven Adams
sadams@ctp.org
KD6KGJ

--

2993. /pub/hamradio structure on Oakland (LONG)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 00:26:35 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCMqEKC.4zL@netcom.com>
Source record: 269644
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,alt.radio.scanner,rec.radio.shortwave

Below is the subdirectory/file structure of the /pub/hamradio FTP area on oak.oakland.edu

```
total 18
-rwxrwxr-x 1 wy1z 1788 Mar 15 12:22 00-README
drwxrwxr-x 2 wy1z 512 Mar 15 11:47 amiga
drwxrwxr-x 2 wy1z 512 Mar 15 11:48 apple2
drwxrwxr-x 5 wy1z 512 Mar 15 11:54 arrl
drwxrwxr-x 4 wy1z 512 Mar 15 11:54 atari
drwxrwxr-x 8 wy1z 512 Mar 15 11:58 barc
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 faq
drwxrwxr-x 2 wy1z 512 Mar 15 11:59 general-info
drwxrwx-wx 2 wy1z 512 Mar 15 12:19 incoming
-rw------- 1 wy1z 0 Mar 15 19:09 ls-lR
drwxrwxr-x 11 wy1z 512 Mar 15 12:51 mac
drwxrwxr-x 2 wy1z 1024 Mar 15 12:03 misc
drwxrwxr-x 25 wy1z 512 Mar 15 12:05 mods
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 packet-internet
drwxrwxr-x 2 wy1z 512 Mar 15 12:06 part97
drwxrwxr-x 8 wy1z 512 Mar 15 12:10 pc
drwxrwxr-x 3 wy1z 512 Mar 15 12:10 tcpip
drwxrwxr-x 3 wy1z 512 Mar 15 12:11 unix

amiga:
total 3810
-rwxrwxr-x 1 wy1z 76 Nov 9 23:06 00-INFO
-rwxrwxr-x 1 wy1z 2014 Nov 9 22:58 00Index
-rwxrwxr-x 1 wy1z 170751 Nov 9 22:53 7pl204am.lzh.gz
-rwxrwxr-x 1 wy1z 467 Nov 9 22:58 LHWARPed_disks
-rwxrwxr-x 1 wy1z 247202 Nov 9 22:53 c-bbs720j.lzh.gz
-rwxrwxr-x 1 wy1z 130564 Nov 9 22:53 c-doc720j.lzh.gz
-rwxrwxr-x 1 wy1z 186684 Nov 9 22:53 c-src720j.lzh.gz
-rwxrwxr-x 1 wy1z 416848 Nov 9 22:54 ham1.lhw.gz
-rwxrwxr-x 1 wy1z 477088 Nov 9 22:55 ham2.lhw
-rwxrwxr-x 1 wy1z 376639 Nov 9 22:55 ham3.lhw
-rwxrwxr-x 1 wy1z 287484 Nov 9 22:56 ham4.lhw
-rwxrwxr-x 1 wy1z 352091 Nov 9 22:56 ham5.lhw
-rwxrwxr-x 1 wy1z 285504 Nov 9 22:56 ham6.lhw
-rwxrwxr-x 1 wy1z 272 Nov 9 22:58 logger-303.README
-rwxrwxr-x 1 wy1z 310816 Nov 9 22:57 logger-303.lzh
-rwxrwxr-x 1 wy1z 396597 Nov 9 22:58 logger-4.lzh
-rwxrwxr-x 1 wy1z 463 Nov 9 22:58 text
-rwxrwxr-x 1 wy1z 59036 Nov 9 22:58 vhlogger_V2.lzh
-rwxrwxr-x 1 wy1z 466 Nov 9 22:58 vhlogger_V2.readme
```

```
-rwxrwxr-x 1 wy1z 64336 Nov 9 22:58 wpx
-rwxrwxr-x 1 wy1z 1072 Nov 9 22:58 wpx-fix.doc

apple2:
total 129
-rwxrwxr-x 1 wy1z 71808 May 22 1993 A2FTER.BXY
-rwxrwxr-x 1 wy1z 59200 Apr 10 1993 APRADIO.SHK

arrl:
total 3
drwxrwxr-x 2 wy1z 512 Mar 15 11:54 NTS
drwxrwxr-x 2 wy1z 512 Mar 15 11:49 Other-files
drwxrwxr-x 4 wy1z 512 Mar 15 11:54 Server-files

arrl/NTS:
total 39
-rwxrwxr-x 1 wy1z 1201 Apr 7 1993 NTSBOOKA
-rwxrwxr-x 1 wy1z 772 Apr 7 1993 NTSBOOKB
-rwxrwxr-x 1 wy1z 1464 Feb 15 1993 NTSFORM.DOC
-rwxrwxr-x 1 wy1z 1464 Mar 22 1993 NTSFORM2
-rwxrwxr-x 1 wy1z 3713 Jan 20 1993 new-nts-award
-rwxrwxr-x 1 wy1z 10504 Nov 26 1992 nts-basics
-rwxrwxr-x 1 wy1z 12787 Nov 26 1992 nts-format
-rwxrwxr-x 1 wy1z 3450 Nov 26 1992 ors-job

arrl/Other-files:
total 283
-rwxrwxr-x 1 wy1z 4491 Nov 26 1992 aplink-list
-rwxrwxr-x 1 wy1z 7224 Dec 24 1992 arrl-file-server.hlp
-rwxrwxr-x 1 wy1z 18455 Nov 29 1992 arrl-fo.txt
-rwxrwxr-x 1 wy1z 4998 Nov 26 1992 arrl-serv
-rwxrwxr-x 1 wy1z 3305 Nov 26 1992 ec-job
-rwxrwxr-x 1 wy1z 6364 Nov 26 1992 ele-cred
-rwxrwxr-x 1 wy1z 2988 Nov 26 1992 ham-ftp
-rwxrwxr-x 1 wy1z 7041 Nov 26 1992 ham-vs-cb
-rwxrwxr-x 1 wy1z 23317 Nov 29 1992 hffwd.arl
-rwxrwxr-x 1 wy1z 10795 Nov 26 1992 hurric-nfo
-rwxrwxr-x 1 wy1z 8779 Nov 26 1992 lightn-prot
-rwxrwxr-x 1 wy1z 9326 Nov 26 1992 limi-spc-ants
-rwxrwxr-x 1 wy1z 2985 Nov 26 1992 ooaux-job
-rwxrwxr-x 1 wy1z 24868 Sep 24 09:16 prb-1
-rwxrwxr-x 1 wy1z 2019 Nov 26 1992 pshr-rules
-rwxrwxr-x 1 wy1z 3691 Nov 26 1992 sgl-job
-rwxrwxr-x 1 wy1z 115021 Apr 23 1993 veman6.zip
-rwxrwxr-x 1 wy1z 9632 Nov 29 1992 waiver.txt

arrl/Server-files:
total 2
drwxrwxr-x 2 wy1z 512 Mar 15 11:54 Circuits-Pcx-Decoded
drwxrwxr-x 19 wy1z 512 Mar 15 11:53 info
```

```
arrl/Server-files/Circuits-Pcx-Decoded:
total 640
-rwxrwxr-x 1 wy1z 153718 Nov 13 22:19 antsys.pcx
-rwxrwxr-x 1 wy1z 153718 Nov 13 22:19 circuits.pcx
-rwxrwxr-x 1 wy1z 153718 Nov 13 22:19 rc.pcx
-rwxrwxr-x 1 wy1z 153718 Nov 13 22:19 translog.pcx

arrl/Server-files/info:
total 32
-rwxrwxr-x 1 wy1z 634 Feb 10 00:07 00-Index.txt
drwxrwxr-x 2 wy1z 512 Mar 15 11:53 League
drwxrwxr-x 9 wy1z 512 Mar 15 11:53 W1AW
drwxrwxr-x 2 wy1z 2560 Mar 15 11:50 bib
drwxrwxr-x 2 wy1z 512 Mar 15 11:50 circ
drwxrwxr-x 2 wy1z 1536 Mar 15 11:51 clubs
drwxrwxr-x 2 wy1z 512 Mar 15 11:50 ead
drwxrwxr-x 2 wy1z 512 Mar 15 11:53 evp
drwxrwxr-x 2 wy1z 512 Mar 15 11:53 faq
drwxrwxr-x 3 wy1z 2048 Mar 15 11:51 hiram
drwxrwxr-x 2 wy1z 512 Mar 15 11:53 league
drwxrwxr-x 2 wy1z 512 Mar 15 11:50 msd
drwxrwxr-x 2 wy1z 512 Mar 15 11:53 msd-2
-rwxrwxr-x 1 wy1z 9162 Nov 2 14:33 new
drwxrwxr-x 2 wy1z 512 Mar 15 11:51 qex
drwxrwxr-x 2 wy1z 512 Mar 15 11:50 qst
drwxrwxr-x 2 wy1z 512 Mar 15 11:53 rib
drwxrwxr-x 2 wy1z 2048 Mar 15 11:54 tis
drwxrwxr-x 2 wy1z 512 Mar 15 11:53 vec

arrl/Server-files/info/League:
total 99
-rwxrwxr-x 1 wy1z 516 Jan 5 14:58 00-index.txt
-rwxrwxr-x 1 wy1z 41528 Jan 6 11:21 catalog.txt
-rwxrwxr-x 1 wy1z 5743 Jan 5 14:58 direct.txt
-rwxrwxr-x 1 wy1z 7567 Feb 2 15:56 email.txt
-rwxrwxr-x 1 wy1z 4775 Jan 4 12:07 helpinfo.txt
-rwxrwxr-x 1 wy1z 2714 Jan 4 12:04 join.txt
-rwxrwxr-x 1 wy1z 2696 Jan 4 12:05 prospect.txt
-rwxrwxr-x 1 wy1z 5512 Jan 4 12:05 services.txt
-rwxrwxr-x 1 wy1z 26359 Jan 5 14:59 tour.txt

arrl/Server-files/info/W1AW:
total 25
-rwxrwxr-x 1 wy1z 5699 Jan 8 21:38 1993arlb.des
-rwxrwxr-x 1 wy1z 645 Jan 8 21:38 1993arld.des
-rwxrwxr-x 1 wy1z 1024 Jan 8 21:38 1993arlk.des
-rwxrwxr-x 1 wy1z 768 Jan 8 21:38 1993arlp.des
-rwxrwxr-x 1 wy1z 3116 Jan 8 21:38 1993arls.des
-rwxrwxr-x 1 wy1z 1230 Jan 8 21:38 1993arlx.des
drwxrwxr-x 2 wy1z 1024 Mar 15 11:51 amsat
drwxrwxr-x 2 wy1z 2048 Mar 15 11:51 arlb
drwxrwxr-x 2 wy1z 1536 Mar 15 11:52 arld
```

```
drwxrwxr-x 2 wy1z 1024 Mar 15 11:52 arlk
drwxrwxr-x 2 wy1z 1024 Mar 15 11:52 arlp
drwxrwxr-x 2 wy1z 1536 Mar 15 11:53 arls
drwxrwxr-x 2 wy1z 512 Mar 15 11:53 arlx

arrl/Server-files/info/W1AW/amsat:
total 132
-rwxrwxr-x 1 wy1z 2125 Jan 8 21:39 ans-191.01
-rwxrwxr-x 1 wy1z 968 Jan 8 21:39 ans-191.02
-rwxrwxr-x 1 wy1z 1208 Jan 8 21:39 ans-191.03
-rwxrwxr-x 1 wy1z 4131 Jan 8 21:39 ans-191.04
-rwxrwxr-x 1 wy1z 5743 Jan 8 21:39 sts-58.003
-rwxrwxr-x 1 wy1z 5414 Jan 8 21:39 sts-58.004
-rwxrwxr-x 1 wy1z 5663 Jan 8 21:39 sts-58.005
-rwxrwxr-x 1 wy1z 4142 Jan 8 21:39 sts-58.006
-rwxrwxr-x 1 wy1z 1291 Jan 8 21:39 sts-58.007
-rwxrwxr-x 1 wy1z 1284 Jan 8 21:39 sts-58.008
-rwxrwxr-x 1 wy1z 1032 Jan 8 21:39 sts-58.009
-rwxrwxr-x 1 wy1z 1950 Jan 8 21:39 sts-58.010
-rwxrwxr-x 1 wy1z 259 Jan 8 21:39 sts-58.011
-rwxrwxr-x 1 wy1z 1271 Jan 8 21:39 sts-58.012
-rwxrwxr-x 1 wy1z 5219 Jan 8 21:39 sts-58.013
-rwxrwxr-x 1 wy1z 5105 Jan 8 21:39 sts-58.014
-rwxrwxr-x 1 wy1z 4838 Jan 8 21:39 sts-58.015
-rwxrwxr-x 1 wy1z 3966 Jan 8 21:39 sts-58.016
-rwxrwxr-x 1 wy1z 3466 Jan 8 21:39 sts-58.017
-rwxrwxr-x 1 wy1z 1966 Jan 8 21:39 sts-58.018
-rwxrwxr-x 1 wy1z 2651 Jan 8 21:39 sts-58.019
-rwxrwxr-x 1 wy1z 5053 Jan 8 21:39 sts-58.020
-rwxrwxr-x 1 wy1z 5106 Jan 8 21:39 sts-58.021
-rwxrwxr-x 1 wy1z 4837 Jan 8 21:39 sts-58.022
-rwxrwxr-x 1 wy1z 4132 Jan 8 21:39 sts-58.023
-rwxrwxr-x 1 wy1z 3323 Jan 8 21:39 sts-58.024
-rwxrwxr-x 1 wy1z 2584 Jan 8 21:39 sts-58.025
-rwxrwxr-x 1 wy1z 3212 Jan 8 21:39 sts-58.026
-rwxrwxr-x 1 wy1z 7005 Jan 8 21:39 sts-58.027
-rwxrwxr-x 1 wy1z 6742 Jan 8 21:39 sts-58.028
-rwxrwxr-x 1 wy1z 6302 Jan 8 21:39 sts-58.029
-rwxrwxr-x 1 wy1z 5464 Jan 8 21:39 sts-58.030

arrl/Server-files/info/W1AW/arlb:
total 217
-rwxrwxr-x 1 wy1z 507 Jan 8 21:39 arlb001
-rwxrwxr-x 1 wy1z 717 Jan 8 21:39 arlb002
-rwxrwxr-x 1 wy1z 495 Jan 8 21:39 arlb003
-rwxrwxr-x 1 wy1z 2668 Jan 8 21:39 arlb004
-rwxrwxr-x 1 wy1z 1464 Jan 8 21:39 arlb005
-rwxrwxr-x 1 wy1z 1465 Jan 8 21:39 arlb006
-rwxrwxr-x 1 wy1z 1567 Jan 8 21:39 arlb007
-rwxrwxr-x 1 wy1z 492 Jan 8 21:39 arlb008
-rwxrwxr-x 1 wy1z 778 Jan 8 21:39 arlb009
```

```
-rwxrwxr-x 1 wy1z 2291 Jan 8 21:39 arlb010
-rwxrwxr-x 1 wy1z 1035 Jan 8 21:39 arlb011
-rwxrwxr-x 1 wy1z 1052 Jan 8 21:39 arlb012
-rwxrwxr-x 1 wy1z 458 Jan 8 21:39 arlb013
-rwxrwxr-x 1 wy1z 2915 Jan 8 21:39 arlb014
-rwxrwxr-x 1 wy1z 849 Jan 8 21:39 arlb015
-rwxrwxr-x 1 wy1z 1090 Jan 8 21:39 arlb016
-rwxrwxr-x 1 wy1z 1321 Jan 8 21:39 arlb017
-rwxrwxr-x 1 wy1z 1556 Jan 8 21:39 arlb018
-rwxrwxr-x 1 wy1z 1155 Jan 8 21:39 arlb019
-rwxrwxr-x 1 wy1z 1244 Jan 8 21:39 arlb020
-rwxrwxr-x 1 wy1z 1021 Jan 8 21:39 arlb021
-rwxrwxr-x 1 wy1z 1463 Jan 8 21:39 arlb022
-rwxrwxr-x 1 wy1z 2413 Jan 8 21:39 arlb023
-rwxrwxr-x 1 wy1z 2478 Jan 8 21:39 arlb024
-rwxrwxr-x 1 wy1z 1460 Jan 8 21:39 arlb025
-rwxrwxr-x 1 wy1z 1204 Jan 8 21:39 arlb026
-rwxrwxr-x 1 wy1z 1152 Jan 8 21:39 arlb027
-rwxrwxr-x 1 wy1z 1730 Jan 8 21:39 arlb028
-rwxrwxr-x 1 wy1z 1318 Jan 8 21:39 arlb029
-rwxrwxr-x 1 wy1z 1172 Jan 8 21:39 arlb030
-rwxrwxr-x 1 wy1z 926 Jan 8 21:39 arlb031
-rwxrwxr-x 1 wy1z 1957 Jan 8 21:39 arlb032
-rwxrwxr-x 1 wy1z 2477 Jan 8 21:39 arlb033
-rwxrwxr-x 1 wy1z 552 Jan 8 21:39 arlb034
-rwxrwxr-x 1 wy1z 2211 Jan 8 21:39 arlb035
-rwxrwxr-x 1 wy1z 1772 Jan 8 21:39 arlb036
-rwxrwxr-x 1 wy1z 1736 Jan 8 21:39 arlb037
-rwxrwxr-x 1 wy1z 502 Jan 8 21:39 arlb038
-rwxrwxr-x 1 wy1z 953 Jan 8 21:39 arlb039
-rwxrwxr-x 1 wy1z 776 Jan 8 21:39 arlb040
-rwxrwxr-x 1 wy1z 912 Jan 8 21:39 arlb041
-rwxrwxr-x 1 wy1z 1461 Jan 8 21:39 arlb042
-rwxrwxr-x 1 wy1z 1945 Jan 8 21:39 arlb043
-rwxrwxr-x 1 wy1z 1498 Jan 8 21:39 arlb044
-rwxrwxr-x 1 wy1z 1388 Jan 8 21:39 arlb045
-rwxrwxr-x 1 wy1z 615 Jan 8 21:39 arlb046
-rwxrwxr-x 1 wy1z 1295 Jan 8 21:39 arlb047
-rwxrwxr-x 1 wy1z 386 Jan 8 21:39 arlb048
-rwxrwxr-x 1 wy1z 2029 Jan 8 21:39 arlb049
-rwxrwxr-x 1 wy1z 1056 Jan 8 21:39 arlb050
-rwxrwxr-x 1 wy1z 1348 Jan 8 21:39 arlb051
-rwxrwxr-x 1 wy1z 1210 Jan 8 21:39 arlb052
-rwxrwxr-x 1 wy1z 1929 Jan 8 21:39 arlb053
-rwxrwxr-x 1 wy1z 1129 Jan 8 21:39 arlb054
-rwxrwxr-x 1 wy1z 2220 Jan 8 21:39 arlb055
-rwxrwxr-x 1 wy1z 1534 Jan 8 21:39 arlb056
-rwxrwxr-x 1 wy1z 1317 Jan 8 21:39 arlb057
-rwxrwxr-x 1 wy1z 1730 Jan 8 21:39 arlb058
-rwxrwxr-x 1 wy1z 697 Jan 8 21:39 arlb059
```

```
-rwxrwxr-x 1 wy1z 1450 Jan 8 21:39 arlb060
-rwxrwxr-x 1 wy1z 1124 Jan 8 21:39 arlb061
-rwxrwxr-x 1 wy1z 1231 Jan 8 21:39 arlb062
-rwxrwxr-x 1 wy1z 1459 Jan 8 21:39 arlb063
-rwxrwxr-x 1 wy1z 561 Jan 8 21:39 arlb064
-rwxrwxr-x 1 wy1z 596 Jan 8 21:39 arlb065
-rwxrwxr-x 1 wy1z 761 Jan 8 21:39 arlb066
-rwxrwxr-x 1 wy1z 2253 Jan 8 21:39 arlb067
-rwxrwxr-x 1 wy1z 2045 Jan 8 21:39 arlb068
-rwxrwxr-x 1 wy1z 653 Jan 8 21:39 arlb069
-rwxrwxr-x 1 wy1z 925 Jan 8 21:39 arlb070
-rwxrwxr-x 1 wy1z 664 Jan 8 21:39 arlb071
-rwxrwxr-x 1 wy1z 1802 Jan 8 21:39 arlb072
-rwxrwxr-x 1 wy1z 1620 Jan 8 21:39 arlb073
-rwxrwxr-x 1 wy1z 1515 Jan 8 21:39 arlb074
-rwxrwxr-x 1 wy1z 4073 Jan 8 21:39 arlb075
-rwxrwxr-x 1 wy1z 1520 Jan 8 21:39 arlb076
-rwxrwxr-x 1 wy1z 805 Jan 8 21:39 arlb077
-rwxrwxr-x 1 wy1z 1442 Jan 8 21:39 arlb078
-rwxrwxr-x 1 wy1z 2035 Jan 8 21:39 arlb079
-rwxrwxr-x 1 wy1z 862 Jan 8 21:39 arlb080
-rwxrwxr-x 1 wy1z 814 Jan 8 21:39 arlb082
-rwxrwxr-x 1 wy1z 791 Jan 8 21:39 arlb083
-rwxrwxr-x 1 wy1z 1779 Jan 8 21:39 arlb084
-rwxrwxr-x 1 wy1z 1273 Jan 8 21:39 arlb085
-rwxrwxr-x 1 wy1z 1233 Jan 8 21:39 arlb086
-rwxrwxr-x 1 wy1z 1737 Jan 8 21:39 arlb087
-rwxrwxr-x 1 wy1z 2020 Jan 8 21:39 arlb088
-rwxrwxr-x 1 wy1z 540 Jan 8 21:39 arlb089
-rwxrwxr-x 1 wy1z 1553 Jan 8 21:39 arlb090
-rwxrwxr-x 1 wy1z 1905 Jan 8 21:39 arlb091
-rwxrwxr-x 1 wy1z 1530 Jan 8 21:39 arlb092
-rwxrwxr-x 1 wy1z 1319 Jan 8 21:39 arlb093
-rwxrwxr-x 1 wy1z 1494 Jan 8 21:39 arlb094
-rwxrwxr-x 1 wy1z 1502 Jan 8 21:39 arlb095
-rwxrwxr-x 1 wy1z 1722 Jan 8 21:39 arlb096
-rwxrwxr-x 1 wy1z 2016 Jan 8 21:39 arlb097
-rwxrwxr-x 1 wy1z 1507 Jan 8 21:39 arlb098
-rwxrwxr-x 1 wy1z 970 Jan 8 21:39 arlb099
-rwxrwxr-x 1 wy1z 365 Jan 8 21:39 arlb100
-rwxrwxr-x 1 wy1z 883 Jan 8 21:39 arlb101
-rwxrwxr-x 1 wy1z 767 Jan 8 21:39 arlb102
-rwxrwxr-x 1 wy1z 1386 Jan 8 21:39 arlb103
-rwxrwxr-x 1 wy1z 1176 Jan 8 21:39 arlb104
-rwxrwxr-x 1 wy1z 794 Jan 8 21:39 arlb105
-rwxrwxr-x 1 wy1z 1768 Jan 8 21:39 arlb106
-rwxrwxr-x 1 wy1z 1505 Jan 8 21:39 arlb107
-rwxrwxr-x 1 wy1z 1155 Jan 8 21:39 arlb108
-rwxrwxr-x 1 wy1z 2047 Jan 8 21:39 arlb109
-rwxrwxr-x 1 wy1z 1561 Jan 8 21:39 arlb110
```

```
-rwxrwxr-x 1 wy1z 1511 Jan 8 21:39 arlb111
-rwxrwxr-x 1 wy1z 1566 Jan 8 21:39 arlb112
-rwxrwxr-x 1 wy1z 1427 Jan 8 21:39 arlb113
-rwxrwxr-x 1 wy1z 494 Jan 8 21:39 arlb114
-rwxrwxr-x 1 wy1z 2483 Jan 8 21:39 arlb115
-rwxrwxr-x 1 wy1z 1815 Jan 8 21:39 arlb116
-rwxrwxr-x 1 wy1z 1598 Jan 8 21:39 arlb117
-rwxrwxr-x 1 wy1z 547 Jan 8 21:39 arlb118
-rwxrwxr-x 1 wy1z 494 Jan 8 21:39 arlb119
-rwxrwxr-x 1 wy1z 1982 Jan 8 21:39 arlb120
-rwxrwxr-x 1 wy1z 1520 Jan 8 21:39 arlb121
-rwxrwxr-x 1 wy1z 510 Jan 8 21:39 arlb122

arrl/Server-files/info/W1AW/arld:
total 209
-rwxrwxr-x 1 wy1z 1964 Jan 8 21:39 arld001
-rwxrwxr-x 1 wy1z 620 Jan 8 21:39 arld002
-rwxrwxr-x 1 wy1z 1693 Jan 8 21:39 arld003
-rwxrwxr-x 1 wy1z 2223 Jan 8 21:39 arld004
-rwxrwxr-x 1 wy1z 874 Jan 8 21:39 arld005
-rwxrwxr-x 1 wy1z 3541 Jan 8 21:39 arld006
-rwxrwxr-x 1 wy1z 3388 Jan 8 21:39 arld007
-rwxrwxr-x 1 wy1z 460 Jan 8 21:39 arld008
-rwxrwxr-x 1 wy1z 3768 Jan 8 21:39 arld009
-rwxrwxr-x 1 wy1z 2112 Jan 8 21:39 arld010
-rwxrwxr-x 1 wy1z 3170 Jan 8 21:39 arld011
-rwxrwxr-x 1 wy1z 3677 Jan 8 21:39 arld012
-rwxrwxr-x 1 wy1z 2853 Jan 8 21:39 arld013
-rwxrwxr-x 1 wy1z 1949 Jan 8 21:39 arld014
-rwxrwxr-x 1 wy1z 4054 Jan 8 21:39 arld015
-rwxrwxr-x 1 wy1z 3176 Jan 8 21:39 arld016
-rwxrwxr-x 1 wy1z 4108 Jan 8 21:39 arld017
-rwxrwxr-x 1 wy1z 1401 Jan 8 21:39 arld018
-rwxrwxr-x 1 wy1z 1688 Jan 8 21:39 arld019
-rwxrwxr-x 1 wy1z 2252 Jan 8 21:39 arld020
-rwxrwxr-x 1 wy1z 3962 Jan 8 21:39 arld021
-rwxrwxr-x 1 wy1z 1229 Jan 8 21:39 arld022
-rwxrwxr-x 1 wy1z 3112 Jan 8 21:39 arld023
-rwxrwxr-x 1 wy1z 4167 Jan 8 21:39 arld024
-rwxrwxr-x 1 wy1z 2102 Jan 8 21:39 arld025
-rwxrwxr-x 1 wy1z 945 Jan 8 21:39 arld026
-rwxrwxr-x 1 wy1z 1630 Jan 8 21:39 arld027
-rwxrwxr-x 1 wy1z 3523 Jan 8 21:39 arld028
-rwxrwxr-x 1 wy1z 3329 Jan 8 21:39 arld029
-rwxrwxr-x 1 wy1z 2926 Jan 8 21:39 arld030
-rwxrwxr-x 1 wy1z 2646 Jan 8 21:39 arld031
-rwxrwxr-x 1 wy1z 2282 Jan 8 21:39 arld032
-rwxrwxr-x 1 wy1z 2126 Jan 8 21:39 arld033
-rwxrwxr-x 1 wy1z 3302 Jan 8 21:39 arld034
-rwxrwxr-x 1 wy1z 3110 Jan 8 21:39 arld035
```

```
-rwxrwxr-x 1 wy1z 817 Jan 8 21:39 arld036
-rwxrwxr-x 1 wy1z 897 Jan 8 21:39 arld037
-rwxrwxr-x 1 wy1z 2970 Jan 8 21:39 arld038
-rwxrwxr-x 1 wy1z 664 Jan 8 21:39 arld039
-rwxrwxr-x 1 wy1z 2461 Jan 8 21:39 arld040
-rwxrwxr-x 1 wy1z 1548 Jan 8 21:39 arld041
-rwxrwxr-x 1 wy1z 2764 Jan 8 21:39 arld042
-rwxrwxr-x 1 wy1z 2298 Jan 8 21:39 arld043
-rwxrwxr-x 1 wy1z 3269 Jan 8 21:39 arld044
-rwxrwxr-x 1 wy1z 2899 Jan 8 21:39 arld045
-rwxrwxr-x 1 wy1z 3011 Jan 8 21:39 arld046
-rwxrwxr-x 1 wy1z 1158 Jan 8 21:39 arld047
-rwxrwxr-x 1 wy1z 3751 Jan 8 21:39 arld048
-rwxrwxr-x 1 wy1z 3071 Jan 8 21:39 arld049
-rwxrwxr-x 1 wy1z 3009 Jan 8 21:39 arld050
-rwxrwxr-x 1 wy1z 714 Jan 8 21:39 arld051
-rwxrwxr-x 1 wy1z 3107 Jan 8 21:39 arld052
-rwxrwxr-x 1 wy1z 2378 Jan 8 21:39 arld053
-rwxrwxr-x 1 wy1z 978 Jan 8 21:39 arld054
-rwxrwxr-x 1 wy1z 4214 Jan 8 21:39 arld055
-rwxrwxr-x 1 wy1z 3186 Jan 8 21:39 arld056
-rwxrwxr-x 1 wy1z 4017 Jan 8 21:39 arld057
-rwxrwxr-x 1 wy1z 3194 Jan 8 21:39 arld058
-rwxrwxr-x 1 wy1z 1242 Jan 8 21:39 arld059
-rwxrwxr-x 1 wy1z 661 Jan 8 21:39 arld060
-rwxrwxr-x 1 wy1z 3518 Jan 8 21:39 arld061
-rwxrwxr-x 1 wy1z 661 Jan 8 21:39 arld062
-rwxrwxr-x 1 wy1z 3092 Jan 8 21:39 arld063
-rwxrwxr-x 1 wy1z 4159 Jan 8 21:39 arld064
-rwxrwxr-x 1 wy1z 1354 Jan 8 21:39 arld065
-rwxrwxr-x 1 wy1z 2293 Jan 8 21:39 arld066
-rwxrwxr-x 1 wy1z 3347 Jan 8 21:39 arld067
-rwxrwxr-x 1 wy1z 1043 Jan 8 21:39 arld068
-rwxrwxr-x 1 wy1z 2271 Jan 8 21:39 arld069
-rwxrwxr-x 1 wy1z 2896 Jan 8 21:39 arld070
-rwxrwxr-x 1 wy1z 2663 Jan 8 21:39 arld071

arrl/Server-files/info/W1AW/arlk:
total 223
-rwxrwxr-x 1 wy1z 3157 Jan 8 21:39 arlk001
-rwxrwxr-x 1 wy1z 3158 Jan 8 21:39 arlk002
-rwxrwxr-x 1 wy1z 3314 Jan 8 21:39 arlk003
-rwxrwxr-x 1 wy1z 3159 Jan 8 21:39 arlk004
-rwxrwxr-x 1 wy1z 3314 Jan 8 21:39 arlk005
-rwxrwxr-x 1 wy1z 3314 Jan 8 21:39 arlk006
-rwxrwxr-x 1 wy1z 3316 Jan 8 21:39 arlk007
-rwxrwxr-x 1 wy1z 3161 Jan 8 21:39 arlk008
-rwxrwxr-x 1 wy1z 3158 Jan 8 21:39 arlk009
-rwxrwxr-x 1 wy1z 3155 Jan 8 21:39 arlk010
-rwxrwxr-x 1 wy1z 3156 Jan 8 21:39 arlk011
```

```
-rwxrwxr-x 1 wy1z 3157 Jan 8 21:39 arlk012
-rwxrwxr-x 1 wy1z 3157 Jan 8 21:39 arlk013
-rwxrwxr-x 1 wy1z 3157 Jan 8 21:39 arlk014
-rwxrwxr-x 1 wy1z 3313 Jan 8 21:39 arlk015
-rwxrwxr-x 1 wy1z 3158 Jan 8 21:39 arlk016
-rwxrwxr-x 1 wy1z 3158 Jan 8 21:39 arlk017
-rwxrwxr-x 1 wy1z 3308 Jan 8 21:39 arlk018
-rwxrwxr-x 1 wy1z 3153 Jan 8 21:39 arlk019
-rwxrwxr-x 1 wy1z 3154 Jan 8 21:39 arlk020
-rwxrwxr-x 1 wy1z 3154 Jan 8 21:39 arlk021
-rwxrwxr-x 1 wy1z 3462 Jan 8 21:39 arlk022
-rwxrwxr-x 1 wy1z 3309 Jan 8 21:39 arlk023
-rwxrwxr-x 1 wy1z 3311 Jan 8 21:39 arlk024
-rwxrwxr-x 1 wy1z 3311 Jan 8 21:39 arlk025
-rwxrwxr-x 1 wy1z 3466 Jan 8 21:39 arlk026
-rwxrwxr-x 1 wy1z 3154 Jan 8 21:39 arlk027
-rwxrwxr-x 1 wy1z 3156 Jan 8 21:39 arlk028
-rwxrwxr-x 1 wy1z 3311 Jan 8 21:39 arlk029
-rwxrwxr-x 1 wy1z 3312 Jan 8 21:39 arlk030
-rwxrwxr-x 1 wy1z 3312 Jan 8 21:39 arlk031
-rwxrwxr-x 1 wy1z 3160 Jan 8 21:39 arlk032
-rwxrwxr-x 1 wy1z 3160 Jan 8 21:39 arlk033
-rwxrwxr-x 1 wy1z 3471 Jan 8 21:39 arlk034
-rwxrwxr-x 1 wy1z 3315 Jan 8 21:39 arlk035
-rwxrwxr-x 1 wy1z 3319 Jan 8 21:39 arlk036
-rwxrwxr-x 1 wy1z 3476 Jan 8 21:39 arlk037
-rwxrwxr-x 1 wy1z 3321 Jan 8 21:39 arlk038
-rwxrwxr-x 1 wy1z 3632 Jan 8 21:39 arlk039
-rwxrwxr-x 1 wy1z 3476 Jan 8 21:39 arlk040
-rwxrwxr-x 1 wy1z 3470 Jan 8 21:39 arlk041
-rwxrwxr-x 1 wy1z 3628 Jan 8 21:39 arlk042
-rwxrwxr-x 1 wy1z 3996 Jan 8 21:39 arlk043
-rwxrwxr-x 1 wy1z 3998 Jan 8 21:39 arlk044
-rwxrwxr-x 1 wy1z 4146 Jan 8 21:39 arlk045
-rwxrwxr-x 1 wy1z 3934 Jan 8 21:39 arlk046
-rwxrwxr-x 1 wy1z 3993 Jan 8 21:39 arlk047
-rwxrwxr-x 1 wy1z 3993 Jan 8 21:39 arlk048
-rwxrwxr-x 1 wy1z 3934 Jan 8 21:39 arlk049
-rwxrwxr-x 1 wy1z 3993 Jan 8 21:39 arlk050
-rwxrwxr-x 1 wy1z 4242 Jan 8 21:39 arlk051
-rwxrwxr-x 1 wy1z 4303 Jan 8 21:39 arlk052
-rwxrwxr-x 1 wy1z 3993 Jan 8 21:39 arlk053
-rwxrwxr-x 1 wy1z 3992 Jan 8 21:39 arlk054
-rwxrwxr-x 1 wy1z 3989 Jan 8 21:39 arlk055

arrl/Server-files/info/W1AW/arlp:
total 128
-rwxrwxr-x 1 wy1z 1918 Jan 8 21:39 arlp001
-rwxrwxr-x 1 wy1z 1431 Jan 8 21:39 arlp002
-rwxrwxr-x 1 wy1z 2246 Jan 8 21:39 arlp003
```

```
-rwxrwxr-x 1 wy1z 1647 Jan 8 21:39 arlp004
-rwxrwxr-x 1 wy1z 1654 Jan 8 21:39 arlp005
-rwxrwxr-x 1 wy1z 1597 Jan 8 21:39 arlp006
-rwxrwxr-x 1 wy1z 1504 Jan 8 21:39 arlp007
-rwxrwxr-x 1 wy1z 1523 Jan 8 21:39 arlp008
-rwxrwxr-x 1 wy1z 2020 Jan 8 21:39 arlp009
-rwxrwxr-x 1 wy1z 2287 Jan 8 21:39 arlp010
-rwxrwxr-x 1 wy1z 2477 Jan 8 21:39 arlp011
-rwxrwxr-x 1 wy1z 1914 Jan 8 21:39 arlp012
-rwxrwxr-x 1 wy1z 1714 Jan 8 21:39 arlp013
-rwxrwxr-x 1 wy1z 1709 Jan 8 21:39 arlp014
-rwxrwxr-x 1 wy1z 1895 Jan 8 21:39 arlp015
-rwxrwxr-x 1 wy1z 2259 Jan 8 21:39 arlp016
-rwxrwxr-x 1 wy1z 2250 Jan 8 21:39 arlp017
-rwxrwxr-x 1 wy1z 2517 Jan 8 21:39 arlp018
-rwxrwxr-x 1 wy1z 1720 Jan 8 21:39 arlp019
-rwxrwxr-x 1 wy1z 1454 Jan 8 21:39 arlp020
-rwxrwxr-x 1 wy1z 2265 Jan 8 21:39 arlp021
-rwxrwxr-x 1 wy1z 1921 Jan 8 21:39 arlp022
-rwxrwxr-x 1 wy1z 2018 Jan 8 21:39 arlp023
-rwxrwxr-x 1 wy1z 1447 Jan 8 21:39 arlp024
-rwxrwxr-x 1 wy1z 2298 Jan 8 21:39 arlp025
-rwxrwxr-x 1 wy1z 1432 Jan 8 21:39 arlp026
-rwxrwxr-x 1 wy1z 1963 Jan 8 21:39 arlp027
-rwxrwxr-x 1 wy1z 2170 Jan 8 21:39 arlp028
-rwxrwxr-x 1 wy1z 2223 Jan 8 21:39 arlp029
-rwxrwxr-x 1 wy1z 2699 Jan 8 21:39 arlp030
-rwxrwxr-x 1 wy1z 2291 Jan 8 21:39 arlp031
-rwxrwxr-x 1 wy1z 2123 Jan 8 21:39 arlp032
-rwxrwxr-x 1 wy1z 2530 Jan 8 21:39 arlp033
-rwxrwxr-x 1 wy1z 2729 Jan 8 21:39 arlp034
-rwxrwxr-x 1 wy1z 2548 Jan 8 21:39 arlp035
-rwxrwxr-x 1 wy1z 1938 Jan 8 21:39 arlp036
-rwxrwxr-x 1 wy1z 1914 Jan 8 21:39 arlp037
-rwxrwxr-x 1 wy1z 2158 Jan 8 21:39 arlp038
-rwxrwxr-x 1 wy1z 1950 Jan 8 21:39 arlp039
-rwxrwxr-x 1 wy1z 1946 Jan 8 21:39 arlp040
-rwxrwxr-x 1 wy1z 1533 Jan 8 21:39 arlp041
-rwxrwxr-x 1 wy1z 2002 Jan 8 21:39 arlp042
-rwxrwxr-x 1 wy1z 2269 Jan 8 21:39 arlp043
-rwxrwxr-x 1 wy1z 1868 Jan 8 21:39 arlp044
-rwxrwxr-x 1 wy1z 2214 Jan 8 21:39 arlp045
-rwxrwxr-x 1 wy1z 2319 Jan 8 21:39 arlp046
-rwxrwxr-x 1 wy1z 1694 Jan 8 21:39 arlp047
-rwxrwxr-x 1 wy1z 2327 Jan 8 21:39 arlp048
-rwxrwxr-x 1 wy1z 2408 Jan 8 21:39 arlp049
-rwxrwxr-x 1 wy1z 1586 Jan 8 21:39 arlp050
-rwxrwxr-x 1 wy1z 1684 Jan 8 21:39 arlp051
-rwxrwxr-x 1 wy1z 3328 Jan 8 21:39 arlp052
```

```
arrl/Server-files/info/W1AW/arls:
total 124
-rwxrwxr-x 1 wy1z 2853 Jan 8 21:39 arls001
-rwxrwxr-x 1 wy1z 1211 Jan 8 21:39 arls002
-rwxrwxr-x 1 wy1z 1235 Jan 8 21:39 arls003
-rwxrwxr-x 1 wy1z 970 Jan 8 21:39 arls004
-rwxrwxr-x 1 wy1z 1677 Jan 8 21:39 arls005
-rwxrwxr-x 1 wy1z 657 Jan 8 21:39 arls006
-rwxrwxr-x 1 wy1z 522 Jan 8 21:39 arls007
-rwxrwxr-x 1 wy1z 3204 Jan 8 21:39 arls008
-rwxrwxr-x 1 wy1z 564 Jan 8 21:39 arls009
-rwxrwxr-x 1 wy1z 624 Jan 8 21:39 arls010
-rwxrwxr-x 1 wy1z 635 Jan 8 21:39 arls011
-rwxrwxr-x 1 wy1z 1501 Jan 8 21:39 arls012
-rwxrwxr-x 1 wy1z 1045 Jan 8 21:39 arls013
-rwxrwxr-x 1 wy1z 854 Jan 8 21:39 arls014
-rwxrwxr-x 1 wy1z 2581 Jan 8 21:39 arls015
-rwxrwxr-x 1 wy1z 1475 Jan 8 21:39 arls016
-rwxrwxr-x 1 wy1z 1107 Jan 8 21:39 arls017
-rwxrwxr-x 1 wy1z 1464 Jan 8 21:39 arls018
-rwxrwxr-x 1 wy1z 1286 Jan 8 21:39 arls019
-rwxrwxr-x 1 wy1z 3133 Jan 8 21:39 arls020
-rwxrwxr-x 1 wy1z 1365 Jan 8 21:39 arls021
-rwxrwxr-x 1 wy1z 1736 Jan 8 21:39 arls022
-rwxrwxr-x 1 wy1z 1058 Jan 8 21:39 arls023
-rwxrwxr-x 1 wy1z 496 Jan 8 21:39 arls024
-rwxrwxr-x 1 wy1z 685 Jan 8 21:39 arls025
-rwxrwxr-x 1 wy1z 422 Jan 8 21:39 arls026
-rwxrwxr-x 1 wy1z 1526 Jan 8 21:39 arls027
-rwxrwxr-x 1 wy1z 966 Jan 8 21:39 arls028
-rwxrwxr-x 1 wy1z 862 Jan 8 21:39 arls029
-rwxrwxr-x 1 wy1z 940 Jan 8 21:39 arls030
-rwxrwxr-x 1 wy1z 1402 Jan 8 21:39 arls031
-rwxrwxr-x 1 wy1z 617 Jan 8 21:39 arls032
-rwxrwxr-x 1 wy1z 1305 Jan 8 21:39 arls033
-rwxrwxr-x 1 wy1z 1842 Jan 8 21:39 arls034
-rwxrwxr-x 1 wy1z 1159 Jan 8 21:39 arls035
-rwxrwxr-x 1 wy1z 1936 Jan 8 21:39 arls036
-rwxrwxr-x 1 wy1z 2266 Jan 8 21:39 arls037
-rwxrwxr-x 1 wy1z 1276 Jan 8 21:39 arls038
-rwxrwxr-x 1 wy1z 2899 Jan 8 21:39 arls039
-rwxrwxr-x 1 wy1z 1068 Jan 8 21:39 arls040
-rwxrwxr-x 1 wy1z 913 Jan 8 21:39 arls041
-rwxrwxr-x 1 wy1z 1613 Jan 8 21:39 arls042
-rwxrwxr-x 1 wy1z 2603 Jan 8 21:39 arls043
-rwxrwxr-x 1 wy1z 711 Jan 8 21:39 arls044
-rwxrwxr-x 1 wy1z 1378 Jan 8 21:39 arls045
-rwxrwxr-x 1 wy1z 1428 Jan 8 21:39 arls046
-rwxrwxr-x 1 wy1z 604 Jan 8 21:39 arls047
-rwxrwxr-x 1 wy1z 1735 Jan 8 21:39 arls048
-rwxrwxr-x 1 wy1z 2102 Jan 8 21:39 arls049
```

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-rwxrwxr-x 1 wy1z 2578 Jan 8 21:39 arls050
-rwxrwxr-x 1 wy1z 1193 Jan 8 21:39 arls051
-rwxrwxr-x 1 wy1z 582 Jan 8 21:39 arls052
-rwxrwxr-x 1 wy1z 907 Jan 8 21:39 arls053
-rwxrwxr-x 1 wy1z 927 Jan 8 21:39 arls054
-rwxrwxr-x 1 wy1z 2070 Jan 8 21:39 arls055
-rwxrwxr-x 1 wy1z 1879 Jan 8 21:39 arls056
-rwxrwxr-x 1 wy1z 2443 Jan 8 21:39 arls057
-rwxrwxr-x 1 wy1z 2577 Jan 8 21:39 arls058
-rwxrwxr-x 1 wy1z 1549 Jan 8 21:39 arls059
-rwxrwxr-x 1 wy1z 2548 Jan 8 21:39 arls060
-rwxrwxr-x 1 wy1z 2362 Jan 8 21:39 arls061
-rwxrwxr-x 1 wy1z 698 Jan 8 21:39 arls062
-rwxrwxr-x 1 wy1z 2208 Jan 8 21:39 arls063
-rwxrwxr-x 1 wy1z 1178 Jan 8 21:39 arls064

arrl/Server-files/info/W1AW/arlx:
total 33
-rwxrwxr-x 1 wy1z 486 Jan 8 21:39 arlx001
-rwxrwxr-x 1 wy1z 1382 Jan 8 21:39 arlx002
-rwxrwxr-x 1 wy1z 1984 Jan 8 21:39 arlx003
-rwxrwxr-x 1 wy1z 1079 Jan 8 21:39 arlx004
-rwxrwxr-x 1 wy1z 788 Jan 8 21:39 arlx005
-rwxrwxr-x 1 wy1z 1422 Jan 8 21:39 arlx006
-rwxrwxr-x 1 wy1z 333 Jan 8 21:39 arlx007
-rwxrwxr-x 1 wy1z 554 Jan 8 21:39 arlx008
-rwxrwxr-x 1 wy1z 1147 Jan 8 21:39 arlx009
-rwxrwxr-x 1 wy1z 997 Jan 8 21:39 arlx010
-rwxrwxr-x 1 wy1z 1632 Jan 8 21:39 arlx011
-rwxrwxr-x 1 wy1z 677 Jan 8 21:39 arlx012
-rwxrwxr-x 1 wy1z 706 Jan 8 21:39 arlx013
-rwxrwxr-x 1 wy1z 1065 Jan 8 21:39 arlx014
-rwxrwxr-x 1 wy1z 864 Jan 8 21:39 arlx015
-rwxrwxr-x 1 wy1z 829 Jan 8 21:39 arlx016
-rwxrwxr-x 1 wy1z 848 Jan 8 21:39 arlx017
-rwxrwxr-x 1 wy1z 849 Jan 8 21:39 arlx018
-rwxrwxr-x 1 wy1z 619 Jan 8 21:39 arlx019
-rwxrwxr-x 1 wy1z 852 Jan 8 21:39 arlx020
-rwxrwxr-x 1 wy1z 1181 Jan 8 21:39 arlx021
-rwxrwxr-x 1 wy1z 1728 Jan 8 21:39 arlx022
-rwxrwxr-x 1 wy1z 1665 Jan 8 21:39 arlx023

arrl/Server-files/info/bib:
total 589
-rwxrwxr-x 1 wy1z 8306 Jan 8 21:35 !index.txt
-rwxrwxr-x 1 wy1z 5984 Jan 8 21:35 !list.txt
-rwxrwxr-x 1 wy1z 4420 Jan 8 21:35 altpwr.txt
-rwxrwxr-x 1 wy1z 4470 Jan 8 21:35 amtor.txt
-rwxrwxr-x 1 wy1z 10222 Jan 8 21:35 ant16040.txt
-rwxrwxr-x 1 wy1z 8166 Jan 8 21:35 ant3010.txt
-rwxrwxr-x 1 wy1z 2757 Jan 8 21:35 antcurt.txt
```

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-rwxrwxr-x 1 wy1z 9245 Jan 8 21:35 antlimsp.txt
-rwxrwxr-x 1 wy1z 3218 Jan 8 21:35 antlog.txt
-rwxrwxr-x 1 wy1z 11682 Jan 8 21:35 antloop.txt
-rwxrwxr-x 1 wy1z 3129 Jan 8 21:35 antmatch.txt
-rwxrwxr-x 1 wy1z 3340 Jan 8 21:35 antmobil.txt
-rwxrwxr-x 1 wy1z 2629 Jan 8 21:35 antrot.txt
-rwxrwxr-x 1 wy1z 2617 Jan 8 21:35 antswitc.txt
-rwxrwxr-x 1 wy1z 5459 Jan 8 21:35 anttheor.txt
-rwxrwxr-x 1 wy1z 3893 Jan 8 21:35 antvee.txt
-rwxrwxr-x 1 wy1z 6515 Jan 8 21:35 antvert.txt
-rwxrwxr-x 1 wy1z 7223 Jan 8 21:35 antvhf.txt
-rwxrwxr-x 1 wy1z 2247 Jan 8 21:35 apple.txt
-rwxrwxr-x 1 wy1z 2738 Jan 8 21:35 atari.txt
-rwxrwxr-x 1 wy1z 2390 Jan 8 21:35 atv.txt
-rwxrwxr-x 1 wy1z 14489 Jan 8 21:35 basconst.txt
-rwxrwxr-x 1 wy1z 20400 Jan 8 21:35 baselect.txt
-rwxrwxr-x 1 wy1z 4285 Jan 8 21:35 battery.txt
-rwxrwxr-x 1 wy1z 1999 Jan 8 21:35 bicycle.txt
-rwxrwxr-x 1 wy1z 2902 Jan 8 21:35 bioeff.txt
-rwxrwxr-x 1 wy1z 2566 Jan 8 21:35 cbconv.txt
-rwxrwxr-x 1 wy1z 1962 Jan 8 21:35 clover.txt
-rwxrwxr-x 1 wy1z 4287 Jan 8 21:35 coax.txt
-rwxrwxr-x 1 wy1z 2168 Jan 8 21:35 collins.txt
-rwxrwxr-x 1 wy1z 4639 Jan 8 21:35 compgen.txt
-rwxrwxr-x 1 wy1z 2665 Jan 8 21:35 contest.txt
-rwxrwxr-x 1 wy1z 2843 Jan 8 21:35 crystal.txt
-rwxrwxr-x 1 wy1z 4142 Jan 8 21:35 dfing.txt
-rwxrwxr-x 1 wy1z 2036 Jan 8 21:35 diverse.txt
-rwxrwxr-x 1 wy1z 3240 Jan 8 21:35 drake.txt
-rwxrwxr-x 1 wy1z 2067 Jan 8 21:35 dsp.txt
-rwxrwxr-x 1 wy1z 3180 Jan 8 21:35 dtmf.txt
-rwxrwxr-x 1 wy1z 2303 Jan 8 21:35 echo.txt
-rwxrwxr-x 1 wy1z 20308 Jan 8 21:35 eme.txt
-rwxrwxr-x 1 wy1z 2293 Jan 8 21:35 esd.txt
-rwxrwxr-x 1 wy1z 7358 Jan 8 21:35 fax.txt
-rwxrwxr-x 1 wy1z 1913 Jan 8 21:35 fiber.txt
-rwxrwxr-x 1 wy1z 4847 Jan 8 21:35 filteraf.txt
-rwxrwxr-x 1 wy1z 3113 Jan 8 21:35 filterif.txt
-rwxrwxr-x 1 wy1z 3682 Jan 8 21:35 filterrf.txt
-rwxrwxr-x 1 wy1z 2489 Jan 8 21:35 grounds.txt
-rwxrwxr-x 1 wy1z 4561 Jan 8 21:35 handicap.txt
-rwxrwxr-x 1 wy1z 3839 Jan 8 21:35 heath.txt
-rwxrwxr-x 1 wy1z 3972 Jan 8 21:35 historic.txt
-rwxrwxr-x 1 wy1z 4310 Jan 8 21:35 hmbrwcmp.txt
-rwxrwxr-x 1 wy1z 2176 Jan 8 21:35 ibm.txt
-rwxrwxr-x 1 wy1z 2993 Jan 8 21:35 ic.txt
-rwxrwxr-x 1 wy1z 2623 Jan 8 21:35 icom.txt
-rwxrwxr-x 1 wy1z 2574 Jan 8 21:35 kenwood.txt
-rwxrwxr-x 1 wy1z 7894 Jan 8 21:35 keyer.txt
-rwxrwxr-x 1 wy1z 2031 Jan 8 21:35 light.txt
```

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-rwxrwxr-x 1 wy1z 2838 Jan 8 21:35 lightnin.txt
-rwxrwxr-x 1 wy1z 1927 Jan 8 21:35 mfj.txt
-rwxrwxr-x 1 wy1z 2685 Jan 8 21:35 microwv.txt
-rwxrwxr-x 1 wy1z 2016 Jan 8 21:35 nbvm.txt
-rwxrwxr-x 1 wy1z 8156 Jan 8 21:35 oscope.txt
-rwxrwxr-x 1 wy1z 5375 Jan 8 21:35 packet.txt
-rwxrwxr-x 1 wy1z 1947 Jan 8 21:35 pactor.txt
-rwxrwxr-x 1 wy1z 4713 Jan 8 21:35 pcbrd.txt
-rwxrwxr-x 1 wy1z 4101 Jan 8 21:35 prog.txt
-rwxrwxr-x 1 wy1z 2187 Jan 8 21:35 projacc.txt
-rwxrwxr-x 1 wy1z 8083 Jan 8 21:35 prop.txt
-rwxrwxr-x 1 wy1z 2413 Jan 8 21:35 public.txt
-rwxrwxr-x 1 wy1z 6697 Jan 8 21:35 pwrsupp.txt
-rwxrwxr-x 1 wy1z 4628 Jan 8 21:35 qrp.txt
-rwxrwxr-x 1 wy1z 3057 Jan 8 21:35 radastro.txt
-rwxrwxr-x 1 wy1z 8321 Jan 8 21:35 rcvrhf.txt
-rwxrwxr-x 1 wy1z 5788 Jan 8 21:35 rcvrvhf.txt
-rwxrwxr-x 1 wy1z 3168 Jan 8 21:35 remote.txt
-rwxrwxr-x 1 wy1z 7862 Jan 8 21:35 rfi.txt
-rwxrwxr-x 1 wy1z 2115 Jan 8 21:35 rfipcmkr.txt
-rwxrwxr-x 1 wy1z 4906 Jan 8 21:35 rptr.txt
-rwxrwxr-x 1 wy1z 22724 Jan 8 21:35 rtty.txt
-rwxrwxr-x 1 wy1z 2363 Jan 8 21:35 safety.txt
-rwxrwxr-x 1 wy1z 2364 Jan 8 21:35 sarex.txt
-rwxrwxr-x 1 wy1z 45420 Jan 8 21:35 sat.txt
-rwxrwxr-x 1 wy1z 2764 Jan 8 21:35 speech.txt
-rwxrwxr-x 1 wy1z 2690 Jan 8 21:35 spread.txt
-rwxrwxr-x 1 wy1z 1911 Jan 8 21:35 sstv.txt
-rwxrwxr-x 1 wy1z 2197 Jan 8 21:35 surface.txt
-rwxrwxr-x 1 wy1z 3433 Jan 8 21:35 surplus.txt
-rwxrwxr-x 1 wy1z 5479 Jan 8 21:35 swr.txt
-rwxrwxr-x 1 wy1z 4183 Jan 8 21:35 synth.txt
-rwxrwxr-x 1 wy1z 2228 Jan 8 21:35 tentec.txt
-rwxrwxr-x 1 wy1z 14329 Jan 8 21:35 testeqpt.txt
-rwxrwxr-x 1 wy1z 2032 Jan 8 21:35 time.txt
-rwxrwxr-x 1 wy1z 4976 Jan 8 21:35 tower.txt
-rwxrwxr-x 1 wy1z 2297 Jan 8 21:35 trs.txt
-rwxrwxr-x 1 wy1z 18389 Jan 8 21:35 tv.txt
-rwxrwxr-x 1 wy1z 8866 Jan 8 21:35 up.txt
-rwxrwxr-x 1 wy1z 2384 Jan 8 21:35 vic.txt
-rwxrwxr-x 1 wy1z 3480 Jan 8 21:35 vlf.txt
-rwxrwxr-x 1 wy1z 4440 Jan 8 21:35 warc.txt
-rwxrwxr-x 1 wy1z 2035 Jan 8 21:35 weaksig.txt
-rwxrwxr-x 1 wy1z 10407 Jan 8 21:35 xmtrhf.txt
-rwxrwxr-x 1 wy1z 7652 Jan 8 21:35 xmtrvhf.txt
-rwxrwxr-x 1 wy1z 2507 Jan 8 21:35 yaesu.txt

arrl/Server-files/info/circ:
total 52
-rwxrwxr-x 1 wy1z 43648 Jan 3 12:55 arrlcat.txt
```

```
-rwxrwxr-x 1 wy1z 2803 Jul 13 1993 join.txt
-rwxrwxr-x 1 wy1z 5637 Dec 2 17:41 services.txt

arrl/Server-files/info/clubs:
total 261
-rwxrwxr-x 1 wy1z 1846 Jan 8 21:29 clubs.ak
-rwxrwxr-x 1 wy1z 3889 Jan 8 21:29 clubs.al
-rwxrwxr-x 1 wy1z 3644 Jan 8 21:29 clubs.ar
-rwxrwxr-x 1 wy1z 3188 Jan 8 21:29 clubs.az
-rwxrwxr-x 1 wy1z 19643 Jan 8 21:29 clubs.ca
-rwxrwxr-x 1 wy1z 3139 Jan 8 21:29 clubs.co
-rwxrwxr-x 1 wy1z 4453 Jan 8 21:29 clubs.ct
-rwxrwxr-x 1 wy1z 1426 Jan 8 21:29 clubs.dc
-rwxrwxr-x 1 wy1z 1894 Jan 8 21:29 clubs.de
-rwxrwxr-x 1 wy1z 9796 Jan 8 21:29 clubs.fl
-rwxrwxr-x 1 wy1z 4807 Jan 8 21:29 clubs.ga
-rwxrwxr-x 1 wy1z 1640 Jan 8 21:29 clubs.hi
-rwxrwxr-x 1 wy1z 3178 Jan 8 21:29 clubs.ia
-rwxrwxr-x 1 wy1z 1955 Jan 8 21:29 clubs.id
-rwxrwxr-x 1 wy1z 6744 Jan 8 21:29 clubs.il
-rwxrwxr-x 1 wy1z 6868 Jan 8 21:29 clubs.in
-rwxrwxr-x 1 wy1z 4221 Jan 8 21:29 clubs.ks
-rwxrwxr-x 1 wy1z 3087 Jan 8 21:29 clubs.ky
-rwxrwxr-x 1 wy1z 3423 Jan 8 21:29 clubs.la
-rwxrwxr-x 1 wy1z 6222 Jan 8 21:29 clubs.ma
-rwxrwxr-x 1 wy1z 4845 Jan 8 21:29 clubs.md
-rwxrwxr-x 1 wy1z 2570 Jan 8 21:29 clubs.me
-rwxrwxr-x 1 wy1z 7429 Jan 8 21:29 clubs.mi
-rwxrwxr-x 1 wy1z 4655 Jan 8 21:29 clubs.mn
-rwxrwxr-x 1 wy1z 5385 Jan 8 21:29 clubs.mo
-rwxrwxr-x 1 wy1z 2396 Jan 8 21:29 clubs.ms
-rwxrwxr-x 1 wy1z 2270 Jan 8 21:29 clubs.mt
-rwxrwxr-x 1 wy1z 4391 Jan 8 21:29 clubs.nc
-rwxrwxr-x 1 wy1z 1385 Jan 8 21:29 clubs.nd
-rwxrwxr-x 1 wy1z 2324 Jan 8 21:29 clubs.ne
-rwxrwxr-x 1 wy1z 2850 Jan 8 21:29 clubs.nh
-rwxrwxr-x 1 wy1z 7211 Jan 8 21:29 clubs.nj
-rwxrwxr-x 1 wy1z 2343 Jan 8 21:29 clubs.nm
-rwxrwxr-x 1 wy1z 2006 Jan 8 21:29 clubs.nv
-rwxrwxr-x 1 wy1z 13706 Jan 8 21:29 clubs.ny
-rwxrwxr-x 1 wy1z 10039 Jan 8 21:29 clubs.oh
-rwxrwxr-x 1 wy1z 2627 Jan 8 21:29 clubs.ok
-rwxrwxr-x 1 wy1z 3600 Jan 8 21:29 clubs.or
-rwxrwxr-x 1 wy1z 11174 Jan 8 21:29 clubs.pa
-rwxrwxr-x 1 wy1z 1241 Jan 8 21:29 clubs.pr
-rwxrwxr-x 1 wy1z 1974 Jan 8 21:29 clubs.ri
-rwxrwxr-x 1 wy1z 2551 Jan 8 21:29 clubs.sc
-rwxrwxr-x 1 wy1z 2044 Jan 8 21:29 clubs.sd
-rwxrwxr-x 1 wy1z 4584 Jan 8 21:29 clubs.tn
-rwxrwxr-x 1 wy1z 11284 Jan 8 21:29 clubs.tx
```

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-rwxrwxr-x 1 wy1z 1325 Jan 8 21:29 clubs.ut
-rwxrwxr-x 1 wy1z 5136 Jan 8 21:29 clubs.va
-rwxrwxr-x 1 wy1z 1232 Jan 8 21:29 clubs.vi
-rwxrwxr-x 1 wy1z 2010 Jan 8 21:29 clubs.vt
-rwxrwxr-x 1 wy1z 5965 Jan 8 21:29 clubs.wa
-rwxrwxr-x 1 wy1z 4447 Jan 8 21:29 clubs.wi
-rwxrwxr-x 1 wy1z 3093 Jan 8 21:29 clubs.wv
-rwxrwxr-x 1 wy1z 1657 Jan 8 21:29 clubs.wy
-rwxrwxr-x 1 wy1z 384 Jan 8 21:29 clubs.xx

arrl/Server-files/info/ead:
total 67
-rwxrwxr-x 1 wy1z 6627 Apr 23 1993 abtest.asc
-rwxrwxr-x 1 wy1z 2816 May 14 1993 prospect.txt
-rwxrwxr-x 1 wy1z 1645 Dec 3 1992 sarex
-rwxrwxr-x 1 wy1z 3293 May 18 1993 sarex.1
-rwxrwxr-x 1 wy1z 8747 May 18 1993 sarex.2
-rwxrwxr-x 1 wy1z 6108 Aug 12 1993 sarex.3
-rwxrwxr-x 1 wy1z 1843 May 18 1993 sarex.4
-rwxrwxr-x 1 wy1z 21850 Aug 12 1993 sarex.5
-rwxrwxr-x 1 wy1z 7015 Aug 12 1993 sarex.6
-rwxrwxr-x 1 wy1z 4637 Oct 27 17:54 video.asc

arrl/Server-files/info/evp:
total 6
-rwxrwxr-x 1 wy1z 5250 May 18 1993 director.txt

arrl/Server-files/info/faq:
total 665
-rwxrwxr-x 1 wy1z 9769 Jan 8 21:32 elmers.inf
-rwxrwxr-x 1 wy1z 65745 Jan 8 21:32 elmers.lst
-rwxrwxr-x 1 wy1z 25356 Jan 8 21:32 faq1.txt
-rwxrwxr-x 1 wy1z 47086 Jan 8 21:32 faq2.txt
-rwxrwxr-x 1 wy1z 35419 Jan 8 21:32 faq3.txt
-rwxrwxr-x 1 wy1z 13069 Jan 8 21:32 faq6m.txt
-rwxrwxr-x 1 wy1z 48512 Jan 8 21:32 faqaud1.txt
-rwxrwxr-x 1 wy1z 49261 Jan 8 21:32 faqaud2.txt
-rwxrwxr-x 1 wy1z 12786 Jan 8 21:32 faqbook.txt
-rwxrwxr-x 1 wy1z 11120 Jan 8 21:32 faqcb1.txt
-rwxrwxr-x 1 wy1z 31430 Jan 8 21:32 faqcb2.txt
-rwxrwxr-x 1 wy1z 11028 Jan 8 21:32 faqcb3.txt
-rwxrwxr-x 1 wy1z 15771 Jan 8 21:32 faqcb4.txt
-rwxrwxr-x 1 wy1z 39658 Jan 8 21:32 faqdigi.txt
-rwxrwxr-x 1 wy1z 67884 Jan 8 21:32 faqdsp1.txt
-rwxrwxr-x 1 wy1z 41870 Jan 8 21:32 faqdsp2.txt
-rwxrwxr-x 1 wy1z 17600 Jan 8 21:32 faqdsp3.txt
-rwxrwxr-x 1 wy1z 5934 Jan 8 21:32 faqdsp4.txt
-rwxrwxr-x 1 wy1z 12036 Jan 8 21:32 faqindex.txt
-rwxrwxr-x 1 wy1z 34817 Jan 8 21:32 faqrtty.txt
-rwxrwxr-x 1 wy1z 18572 Jan 8 21:32 faqscan.txt
-rwxrwxr-x 1 wy1z 3219 Jan 8 21:32 faqsw1.txt
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-rwxrwxr-x 1 wy1z 25563 Jan 8 21:32 faqsw2.txt
-rwxrwxr-x 1 wy1z 25842 Jan 8 21:32 faqswam.txt

arrl/Server-files/info/hiram:
total 915
-rwxrwxr-x 1 wy1z 167 Dec 3 1992 !read.me
-rwxrwxr-x 1 wy1z 2816 Dec 3 1992 10-10.inf
-rwxrwxr-x 1 wy1z 1580 Dec 3 1992 147000.fcc
-rwxrwxr-x 1 wy1z 4529 Dec 3 1992 160meter
-rwxrwxr-x 1 wy1z 12806 Dec 23 1992 badge.frm
-rwxrwxr-x 1 wy1z 51200 Dec 3 1992 capdoc.txt
-rwxrwxr-x 1 wy1z 26240 Dec 3 1992 clubprez.pt1
-rwxrwxr-x 1 wy1z 27520 Dec 3 1992 clubprez.pt2
drwxrwxr-x 2 wy1z 512 Mar 15 11:51 contests
-rwxrwxr-x 1 wy1z 9216 Dec 3 1992 ebarc.mou
-rwxrwxr-x 1 wy1z 1971 Dec 3 1992 ec.app
-rwxrwxr-x 1 wy1z 14484 Dec 3 1992 eccert
-rwxrwxr-x 1 wy1z 9984 Dec 3 1992 emerg.bbs
-rwxrwxr-x 1 wy1z 9313 Dec 14 1992 event.txt
-rwxrwxr-x 1 wy1z 2560 Dec 3 1992 field.lst
-rwxrwxr-x 1 wy1z 75648 May 17 1993 files.bbs
-rwxrwxr-x 1 wy1z 698 Dec 23 1992 fujita.txt
-rwxrwxr-x 1 wy1z 7680 Dec 3 1992 glossary.pkt
-rwxrwxr-x 1 wy1z 1915 Dec 3 1992 guidlin.acc
-rwxrwxr-x 1 wy1z 1676 Dec 3 1992 guidlin.asm
-rwxrwxr-x 1 wy1z 3591 Dec 3 1992 guidlin.bm
-rwxrwxr-x 1 wy1z 1960 Dec 3 1992 guidlin.dec
-rwxrwxr-x 1 wy1z 2439 Dec 3 1992 guidlin.ec
-rwxrwxr-x 1 wy1z 2849 Dec 3 1992 guidlin.lgl
-rwxrwxr-x 1 wy1z 1708 Dec 3 1992 guidlin.nm
-rwxrwxr-x 1 wy1z 3668 Dec 3 1992 guidlin.obs
-rwxrwxr-x 1 wy1z 1403 Dec 3 1992 guidlin.oes
-rwxrwxr-x 1 wy1z 2091 Dec 3 1992 guidlin.oo
-rwxrwxr-x 1 wy1z 2144 Dec 3 1992 guidlin.ooc
-rwxrwxr-x 1 wy1z 2606 Dec 3 1992 guidlin.ors
-rwxrwxr-x 1 wy1z 2524 Dec 3 1992 guidlin.pic
-rwxrwxr-x 1 wy1z 2964 Dec 3 1992 guidlin.sec
-rwxrwxr-x 1 wy1z 2838 Dec 3 1992 guidlin.sgl
-rwxrwxr-x 1 wy1z 2836 Dec 3 1992 guidlin.stm
-rwxrwxr-x 1 wy1z 2678 Dec 3 1992 guidlin.tc
-rwxrwxr-x 1 wy1z 2048 Dec 3 1992 guidlin.ts
-rwxrwxr-x 1 wy1z 24931 Nov 2 07:39 hamfests.usa
-rwxrwxr-x 1 wy1z 9856 Dec 3 1992 hampromo.asc
-rwxrwxr-x 1 wy1z 7969 Sep 9 1993 hfbands
-rwxrwxr-x 1 wy1z 896 Dec 3 1992 hiram.txt
-rwxrwxr-x 1 wy1z 14547 Dec 3 1992 howto.nts
-rwxrwxr-x 1 wy1z 2669 Dec 3 1992 hr73.asc
-rwxrwxr-x 1 wy1z 9743 Dec 3 1992 hurrican
-rwxrwxr-x 1 wy1z 2467 Dec 3 1992 improve.vec
-rwxrwxr-x 1 wy1z 27008 Dec 3 1992 itslegal.asc
```

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-rwxrwxr-x 1 wy1z 6529 Dec 3 1992 leadersh.req
-rwxrwxr-x 1 wy1z 26769 Nov 16 17:27 letter1.11
-rwxrwxr-x 1 wy1z 21130 Nov 16 16:55 letter1.27
-rwxrwxr-x 1 wy1z 18202 Nov 16 17:35 letter10.12
-rwxrwxr-x 1 wy1z 18517 Nov 16 17:41 letter10.26
-rwxrwxr-x 1 wy1z 18947 Nov 16 16:55 letter2.10
-rwxrwxr-x 1 wy1z 18417 Nov 16 16:55 letter2.24
-rwxrwxr-x 1 wy1z 25254 Nov 16 16:54 letter3.10
-rwxrwxr-x 1 wy1z 19430 Nov 16 16:54 letter3.24
-rwxrwxr-x 1 wy1z 22073 Nov 16 16:54 letter4.13
-rwxrwxr-x 1 wy1z 22169 Nov 16 16:53 letter5.12
-rwxrwxr-x 1 wy1z 26096 Nov 16 16:57 letter5.25
-rwxrwxr-x 1 wy1z 22192 Nov 16 16:53 letter6.15
-rwxrwxr-x 1 wy1z 24554 Nov 16 16:53 letter7.24
-rwxrwxr-x 1 wy1z 22180 Nov 16 16:52 letter8.11
-rwxrwxr-x 1 wy1z 17965 Nov 16 16:52 letter8.25
-rwxrwxr-x 1 wy1z 20215 Nov 16 16:52 letter9.14
-rwxrwxr-x 1 wy1z 16476 Nov 16 16:50 letter9.27
-rwxrwxr-x 1 wy1z 43129 Dec 3 1992 minutes.brd
-rwxrwxr-x 1 wy1z 14924 Jan 8 1993 packet.new
-rwxrwxr-x 1 wy1z 3858 Dec 3 1992 prb1.fla
-rwxrwxr-x 1 wy1z 3222 Dec 3 1992 pressa.txt
-rwxrwxr-x 1 wy1z 2432 Dec 3 1992 protect.act
-rwxrwxr-x 1 wy1z 1244 Dec 3 1992 pshr
-rwxrwxr-x 1 wy1z 1894 Dec 3 1992 q-sigs
-rwxrwxr-x 1 wy1z 13184 Dec 3 1992 quake.txt
-rwxrwxr-x 1 wy1z 2688 Dec 3 1992 rules.wac
-rwxrwxr-x 1 wy1z 4864 Dec 3 1992 rules.was
-rwxrwxr-x 1 wy1z 2661 May 21 1993 sadstory
-rwxrwxr-x 1 wy1z 7230 Dec 3 1992 smethics
-rwxrwxr-x 1 wy1z 4770 Dec 3 1992 sscinit.app
-rwxrwxr-x 1 wy1z 3407 Dec 3 1992 sscrenew.app
-rwxrwxr-x 1 wy1z 3041 Dec 3 1992 survey
-rwxrwxr-x 1 wy1z 6218 Dec 3 1992 training.air
-rwxrwxr-x 1 wy1z 9856 Dec 3 1992 trans.rel
-rwxrwxr-x 1 wy1z 2448 Dec 3 1992 wallsign

arrl/Server-files/info/hiram/contests:
total 41
-rwxrwxr-x 1 wy1z 3456 Nov 24 1992 10m.frm
-rwxrwxr-x 1 wy1z 3584 Nov 24 1992 160m.frm
-rwxrwxr-x 1 wy1z 3584 Nov 24 1992 arrldx.frm
-rwxrwxr-x 1 wy1z 1625 Dec 3 1992 contest.dat
-rwxrwxr-x 1 wy1z 1664 Nov 24 1992 contests.92
-rwxrwxr-x 1 wy1z 1536 Dec 3 1992 contests.93
-rwxrwxr-x 1 wy1z 13312 Nov 24 1992 fd.92
-rwxrwxr-x 1 wy1z 3699 Oct 12 15:32 novss.frm
-rwxrwxr-x 1 wy1z 1536 Nov 24 1992 sprint.chg
-rwxrwxr-x 1 wy1z 3968 Nov 24 1992 vhfqso.frm
```

```
arrl/Server-files/info/league:
total 125
-rwxrwxr-x 1 wy1z 768 Jan 23 16:20 00-index.txt
-rwxrwxr-x 1 wy1z 42492 Jan 4 12:01 catalog.txt
-rwxrwxr-x 1 wy1z 5865 Jan 4 11:58 direct.txt
-rwxrwxr-x 1 wy1z 7315 Jan 4 12:00 email.txt
-rwxrwxr-x 1 wy1z 4878 Jan 4 12:01 helpinfo.txt
-rwxrwxr-x 1 wy1z 24064 Jan 23 16:17 indxinfo.txt
-rwxrwxr-x 1 wy1z 2803 Jan 4 12:00 join.txt
-rwxrwxr-x 1 wy1z 2758 Jan 4 12:00 prospect.txt
-rwxrwxr-x 1 wy1z 5637 Jan 4 12:00 services.txt
-rwxrwxr-x 1 wy1z 26932 Jan 4 12:02 tour.txt

arrl/Server-files/info/msd:
total 222
-rwxrwxr-x 1 wy1z 7487 Feb 9 1993 awards.txt
-rwxrwxr-x 1 wy1z 5865 Dec 13 14:25 dir.hq
-rwxrwxr-x 1 wy1z 36217 Sep 28 16:07 dxcclist.txt
-rwxrwxr-x 1 wy1z 28753 Sep 28 16:07 dxccrule.txt
-rwxrwxr-x 1 wy1z 1792 Mar 4 1993 dxccstat.txt
-rwxrwxr-x 1 wy1z 51498 Sep 23 15:46 fieldrep.txt
-rwxrwxr-x 1 wy1z 6979 Dec 3 1992 incom1.qsl
-rwxrwxr-x 1 wy1z 7625 Sep 8 1993 itucalls.txt
-rwxrwxr-x 1 wy1z 10301 Jan 20 1993 jansweep
-rwxrwxr-x 1 wy1z 7620 Aug 9 1993 outgo2.qsl
-rwxrwxr-x 1 wy1z 10624 Mar 10 1993 rules.dx
-rwxrwxr-x 1 wy1z 4736 Mar 10 1993 rules.nr
-rwxrwxr-x 1 wy1z 27950 Sep 8 1993 tours.txt
-rwxrwxr-x 1 wy1z 8832 Feb 9 1993 vuccapp.txt
-rwxrwxr-x 1 wy1z 2944 Jan 20 1993 w1aw.skd

arrl/Server-files/info/msd-2:
total 170
-rwxrwxr-x 1 wy1z 65029 Oct 22 16:11 dx_w2iol.a-p
-rwxrwxr-x 1 wy1z 35474 Oct 22 15:10 dx_w2iol.doc
-rwxrwxr-x 1 wy1z 54645 Oct 22 16:18 dx_w2iol.q-z
-rwxrwxr-x 1 wy1z 17242 Oct 22 15:16 dxcck2di.txt

arrl/Server-files/info/qex:
total 117
-rwxrwxr-x 1 wy1z 59916 Dec 1 1992 32864c.ps
-rwxrwxr-x 1 wy1z 4238 Dec 1 1992 inqex.txt
-rwxrwxr-x 1 wy1z 11161 Feb 8 13:04 qexfq194.zip
-rwxrwxr-x 1 wy1z 42496 Feb 14 19:50 txt2eprm.zip

arrl/Server-files/info/qst:
total 852
-rwxrwxr-x 1 wy1z 32230 Feb 8 13:04 dspqst.zip
-rwxrwxr-x 1 wy1z 251703 Feb 8 12:59 kh6cp10g.zip
-rwxrwxr-x 1 wy1z 14956 Feb 8 13:05 qsocord.zip
-rwxrwxr-x 1 wy1z 547516 Mar 1 16:10 vester-b.zip
-rwxrwxr-x 1 wy1z 4582 Feb 8 13:02 xtalf.zip
```

```
arrl/Server-files/info/rib:
total 54
-rwxrwxr-x 1 wy1z 3840 Jan 8 21:27 97113.txt
-rwxrwxr-x 1 wy1z 13796 Jan 8 21:27 addresse.fcc
-rwxrwxr-x 1 wy1z 4941 Jan 8 21:27 allocate.txt
-rwxrwxr-x 1 wy1z 2979 Jan 8 21:27 bandplan.txt
-rwxrwxr-x 1 wy1z 5376 Jan 8 21:27 recipop.txt
-rwxrwxr-x 1 wy1z 1252 Jan 8 21:27 rib.txt
-rwxrwxr-x 1 wy1z 20352 Jan 8 21:27 vanity.txt

arrl/Server-files/info/tis:
total 1005
-rwxrwxr-x 1 wy1z 4822 Jan 8 21:36 2010.txt
-rwxrwxr-x 1 wy1z 42472 Jan 8 21:36 aguide.cii
-rwxrwxr-x 1 wy1z 7470 Jan 8 21:36 amprnet.txt
-rwxrwxr-x 1 wy1z 16776 Jan 8 21:36 antind.txt
-rwxrwxr-x 1 wy1z 2382 Jan 8 21:36 argosy.txt
-rwxrwxr-x 1 wy1z 8190 Jan 8 21:36 auto.rfi
-rwxrwxr-x 1 wy1z 3427 Jan 8 21:36 awg-cur.txt
-rwxrwxr-x 1 wy1z 32384 Jan 8 21:36 ax25-1.doc
-rwxrwxr-x 1 wy1z 34304 Jan 8 21:36 ax25-2.doc
-rwxrwxr-x 1 wy1z 66688 Jan 8 21:36 ax25.doc
-rwxrwxr-x 1 wy1z 12579 Jan 8 21:36 bbs.txt
-rwxrwxr-x 1 wy1z 29488 Jan 8 21:36 bioeffec.txt
-rwxrwxr-x 1 wy1z 11776 Jan 8 21:36 carploop.txt
-rwxrwxr-x 1 wy1z 18501 Jan 8 21:36 catalog.txt
-rwxrwxr-x 1 wy1z 4980 Jan 8 21:36 catvi.txt
-rwxrwxr-x 1 wy1z 37622 Jan 8 21:36 county.txt
-rwxrwxr-x 1 wy1z 1162 Jan 8 21:36 dipmtrsr.txt
-rwxrwxr-x 1 wy1z 2178 Jan 8 21:36 dspbib.txt
-rwxrwxr-x 1 wy1z 1501 Jan 8 21:36 dspvendr.txt
-rwxrwxr-x 1 wy1z 6440 Jan 8 21:36 emcstds.txt
-rwxrwxr-x 1 wy1z 6441 Jan 8 21:36 emerg.pwr
-rwxrwxr-x 1 wy1z 1575 Jan 8 21:36 fcountsr.txt
-rwxrwxr-x 1 wy1z 1345 Jan 8 21:36 fence.txt
-rwxrwxr-x 1 wy1z 5626 Jan 8 21:36 ftp.txt
-rwxrwxr-x 1 wy1z 5038 Jan 8 21:36 hamplate.txt
-rwxrwxr-x 1 wy1z 2612 Jan 8 21:36 heathpts.txt
-rwxrwxr-x 1 wy1z 4195 Jan 8 21:36 history.txt
-rwxrwxr-x 1 wy1z 19323 Jan 8 21:36 kits.txt
-rwxrwxr-x 1 wy1z 663 Jan 8 21:36 lasersrc.txt
-rwxrwxr-x 1 wy1z 6465 Jan 8 21:36 lightnin.txt
-rwxrwxr-x 1 wy1z 3558 Jan 8 21:36 macstack.txt
-rwxrwxr-x 1 wy1z 23937 Jan 8 21:36 mailordr.txt
-rwxrwxr-x 1 wy1z 23554 Jan 8 21:36 manuals.txt
-rwxrwxr-x 1 wy1z 24002 Jan 8 21:36 manw7fg.txt
-rwxrwxr-x 1 wy1z 3642 Jan 8 21:36 mcicomp.txt
-rwxrwxr-x 1 wy1z 9356 Jan 8 21:36 morse.txt
-rwxrwxr-x 1 wy1z 1318 Jan 8 21:36 mosfet.txt
-rwxrwxr-x 1 wy1z 4256 Jan 8 21:36 multiant.txt
-rwxrwxr-x 1 wy1z 2688 Jan 8 21:36 n8emr.cb
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-rwxrwxr-x 1 wy1z 1760 Jan 8 21:36 n8emr.txt
-rwxrwxr-x 1 wy1z 2320 Jan 8 21:36 pack-int.txt
-rwxrwxr-x 1 wy1z 3493 Jan 8 21:36 packet.txt
-rwxrwxr-x 1 wy1z 14544 Jan 8 21:36 partsrc.txt
-rwxrwxr-x 1 wy1z 14163 Jan 8 21:36 pcboard.txt
-rwxrwxr-x 1 wy1z 27614 Jan 8 21:36 pcx.txt
-rwxrwxr-x 1 wy1z 2390 Jan 8 21:36 pll.bib
-rwxrwxr-x 1 wy1z 6974 Jan 8 21:36 pr-sum.txt
-rwxrwxr-x 1 wy1z 48792 Jan 8 21:36 prodrev.txt
-rwxrwxr-x 1 wy1z 12928 Jan 8 21:36 prodrev1.txt
-rwxrwxr-x 1 wy1z 22272 Jan 8 21:36 prodrev2.txt
-rwxrwxr-x 1 wy1z 8257 Jan 8 21:36 propprgm.txt
-rwxrwxr-x 1 wy1z 522 Jan 8 21:36 pvc.txt
-rwxrwxr-x 1 wy1z 1209 Jan 8 21:36 qrp-info.txt
-rwxrwxr-x 1 wy1z 1484 Jan 8 21:36 qrprigs.txt
-rwxrwxr-x 1 wy1z 2342 Jan 8 21:36 repair.ham
-rwxrwxr-x 1 wy1z 14475 Jan 8 21:36 rfiaudio.txt
-rwxrwxr-x 1 wy1z 37632 Jan 8 21:36 rfigen.txt
-rwxrwxr-x 1 wy1z 6782 Jan 8 21:36 rfilamps.txt
-rwxrwxr-x 1 wy1z 13087 Jan 8 21:36 rfisourc.txt
-rwxrwxr-x 1 wy1z 4464 Jan 8 21:36 rflamp.txt
-rwxrwxr-x 1 wy1z 29424 Jan 8 21:36 softmac.txt
-rwxrwxr-x 1 wy1z 12032 Jan 8 21:36 software.txt
-rwxrwxr-x 1 wy1z 2076 Jan 8 21:36 solarpan.txt
-rwxrwxr-x 1 wy1z 41367 Jan 8 21:36 sstv.txt
-rwxrwxr-x 1 wy1z 3848 Jan 8 21:36 stores.txt
-rwxrwxr-x 1 wy1z 14008 Jan 8 21:36 substitu.txt
-rwxrwxr-x 1 wy1z 33558 Jan 8 21:36 swl-addr.txt
-rwxrwxr-x 1 wy1z 12681 Jan 8 21:36 talist.txt
-rwxrwxr-x 1 wy1z 11220 Jan 8 21:36 tcp.txt
-rwxrwxr-x 1 wy1z 22299 Jan 8 21:36 tel.txt
-rwxrwxr-x 1 wy1z 8743 Jan 8 21:36 tesla.txt
-rwxrwxr-x 1 wy1z 5301 Jan 8 21:36 tis-list.txt
-rwxrwxr-x 1 wy1z 4850 Jan 8 21:36 topomaps.txt
-rwxrwxr-x 1 wy1z 3049 Jan 8 21:36 tubes.txt
-rwxrwxr-x 1 wy1z 10624 Jan 8 21:36 uwave.txt
-rwxrwxr-x 1 wy1z 30997 Jan 8 21:36 vhfindex.asc
-rwxrwxr-x 1 wy1z 896 Jan 8 21:36 yellsht.txt

arrl/Server-files/info/vec:
total 659
-rwxrwxr-x 1 wy1z 3328 Jan 8 21:31 610instr.txt
-rwxrwxr-x 1 wy1z 55168 Jan 8 21:31 adv-1.asc
-rwxrwxr-x 1 wy1z 54656 Jan 8 21:31 adv-2.asc
-rwxrwxr-x 1 wy1z 41984 Jan 8 21:31 adv-3.asc
-rwxrwxr-x 1 wy1z 4864 Jan 8 21:31 contact.fcc
-rwxrwxr-x 1 wy1z 5504 Jan 8 21:31 examaccm.txt
-rwxrwxr-x 1 wy1z 4480 Jan 8 21:31 examexmt.txt
-rwxrwxr-x 1 wy1z 9344 Jan 8 21:31 examinfo.txt
-rwxrwxr-x 1 wy1z 15104 Jan 8 21:31 examnews.txt
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-rwxrwxr-x 1 wy1z 47616 Jan 8 21:31 exams.txt
-rwxrwxr-x 1 wy1z 62464 Jan 8 21:31 extra-1.asc
-rwxrwxr-x 1 wy1z 55296 Jan 8 21:31 extra-2.asc
-rwxrwxr-x 1 wy1z 33408 Jan 8 21:31 extra-3.asc
-rwxrwxr-x 1 wy1z 48640 Jan 8 21:31 gen-1.asc
-rwxrwxr-x 1 wy1z 41856 Jan 8 21:31 gen-2.asc
-rwxrwxr-x 1 wy1z 46860 Jan 8 21:31 novice-1.new
-rwxrwxr-x 1 wy1z 49152 Jan 8 21:31 novice-2.new
-rwxrwxr-x 1 wy1z 5120 Jan 8 21:31 prospect.ve
-rwxrwxr-x 1 wy1z 37376 Jan 8 21:31 tech-1.new
-rwxrwxr-x 1 wy1z 45696 Jan 8 21:31 tech-2.new

atari:
total 2
drwxrwxr-x 2 wy1z 512 Mar 15 11:54 digital
drwxrwxr-x 2 wy1z 512 Mar 15 11:54 satellite

atari/digital:
total 865
-rwxrwxr-x 1 wy1z 869218 Jan 21 20:19 dp_351.lzh
-rwxrwxr-x 1 wy1z 235 Jan 21 20:19 dp_351.txt

atari/satellite:
total 93
-rwxrwxr-x 1 wy1z 94661 Mar 9 08:35 atari_sat-tracker.lzh

barc:
total 9
drwxrwxr-x 2 wy1z 1024 Mar 15 11:57 Newsletters
-rwxrwxr-x 1 wy1z 218 Nov 30 11:41 README
drwxrwxr-x 8 wy1z 512 Mar 15 11:56 barc-list
drwxrwxr-x 2 wy1z 3072 Mar 15 11:56 barc-races
drwxrwxr-x 2 wy1z 512 Mar 15 11:56 fox-list
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 official-docs
drwxrwxr-x 8 wy1z 512 Mar 15 11:58 w1aw-list

barc/Newsletters:
total 850
-rwxrwxr-x 1 wy1z 26408 Dec 18 14:37 sparc-91.08
-rwxrwxr-x 1 wy1z 23401 Dec 18 14:39 sparc-91.09
-rwxrwxr-x 1 wy1z 20862 Dec 18 14:39 sparc-91.10
-rwxrwxr-x 1 wy1z 21031 Dec 18 14:40 sparc-91.11
-rwxrwxr-x 1 wy1z 20730 Dec 18 14:41 sparc-91.12
-rwxrwxr-x 1 wy1z 26361 Dec 18 14:33 sparc-92.01
-rwxrwxr-x 1 wy1z 22793 Dec 18 14:33 sparc-92.02
-rwxrwxr-x 1 wy1z 26272 Dec 18 14:34 sparc-92.03
-rwxrwxr-x 1 wy1z 23405 Dec 18 14:35 sparc-92.05
-rwxrwxr-x 1 wy1z 27244 Dec 18 14:36 sparc-92.06
-rwxrwxr-x 1 wy1z 34742 Dec 18 14:37 sparc-92.07
-rwxrwxr-x 1 wy1z 41143 Dec 18 14:38 sparc-92.08
-rwxrwxr-x 1 wy1z 44035 Dec 18 14:39 sparc-92.10
-rwxrwxr-x 1 wy1z 37997 Dec 18 14:41 sparc-92.12
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-rwxrwxr-x 1 wy1z 49191 Dec 18 14:33 sparc-93.01
-rwxrwxr-x 1 wy1z 57698 Dec 18 14:34 sparc-93.02
-rwxrwxr-x 1 wy1z 45252 Dec 18 14:34 sparc-93.03
-rwxrwxr-x 1 wy1z 393 Dec 18 14:42 sparc-93.03-addendum
-rwxrwxr-x 1 wy1z 55411 Dec 18 14:35 sparc-93.04
-rwxrwxr-x 1 wy1z 40778 Dec 18 14:35 sparc-93.05
-rwxrwxr-x 1 wy1z 51580 Dec 18 14:36 sparc-93.06
-rwxrwxr-x 1 wy1z 45296 Dec 18 14:37 sparc-93.07
-rwxrwxr-x 1 wy1z 37678 Dec 18 14:39 sparc-93.10
-rwxrwxr-x 1 wy1z 37060 Dec 18 14:40 sparc-93.11
-rwxrwxr-x 1 wy1z 38954 Dec 18 14:51 sparc-93.12

barc/barc-list:
total 21
-rwxrwxr-x 1 wy1z 1186 Dec 29 00:45 README
drwxrwxr-x 2 wy1z 512 Mar 15 11:55 appointments
-rwxrwxr-x 1 wy1z 9055 Dec 20 17:27 flea1215.93
drwxrwxr-x 2 wy1z 512 Mar 15 11:56 meetings
drwxrwxr-x 6 wy1z 512 Mar 15 11:55 minutes
drwxrwxr-x 2 wy1z 4608 Mar 15 11:56 misc
drwxrwxr-x 2 wy1z 512 Mar 15 11:56 ve-sessions
drwxrwxr-x 2 wy1z 512 Mar 15 11:56 workshops

barc/barc-list/appointments:
total 22
-rwxrwxr-x 1 wy1z 408 Jul 17 1993 Index
-rwxrwxr-x 1 wy1z 1605 Jul 16 1993 barc005
-rwxrwxr-x 1 wy1z 1150 Jul 16 1993 barc032
-rwxrwxr-x 1 wy1z 2432 Jul 16 1993 barc112
-rwxrwxr-x 1 wy1z 4732 Jul 16 1993 barc145
-rwxrwxr-x 1 wy1z 1665 Jul 16 1993 barc212
-rwxrwxr-x 1 wy1z 1889 Jul 16 1993 barc223
-rwxrwxr-x 1 wy1z 2313 Jul 16 1993 barc233
-rwxrwxr-x 1 wy1z 1822 Jul 16 1993 barc299

barc/barc-list/meetings:
total 5
-rwxrwxr-x 1 wy1z 97 Jul 17 1993 Index
-rwxrwxr-x 1 wy1z 1321 Jul 17 1993 barc266
-rwxrwxr-x 1 wy1z 1632 Jul 17 1993 barc349

barc/barc-list/minutes:
total 4
drwxrwxr-x 2 wy1z 1024 Mar 15 11:55 barc-net
drwxrwxr-x 2 wy1z 512 Mar 15 11:55 executive-committee
drwxrwxr-x 2 wy1z 512 Mar 15 11:55 general-meeting
drwxrwxr-x 2 wy1z 512 Mar 15 11:55 misc

barc/barc-list/minutes/barc-net:
total 163
-rwxrwxr-x 1 wy1z 4467 Jul 16 1993 1992.aug.17
-rwxrwxr-x 1 wy1z 3818 Jul 16 1993 1992.aug.31
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-rwxrwxr-x 1 wy1z 4180 Jul 16 1993 1992.dec.14
-rwxrwxr-x 1 wy1z 3398 Jul 16 1993 1992.dec.21
-rwxrwxr-x 1 wy1z 2393 Jul 16 1993 1992.dec.28
-rwxrwxr-x 1 wy1z 4900 Jul 16 1993 1992.jul.06
-rwxrwxr-x 1 wy1z 2667 Jul 16 1993 1992.jul.13
-rwxrwxr-x 1 wy1z 3152 Jul 16 1993 1992.jul.20
-rwxrwxr-x 1 wy1z 3515 Jul 16 1993 1992.jun.01
-rwxrwxr-x 1 wy1z 4817 Jul 16 1993 1992.jun.08
-rwxrwxr-x 1 wy1z 4378 Jul 16 1993 1992.jun.15
-rwxrwxr-x 1 wy1z 4731 Jul 16 1993 1992.jun.22
-rwxrwxr-x 1 wy1z 4809 Jul 16 1993 1992.jun.29
-rwxrwxr-x 1 wy1z 3923 Jul 16 1993 1992.nov.09
-rwxrwxr-x 1 wy1z 4183 Jul 15 1993 1992.nov.23
-rwxrwxr-x 1 wy1z 3109 Jul 15 1993 1992.nov.30
-rwxrwxr-x 1 wy1z 4546 Jul 16 1993 1992.oct.12
-rwxrwxr-x 1 wy1z 3710 Jul 16 1993 1992.sep.07
-rwxrwxr-x 1 wy1z 4237 Jul 16 1993 1992.sep.14
-rwxrwxr-x 1 wy1z 2687 Jul 16 1993 1993.apr.12
-rwxrwxr-x 1 wy1z 2449 Jul 16 1993 1993.apr.19
-rwxrwxr-x 1 wy1z 3365 Jul 16 1993 1993.feb.01
-rwxrwxr-x 1 wy1z 2409 Jul 16 1993 1993.feb.08
-rwxrwxr-x 1 wy1z 3403 Jul 16 1993 1993.feb.15
-rwxrwxr-x 1 wy1z 3436 Jul 16 1993 1993.feb.22
-rwxrwxr-x 1 wy1z 2915 Jul 16 1993 1993.jan.04
-rwxrwxr-x 1 wy1z 2960 Jul 16 1993 1993.jan.11
-rwxrwxr-x 1 wy1z 2652 Jul 16 1993 1993.jan.18
-rwxrwxr-x 1 wy1z 2976 Jul 16 1993 1993.jan.25
-rwxrwxr-x 1 wy1z 1010 Jul 16 1993 1993.jul.05
-rwxrwxr-x 1 wy1z 2863 Jul 16 1993 1993.jun.21
-rwxrwxr-x 1 wy1z 2585 Jul 16 1993 1993.jun.28
-rwxrwxr-x 1 wy1z 3575 Jul 16 1993 1993.mar.01
-rwxrwxr-x 1 wy1z 4773 Jul 16 1993 1993.mar.08
-rwxrwxr-x 1 wy1z 3759 Jul 16 1993 1993.mar.15
-rwxrwxr-x 1 wy1z 4689 Jul 16 1993 1993.mar.22
-rwxrwxr-x 1 wy1z 3726 Jul 16 1993 1993.mar.29
-rwxrwxr-x 1 wy1z 3098 Jul 16 1993 1993.may.03
-rwxrwxr-x 1 wy1z 4068 Jul 16 1993 1993.may.10
-rwxrwxr-x 1 wy1z 2169 Jul 16 1993 1993.may.17
-rwxrwxr-x 1 wy1z 3350 Jul 16 1993 1993.may.24
-rwxrwxr-x 1 wy1z 1851 Jul 17 1993 Index

barc/barc-list/minutes/executive-committee:
total 17
-rwxrwxr-x 1 wy1z 7979 Jul 17 1993 feb.1993
-rwxrwxr-x 1 wy1z 8677 Jul 17 1993 may.1993

barc/barc-list/minutes/general-meeting:
total 18
-rwxrwxr-x 1 wy1z 322 Jul 17 1993 Index
-rwxrwxr-x 1 wy1z 1503 Jul 16 1993 gen.mtg.mar.1993.corrections
-rwxrwxr-x 1 wy1z 1095 Jul 16 1993 gen.mtg.mar.1993.corrections2
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-rwxrwxr-x 1 wy1z 4225 Jul 16 1993 general.mtg.feb.1993
-rwxrwxr-x 1 wy1z 2990 Jul 16 1993 general.mtg.jan.1993
-rwxrwxr-x 1 wy1z 4259 Jul 16 1993 general.mtg.mar.1993

barc/barc-list/minutes/misc:
total 12
-rwxrwxr-x 1 wy1z 108 Jul 17 1993 Index
-rwxrwxr-x 1 wy1z 7384 Jul 16 1993 cemarc.mtg.1993.jan.1
-rwxrwxr-x 1 wy1z 2324 Jul 16 1993 nesmc.mtg.jan.1993

barc/barc-list/misc:
total 794
-rwxrwxr-x 1 wy1z 13536 Jul 17 1993 Index
-rwxrwxr-x 1 wy1z 1678 Jul 17 1993 barc001
-rwxrwxr-x 1 wy1z 2179 Jul 17 1993 barc002
-rwxrwxr-x 1 wy1z 2073 Jul 17 1993 barc003
-rwxrwxr-x 1 wy1z 2531 Jul 17 1993 barc004
-rwxrwxr-x 1 wy1z 1523 Jul 17 1993 barc006
-rwxrwxr-x 1 wy1z 1534 Jul 17 1993 barc007
-rwxrwxr-x 1 wy1z 2071 Jul 17 1993 barc008
-rwxrwxr-x 1 wy1z 2267 Jul 17 1993 barc009
-rwxrwxr-x 1 wy1z 1958 Jul 17 1993 barc010
-rwxrwxr-x 1 wy1z 3707 Jul 17 1993 barc011
-rwxrwxr-x 1 wy1z 3309 Jul 17 1993 barc015
-rwxrwxr-x 1 wy1z 2841 Jul 17 1993 barc016
-rwxrwxr-x 1 wy1z 2050 Jul 17 1993 barc017
-rwxrwxr-x 1 wy1z 2413 Jul 17 1993 barc018
-rwxrwxr-x 1 wy1z 1868 Jul 17 1993 barc019
-rwxrwxr-x 1 wy1z 1376 Jul 17 1993 barc021
-rwxrwxr-x 1 wy1z 1976 Jul 17 1993 barc022
-rwxrwxr-x 1 wy1z 1793 Jul 17 1993 barc023
-rwxrwxr-x 1 wy1z 5016 Jul 17 1993 barc024
-rwxrwxr-x 1 wy1z 1137 Jul 17 1993 barc025
-rwxrwxr-x 1 wy1z 2046 Jul 17 1993 barc026
-rwxrwxr-x 1 wy1z 989 Jul 17 1993 barc027
-rwxrwxr-x 1 wy1z 1785 Jul 17 1993 barc028
-rwxrwxr-x 1 wy1z 1805 Jul 17 1993 barc030
-rwxrwxr-x 1 wy1z 1138 Jul 17 1993 barc031
-rwxrwxr-x 1 wy1z 3020 Jul 17 1993 barc033
-rwxrwxr-x 1 wy1z 1068 Jul 17 1993 barc034
-rwxrwxr-x 1 wy1z 1459 Jul 17 1993 barc036
-rwxrwxr-x 1 wy1z 1729 Jul 17 1993 barc037
-rwxrwxr-x 1 wy1z 3400 Jul 17 1993 barc038
-rwxrwxr-x 1 wy1z 1121 Jul 17 1993 barc039
-rwxrwxr-x 1 wy1z 3049 Jul 17 1993 barc041
-rwxrwxr-x 1 wy1z 1451 Jul 17 1993 barc042
-rwxrwxr-x 1 wy1z 802 Jul 17 1993 barc043
-rwxrwxr-x 1 wy1z 865 Jul 17 1993 barc045
-rwxrwxr-x 1 wy1z 1216 Jul 17 1993 barc046
-rwxrwxr-x 1 wy1z 1648 Jul 17 1993 barc047
-rwxrwxr-x 1 wy1z 1521 Jul 17 1993 barc049
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-rwxrwxr-x 1 wy1z 986 Jul 17 1993 barc050
-rwxrwxr-x 1 wy1z 2754 Jul 17 1993 barc051
-rwxrwxr-x 1 wy1z 1173 Jul 17 1993 barc053
-rwxrwxr-x 1 wy1z 7696 Jul 17 1993 barc054
-rwxrwxr-x 1 wy1z 6394 Jul 17 1993 barc058
-rwxrwxr-x 1 wy1z 1847 Jul 17 1993 barc059
-rwxrwxr-x 1 wy1z 1105 Jul 17 1993 barc061
-rwxrwxr-x 1 wy1z 2979 Jul 17 1993 barc062
-rwxrwxr-x 1 wy1z 1367 Jul 17 1993 barc063
-rwxrwxr-x 1 wy1z 1739 Jul 17 1993 barc064
-rwxrwxr-x 1 wy1z 1897 Jul 17 1993 barc065
-rwxrwxr-x 1 wy1z 2242 Jul 17 1993 barc067
-rwxrwxr-x 1 wy1z 2282 Jul 17 1993 barc068
-rwxrwxr-x 1 wy1z 7448 Jul 17 1993 barc069
-rwxrwxr-x 1 wy1z 3390 Jul 17 1993 barc070
-rwxrwxr-x 1 wy1z 1735 Jul 17 1993 barc072
-rwxrwxr-x 1 wy1z 1855 Jul 17 1993 barc073
-rwxrwxr-x 1 wy1z 3578 Jul 17 1993 barc074
-rwxrwxr-x 1 wy1z 2690 Jul 17 1993 barc075
-rwxrwxr-x 1 wy1z 2862 Jul 17 1993 barc078
-rwxrwxr-x 1 wy1z 1822 Jul 17 1993 barc079
-rwxrwxr-x 1 wy1z 2140 Jul 17 1993 barc081
-rwxrwxr-x 1 wy1z 1807 Jul 17 1993 barc083
-rwxrwxr-x 1 wy1z 2269 Jul 17 1993 barc084
-rwxrwxr-x 1 wy1z 1910 Jul 17 1993 barc085
-rwxrwxr-x 1 wy1z 2067 Jul 17 1993 barc086
-rwxrwxr-x 1 wy1z 6594 Jul 17 1993 barc087
-rwxrwxr-x 1 wy1z 2438 Jul 17 1993 barc088
-rwxrwxr-x 1 wy1z 3784 Jul 17 1993 barc089
-rwxrwxr-x 1 wy1z 3327 Jul 17 1993 barc090
-rwxrwxr-x 1 wy1z 1673 Jul 17 1993 barc091
-rwxrwxr-x 1 wy1z 2277 Jul 17 1993 barc092
-rwxrwxr-x 1 wy1z 1674 Jul 17 1993 barc093
-rwxrwxr-x 1 wy1z 2047 Jul 17 1993 barc094
-rwxrwxr-x 1 wy1z 3310 Jul 17 1993 barc095
-rwxrwxr-x 1 wy1z 3065 Jul 17 1993 barc096
-rwxrwxr-x 1 wy1z 4360 Jul 17 1993 barc097
-rwxrwxr-x 1 wy1z 5179 Jul 17 1993 barc098
-rwxrwxr-x 1 wy1z 2385 Jul 17 1993 barc099
-rwxrwxr-x 1 wy1z 2764 Jul 17 1993 barc100
-rwxrwxr-x 1 wy1z 3253 Jul 17 1993 barc101
-rwxrwxr-x 1 wy1z 2637 Jul 17 1993 barc102
-rwxrwxr-x 1 wy1z 2839 Jul 17 1993 barc103
-rwxrwxr-x 1 wy1z 3043 Jul 17 1993 barc104
-rwxrwxr-x 1 wy1z 2341 Jul 17 1993 barc105
-rwxrwxr-x 1 wy1z 3914 Jul 17 1993 barc110
-rwxrwxr-x 1 wy1z 2419 Jul 17 1993 barc111
-rwxrwxr-x 1 wy1z 2699 Jul 17 1993 barc114
-rwxrwxr-x 1 wy1z 3322 Jul 17 1993 barc115
-rwxrwxr-x 1 wy1z 4003 Jul 17 1993 barc116
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-rwxrwxr-x 1 wy1z 2337 Jul 17 1993 barc118
-rwxrwxr-x 1 wy1z 2679 Jul 17 1993 barc119
-rwxrwxr-x 1 wy1z 3573 Jul 17 1993 barc121
-rwxrwxr-x 1 wy1z 3893 Jul 17 1993 barc122
-rwxrwxr-x 1 wy1z 3123 Jul 17 1993 barc123
-rwxrwxr-x 1 wy1z 2863 Jul 17 1993 barc124
-rwxrwxr-x 1 wy1z 2953 Jul 17 1993 barc125
-rwxrwxr-x 1 wy1z 1760 Jul 17 1993 barc126
-rwxrwxr-x 1 wy1z 4893 Jul 17 1993 barc127
-rwxrwxr-x 1 wy1z 3511 Jul 17 1993 barc128
-rwxrwxr-x 1 wy1z 7077 Jul 17 1993 barc130
-rwxrwxr-x 1 wy1z 3324 Jul 17 1993 barc131
-rwxrwxr-x 1 wy1z 3887 Jul 17 1993 barc132
-rwxrwxr-x 1 wy1z 5276 Jul 17 1993 barc133
-rwxrwxr-x 1 wy1z 4610 Jul 17 1993 barc135
-rwxrwxr-x 1 wy1z 2286 Jul 17 1993 barc136
-rwxrwxr-x 1 wy1z 2227 Jul 17 1993 barc137
-rwxrwxr-x 1 wy1z 2981 Jul 17 1993 barc139
-rwxrwxr-x 1 wy1z 2123 Jul 17 1993 barc141
-rwxrwxr-x 1 wy1z 2203 Jul 17 1993 barc143
-rwxrwxr-x 1 wy1z 2131 Jul 17 1993 barc144
-rwxrwxr-x 1 wy1z 3348 Jul 17 1993 barc147
-rwxrwxr-x 1 wy1z 2805 Jul 17 1993 barc148
-rwxrwxr-x 1 wy1z 1610 Jul 17 1993 barc150
-rwxrwxr-x 1 wy1z 1268 Jul 17 1993 barc151
-rwxrwxr-x 1 wy1z 1453 Jul 17 1993 barc152
-rwxrwxr-x 1 wy1z 4297 Jul 17 1993 barc153
-rwxrwxr-x 1 wy1z 1741 Jul 17 1993 barc154
-rwxrwxr-x 1 wy1z 1952 Jul 17 1993 barc155
-rwxrwxr-x 1 wy1z 2280 Jul 17 1993 barc156
-rwxrwxr-x 1 wy1z 6203 Jul 17 1993 barc157
-rwxrwxr-x 1 wy1z 1141 Jul 17 1993 barc159
-rwxrwxr-x 1 wy1z 1920 Jul 17 1993 barc160
-rwxrwxr-x 1 wy1z 1197 Jul 17 1993 barc163
-rwxrwxr-x 1 wy1z 7602 Jul 17 1993 barc166
-rwxrwxr-x 1 wy1z 1658 Jul 17 1993 barc167
-rwxrwxr-x 1 wy1z 1298 Jul 17 1993 barc170
-rwxrwxr-x 1 wy1z 1348 Jul 17 1993 barc171
-rwxrwxr-x 1 wy1z 3608 Jul 17 1993 barc172
-rwxrwxr-x 1 wy1z 3613 Jul 17 1993 barc174
-rwxrwxr-x 1 wy1z 1172 Jul 17 1993 barc175
-rwxrwxr-x 1 wy1z 1722 Jul 17 1993 barc176
-rwxrwxr-x 1 wy1z 1596 Jul 17 1993 barc178
-rwxrwxr-x 1 wy1z 2365 Jul 17 1993 barc180
-rwxrwxr-x 1 wy1z 2656 Jul 17 1993 barc181
-rwxrwxr-x 1 wy1z 2664 Jul 17 1993 barc182
-rwxrwxr-x 1 wy1z 1156 Jul 17 1993 barc183
-rwxrwxr-x 1 wy1z 1869 Jul 17 1993 barc184
-rwxrwxr-x 1 wy1z 3097 Jul 17 1993 barc185
-rwxrwxr-x 1 wy1z 2460 Jul 17 1993 barc186
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-rwxrwxr-x 1 wy1z 1203 Jul 17 1993 barc187
-rwxrwxr-x 1 wy1z 4118 Jul 17 1993 barc189
-rwxrwxr-x 1 wy1z 2738 Jul 17 1993 barc190
-rwxrwxr-x 1 wy1z 1180 Jul 17 1993 barc192
-rwxrwxr-x 1 wy1z 1459 Jul 17 1993 barc193
-rwxrwxr-x 1 wy1z 1357 Jul 17 1993 barc194
-rwxrwxr-x 1 wy1z 8266 Jul 17 1993 barc195
-rwxrwxr-x 1 wy1z 1499 Jul 17 1993 barc197
-rwxrwxr-x 1 wy1z 3348 Jul 17 1993 barc198
-rwxrwxr-x 1 wy1z 1505 Jul 17 1993 barc199
-rwxrwxr-x 1 wy1z 3456 Jul 17 1993 barc200
-rwxrwxr-x 1 wy1z 11015 Jul 17 1993 barc201
-rwxrwxr-x 1 wy1z 3369 Jul 17 1993 barc202
-rwxrwxr-x 1 wy1z 4376 Jul 17 1993 barc203
-rwxrwxr-x 1 wy1z 1274 Jul 17 1993 barc204
-rwxrwxr-x 1 wy1z 678 Jul 17 1993 barc205
-rwxrwxr-x 1 wy1z 2599 Jul 17 1993 barc206
-rwxrwxr-x 1 wy1z 1615 Jul 17 1993 barc208
-rwxrwxr-x 1 wy1z 1834 Jul 17 1993 barc209
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-rwxrwxr-x 1 wy1z 1166 Jul 17 1993 barc213
-rwxrwxr-x 1 wy1z 2088 Jul 17 1993 barc214
-rwxrwxr-x 1 wy1z 1858 Jul 17 1993 barc216
-rwxrwxr-x 1 wy1z 1669 Jul 17 1993 barc217
-rwxrwxr-x 1 wy1z 693 Jul 17 1993 barc218
-rwxrwxr-x 1 wy1z 4976 Jul 17 1993 barc224
-rwxrwxr-x 1 wy1z 2607 Jul 17 1993 barc225
-rwxrwxr-x 1 wy1z 2499 Jul 17 1993 barc226
-rwxrwxr-x 1 wy1z 2081 Jul 17 1993 barc227
-rwxrwxr-x 1 wy1z 848 Jul 17 1993 barc228
-rwxrwxr-x 1 wy1z 1494 Jul 17 1993 barc230
-rwxrwxr-x 1 wy1z 1743 Jul 17 1993 barc231
-rwxrwxr-x 1 wy1z 3829 Jul 17 1993 barc232
-rwxrwxr-x 1 wy1z 1248 Jul 17 1993 barc234
-rwxrwxr-x 1 wy1z 1335 Jul 17 1993 barc235
-rwxrwxr-x 1 wy1z 2445 Jul 17 1993 barc237
-rwxrwxr-x 1 wy1z 1965 Jul 17 1993 barc238
-rwxrwxr-x 1 wy1z 5174 Jul 17 1993 barc239
-rwxrwxr-x 1 wy1z 1688 Jul 17 1993 barc240
-rwxrwxr-x 1 wy1z 1719 Jul 17 1993 barc241
-rwxrwxr-x 1 wy1z 794 Jul 17 1993 barc242
-rwxrwxr-x 1 wy1z 1067 Jul 17 1993 barc243
-rwxrwxr-x 1 wy1z 2558 Jul 17 1993 barc244
-rwxrwxr-x 1 wy1z 1060 Jul 17 1993 barc245
-rwxrwxr-x 1 wy1z 2107 Jul 17 1993 barc246
-rwxrwxr-x 1 wy1z 2084 Jul 17 1993 barc247
-rwxrwxr-x 1 wy1z 2142 Jul 17 1993 barc248
-rwxrwxr-x 1 wy1z 1355 Jul 17 1993 barc249
-rwxrwxr-x 1 wy1z 1702 Jul 17 1993 barc252
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-rwxrwxr-x 1 wy1z 3311 Jul 17 1993 barc253
-rwxrwxr-x 1 wy1z 3020 Jul 17 1993 barc254
-rwxrwxr-x 1 wy1z 745 Jul 17 1993 barc256
-rwxrwxr-x 1 wy1z 699 Jul 17 1993 barc257
-rwxrwxr-x 1 wy1z 1313 Jul 17 1993 barc258
-rwxrwxr-x 1 wy1z 2711 Jul 17 1993 barc261
-rwxrwxr-x 1 wy1z 1121 Jul 17 1993 barc262
-rwxrwxr-x 1 wy1z 1371 Jul 17 1993 barc263
-rwxrwxr-x 1 wy1z 968 Jul 17 1993 barc264
-rwxrwxr-x 1 wy1z 1745 Jul 17 1993 barc267
-rwxrwxr-x 1 wy1z 1815 Jul 17 1993 barc268
-rwxrwxr-x 1 wy1z 1368 Jul 17 1993 barc270
-rwxrwxr-x 1 wy1z 972 Jul 17 1993 barc272
-rwxrwxr-x 1 wy1z 2051 Jul 17 1993 barc273
-rwxrwxr-x 1 wy1z 1110 Jul 17 1993 barc274
-rwxrwxr-x 1 wy1z 1004 Jul 17 1993 barc275
-rwxrwxr-x 1 wy1z 913 Jul 17 1993 barc276
-rwxrwxr-x 1 wy1z 1581 Jul 17 1993 barc277
-rwxrwxr-x 1 wy1z 1076 Jul 17 1993 barc278
-rwxrwxr-x 1 wy1z 850 Jul 17 1993 barc279
-rwxrwxr-x 1 wy1z 2441 Jul 17 1993 barc280
-rwxrwxr-x 1 wy1z 2459 Jul 17 1993 barc281
-rwxrwxr-x 1 wy1z 2086 Jul 17 1993 barc283
-rwxrwxr-x 1 wy1z 1645 Jul 17 1993 barc284
-rwxrwxr-x 1 wy1z 1914 Jul 17 1993 barc285
-rwxrwxr-x 1 wy1z 1752 Jul 17 1993 barc286
-rwxrwxr-x 1 wy1z 611 Jul 17 1993 barc287
-rwxrwxr-x 1 wy1z 512 Jul 17 1993 barc288
-rwxrwxr-x 1 wy1z 2113 Jul 17 1993 barc289
-rwxrwxr-x 1 wy1z 1036 Jul 17 1993 barc290
-rwxrwxr-x 1 wy1z 1707 Jul 17 1993 barc292
-rwxrwxr-x 1 wy1z 1671 Jul 17 1993 barc293
-rwxrwxr-x 1 wy1z 1333 Jul 17 1993 barc295
-rwxrwxr-x 1 wy1z 562 Jul 17 1993 barc296
-rwxrwxr-x 1 wy1z 1183 Jul 17 1993 barc298
-rwxrwxr-x 1 wy1z 7853 Jul 17 1993 barc300
-rwxrwxr-x 1 wy1z 1829 Jul 17 1993 barc301
-rwxrwxr-x 1 wy1z 1693 Jul 17 1993 barc302
-rwxrwxr-x 1 wy1z 2021 Jul 17 1993 barc303
-rwxrwxr-x 1 wy1z 1598 Jul 17 1993 barc304
-rwxrwxr-x 1 wy1z 1892 Jul 17 1993 barc305
-rwxrwxr-x 1 wy1z 2046 Jul 17 1993 barc306
-rwxrwxr-x 1 wy1z 1628 Jul 17 1993 barc308
-rwxrwxr-x 1 wy1z 2342 Jul 17 1993 barc309
-rwxrwxr-x 1 wy1z 1484 Jul 17 1993 barc310
-rwxrwxr-x 1 wy1z 2822 Jul 17 1993 barc311
-rwxrwxr-x 1 wy1z 1626 Jul 17 1993 barc312
-rwxrwxr-x 1 wy1z 1733 Jul 17 1993 barc314
-rwxrwxr-x 1 wy1z 842 Jul 17 1993 barc315
-rwxrwxr-x 1 wy1z 4888 Jul 17 1993 barc316
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-rwxrwxr-x 1 wy1z 4201 Jul 17 1993 barc317
-rwxrwxr-x 1 wy1z 1285 Jul 17 1993 barc318
-rwxrwxr-x 1 wy1z 2183 Jul 17 1993 barc319
-rwxrwxr-x 1 wy1z 1681 Jul 17 1993 barc320
-rwxrwxr-x 1 wy1z 1712 Jul 17 1993 barc321
-rwxrwxr-x 1 wy1z 1824 Jul 17 1993 barc322
-rwxrwxr-x 1 wy1z 2508 Jul 17 1993 barc323
-rwxrwxr-x 1 wy1z 1241 Jul 17 1993 barc324
-rwxrwxr-x 1 wy1z 1624 Jul 17 1993 barc325
-rwxrwxr-x 1 wy1z 2354 Jul 17 1993 barc326
-rwxrwxr-x 1 wy1z 1841 Jul 17 1993 barc327
-rwxrwxr-x 1 wy1z 934 Jul 17 1993 barc328
-rwxrwxr-x 1 wy1z 1112 Jul 17 1993 barc329
-rwxrwxr-x 1 wy1z 1850 Jul 17 1993 barc331
-rwxrwxr-x 1 wy1z 1484 Jul 17 1993 barc332
-rwxrwxr-x 1 wy1z 1479 Jul 17 1993 barc333
-rwxrwxr-x 1 wy1z 2152 Jul 17 1993 barc334
-rwxrwxr-x 1 wy1z 2138 Jul 17 1993 barc335
-rwxrwxr-x 1 wy1z 1764 Jul 17 1993 barc336
-rwxrwxr-x 1 wy1z 1374 Jul 17 1993 barc337
-rwxrwxr-x 1 wy1z 2561 Jul 17 1993 barc339
-rwxrwxr-x 1 wy1z 1129 Jul 17 1993 barc341
-rwxrwxr-x 1 wy1z 1562 Jul 17 1993 barc343
-rwxrwxr-x 1 wy1z 1500 Jul 17 1993 barc345
-rwxrwxr-x 1 wy1z 841 Jul 17 1993 barc346
-rwxrwxr-x 1 wy1z 1766 Jul 17 1993 barc347
-rwxrwxr-x 1 wy1z 1895 Jul 17 1993 barc348
-rwxrwxr-x 1 wy1z 1705 Jul 17 1993 barc350
-rwxrwxr-x 1 wy1z 1296 Jul 17 1993 barc351
-rwxrwxr-x 1 wy1z 10062 Jul 17 1993 barc352
-rwxrwxr-x 1 wy1z 2156 Jul 17 1993 barc353
-rwxrwxr-x 1 wy1z 1676 Jul 17 1993 barc354
-rwxrwxr-x 1 wy1z 3409 Jul 17 1993 barc355
-rwxrwxr-x 1 wy1z 1544 Jul 17 1993 barc356
-rwxrwxr-x 1 wy1z 1967 Jul 17 1993 barc357
-rwxrwxr-x 1 wy1z 1929 Jul 17 1993 barc358
-rwxrwxr-x 1 wy1z 1761 Jul 17 1993 barc359
-rwxrwxr-x 1 wy1z 5443 Jul 17 1993 barc363
-rwxrwxr-x 1 wy1z 845 Jul 17 1993 barc364

barc/barc-list/ve-sessions:
total 19
-rwxrwxr-x 1 wy1z 1710 Jul 16 1993 1992.dec.07
-rwxrwxr-x 1 wy1z 1798 Jul 16 1993 1993.feb.01
-rwxrwxr-x 1 wy1z 2195 Jul 16 1993 1993.jul.05
-rwxrwxr-x 1 wy1z 1847 Jul 16 1993 1993.mar.01
-rwxrwxr-x 1 wy1z 1832 Jul 16 1993 1993.may.03
-rwxrwxr-x 1 wy1z 350 Jul 17 1993 Index
-rwxrwxr-x 1 wy1z 1507 Jul 16 1993 carrol.center
-rwxrwxr-x 1 wy1z 1670 Jul 16 1993 ky1n.info
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-rwxrwxr-x 1 wy1z 2828 Jul 16 1993 team-change.1992.nov.02

barc/barc-list/workshops:
total 39
-rwxrwxr-x 1 wy1z 569 Jul 17 1993 Index
-rwxrwxr-x 1 wy1z 2267 Jul 16 1993 barc009
-rwxrwxr-x 1 wy1z 3712 Jul 16 1993 barc014
-rwxrwxr-x 1 wy1z 3613 Jul 16 1993 barc107
-rwxrwxr-x 1 wy1z 3823 Jul 16 1993 barc140
-rwxrwxr-x 1 wy1z 3752 Jul 16 1993 barc146
-rwxrwxr-x 1 wy1z 1722 Jul 16 1993 barc164
-rwxrwxr-x 1 wy1z 2124 Jul 17 1993 barc169
-rwxrwxr-x 1 wy1z 4614 Jul 16 1993 barc251
-rwxrwxr-x 1 wy1z 2553 Jul 16 1993 barc294
-rwxrwxr-x 1 wy1z 1681 Jul 16 1993 barc320
-rwxrwxr-x 1 wy1z 1129 Jul 16 1993 barc341
-rwxrwxr-x 1 wy1z 1895 Jul 16 1993 barc348

barc/barc-races:
total 269
-rwxrwxr-x 1 wy1z 13411 Nov 29 1992 1991.001.Z
-rwxrwxr-x 1 wy1z 14414 Jun 14 1993 RACES
-rwxrwxr-x 1 wy1z 199 Mar 6 1993 README
-rwxrwxr-x 1 wy1z 2797 Jul 13 1993 hurricane-drill
-rwxrwxr-x 1 wy1z 1293 Nov 29 1992 racesbul.167.Z
-rwxrwxr-x 1 wy1z 1184 Nov 29 1992 racesbul.168.Z
-rwxrwxr-x 1 wy1z 1004 Nov 29 1992 racesbul.169.Z
-rwxrwxr-x 1 wy1z 854 Nov 29 1992 racesbul.170.Z
-rwxrwxr-x 1 wy1z 1235 Nov 29 1992 racesbul.171.Z
-rwxrwxr-x 1 wy1z 1057 Nov 29 1992 racesbul.172.Z
-rwxrwxr-x 1 wy1z 868 Nov 29 1992 racesbul.173.Z
-rwxrwxr-x 1 wy1z 1237 Nov 29 1992 racesbul.174.Z
-rwxrwxr-x 1 wy1z 1308 Nov 29 1992 racesbul.175.Z
-rwxrwxr-x 1 wy1z 1245 Nov 29 1992 racesbul.176.Z
-rwxrwxr-x 1 wy1z 1026 Nov 29 1992 racesbul.177.Z
-rwxrwxr-x 1 wy1z 1106 Nov 29 1992 racesbul.178.Z
-rwxrwxr-x 1 wy1z 1486 Nov 29 1992 racesbul.179.Z
-rwxrwxr-x 1 wy1z 1110 Nov 29 1992 racesbul.180.Z
-rwxrwxr-x 1 wy1z 1794 Nov 29 1992 racesbul.181.Z
-rwxrwxr-x 1 wy1z 1600 Nov 29 1992 racesbul.182.Z
-rwxrwxr-x 1 wy1z 1704 Nov 29 1992 racesbul.183.Z
-rwxrwxr-x 1 wy1z 1499 Nov 29 1992 racesbul.184.Z
-rwxrwxr-x 1 wy1z 1714 Nov 29 1992 racesbul.185.Z
-rwxrwxr-x 1 wy1z 1316 Nov 29 1992 racesbul.186.Z
-rwxrwxr-x 1 wy1z 1033 Nov 29 1992 racesbul.187.Z
-rwxrwxr-x 1 wy1z 1517 Nov 29 1992 racesbul.188.Z
-rwxrwxr-x 1 wy1z 1681 Nov 29 1992 racesbul.189.Z
-rwxrwxr-x 1 wy1z 1835 Nov 29 1992 racesbul.190.Z
-rwxrwxr-x 1 wy1z 1315 Nov 29 1992 racesbul.191.Z
-rwxrwxr-x 1 wy1z 1656 Nov 29 1992 racesbul.192.Z
-rwxrwxr-x 1 wy1z 1640 Nov 29 1992 racesbul.193.Z
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-rwxrwxr-x 1 wy1z 1209 Nov 29 1992 racesbul.194.Z
-rwxrwxr-x 1 wy1z 1448 Nov 29 1992 racesbul.195.Z
-rwxrwxr-x 1 wy1z 1536 Nov 29 1992 racesbul.196.Z
-rwxrwxr-x 1 wy1z 1481 Nov 29 1992 racesbul.197.Z
-rwxrwxr-x 1 wy1z 1366 Nov 29 1992 racesbul.198.Z
-rwxrwxr-x 1 wy1z 1194 Nov 29 1992 racesbul.199.Z
-rwxrwxr-x 1 wy1z 1160 Nov 29 1992 racesbul.200.Z
-rwxrwxr-x 1 wy1z 1169 Nov 29 1992 racesbul.201.Z
-rwxrwxr-x 1 wy1z 1674 Nov 29 1992 racesbul.202.Z
-rwxrwxr-x 1 wy1z 1074 Nov 29 1992 racesbul.203.Z
-rwxrwxr-x 1 wy1z 1102 Nov 29 1992 racesbul.204.Z
-rwxrwxr-x 1 wy1z 1266 Nov 29 1992 racesbul.205.Z
-rwxrwxr-x 1 wy1z 1363 Nov 29 1992 racesbul.206.Z
-rwxrwxr-x 1 wy1z 1811 Nov 29 1992 racesbul.207.Z
-rwxrwxr-x 1 wy1z 1429 Nov 29 1992 racesbul.208.Z
-rwxrwxr-x 1 wy1z 1590 Nov 29 1992 racesbul.209.Z
-rwxrwxr-x 1 wy1z 1462 Nov 29 1992 racesbul.210.Z
-rwxrwxr-x 1 wy1z 1186 Nov 29 1992 racesbul.211.Z
-rwxrwxr-x 1 wy1z 749 Nov 29 1992 racesbul.212.Z
-rwxrwxr-x 1 wy1z 1344 Nov 29 1992 racesbul.213.Z
-rwxrwxr-x 1 wy1z 1575 Nov 29 1992 racesbul.214.Z
-rwxrwxr-x 1 wy1z 997 Nov 29 1992 racesbul.215.Z
-rwxrwxr-x 1 wy1z 1245 Nov 29 1992 racesbul.216.Z
-rwxrwxr-x 1 wy1z 1378 Nov 29 1992 racesbul.217.Z
-rwxrwxr-x 1 wy1z 1398 Nov 29 1992 racesbul.218.Z
-rwxrwxr-x 1 wy1z 1073 Nov 29 1992 racesbul.219.Z
-rwxrwxr-x 1 wy1z 1173 Nov 29 1992 racesbul.220.Z
-rwxrwxr-x 1 wy1z 1268 Nov 29 1992 racesbul.221.Z
-rwxrwxr-x 1 wy1z 1464 Nov 29 1992 racesbul.222.Z
-rwxrwxr-x 1 wy1z 1191 Nov 29 1992 racesbul.223.Z
-rwxrwxr-x 1 wy1z 1285 Nov 29 1992 racesbul.224.Z
-rwxrwxr-x 1 wy1z 1110 Nov 29 1992 racesbul.225.Z
-rwxrwxr-x 1 wy1z 1227 Nov 29 1992 racesbul.226.Z
-rwxrwxr-x 1 wy1z 1294 Nov 29 1992 racesbul.227.Z
-rwxrwxr-x 1 wy1z 1362 Nov 29 1992 racesbul.228.Z
-rwxrwxr-x 1 wy1z 1296 Nov 29 1992 racesbul.229.Z
-rwxrwxr-x 1 wy1z 1297 Nov 29 1992 racesbul.230.Z
-rwxrwxr-x 1 wy1z 1428 Nov 29 1992 racesbul.231.Z
-rwxrwxr-x 1 wy1z 1378 Nov 29 1992 racesbul.232.Z
-rwxrwxr-x 1 wy1z 1479 Nov 29 1992 racesbul.233.Z
-rwxrwxr-x 1 wy1z 1561 Nov 29 1992 racesbul.234.Z
-rwxrwxr-x 1 wy1z 1571 Nov 29 1992 racesbul.235.Z
-rwxrwxr-x 1 wy1z 1125 Nov 29 1992 racesbul.236.Z
-rwxrwxr-x 1 wy1z 1319 Nov 29 1992 racesbul.237.Z
-rwxrwxr-x 1 wy1z 1318 Nov 29 1992 racesbul.238.Z
-rwxrwxr-x 1 wy1z 1358 Nov 29 1992 racesbul.239.Z
-rwxrwxr-x 1 wy1z 1343 Nov 29 1992 racesbul.240.Z
-rwxrwxr-x 1 wy1z 1310 Nov 29 1992 racesbul.241.Z
-rwxrwxr-x 1 wy1z 1730 Nov 29 1992 racesbul.242.Z
-rwxrwxr-x 1 wy1z 1198 Nov 29 1992 racesbul.243.Z
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-rwxrwxr-x 1 wy1z 1321 Nov 29 1992 racesbul.244.Z
-rwxrwxr-x 1 wy1z 1195 Nov 29 1992 racesbul.245.Z
-rwxrwxr-x 1 wy1z 1318 Nov 29 1992 racesbul.246.Z
-rwxrwxr-x 1 wy1z 1145 Nov 29 1992 racesbul.247.Z
-rwxrwxr-x 1 wy1z 1481 Nov 29 1992 racesbul.248.Z
-rwxrwxr-x 1 wy1z 1411 Nov 29 1992 racesbul.249.Z
-rwxrwxr-x 1 wy1z 1600 Nov 29 1992 racesbul.250.Z
-rwxrwxr-x 1 wy1z 1960 Dec 5 1992 racesbul.251.Z
-rwxrwxr-x 1 wy1z 1773 Dec 21 1992 racesbul.252.Z
-rwxrwxr-x 1 wy1z 1646 Dec 21 1992 racesbul.253.Z
-rwxrwxr-x 1 wy1z 2152 Dec 26 1992 racesbul.254.Z
-rwxrwxr-x 1 wy1z 1513 Jan 2 1993 racesbul.255.Z
-rwxrwxr-x 1 wy1z 2267 Jan 16 1993 racesbul.256.Z
-rwxrwxr-x 1 wy1z 1689 Jan 17 1993 racesbul.257.Z
-rwxrwxr-x 1 wy1z 1828 Jan 24 1993 racesbul.258.Z
-rwxrwxr-x 1 wy1z 1931 Jan 30 1993 racesbul.259.Z
-rwxrwxr-x 1 wy1z 1895 Feb 7 1993 racesbul.260.Z
-rwxrwxr-x 1 wy1z 1795 Feb 20 1993 racesbul.261.Z
-rwxrwxr-x 1 wy1z 1723 Feb 20 1993 racesbul.262.Z
-rwxrwxr-x 1 wy1z 1604 Feb 27 1993 racesbul.263.Z
-rwxrwxr-x 1 wy1z 1986 Mar 14 1993 racesbul.265.Z
-rwxrwxr-x 1 wy1z 2051 Mar 20 1993 racesbul.266.Z
-rwxrwxr-x 1 wy1z 1975 Mar 27 1993 racesbul.267.Z
-rwxrwxr-x 1 wy1z 2952 Apr 5 1993 racesbul.268
-rwxrwxr-x 1 wy1z 2839 Apr 24 1993 racesbul.269
-rwxrwxr-x 1 wy1z 2050 Apr 24 1993 racesbul.270
-rwxrwxr-x 1 wy1z 2475 Apr 24 1993 racesbul.271
-rwxrwxr-x 1 wy1z 2874 May 4 1993 racesbul.272
-rwxrwxr-x 1 wy1z 1967 May 9 1993 racesbul.273
-rwxrwxr-x 1 wy1z 2388 May 16 1993 racesbul.274
-rwxrwxr-x 1 wy1z 2708 May 23 1993 racesbul.275
-rwxrwxr-x 1 wy1z 2781 May 31 1993 racesbul.276
-rwxrwxr-x 1 wy1z 2488 Jun 14 1993 racesbul.278
-rwxrwxr-x 1 wy1z 3450 Jul 12 1993 racesbul.280
-rwxrwxr-x 1 wy1z 2386 Jul 12 1993 racesbul.282
-rwxrwxr-x 1 wy1z 1316 Nov 29 1992 tacalls.asc.Z

barc/fox-list:
total 104
-rwxrwxr-x 1 wy1z 1592 Dec 12 1992 README
-rwxrwxr-x 1 wy1z 10029 Nov 28 1992 fox-hunt-tips.4
-rwxrwxr-x 1 wy1z 4295 Nov 28 1992 fox-hunt-tips.5b
-rwxrwxr-x 1 wy1z 20129 Jul 5 1993 fox-list
-rwxrwxr-x 1 wy1z 47052 Jul 5 1993 fox-list-old
-rwxrwxr-x 1 wy1z 5923 Nov 28 1992 fox-what?
-rwxrwxr-x 1 wy1z 3710 Nov 28 1992 foxhunt-workshop.6.20.92
-rwxrwxr-x 1 wy1z 10661 Nov 28 1992 last-weeks-fox-hunt

barc/official-docs:
total 92
-rwxrwxr-x 1 wy1z 2474 Jan 25 1993 1993-membership-appl-form
```

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-rwxrwxr-x 1 wy1z 254 Mar 9 15:45 1994-app-README
-rwxrwxr-x 1 wy1z 3820 Mar 9 15:45 1994-membership-appl-form
-rwxrwxr-x 1 wy1z 7989 Mar 9 15:45 ARCMB-MEMORANDUM
-rwxrwxr-x 1 wy1z 6265 Mar 9 15:45 ARTICLES-OF-ORGANIZATION
-rwxrwxr-x 1 wy1z 5472 Mar 9 15:45 BYLAWS
-rwxrwxr-x 1 wy1z 2257 Mar 9 15:45 BYLAWS-AMENDMENTS
-rwxrwxr-x 1 wy1z 5208 Mar 9 15:45 barcinf2.txt
-rwxrwxr-x 1 wy1z 2574 Mar 9 15:45 barcinfo.txt
-rwxrwxr-x 1 wy1z 17867 Jan 24 1993 club-roster
-rwxrwxr-x 1 wy1z 1950 Mar 9 15:45 hamvscb.txt
-rwxrwxr-x 1 wy1z 2639 Mar 9 15:45 howto.txt
-rwxrwxr-x 1 wy1z 19271 Mar 9 15:46 intro-barc.txt
-rwxrwxr-x 1 wy1z 1918 Mar 9 15:46 repeater.txt
-rwxrwxr-x 1 wy1z 2907 Mar 9 15:46 rptrdos.txt
-rwxrwxr-x 1 wy1z 3842 Mar 9 15:46 whatsham.txt

barc/w1aw-list:
total 6
drwxrwxr-x 5 wy1z 512 Mar 15 11:57 arlb
drwxrwxr-x 5 wy1z 512 Mar 15 11:57 arld
drwxrwxr-x 5 wy1z 512 Mar 15 11:58 arlk
drwxrwxr-x 5 wy1z 512 Mar 15 11:58 arlp
drwxrwxr-x 4 wy1z 512 Mar 15 11:58 arls
drwxrwxr-x 5 wy1z 512 Mar 15 11:58 arlx

barc/w1aw-list/arlb:
total 4
drwxrwxr-x 2 wy1z 512 Mar 15 11:57 1992
drwxrwxr-x 2 wy1z 1536 Mar 15 11:57 1993
drwxrwxr-x 2 wy1z 512 Mar 15 11:57 1994

barc/w1aw-list/arlb/1992:
total 41
-rwxrwxr-x 1 wy1z 1331 Feb 11 10:28 arlb104.92
-rwxrwxr-x 1 wy1z 1986 Feb 11 10:28 arlb105.92
-rwxrwxr-x 1 wy1z 2687 Feb 11 10:28 arlb106.92
-rwxrwxr-x 1 wy1z 2190 Feb 11 10:28 arlb107.92
-rwxrwxr-x 1 wy1z 2451 Feb 11 10:28 arlb108.92
-rwxrwxr-x 1 wy1z 2375 Feb 11 10:28 arlb109.92
-rwxrwxr-x 1 wy1z 2941 Feb 11 10:28 arlb110.92
-rwxrwxr-x 1 wy1z 3293 Feb 11 10:28 arlb111.92
-rwxrwxr-x 1 wy1z 3521 Feb 11 10:28 arlb112.92
-rwxrwxr-x 1 wy1z 2701 Feb 11 10:28 arlb113.92
-rwxrwxr-x 1 wy1z 2404 Feb 11 10:28 arlb114.92
-rwxrwxr-x 1 wy1z 2750 Feb 11 10:28 arlb115.92
-rwxrwxr-x 1 wy1z 2899 Feb 11 10:28 arlb116.92
-rwxrwxr-x 1 wy1z 1777 Feb 11 10:28 arlb118.92

barc/w1aw-list/arlb/1993:
total 230
-rwxrwxr-x 1 wy1z 2028 Feb 11 10:28 arlb001.93
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-rwxrwxr-x 1 wy1z 1966 Feb 11 10:28 arlb002.93
-rwxrwxr-x 1 wy1z 1745 Feb 11 10:28 arlb003.93
-rwxrwxr-x 1 wy1z 3876 Feb 11 10:28 arlb004.93
-rwxrwxr-x 1 wy1z 2720 Feb 11 10:28 arlb005.93
-rwxrwxr-x 1 wy1z 2766 Feb 11 10:28 arlb006.93
-rwxrwxr-x 1 wy1z 2883 Feb 11 10:28 arlb007.93
-rwxrwxr-x 1 wy1z 1787 Feb 11 10:28 arlb008.93
-rwxrwxr-x 1 wy1z 2090 Feb 11 10:28 arlb009.93
-rwxrwxr-x 1 wy1z 3593 Feb 11 10:28 arlb010.93
-rwxrwxr-x 1 wy1z 4718 Feb 11 10:28 arlb012.93
-rwxrwxr-x 1 wy1z 1785 Feb 11 10:28 arlb013.93
-rwxrwxr-x 1 wy1z 4250 Feb 11 10:28 arlb014.93
-rwxrwxr-x 1 wy1z 2091 Feb 11 10:28 arlb015.93
-rwxrwxr-x 1 wy1z 2369 Feb 11 10:28 arlb016.93
-rwxrwxr-x 1 wy1z 2633 Feb 11 10:28 arlb017.93
-rwxrwxr-x 1 wy1z 2888 Feb 11 10:28 arlb018.93
-rwxrwxr-x 1 wy1z 2488 Feb 11 10:28 arlb019.93
-rwxrwxr-x 1 wy1z 2571 Feb 11 10:28 arlb020.93
-rwxrwxr-x 1 wy1z 2351 Feb 11 10:28 arlb021.93
-rwxrwxr-x 1 wy1z 2785 Feb 11 10:28 arlb022.93
-rwxrwxr-x 1 wy1z 3699 Feb 11 10:28 arlb023.93
-rwxrwxr-x 1 wy1z 3783 Feb 11 10:28 arlb024.93
-rwxrwxr-x 1 wy1z 2789 Feb 11 10:28 arlb025.93
-rwxrwxr-x 1 wy1z 2543 Feb 11 10:28 arlb026.93
-rwxrwxr-x 1 wy1z 2544 Feb 11 10:28 arlb027.93
-rwxrwxr-x 1 wy1z 3114 Feb 11 10:28 arlb028.93
-rwxrwxr-x 1 wy1z 2710 Feb 11 10:28 arlb029.93
-rwxrwxr-x 1 wy1z 2559 Feb 11 10:28 arlb030.93
-rwxrwxr-x 1 wy1z 2287 Feb 11 10:28 arlb031.93
-rwxrwxr-x 1 wy1z 7079 Feb 11 10:28 arlb032.93
-rwxrwxr-x 1 wy1z 1931 Feb 11 10:28 arlb034.93
-rwxrwxr-x 1 wy1z 3664 Feb 11 10:28 arlb035.93
-rwxrwxr-x 1 wy1z 3227 Feb 11 10:28 arlb036.93
-rwxrwxr-x 1 wy1z 3167 Feb 11 10:28 arlb037.93
-rwxrwxr-x 1 wy1z 1952 Feb 11 10:28 arlb038.93
-rwxrwxr-x 1 wy1z 2402 Feb 11 10:28 arlb039.93
-rwxrwxr-x 1 wy1z 2244 Feb 11 10:28 arlb040.93
-rwxrwxr-x 1 wy1z 2363 Feb 11 10:28 arlb041.93
-rwxrwxr-x 1 wy1z 2941 Feb 11 10:28 arlb042.93
-rwxrwxr-x 1 wy1z 3478 Feb 11 10:28 arlb043.93
-rwxrwxr-x 1 wy1z 3034 Feb 11 10:28 arlb044.93
-rwxrwxr-x 1 wy1z 2922 Feb 11 10:28 arlb045.93
-rwxrwxr-x 1 wy1z 2115 Feb 11 10:28 arlb046.93
-rwxrwxr-x 1 wy1z 2764 Feb 11 10:28 arlb047.93
-rwxrwxr-x 1 wy1z 1973 Feb 11 10:28 arlb048.93
-rwxrwxr-x 1 wy1z 3598 Feb 11 10:28 arlb049.93
-rwxrwxr-x 1 wy1z 2562 Feb 11 10:28 arlb050.93
-rwxrwxr-x 1 wy1z 2847 Feb 11 10:28 arlb051.93
-rwxrwxr-x 1 wy1z 2765 Feb 11 10:28 arlb052.93
-rwxrwxr-x 1 wy1z 3472 Feb 11 10:28 arlb053.93
```

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-rwxrwxr-x 1 wy1z 2743 Feb 11 10:28 arlb054.93
-rwxrwxr-x 1 wy1z 3790 Feb 11 10:28 arlb055.93
-rwxrwxr-x 1 wy1z 3162 Feb 11 10:28 arlb056.93
-rwxrwxr-x 1 wy1z 3359 Feb 11 10:28 arlb058.93
-rwxrwxr-x 1 wy1z 2343 Feb 11 10:28 arlb059.93
-rwxrwxr-x 1 wy1z 2921 Feb 11 10:28 arlb060.93
-rwxrwxr-x 1 wy1z 2798 Feb 11 10:28 arlb061.93
-rwxrwxr-x 1 wy1z 3045 Feb 11 10:28 arlb063.93
-rwxrwxr-x 1 wy1z 2339 Feb 11 10:28 arlb064.93
-rwxrwxr-x 1 wy1z 2308 Feb 11 10:28 arlb065.93
-rwxrwxr-x 1 wy1z 2586 Feb 11 10:28 arlb066.93
-rwxrwxr-x 1 wy1z 4117 Feb 11 10:28 arlb067.93
-rwxrwxr-x 1 wy1z 3654 Feb 11 10:28 arlb068.93
-rwxrwxr-x 1 wy1z 2308 Feb 11 10:28 arlb069.93
-rwxrwxr-x 1 wy1z 8230 Feb 11 10:28 arlb115.93
-rwxrwxr-x 1 wy1z 3339 Feb 11 10:28 arlb120.93
-rwxrwxr-x 1 wy1z 2875 Feb 11 10:28 arlb121.93
-rwxrwxr-x 1 wy1z 1898 Feb 11 10:28 arlb122.93

barc/w1aw-list/arlb/1994:
total 72
-rwxrwxr-x 1 wy1z 2673 Feb 11 10:28 arlb002.94
-rwxrwxr-x 1 wy1z 3383 Feb 11 10:28 arlb003.94
-rwxrwxr-x 1 wy1z 3287 Feb 11 10:28 arlb004.94
-rwxrwxr-x 1 wy1z 2805 Feb 11 10:28 arlb005.94
-rwxrwxr-x 1 wy1z 1894 Feb 11 10:28 arlb006.94
-rwxrwxr-x 1 wy1z 2840 Feb 11 10:28 arlb007.94
-rwxrwxr-x 1 wy1z 3106 Feb 11 10:28 arlb008.94
-rwxrwxr-x 1 wy1z 3550 Feb 11 10:28 arlb009.94
-rwxrwxr-x 1 wy1z 2499 Feb 11 10:28 arlb010.94
-rwxrwxr-x 1 wy1z 4848 Feb 11 10:28 arlb011.94
-rwxrwxr-x 1 wy1z 3478 Feb 11 10:28 arlb012.94
-rwxrwxr-x 1 wy1z 1600 Feb 11 10:00 arlb013.94
-rwxrwxr-x 1 wy1z 1756 Feb 11 10:00 arlb014.94
-rwxrwxr-x 1 wy1z 2293 Feb 11 10:00 arlb015.94
-rwxrwxr-x 1 wy1z 3397 Feb 11 10:00 arlb016.94
-rwxrwxr-x 1 wy1z 2439 Feb 11 10:00 arlb017.94
-rwxrwxr-x 1 wy1z 2688 Feb 16 15:05 arlb018.94
-rwxrwxr-x 1 wy1z 2465 Feb 16 12:10 arlb019.94
-rwxrwxr-x 1 wy1z 1810 Mar 8 23:21 arlb020.94
-rwxrwxr-x 1 wy1z 2330 Mar 8 23:21 arlb021.94
-rwxrwxr-x 1 wy1z 1265 Mar 9 17:56 arlb022.94
-rwxrwxr-x 1 wy1z 1561 Mar 9 18:23 arlb023.94
-rwxrwxr-x 1 wy1z 1485 Mar 10 11:01 arlb024.94
-rwxrwxr-x 1 wy1z 1601 Mar 10 11:01 arlb025.94

barc/w1aw-list/arld:
total 3
drwxrwxr-x 2 wy1z 512 Mar 15 11:57 1992
drwxrwxr-x 2 wy1z 1024 Mar 15 11:57 1993
drwxrwxr-x 2 wy1z 512 Mar 15 11:57 1994
```

```
barc/w1aw-list/arld/1992:
total 31
-rwxrwxr-x 1 wy1z 2750 Feb 11 10:35 arld056.92
-rwxrwxr-x 1 wy1z 4758 Feb 11 10:35 arld057.92
-rwxrwxr-x 1 wy1z 2659 Feb 11 10:35 arld058.92
-rwxrwxr-x 1 wy1z 3813 Feb 11 10:35 arld059.92
-rwxrwxr-x 1 wy1z 3411 Feb 11 10:35 arld060.92
-rwxrwxr-x 1 wy1z 3245 Feb 11 10:35 arld061.92
-rwxrwxr-x 1 wy1z 3704 Feb 11 10:35 arld062.92
-rwxrwxr-x 1 wy1z 3751 Feb 11 10:35 arld063.92

barc/w1aw-list/arld/1993:
total 149
-rwxrwxr-x 1 wy1z 3179 Feb 11 10:35 arld001.93
-rwxrwxr-x 1 wy1z 1867 Feb 11 10:35 arld002.93
-rwxrwxr-x 1 wy1z 3496 Feb 11 10:35 arld004.93
-rwxrwxr-x 1 wy1z 2179 Feb 11 10:35 arld005.93
-rwxrwxr-x 1 wy1z 4808 Feb 11 10:35 arld006.93
-rwxrwxr-x 1 wy1z 1737 Feb 11 10:35 arld008.93
-rwxrwxr-x 1 wy1z 4971 Feb 11 10:35 arld009.93
-rwxrwxr-x 1 wy1z 3410 Feb 11 10:35 arld010.93
-rwxrwxr-x 1 wy1z 4591 Feb 11 10:35 arld011.93
-rwxrwxr-x 1 wy1z 4981 Feb 11 10:35 arld012.93
-rwxrwxr-x 1 wy1z 8352 Feb 11 10:35 arld013.93
-rwxrwxr-x 1 wy1z 3275 Feb 11 10:35 arld014.93
-rwxrwxr-x 1 wy1z 5353 Feb 11 10:35 arld015.93
-rwxrwxr-x 1 wy1z 9062 Feb 11 10:35 arld016.93
-rwxrwxr-x 1 wy1z 5511 Feb 11 10:35 arld017.93
-rwxrwxr-x 1 wy1z 2893 Feb 11 10:35 arld018.93
-rwxrwxr-x 1 wy1z 3173 Feb 11 10:35 arld019.93
-rwxrwxr-x 1 wy1z 3772 Feb 11 10:35 arld020.93
-rwxrwxr-x 1 wy1z 5356 Feb 11 10:35 arld021.93
-rwxrwxr-x 1 wy1z 2733 Feb 11 10:35 arld022.93
-rwxrwxr-x 1 wy1z 4578 Feb 11 10:35 arld023.93
-rwxrwxr-x 1 wy1z 5622 Feb 11 10:35 arld024.93
-rwxrwxr-x 1 wy1z 3735 Feb 11 10:35 arld025.93
-rwxrwxr-x 1 wy1z 2643 Feb 11 10:35 arld026.93
-rwxrwxr-x 1 wy1z 3269 Feb 11 10:35 arld027.93
-rwxrwxr-x 1 wy1z 4958 Feb 11 10:35 arld028.93
-rwxrwxr-x 1 wy1z 4486 Feb 11 10:35 arld030.93
-rwxrwxr-x 1 wy1z 4237 Feb 11 10:35 arld031.93
-rwxrwxr-x 1 wy1z 4083 Feb 11 10:35 arld032.93
-rwxrwxr-x 1 wy1z 3718 Feb 11 10:35 arld033.93
-rwxrwxr-x 1 wy1z 6202 Feb 11 10:35 arld068.93
-rwxrwxr-x 1 wy1z 4063 Feb 11 10:35 arld071.93

barc/w1aw-list/arld/1994:
total 51
-rwxrwxr-x 1 wy1z 5189 Feb 11 10:35 arld002.94
-rwxrwxr-x 1 wy1z 2293 Feb 11 10:35 arld003.94
-rwxrwxr-x 1 wy1z 6020 Feb 11 10:35 arld004.94
-rwxrwxr-x 1 wy1z 6345 Feb 11 10:35 arld005.94
```

```
-rwxrwxr-x 1 wy1z 1484 Feb 11 10:00 arld006.94
-rwxrwxr-x 1 wy1z 3122 Feb 11 10:00 arld007.94
-rwxrwxr-x 1 wy1z 4115 Feb 11 10:00 arld008.94
-rwxrwxr-x 1 wy1z 4639 Feb 12 19:21 arld009.94
-rwxrwxr-x 1 wy1z 4205 Mar 8 23:22 arld010.94
-rwxrwxr-x 1 wy1z 4756 Mar 8 23:22 arld011.94
-rwxrwxr-x 1 wy1z 2903 Mar 10 11:02 arld013.94

barc/w1aw-list/arlk:
total 3
drwxrwxr-x 2 wy1z 512 Mar 15 11:57 1992
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 1993
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 1994

barc/w1aw-list/arlk/1992:
total 24
-rwxrwxr-x 1 wy1z 4101 Feb 11 10:50 arlk049.92
-rwxrwxr-x 1 wy1z 4358 Feb 11 10:50 arlk051.92
-rwxrwxr-x 1 wy1z 4357 Feb 11 10:50 arlk052.92
-rwxrwxr-x 1 wy1z 4357 Feb 11 10:50 arlk055.92
-rwxrwxr-x 1 wy1z 4053 Feb 11 10:50 arlk056.92

barc/w1aw-list/arlk/1993:
total 96
-rwxrwxr-x 1 wy1z 4425 Feb 11 10:50 arlk004.93
-rwxrwxr-x 1 wy1z 4577 Feb 11 10:50 arlk005.93
-rwxrwxr-x 1 wy1z 4477 Feb 11 10:50 arlk008.93
-rwxrwxr-x 1 wy1z 4452 Feb 11 10:50 arlk009.93
-rwxrwxr-x 1 wy1z 4507 Feb 11 10:50 arlk011.93
-rwxrwxr-x 1 wy1z 4452 Feb 11 10:50 arlk012.93
-rwxrwxr-x 1 wy1z 4460 Feb 11 10:50 arlk013.93
-rwxrwxr-x 1 wy1z 4609 Feb 11 10:50 arlk014.93
-rwxrwxr-x 1 wy1z 4716 Feb 11 10:50 arlk015.93
-rwxrwxr-x 1 wy1z 4655 Feb 11 10:50 arlk016.93
-rwxrwxr-x 1 wy1z 4412 Feb 11 10:50 arlk017.93
-rwxrwxr-x 1 wy1z 4775 Feb 11 10:50 arlk018.93
-rwxrwxr-x 1 wy1z 4532 Feb 11 10:50 arlk019.93
-rwxrwxr-x 1 wy1z 4792 Feb 11 10:50 arlk020.93
-rwxrwxr-x 1 wy1z 4758 Feb 11 10:50 arlk021.93
-rwxrwxr-x 1 wy1z 5043 Feb 11 10:50 arlk022.93
-rwxrwxr-x 1 wy1z 5092 Feb 11 10:50 arlk025.93
-rwxrwxr-x 1 wy1z 5013 Feb 11 10:50 arlk026.93
-rwxrwxr-x 1 wy1z 5565 Feb 11 10:50 arlk054.93

barc/w1aw-list/arlk/1994:
total 33
-rwxrwxr-x 1 wy1z 5261 Feb 11 10:50 arlk001.94
-rwxrwxr-x 1 wy1z 5261 Feb 11 10:50 arlk002.94
-rwxrwxr-x 1 wy1z 4721 Feb 11 10:01 arlk004.94
-rwxrwxr-x 1 wy1z 4470 Feb 16 15:06 arlk006.94
-rwxrwxr-x 1 wy1z 4458 Mar 8 23:23 arlk007.94
```

```
-rwxrwxr-x 1 wy1z 5252 Feb 11 10:50 arlk055.94

barc/w1aw-list/arlp:
total 3
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 1992
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 1993
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 1994

barc/w1aw-list/arlp/1992:
total 27
-rwxrwxr-x 1 wy1z 1750 Nov 24 1992 arlp046.92
-rwxrwxr-x 1 wy1z 3578 Nov 24 1992 arlp047.92
-rwxrwxr-x 1 wy1z 3517 Nov 30 1992 arlp048.92
-rwxrwxr-x 1 wy1z 3212 Dec 4 1992 arlp049.92
-rwxrwxr-x 1 wy1z 2897 Dec 13 1992 arlp050.92
-rwxrwxr-x 1 wy1z 3497 Dec 18 1992 arlp051.92
-rwxrwxr-x 1 wy1z 3032 Dec 28 1992 arlp052.92
-rwxrwxr-x 1 wy1z 3042 Jan 4 1993 arlp053.92

barc/w1aw-list/arlp/1993:
total 90
-rwxrwxr-x 1 wy1z 7494 Jan 16 1993 arlp001.93
-rwxrwxr-x 1 wy1z 2665 Jan 16 1993 arlp002.93
-rwxrwxr-x 1 wy1z 3526 Jan 23 1993 arlp003.93
-rwxrwxr-x 1 wy1z 2964 Jan 29 1993 arlp004.93
-rwxrwxr-x 1 wy1z 2928 Feb 8 1993 arlp005.93
-rwxrwxr-x 1 wy1z 2828 Feb 12 1993 arlp006.93
-rwxrwxr-x 1 wy1z 2793 Feb 22 1993 arlp007.93
-rwxrwxr-x 1 wy1z 2847 Feb 26 1993 arlp008.93
-rwxrwxr-x 1 wy1z 3330 Mar 6 1993 arlp009.93
-rwxrwxr-x 1 wy1z 3656 Mar 14 1993 arlp010.93
-rwxrwxr-x 1 wy1z 3839 Mar 20 1993 arlp011.93
-rwxrwxr-x 1 wy1z 3234 Mar 28 1993 arlp012.93
-rwxrwxr-x 1 wy1z 3101 Apr 3 1993 arlp013.93
-rwxrwxr-x 1 wy1z 3137 Apr 12 1993 arlp014.93
-rwxrwxr-x 1 wy1z 3414 Apr 18 1993 arlp015.93
-rwxrwxr-x 1 wy1z 3477 Apr 23 1993 arlp016.93
-rwxrwxr-x 1 wy1z 3725 May 3 1993 arlp017.93
-rwxrwxr-x 1 wy1z 4056 May 7 1993 arlp018.93
-rwxrwxr-x 1 wy1z 3290 May 17 1993 arlp019.93
-rwxrwxr-x 1 wy1z 3724 Jun 1 1993 arlp021.93
-rwxrwxr-x 1 wy1z 3643 Jun 14 1993 arlp023.93
-rwxrwxr-x 1 wy1z 3144 Jun 23 1993 arlp024.93
-rwxrwxr-x 1 wy1z 4040 Jun 29 1993 arlp025.93

barc/w1aw-list/arlp/1994:
total 32
-rwxrwxr-x 1 wy1z 3293 Jan 17 19:15 arlp001.94
-rwxrwxr-x 1 wy1z 3458 Jan 17 19:15 arlp002.94
-rwxrwxr-x 1 wy1z 3835 Jan 25 13:35 arlp003.94
-rwxrwxr-x 1 wy1z 2580 Feb 11 10:01 arlp004.94
```

```
-rwxrwxr-x 1 wy1z 2207 Feb 11 10:01 arlp005.94
-rwxrwxr-x 1 wy1z 2770 Feb 12 19:22 arlp006.94
-rwxrwxr-x 1 wy1z 2583 Mar 8 23:23 arlp007.94
-rwxrwxr-x 1 wy1z 2161 Mar 10 11:02 arlp009.94
-rwxrwxr-x 1 wy1z 4717 Jan 5 14:37 arlp052.94

barc/w1aw-list/arls:
total 2
drwxrwxr-x 2 wy1z 1024 Mar 15 11:58 1993
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 1994

barc/w1aw-list/arls/1993:
total 136
-rwxrwxr-x 1 wy1z 4044 Jan 5 1993 arls001.93
-rwxrwxr-x 1 wy1z 2534 Feb 1 1993 arls002.93
-rwxrwxr-x 1 wy1z 2551 Feb 4 1993 arls003.93
-rwxrwxr-x 1 wy1z 2277 Feb 19 1993 arls004.93
-rwxrwxr-x 1 wy1z 2987 Mar 3 1993 arls005.93
-rwxrwxr-x 1 wy1z 2016 Mar 9 1993 arls006.93
-rwxrwxr-x 1 wy1z 1920 Mar 14 1993 arls007.93
-rwxrwxr-x 1 wy1z 4545 Mar 20 1993 arls008.93
-rwxrwxr-x 1 wy1z 1964 Mar 23 1993 arls009.93
-rwxrwxr-x 1 wy1z 1969 Mar 25 1993 arls010.93
-rwxrwxr-x 1 wy1z 2022 Apr 1 1993 arls011.93
-rwxrwxr-x 1 wy1z 3008 Apr 3 1993 arls012.93
-rwxrwxr-x 1 wy1z 2375 Apr 3 1993 arls013.93
-rwxrwxr-x 1 wy1z 2301 Apr 8 1993 arls014.93
-rwxrwxr-x 1 wy1z 3987 Apr 8 1993 arls015.93
-rwxrwxr-x 1 wy1z 2901 Apr 13 1993 arls016.93
-rwxrwxr-x 1 wy1z 2599 Apr 22 1993 arls017.93
-rwxrwxr-x 1 wy1z 2757 Apr 25 1993 arls018.93
-rwxrwxr-x 1 wy1z 2576 Apr 25 1993 arls019.93
-rwxrwxr-x 1 wy1z 4389 Apr 25 1993 arls020.93
-rwxrwxr-x 1 wy1z 2654 Apr 25 1993 arls021.93
-rwxrwxr-x 1 wy1z 3001 Apr 25 1993 arls022.93
-rwxrwxr-x 1 wy1z 2349 Apr 25 1993 arls023.93
-rwxrwxr-x 1 wy1z 2001 Apr 27 1993 arls024.93
-rwxrwxr-x 1 wy1z 1941 May 4 1993 arls026.93
-rwxrwxr-x 1 wy1z 3065 May 13 1993 arls027.93
-rwxrwxr-x 1 wy1z 2511 May 14 1993 arls028.93
-rwxrwxr-x 1 wy1z 2504 May 20 1993 arls029.93
-rwxrwxr-x 1 wy1z 2663 May 20 1993 arls030.93
-rwxrwxr-x 1 wy1z 3045 May 25 1993 arls031.93
-rwxrwxr-x 1 wy1z 2157 May 28 1993 arls032.93
-rwxrwxr-x 1 wy1z 2991 May 28 1993 arls033.93
-rwxrwxr-x 1 wy1z 3476 Jun 14 1993 arls034.93
-rwxrwxr-x 1 wy1z 2795 Jun 14 1993 arls035.93
-rwxrwxr-x 1 wy1z 6597 Jul 6 1993 arls036.93
-rwxrwxr-x 1 wy1z 3948 Jun 23 1993 arls037.93
-rwxrwxr-x 1 wy1z 2969 Jun 23 1993 arls038.93
-rwxrwxr-x 1 wy1z 4511 Jun 29 1993 arls039.93
```

```
-rwxrwxr-x 1 wy1z 2712 Jun 29 1993 arls040.93
-rwxrwxr-x 1 wy1z 2551 Jul 6 1993 arls041.93
-rwxrwxr-x 1 wy1z 3211 Jun 29 1993 arls042.93
-rwxrwxr-x 1 wy1z 4152 Jun 29 1993 arls043.93

barc/w1aw-list/arls/1994:
total 24
-rwxrwxr-x 1 wy1z 2329 Jan 17 19:16 arls001.94
-rwxrwxr-x 1 wy1z 2314 Jan 25 13:35 arls002.94
-rwxrwxr-x 1 wy1z 1980 Feb 11 10:02 arls003.94
-rwxrwxr-x 1 wy1z 3355 Feb 11 10:02 arls005.94
-rwxrwxr-x 1 wy1z 2198 Feb 11 10:02 arls006.94
-rwxrwxr-x 1 wy1z 2848 Feb 12 19:22 arls008.94
-rwxrwxr-x 1 wy1z 2816 Feb 12 19:22 arls009.94
-rwxrwxr-x 1 wy1z 2075 Feb 12 19:22 arls010.94

barc/w1aw-list/arlx:
total 3
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 1992
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 1993
drwxrwxr-x 2 wy1z 512 Mar 15 11:58 1994

barc/w1aw-list/arlx/1992:
total 19
-rwxrwxr-x 1 wy1z 2264 Nov 30 1992 arlx041.92
-rwxrwxr-x 1 wy1z 1891 Dec 1 1992 arlx042.92
-rwxrwxr-x 1 wy1z 1686 Dec 2 1992 arlx043.92
-rwxrwxr-x 1 wy1z 1620 Dec 3 1992 arlx044.92
-rwxrwxr-x 1 wy1z 1758 Dec 18 1992 arlx045.92
-rwxrwxr-x 1 wy1z 1823 Dec 18 1992 arlx046.92
-rwxrwxr-x 1 wy1z 1894 Dec 18 1992 arlx047.92
-rwxrwxr-x 1 wy1z 3498 Dec 22 1992 arlx048.92

barc/w1aw-list/arlx/1993:
total 36
-rwxrwxr-x 1 wy1z 1736 Jan 16 1993 arlx001.93
-rwxrwxr-x 1 wy1z 2699 Feb 3 1993 arlx002.93
-rwxrwxr-x 1 wy1z 3408 Mar 18 1993 arlx003.93
-rwxrwxr-x 1 wy1z 2524 Apr 14 1993 arlx004.93
-rwxrwxr-x 1 wy1z 2323 Apr 30 1993 arlx005.93
-rwxrwxr-x 1 wy1z 2982 May 7 1993 arlx006.93
-rwxrwxr-x 1 wy1z 1834 May 13 1993 arlx007.93
-rwxrwxr-x 1 wy1z 2053 May 13 1993 arlx008.93
-rwxrwxr-x 1 wy1z 2784 May 24 1993 arlx009.93
-rwxrwxr-x 1 wy1z 2923 May 24 1993 arlx010.93
-rwxrwxr-x 1 wy1z 3189 Jun 3 1993 arlx011.93
-rwxrwxr-x 1 wy1z 2218 May 1 1993 arlx025.93

barc/w1aw-list/arlx/1994:
total 26
-rwxrwxr-x 1 wy1z 2394 Jan 17 19:17 arlx001.94
-rwxrwxr-x 1 wy1z 2036 Jan 17 19:17 arlx002.94
```

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-rwxrwxr-x 1 wy1z 2178 Jan 25 13:36 arlx003.94
-rwxrwxr-x 1 wy1z 2704 Jan 25 13:36 arlx004.94
-rwxrwxr-x 1 wy1z 2417 Jan 25 13:36 arlx005.94
-rwxrwxr-x 1 wy1z 2541 Jan 25 13:36 arlx006.94
-rwxrwxr-x 1 wy1z 1972 Mar 8 23:24 arlx007.94
-rwxrwxr-x 1 wy1z 2059 Mar 8 23:24 arlx008.94
-rwxrwxr-x 1 wy1z 1678 Mar 8 23:24 arlx009.94
-rwxrwxr-x 1 wy1z 1534 Mar 8 23:24 arlx010.94

faq:
total 224
-rwxrwxr-x 1 wy1z 9855 Mar 10 08:00 cb-faq-1
-rwxrwxr-x 1 wy1z 25838 Mar 10 08:01 cb-faq-2
-rwxrwxr-x 1 wy1z 10495 Mar 10 08:01 cb-faq-3
-rwxrwxr-x 1 wy1z 13794 Mar 10 08:01 cb-faq-4
-rwxrwxr-x 1 wy1z 23912 Mar 10 08:01 ham-radio-faq.1
-rwxrwxr-x 1 wy1z 41954 Mar 10 08:01 ham-radio-faq.2
-rwxrwxr-x 1 wy1z 32181 Mar 10 08:01 ham-radio-faq.3
-rwxrwxr-x 1 wy1z 32818 Mar 10 08:01 packet.faq
-rwxrwxr-x 1 wy1z 33652 Mar 10 08:01 rtty_fax.faq

general-info:
total 77
-rwxrwxr-x 1 wy1z 62609 Feb 13 15:25 National_Exams
-rwxrwxr-x 1 wy1z 6242 Feb 13 15:26 New_England_Exams
-rwxrwxr-x 1 wy1z 7903 Feb 13 15:26 New_England_Ham_Fleamarkets

incoming:
total 0

mac:
total 11
-rwxrwxr-x 1 wy1z 1226 Nov 1 13:45 00-README
drwxrwxr-x 2 wy1z 512 Mar 15 11:59 contest
drwxrwxr-x 2 wy1z 1024 Mar 15 19:04 digital
drwxrwxr-x 2 wy1z 512 Mar 15 11:59 games
drwxrwxr-x 2 wy1z 512 Mar 15 12:00 mac-roster
drwxrwxr-x 2 wy1z 512 Mar 15 19:03 satellite
drwxrwxr-x 2 wy1z 512 Mar 15 12:00 space
drwxrwxr-x 2 wy1z 1024 Mar 15 12:54 theory-and-morse
drwxrwxr-x 2 wy1z 1024 Mar 15 19:02 utils
drwxrwxr-x 2 wy1z 512 Mar 15 12:00 welcome

mac/contest:
total 729
-rwxrwxr-x 1 wy1z 7296 Oct 18 18:44 DX-Info
-rwxrwxr-x 1 wy1z 25728 Oct 18 18:44 DXCC-CRIB-SHEET.SEA
-rwxrwxr-x 1 wy1z 31360 Oct 18 18:44 HAM-AWARDS.SEA
-rwxrwxr-x 1 wy1z 133376 Oct 18 18:45 contest.sea
-rwxrwxr-x 1 wy1z 7070 Oct 18 18:45 dx-info
-rwxrwxr-x 1 wy1z 22784 Oct 18 18:45 dxexcel.sea
-rwxrwxr-x 1 wy1z 94976 Oct 18 18:46 dxmap.sea
```

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-rwxrwxr-x 1 wy1z 103808 Oct 18 18:46 dxstack.sea
-rwxrwxr-x 1 wy1z 20608 Oct 18 18:46 grid.sea
-rwxrwxr-x 1 wy1z 156672 Oct 18 18:46 macsw.sea
-rwxrwxr-x 1 wy1z 55936 Oct 18 18:46 morsemaster.sea
-rwxrwxr-x 1 wy1z 41728 Oct 18 18:47 sunclock.sea

mac/digital:
total 3940
-rwxrwxr-x 1 wy1z 94720 Feb 13 1992 BeginTCP.sit.hqx
-rwxrwxr-x 1 wy1z 10878 Jan 31 1993 Domn0201.Net
-rwxrwxr-x 1 wy1z 23284 Jan 31 1993 Host0201.Net
-rwxrwxr-x 1 wy1z 23281 Jan 31 1993 Host0201.txt
-rwxrwxr-x 1 wy1z 3751 Mar 4 06:51 IM_Mac1.0b27y.sea.hqx.text
-rwxrwxr-x 1 wy1z 202901 Mar 4 14:47 IM_Mac_1.0b27y.sea.hqx
-rwxrwxr-x 1 wy1z 2816 Oct 19 08:16 Internet-Packet
-rwxrwxr-x 1 wy1z 213764 Jan 29 1993 NETMacenvironment.sea.hqx
-rwxrwxr-x 1 wy1z 306717 Mar 3 23:19 NET_Mac2.3.38.sea.hqx
-rwxrwxr-x 1 wy1z 1974 Mar 3 23:16 NET_Mac2.3.38.sea.hqx.text
-rwxrwxr-x 1 wy1z 203551 Jun 29 1993 PMM.cpt.hqx
-rwxrwxr-x 1 wy1z 186882 Mar 12 1993 PacketTrackerV1.04.hqx
-rwxrwxr-x 1 wy1z 94208 Oct 19 08:16 Pkt-Macs-188.sea
-rwxrwxr-x 1 wy1z 253711 Mar 15 19:03 Savant-1.0.1-demo.hqx
-rw-r--r-- 1 wy1z 156417 Mar 15 19:03 Savant-1.0.1-updater.hqx
-rwxrwxr-x 1 wy1z 117760 Oct 19 08:17 pkttracker.sea
-rwxrwxr-x 1 wy1z 24192 Oct 19 08:17 pkttu.txt.sea
-rwxrwxr-x 1 wy1z 8494 Jan 31 1993 shrt0201.net
-rwxrwxr-x 1 wy1z 155580 Oct 28 22:14 softkiss.1.8.sit.hqx
-rwxrwxr-x 1 wy1z 4145 Oct 28 22:14 softkiss.notes
-rwxrwxr-x 1 wy1z 493968 Oct 28 22:15 softkiss.src.1.8.sit.hqx
-rwxrwxr-x 1 wy1z 47488 Oct 19 08:17 talkterm.sea
-rwxrwxr-x 1 wy1z 45056 Oct 19 08:17 tcp-faq.sea
-rwxrwxr-x 1 wy1z 444288 Oct 19 09:18 tcp.sea
-rwxrwxr-x 1 wy1z 502237 Apr 28 1993 tcpip.sit.hqx
-rwxrwxr-x 1 wy1z 252416 Feb 13 1992 tcpmanual

mac/games:
total 320
-rwxrwxr-x 1 wy1z 312704 Oct 18 18:50 games.sea

mac/mac-roster:
total 336
-rwxrwxr-x 1 wy1z 335488 Oct 19 07:57 531.sea

mac/satellite:
total 1067
-rw-r--r-- 1 wy1z 67086 Mar 15 19:02 MACSAT.USERS.GUIDE.HQX
-rw-r--r-- 1 wy1z 297011 Mar 15 19:02 MACSAT30.DEMO.SIT.HQX
-rwxrwxr-x 1 wy1z 97671 Feb 13 1992 dove.hqx
-rwxrwxr-x 1 wy1z 3976 Feb 13 1992 dove.readme
-rw-r--r-- 1 wy1z 61460 Mar 15 19:03 sat-quizzer-03.hqx
-rw-r--r-- 1 wy1z 257314 Mar 15 19:03 sat-trak-102.hqx
```

```
-rwxrwxr-x 1 wy1z 267170 Feb 25 17:45 sattrak-102.sea.hqx

mac/space:
total 1145
-rwxrwxr-x 1 wy1z 67086 Jan 5 16:15 MACSAT.USERS.GUIDE.HQX
-rwxrwxr-x 1 wy1z 297011 Jan 5 16:16 MACSAT30.DEMO.SIT.HQX
-rwxrwxr-x 1 wy1z 300544 Oct 19 08:15 OrbiTrack-2.1b14-folder.sea
-rwxrwxr-x 1 wy1z 56192 Oct 19 08:15 galaxy.txt.sea
-rwxrwxr-x 1 wy1z 99712 Oct 19 08:15 macastro.sea
-rwxrwxr-x 1 wy1z 37248 Oct 19 08:15 macdove.sea
-rwxrwxr-x 1 wy1z 257314 Oct 28 19:17 sat-trak-102.hqx
-rwxrwxr-x 1 wy1z 2084 Oct 19 08:15 space-bbs

mac/theory-and-morse:
total 3140
-rwxrwxr-x 1 wy1z 536625 Mar 15 12:53 Advanced_Ham_Test.hqx
-rwxrwxr-x 1 wy1z 476347 Mar 15 12:53 Extra_Ham_Test.hqx
-rwxrwxr-x 1 wy1z 320149 Mar 15 12:52 General_Ham_Test_.hqx
-rwxrwxr-x 1 wy1z 23957 Mar 15 12:52 MORSE_CODE_TUTOR.hqx
-rwxrwxr-x 1 wy1z 16568 Feb 13 1992 MorseCodeV1.2.sit.hqx
-rwxrwxr-x 1 wy1z 409007 Mar 15 12:52 Novice_Ham_Test.hqx
-rwxrwxr-x 1 wy1z 341519 Mar 15 12:52 Technician_Ham_Test.hqx
-rw-r--r-- 1 wy1z 160327 Mar 15 12:53 advanced-pool.txt
-rw-r--r-- 1 wy1z 163769 Mar 15 12:54 extra-pool.txt
-rw-r--r-- 1 wy1z 95919 Mar 15 12:52 general-pool.txt
-rwxrwxr-x 1 wy1z 20991 Mar 15 12:51 morse.hqx
-rwxrwxr-x 1 wy1z 13228 Apr 28 1993 morse.sit.hqx
-rwxrwxr-x 1 wy1z 13320 Apr 28 1993 morse_code_tutor.sit.hqx
-rwxrwxr-x 1 wy1z 44302 Mar 15 12:51 morsecode1.0.sit.hqx
-rwxrwxr-x 1 wy1z 48803 Mar 15 12:51 morsemania.sit.hqx
-rwxrwxr-x 1 wy1z 58146 Mar 15 12:51 morsemaster1.0.sit.hqx
-rwxrwxr-x 1 wy1z 130253 Mar 15 12:51 morsetrainer1.1.sit.hqx
-rw-r--r-- 1 wy1z 115973 Mar 15 12:53 novice-pool.txt
-rw-r--r-- 1 wy1z 105161 Mar 15 12:53 technician-pool.txt

mac/utils:
total 1377
-rwxrwxr-x 1 wy1z 33408 Oct 19 09:25 AutoMacTM-III
-rw-r--r-- 1 wy1z 89586 Mar 15 19:01 BinHex-stuff.hqx
-rwxrwxr-x 1 wy1z 66176 Nov 1 13:34 CPT2SIT-TM-Install
-rwxrwxr-x 1 wy1z 121088 Nov 1 13:35 Compact-Pro-Package
-rwxrwxr-x 1 wy1z 2138 Mar 15 19:00 DX_Map.README
-rwxrwxr-x 1 wy1z 41989 Mar 15 19:00 DX_Map1.0_XFCNs.hqx
-rwxrwxr-x 1 wy1z 100311 Mar 15 19:00 DXmap1.1.hqx
-rwxrwxr-x 1 wy1z 32896 Oct 19 09:25 Serial-Tool
-rwxrwxr-x 1 wy1z 145792 Nov 4 17:54 SmSolSysLT.sea
-rwxrwxr-x 1 wy1z 117632 Nov 1 13:35 StuffIt-1.5.1
-rwxrwxr-x 1 wy1z 17408 Nov 1 13:35 StuffIt-Converter-3.0.2.sit
-rwxrwxr-x 1 wy1z 93952 Nov 1 13:35 StuffIt-Expander-TM.sea
-rw-r--r-- 1 wy1z 185612 Mar 15 19:01 UnstuffitDeluxe.hqx
-rwxrwxr-x 1 wy1z 27776 Nov 4 17:56 WORLDTIME.sit
```

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-rwxrwxr-x 1 wy1z 7040 Nov 1 13:35 binhex4.0.bin
-rwxrwxr-x 1 wy1z 23424 Nov 1 13:35 cptexpand.sea
-rwxrwxr-x 1 wy1z 179072 Nov 9 06:38 disinfectant33.sea
-rwxrwxr-x 1 wy1z 50432 Oct 19 09:25 unzip1.10

mac/welcome:
total 20
-rwxrwxr-x 1 wy1z 86 Oct 29 15:26 00-README
-rwxrwxr-x 1 wy1z 443 Oct 19 09:23 PD-Software-Offer-copy
-rwxrwxr-x 1 wy1z 12416 Oct 19 08:17 Read-me!
-rwxrwxr-x 1 wy1z 4224 Oct 19 08:17 welcome-to-macnet!

misc:
total 1675
-rwxrwxr-x 1 wy1z 15921 Jan 27 1993 E.MASS-CLUB-LIST
-rwxrwxr-x 1 wy1z 6055 Feb 5 1993 MASS-QSO-PARTY.RULES
-rwxrwxr-x 1 wy1z 144 Jan 27 1993 README
-rwxrwxr-x 1 wy1z 3210 Jan 27 1993 af2j-ax.ip
-rwxrwxr-x 1 wy1z 64693 Mar 28 1993 ax25.doc
-rwxrwxr-x 1 wy1z 364581 Jan 1 12:14 barc-list.Z
-rwxrwxr-x 1 wy1z 28401 Mar 5 1993 barc-trace.eps
-rwxrwxr-x 1 wy1z 5918 Feb 4 1993 bars-list
-rwxrwxr-x 1 wy1z 161831 Jul 16 1993 bbs-list
-rwxrwxr-x 1 wy1z 1996 Mar 12 1993 callsigns-march1
-rwxrwxr-x 1 wy1z 3682 May 27 1993 catvfreq.txt
-rwxrwxr-x 1 wy1z 17289 Mar 12 1993 dxcc.lst
-rwxrwxr-x 1 wy1z 22682 May 16 1993 electronic-mail-order.lst
-rwxrwxr-x 1 wy1z 3644 Jul 16 1993 fastfood-frequencies
-rwxrwxr-x 1 wy1z 7888 Mar 10 08:04 fcc.allocations
-rwxrwxr-x 1 wy1z 6275 Mar 10 08:04 fcc.sources
-rwxrwxr-x 1 wy1z 25380 Jan 26 1993 hamlist
-rwxrwxr-x 1 wy1z 2893 Mar 12 1993 hr707
-rwxrwxr-x 1 wy1z 31789 Jul 16 1993 internet-services
-rwxrwxr-x 1 wy1z 3528 Mar 12 1993 intmod.tst
-rwxrwxr-x 1 wy1z 3331 Jan 16 1993 kep-info
-rwxrwxr-x 1 wy1z 3678 Mar 12 1993 molex
-rwxrwxr-x 1 wy1z 164893 Mar 5 1993 nosbgn20.lp
-rwxrwxr-x 1 wy1z 168099 Mar 5 1993 nosbgn20.prn
-rwxrwxr-x 1 wy1z 352681 Mar 5 1993 nosbgn20.ps
-rwxrwxr-x 1 wy1z 9272 Mar 12 1993 nprm93-01
-rwxrwxr-x 1 wy1z 3800 Jan 16 1993 russian-cw.info
-rwxrwxr-x 1 wy1z 7103 Jan 17 11:29 sandiego_ham_repeater_list.zip
-rwxrwxr-x 1 wy1z 45212 Sep 13 1993 sat_bas.txt
-rwxrwxr-x 1 wy1z 7587 Mar 10 08:04 scanner.faf
-rwxrwxr-x 1 wy1z 41750 Mar 12 1993 serial.1
-rwxrwxr-x 1 wy1z 21588 Mar 12 1993 serial.2
-rwxrwxr-x 1 wy1z 12370 Jul 12 1993 shuttle
-rwxrwxr-x 1 wy1z 5839 Jan 17 11:30 tvchfreq.txt
-rwxrwxr-x 1 wy1z 8972 Mar 12 1993 uniden
```

```
mods:
total 28
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 aea
drwxrwxr-x 2 wy1z 1024 Mar 15 12:03 alinco
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 aor
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 argosy
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 ge
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 grundig
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 heathkit
drwxrwxr-x 2 wy1z 2048 Mar 15 12:04 icom
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 kantronics
drwxrwxr-x 2 wy1z 2048 Mar 15 12:04 kenwood
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 mfj
drwxrwxr-x 2 wy1z 1024 Mar 15 12:05 misc
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 motorola
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 paccomm
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 ramsey
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 ranger
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 sangean
drwxrwxr-x 2 wy1z 512 Mar 15 12:04 sony
drwxrwxr-x 2 wy1z 512 Mar 15 12:03 standard
drwxrwxr-x 2 wy1z 1536 Mar 15 12:05 tandy
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 tapr
drwxrwxr-x 5 wy1z 512 Mar 15 12:05 uniden
drwxrwxr-x 2 wy1z 2560 Mar 15 12:04 yaesu

mods/aea:
total 19
-rwxrwxr-x 1 wy1z 2702 Feb 27 23:14 hamlink
-rwxrwxr-x 1 wy1z 1807 Feb 27 23:02 pk232
-rwxrwxr-x 1 wy1z 4930 Feb 27 23:02 pk232.reg
-rwxrwxr-x 1 wy1z 1278 Feb 27 23:02 pk232bat
-rwxrwxr-x 1 wy1z 1820 Feb 27 23:02 pk232lok.mod
-rwxrwxr-x 1 wy1z 3826 Feb 27 23:02 pk232pwr
-rwxrwxr-x 1 wy1z 914 Feb 27 23:02 pk88fix

mods/alinco:
total 117
-rwxrwxr-x 1 wy1z 2726 Feb 25 20:44 alinco
-rwxrwxr-x 1 wy1z 1602 Feb 25 20:44 alinco.9k6
-rwxrwxr-x 1 wy1z 3416 Feb 25 20:44 alinco.lit
-rwxrwxr-x 1 wy1z 2219 Feb 25 20:44 alr22t
-rwxrwxr-x 1 wy1z 2090 Jan 15 23:49 alr22t.mod
-rwxrwxr-x 1 wy1z 786 Feb 25 20:37 dj120
-rwxrwxr-x 1 wy1z 1090 Jan 14 19:09 dj120.mod
-rwxrwxr-x 1 wy1z 3004 Feb 25 20:37 dj160
-rwxrwxr-x 1 wy1z 1581 Feb 25 20:37 dj160dtm
-rwxrwxr-x 1 wy1z 566 Feb 25 20:37 dj160pik
-rwxrwxr-x 1 wy1z 6123 Feb 25 20:39 dj160tx
-rwxrwxr-x 1 wy1z 1593 Jan 14 19:09 dj162.mod
-rwxrwxr-x 1 wy1z 2807 Jan 14 19:09 dj500.mod
-rwxrwxr-x 1 wy1z 3501 Jan 14 19:09 dj560-1.mod
```

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-rwxrwxr-x 1 wy1z 1213 Jan 14 19:09 dj560.mod
-rwxrwxr-x 1 wy1z 2068 Feb 25 20:39 dj560t
-rwxrwxr-x 1 wy1z 1950 Jan 14 19:09 dj580.mod
-rwxrwxr-x 1 wy1z 1350 Feb 25 20:39 dj580.ud
-rwxrwxr-x 1 wy1z 2466 Feb 25 20:39 dj580mod
-rwxrwxr-x 1 wy1z 3951 Jan 14 19:09 dj580rep.inf
-rwxrwxr-x 1 wy1z 6951 Feb 25 20:39 dj580rev
-rwxrwxr-x 1 wy1z 838 Feb 25 20:39 dj580rx
-rwxrwxr-x 1 wy1z 2621 Feb 25 20:39 dj580t
-rwxrwxr-x 1 wy1z 1550 Feb 25 20:40 dj590xbf
-rwxrwxr-x 1 wy1z 2859 Feb 25 20:40 djf1t
-rwxrwxr-x 1 wy1z 1220 Feb 25 20:40 djf1t.mod
-rwxrwxr-x 1 wy1z 1117 Feb 25 20:40 dr110
-rwxrwxr-x 1 wy1z 1181 Feb 25 20:40 dr110_11
-rwxrwxr-x 1 wy1z 2274 Feb 25 20:40 dr110cel
-rwxrwxr-x 1 wy1z 1145 Feb 25 20:40 dr1200
-rwxrwxr-x 1 wy1z 2232 Jan 14 19:09 dr1200-1.mod
-rwxrwxr-x 1 wy1z 845 Feb 25 20:40 dr1200.960
-rwxrwxr-x 1 wy1z 1873 Feb 25 20:40 dr1200.im
-rwxrwxr-x 1 wy1z 1334 Jan 14 19:09 dr1200.mod
-rwxrwxr-x 1 wy1z 2144 Jan 14 19:09 dr1200t.mod
-rwxrwxr-x 1 wy1z 1157 Feb 25 20:40 dr130
-rwxrwxr-x 1 wy1z 1272 Jan 14 19:09 dr130.mod
-rwxrwxr-x 1 wy1z 4077 Jan 14 19:09 dr510.mod
-rwxrwxr-x 1 wy1z 886 Jan 14 19:09 dr570.mod
-rwxrwxr-x 1 wy1z 2006 Feb 25 20:40 dr599t
-rwxrwxr-x 1 wy1z 2147 Jan 14 19:09 dr599t-1.mod
-rwxrwxr-x 1 wy1z 1876 Jan 14 19:09 dr599t.mod
-rwxrwxr-x 1 wy1z 1735 Feb 25 20:40 dr600
-rwxrwxr-x 1 wy1z 6003 Jan 14 19:09 dr600.mod

mods/aor:
total 8
-rwxrwxr-x 1 wy1z 7726 Feb 27 23:10 ar1000

mods/argosy:
total 1
-rwxrwxr-x 1 wy1z 697 Feb 27 23:11 argosy2

mods/ge:
total 18
-rwxrwxr-x 1 wy1z 11676 Jan 15 23:49 ge_mvp.mod
-rwxrwxr-x 1 wy1z 5908 Jan 15 23:49 ge_mvpex.mod

mods/grundig:
total 10
-rwxrwxr-x 1 wy1z 4023 Feb 27 23:41 sat500
-rwxrwxr-x 1 wy1z 5482 Jan 19 15:59 satellit500.mod

mods/heathkit:
total 7
-rwxrwxr-x 1 wy1z 3558 Jan 15 23:50 hw-24-t.mod
```

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-rwxrwxr-x 1 wy1z 980 Jan 15 23:50 hw-24.mod
-rwxrwxr-x 1 wy1z 684 Feb 27 23:16 hw24
-rwxrwxr-x 1 wy1z 825 Feb 27 23:16 hw2m

mods/icom:
total 327
-rwxrwxr-x 1 wy1z 0 Feb 27 22:23 757contr
-rwxrwxr-x 1 wy1z 3020 Feb 27 22:18 i290
-rwxrwxr-x 1 wy1z 2006 Jan 14 19:08 ic-24.mod
-rwxrwxr-x 1 wy1z 1158 Jan 14 19:08 ic-mu2.mod
-rwxrwxr-x 1 wy1z 1143 Jan 14 19:08 ic-p2at.mod
-rwxrwxr-x 1 wy1z 1199 Jan 14 19:08 ic02-2.mod
-rwxrwxr-x 1 wy1z 837 Jan 14 19:08 ic02-3.mod
-rwxrwxr-x 1 wy1z 2031 Jan 14 19:08 ic02.mod
-rwxrwxr-x 1 wy1z 4057 Feb 27 22:17 ic02mod
-rwxrwxr-x 1 wy1z 1845 Jan 14 19:08 ic04.mod
-rwxrwxr-x 1 wy1z 8507 Feb 27 22:17 ic229
-rwxrwxr-x 1 wy1z 2933 Feb 27 22:17 ic229mod
-rwxrwxr-x 1 wy1z 2210 Feb 27 22:17 ic22s
-rwxrwxr-x 1 wy1z 936 Jan 14 19:08 ic24-2.mod
-rwxrwxr-x 1 wy1z 5159 Jan 14 19:08 ic24-3.mod
-rwxrwxr-x 1 wy1z 4425 Feb 27 22:17 ic2410
-rwxrwxr-x 1 wy1z 6541 Jan 14 19:08 ic2410.mod
-rwxrwxr-x 1 wy1z 592 Feb 27 22:17 ic2410tx
-rwxrwxr-x 1 wy1z 2157 Feb 27 22:17 ic24atke
-rwxrwxr-x 1 wy1z 2074 Feb 27 22:17 ic24atke.1
-rwxrwxr-x 1 wy1z 2324 Feb 27 22:17 ic24atmo
-rwxrwxr-x 1 wy1z 1199 Feb 27 22:17 ic24atne
-rwxrwxr-x 1 wy1z 2051 Feb 27 22:17 ic24atte
-rwxrwxr-x 1 wy1z 1229 Feb 27 22:17 ic28
-rwxrwxr-x 1 wy1z 465 Jan 14 19:08 ic28.mod
-rwxrwxr-x 1 wy1z 1927 Feb 27 22:17 ic2at
-rwxrwxr-x 1 wy1z 2327 Feb 27 22:17 ic2at.1
-rwxrwxr-x 1 wy1z 2636 Jan 14 19:08 ic2at.mod
-rwxrwxr-x 1 wy1z 2369 Feb 27 22:17 ic2gatmo
-rwxrwxr-x 1 wy1z 1537 Feb 27 22:17 ic2ia.mic
-rwxrwxr-x 1 wy1z 4413 Feb 27 22:17 ic2sat
-rwxrwxr-x 1 wy1z 7967 Jan 14 19:08 ic2sat-2.mod
-rwxrwxr-x 1 wy1z 4894 Jan 14 19:08 ic2sat.mod
-rwxrwxr-x 1 wy1z 1607 Feb 27 22:17 ic2satrx
-rwxrwxr-x 1 wy1z 545 Feb 27 22:17 ic2satrx.1
-rwxrwxr-x 1 wy1z 8722 Feb 27 22:17 ic2sra
-rwxrwxr-x 1 wy1z 7555 Feb 27 22:17 ic2sra.1
-rwxrwxr-x 1 wy1z 8413 Jan 14 19:08 ic2sra.mod
-rwxrwxr-x 1 wy1z 2622 Jan 14 19:08 ic32-2.mod
-rwxrwxr-x 1 wy1z 2439 Jan 14 19:08 ic32.mod
-rwxrwxr-x 1 wy1z 996 Feb 27 22:17 ic3200a
-rwxrwxr-x 1 wy1z 440 Jan 14 19:08 ic3200a.mod
-rwxrwxr-x 1 wy1z 2240 Feb 27 22:17 ic32at
-rwxrwxr-x 1 wy1z 2995 Feb 27 22:17 ic32atmo
```

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-rwxrwxr-x 1 wy1z 3556 Feb 27 22:17 ic32mod
-rwxrwxr-x 1 wy1z 3190 Feb 27 22:17 ic37
-rwxrwxr-x 1 wy1z 3822 Jan 14 19:08 ic37.mod
-rwxrwxr-x 1 wy1z 2224 Feb 27 22:17 ic720
-rwxrwxr-x 1 wy1z 2363 Jan 16 21:35 ic720a.mod
-rwxrwxr-x 1 wy1z 597 Feb 27 22:17 ic728
-rwxrwxr-x 1 wy1z 6031 Feb 27 22:17 ic731rs2
-rwxrwxr-x 1 wy1z 570 Feb 27 22:17 ic735
-rwxrwxr-x 1 wy1z 3614 Jan 16 00:56 ic735-1.mod
-rwxrwxr-x 1 wy1z 1380 Jan 16 00:56 ic735-2.mod
-rwxrwxr-x 1 wy1z 1373 Jan 14 19:08 ic735ibm.mod
-rwxrwxr-x 1 wy1z 7758 Jan 14 19:08 ic751.mod
-rwxrwxr-x 1 wy1z 4968 Feb 27 22:17 ic751ext
-rwxrwxr-x 1 wy1z 3002 Feb 27 22:17 ic751spl
-rwxrwxr-x 1 wy1z 3316 Feb 27 22:17 ic751sw
-rwxrwxr-x 1 wy1z 2866 Feb 27 22:17 ic900.mod
-rwxrwxr-x 1 wy1z 4226 Feb 27 22:17 ic901
-rwxrwxr-x 1 wy1z 2705 Feb 27 22:17 ic901.p
-rwxrwxr-x 1 wy1z 4063 Jan 14 19:08 ic901a.mod
-rwxrwxr-x 1 wy1z 2214 Jan 14 19:08 icom-ram.mod
-rwxrwxr-x 1 wy1z 3325 Feb 27 22:17 icom2
-rwxrwxr-x 1 wy1z 3331 Feb 27 22:17 icom32
-rwxrwxr-x 1 wy1z 1897 Jan 14 19:08 icom32at.mod
-rwxrwxr-x 1 wy1z 4367 Feb 27 22:17 icom_r71
-rwxrwxr-x 1 wy1z 4519 Feb 27 22:17 icombnc
-rwxrwxr-x 1 wy1z 1378 Feb 27 22:17 icp2at
-rwxrwxr-x 1 wy1z 1311 Feb 27 22:17 icp2at_
-rwxrwxr-x 1 wy1z 3502 Feb 27 22:17 icw.sm7
-rwxrwxr-x 1 wy1z 6488 Feb 27 22:17 icw2.sum
-rwxrwxr-x 1 wy1z 4346 Jan 14 19:08 icw21at.mod
-rwxrwxr-x 1 wy1z 1447 Feb 27 22:17 icw21atr
-rwxrwxr-x 1 wy1z 1043 Feb 27 22:17 icw21atr.pac
-rwxrwxr-x 1 wy1z 4725 Feb 27 22:17 icw2a
-rwxrwxr-x 1 wy1z 2590 Jan 14 19:08 icw2a-1.mod
-rwxrwxr-x 1 wy1z 6673 Jan 14 19:08 icw2a.mod
-rwxrwxr-x 1 wy1z 1440 Feb 27 22:17 icw2arx
-rwxrwxr-x 1 wy1z 589 Feb 27 22:17 icw2arx.1
-rwxrwxr-x 1 wy1z 750 Feb 27 22:17 icw2e
-rwxrwxr-x 1 wy1z 1634 Feb 27 22:17 icw2tune
-rwxrwxr-x 1 wy1z 1902 Feb 27 22:17 icxx71
-rwxrwxr-x 1 wy1z 4713 Feb 27 23:26 r1ant
-rwxrwxr-x 1 wy1z 26176 Jan 14 19:13 r7000-2.mod
-rwxrwxr-x 1 wy1z 3309 Feb 27 22:18 r7000.mod
-rwxrwxr-x 1 wy1z 2844 Feb 28 13:36 u16
-rwxrwxr-x 1 wy1z 3101 Jan 14 19:23 u2at.mod

mods/kantronics:
total 8
-rwxrwxr-x 1 wy1z 1129 Jan 15 23:50 kamdcd.mod
-rwxrwxr-x 1 wy1z 1358 Feb 27 23:04 kantroni
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-rwxrwxr-x 1 wy1z 584 Feb 27 23:04 kpc2dcdm
-rwxrwxr-x 1 wy1z 2403 Feb 27 23:25 pacmod

mods/kenwood:
total 369
-rwxrwxr-x 1 wy1z 3410 Feb 27 22:25 757contr
-rwxrwxr-x 1 wy1z 2084 Feb 27 22:32 9k6tm721
-rwxrwxr-x 1 wy1z 3868 Feb 27 22:26 kenwdmic
-rwxrwxr-x 1 wy1z 1324 Feb 27 22:26 kptr2600
-rwxrwxr-x 1 wy1z 0 Feb 27 22:26 ps50
-rwxrwxr-x 1 wy1z 1753 Jan 15 23:51 ps50.fix
-rwxrwxr-x 1 wy1z 814 Feb 27 22:29 r1000mut
-rwxrwxr-x 1 wy1z 785 Feb 27 22:29 r5000
-rwxrwxr-x 1 wy1z 1155 Jan 14 19:13 r5000.mod
-rwxrwxr-x 1 wy1z 3309 Feb 27 22:29 r7000.mod
-rwxrwxr-x 1 wy1z 4771 Jan 14 19:13 radio.mod
-rwxrwxr-x 1 wy1z 2175 Jan 14 19:11 th215.mod
-rwxrwxr-x 1 wy1z 2932 Jan 16 00:57 th225.mod
-rwxrwxr-x 1 wy1z 7624 Jan 14 19:11 th25.mod
-rwxrwxr-x 1 wy1z 862 Jan 14 19:11 th27a.mod
-rwxrwxr-x 1 wy1z 6003 Jan 14 19:11 th28a.mod
-rwxrwxr-x 1 wy1z 1333 Jan 14 19:11 th75.mod
-rwxrwxr-x 1 wy1z 25211 Jan 14 19:11 th77a.mod
-rwxrwxr-x 1 wy1z 8702 Jan 14 19:11 th78a-0.mod
-rwxrwxr-x 1 wy1z 4445 Jan 14 19:11 th78a-1.mod
-rwxrwxr-x 1 wy1z 7471 Jan 14 19:11 th78a-2.mod
-rwxrwxr-x 1 wy1z 21400 Jan 14 19:11 th78a-complete.mod
-rwxrwxr-x 1 wy1z 3435 Jan 14 19:11 th78a-new.mod
-rwxrwxr-x 1 wy1z 890 Jan 14 19:11 th78a-warn.mod
-rwxrwxr-x 1 wy1z 2441 Jan 14 19:11 tm-96kb.mod
-rwxrwxr-x 1 wy1z 1340 Jan 14 19:11 tm221.fix
-rwxrwxr-x 1 wy1z 758 Jan 14 19:11 tm2570a.mod
-rwxrwxr-x 1 wy1z 937 Jan 14 19:11 tm321a-2.mod
-rwxrwxr-x 1 wy1z 1384 Jan 14 19:11 tm321a-3.mod
-rwxrwxr-x 1 wy1z 583 Jan 14 19:11 tm321a.mod
-rwxrwxr-x 1 wy1z 1702 Jan 14 19:11 tm421.mod
-rwxrwxr-x 1 wy1z 1836 Jan 16 00:57 tm421a.mod
-rwxrwxr-x 1 wy1z 2900 Jan 14 19:11 tm701.mod
-rwxrwxr-x 1 wy1z 271 Jan 14 19:11 tm701a.mod
-rwxrwxr-x 1 wy1z 2718 Jan 14 19:11 tm721-2.mod
-rwxrwxr-x 1 wy1z 5940 Jan 14 19:11 tm721-3.mod
-rwxrwxr-x 1 wy1z 4143 Jan 14 19:11 tm721.mod
-rwxrwxr-x 1 wy1z 1575 Jan 14 19:11 tm731.mod
-rwxrwxr-x 1 wy1z 1083 Jan 14 19:11 tm732a-1.mod
-rwxrwxr-x 1 wy1z 5697 Jan 14 19:11 tm732a-2.mod
-rwxrwxr-x 1 wy1z 4401 Jan 14 19:11 tm741-1.mod
-rwxrwxr-x 1 wy1z 2701 Jan 14 19:11 tm741-2.mod
-rwxrwxr-x 1 wy1z 17234 Jan 14 19:11 tm741.mod
-rwxrwxr-x 1 wy1z 4637 Jan 14 19:11 tm741732.mod
-rwxrwxr-x 1 wy1z 3048 Jan 14 19:11 tm742.mod
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-rwxrwxr-x 1 wy1z 2723 Jan 16 00:57 tm941a-2.mod
-rwxrwxr-x 1 wy1z 4490 Jan 14 19:11 tm941a.mod
-rwxrwxr-x 1 wy1z 1191 Jan 15 23:54 tr7625.fix
-rwxrwxr-x 1 wy1z 1588 Jan 14 19:11 ts140.fix
-rwxrwxr-x 1 wy1z 547 Jan 14 19:11 ts140.mod
-rwxrwxr-x 1 wy1z 9607 Jan 14 19:11 ts180.fix
-rwxrwxr-x 1 wy1z 3439 Jan 14 19:11 ts2400.fix
-rwxrwxr-x 1 wy1z 2969 Jan 14 19:11 ts25-45at.mod
-rwxrwxr-x 1 wy1z 827 Jan 14 19:11 ts430-2.mod
-rwxrwxr-x 1 wy1z 796 Jan 14 19:11 ts430.mod
-rwxrwxr-x 1 wy1z 6155 Jan 14 19:11 ts430s.fix
-rwxrwxr-x 1 wy1z 1355 Jan 14 19:11 ts440-1.mod
-rwxrwxr-x 1 wy1z 954 Jan 14 19:11 ts440-at.mod
-rwxrwxr-x 1 wy1z 2101 Jan 14 19:11 ts440.fix
-rwxrwxr-x 1 wy1z 1543 Jan 14 19:11 ts440.mod
-rwxrwxr-x 1 wy1z 4149 Jan 14 19:11 ts450-690.mod
-rwxrwxr-x 1 wy1z 4689 Jan 16 00:57 ts450s.mod
-rwxrwxr-x 1 wy1z 4268 Jan 14 19:11 ts50.mod
-rwxrwxr-x 1 wy1z 6731 Jan 14 19:11 ts520.fix
-rwxrwxr-x 1 wy1z 1428 Jan 14 19:11 ts530.mod
-rwxrwxr-x 1 wy1z 2848 Jan 14 19:11 ts680-2.mod
-rwxrwxr-x 1 wy1z 500 Jan 14 19:11 ts680.mod
-rwxrwxr-x 1 wy1z 4689 Jan 16 00:57 ts690s.mod
-rwxrwxr-x 1 wy1z 120 Jan 14 19:11 ts711.mod
-rwxrwxr-x 1 wy1z 4923 Jan 14 19:11 ts790a.mod
-rwxrwxr-x 1 wy1z 7811 Jan 14 19:11 ts820.fix
-rwxrwxr-x 1 wy1z 5451 Jan 14 19:11 ts820.mod
-rwxrwxr-x 1 wy1z 3308 Jan 14 19:11 ts830.fix
-rwxrwxr-x 1 wy1z 12088 Jan 16 00:57 ts850-1.mod
-rwxrwxr-x 1 wy1z 9086 Jan 16 00:57 ts850-2.mod
-rwxrwxr-x 1 wy1z 20923 Jan 14 19:11 ts850s.mod
-rwxrwxr-x 1 wy1z 8064 Jan 14 19:11 ts930.fix
-rwxrwxr-x 1 wy1z 6778 Jan 14 19:11 ts930.mod
-rwxrwxr-x 1 wy1z 3658 Jan 14 19:11 ts940.fix
-rwxrwxr-x 1 wy1z 2396 Jan 14 19:11 ts940ibm.mod
-rwxrwxr-x 1 wy1z 1060 Jan 15 23:54 tw-4000.mod

mods/mfj:
total 10
-rwxrwxr-x 1 wy1z 5537 Feb 27 23:22 mfj1278
-rwxrwxr-x 1 wy1z 3265 Jan 15 23:53 tnc2a.mod

mods/misc:
total 442
-rwxrwxr-x 1 wy1z 1636 Feb 27 23:45 2mloop
-rwxrwxr-x 1 wy1z 1061 Jan 15 23:47 56kbfix.mod
-rwxrwxr-x 1 wy1z 2487 Feb 27 23:45 ab2xsw
-rwxrwxr-x 1 wy1z 4241 Feb 27 23:45 akai
-rwxrwxr-x 1 wy1z 2777 Jan 15 23:48 allband.mod
-rwxrwxr-x 1 wy1z 2693 Feb 27 23:45 am1700
-rwxrwxr-x 1 wy1z 1123 Feb 27 23:45 attpc
```

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-rwxrwxr-x 1 wy1z 2021 Feb 27 23:45 basiccar
-rwxrwxr-x 1 wy1z 1566 Feb 27 23:45 chradio1
-rwxrwxr-x 1 wy1z 3795 Feb 27 23:46 coax
-rwxrwxr-x 1 wy1z 2826 Feb 27 23:46 dc777
-rwxrwxr-x 1 wy1z 1968 Feb 27 23:46 dc777.p
-rwxrwxr-x 1 wy1z 149 Feb 27 23:46 disclaim
-rwxrwxr-x 1 wy1z 5934 Feb 27 23:46 fisherpr
-rwxrwxr-x 1 wy1z 2139 Feb 27 23:46 fluke75m
-rwxrwxr-x 1 wy1z 717 Feb 27 23:46 ftp
-rwxrwxr-x 1 wy1z 6353 Feb 27 23:46 ftpmods
-rwxrwxr-x 1 wy1z 2787 Feb 27 23:46 g5rv
-rwxrwxr-x 1 wy1z 1168 Feb 27 23:46 g7
-rwxrwxr-x 1 wy1z 605 Feb 27 23:46 g7-ant
-rwxrwxr-x 1 wy1z 5610 Feb 27 23:46 geclrad
-rwxrwxr-x 1 wy1z 214731 Feb 27 23:46 ibmpcfaq
-rwxrwxr-x 1 wy1z 7523 Feb 27 23:46 jp0le
-rwxrwxr-x 1 wy1z 3315 Feb 27 23:46 jpipe
-rwxrwxr-x 1 wy1z 6422 Feb 27 23:46 jpole
-rwxrwxr-x 1 wy1z 2780 Feb 27 23:46 jpole.bas
-rwxrwxr-x 1 wy1z 3815 Feb 27 23:46 jpole222
-rwxrwxr-x 1 wy1z 2833 Feb 27 23:46 jpolefm
-rwxrwxr-x 1 wy1z 1886 Feb 27 23:46 jps
-rwxrwxr-x 1 wy1z 5691 Feb 27 23:46 kw732
-rwxrwxr-x 1 wy1z 5558 Feb 27 23:46 mobile
-rwxrwxr-x 1 wy1z 5032 Feb 27 23:46 mod
-rwxrwxr-x 1 wy1z 4710 Feb 27 23:46 modfiles
-rwxrwxr-x 1 wy1z 60937 Feb 27 23:46 mods
-rwxrwxr-x 1 wy1z 6353 Feb 27 23:46 modsftp
-rwxrwxr-x 1 wy1z 1516 Feb 27 23:46 procomm
-rwxrwxr-x 1 wy1z 4771 Jan 15 23:52 radio.mod
-rwxrwxr-x 1 wy1z 6542 Feb 27 23:46 radiomod
-rwxrwxr-x 1 wy1z 4888 Feb 27 23:46 rci2950
-rwxrwxr-x 1 wy1z 584 Feb 27 23:46 scanfreq
-rwxrwxr-x 1 wy1z 4202 Feb 27 23:46 scart
-rwxrwxr-x 1 wy1z 6020 Feb 27 23:46 sjant
-rwxrwxr-x 1 wy1z 0 Feb 27 23:46 stereopw
-rwxrwxr-x 1 wy1z 1551 Jan 15 23:53 tc2duplx.mod
-rwxrwxr-x 1 wy1z 1558 Jan 15 23:53 tnc2.mod

mods/motorola:
total 58
-rwxrwxr-x 1 wy1z 2536 Feb 27 22:47 ht220mod
-rwxrwxr-x 1 wy1z 5585 Jan 15 23:50 maxtrac.mod
-rwxrwxr-x 1 wy1z 2475 Feb 27 22:48 maxtrac9
-rwxrwxr-x 1 wy1z 1874 Feb 27 22:48 maxtrac9.p
-rwxrwxr-x 1 wy1z 1633 Feb 27 22:47 micor
-rwxrwxr-x 1 wy1z 6138 Feb 27 22:47 micor9k6
-rwxrwxr-x 1 wy1z 8877 Jan 16 01:17 micordup.mod
-rwxrwxr-x 1 wy1z 11843 Jan 16 01:17 micoruhf.mod
-rwxrwxr-x 1 wy1z 8258 Jan 16 01:17 micorvhf.mod
```

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-rwxrwxr-x 1 wy1z 6060 Jan 15 23:51 mitrek.mod

mods/paccomm:
total 6
-rwxrwxr-x 1 wy1z 3260 Feb 27 23:23 nb9600mo
-rwxrwxr-x 1 wy1z 1397 Jan 15 23:53 tiny2tnc.mod

mods/ramsey:
total 78
-rwxrwxr-x 1 wy1z 2819 Feb 27 22:33 fm10
-rwxrwxr-x 1 wy1z 28984 Feb 27 22:33 fm10.faq
-rwxrwxr-x 1 wy1z 23110 Feb 27 22:33 fm10.mod
-rwxrwxr-x 1 wy1z 3017 Feb 27 22:33 fx146-22
-rwxrwxr-x 1 wy1z 1069 Jan 15 23:49 fx146.mod
-rwxrwxr-x 1 wy1z 323 Jan 15 23:51 pa20.mod
-rwxrwxr-x 1 wy1z 1207 Feb 27 22:33 prosca
-rwxrwxr-x 1 wy1z 1376 Jan 15 23:52 ramsey.mod
-rwxrwxr-x 1 wy1z 770 Feb 27 22:33 ramsey14.pac
-rwxrwxr-x 1 wy1z 4474 Feb 27 22:33 ramsey2m
-rwxrwxr-x 1 wy1z 1410 Jan 15 23:52 ramseyfx.mod
-rwxrwxr-x 1 wy1z 3394 Feb 27 22:33 ramseypm
-rwxrwxr-x 1 wy1z 823 Feb 27 22:33 ramyfx.sql

mods/ranger:
total 5
-rwxrwxr-x 1 wy1z 4386 Jan 15 23:52 rci-2950.mod

mods/sangean:
total 6
-rwxrwxr-x 1 wy1z 3241 Feb 27 23:06 803a
-rwxrwxr-x 1 wy1z 1101 Feb 27 23:40 sangean

mods/sony:
total 21
-rwxrwxr-x 1 wy1z 3831 Feb 27 23:03 sony2010
-rwxrwxr-x 1 wy1z 4347 Jan 19 15:58 sony2010-2.mod
-rwxrwxr-x 1 wy1z 3961 Feb 27 23:03 sony2010.1
-rwxrwxr-x 1 wy1z 4277 Jan 19 15:58 sony2010.mod
-rwxrwxr-x 1 wy1z 2246 Feb 27 23:03 sonysw

mods/standard:
total 72
-rwxrwxr-x 1 wy1z 1600 Feb 27 22:36 c528
-rwxrwxr-x 1 wy1z 9899 Jan 14 19:12 c528.mod
-rwxrwxr-x 1 wy1z 1470 Feb 27 22:36 c528a
-rwxrwxr-x 1 wy1z 4124 Feb 27 22:36 c528batt
-rwxrwxr-x 1 wy1z 7463 Feb 27 22:36 c528mod
-rwxrwxr-x 1 wy1z 4437 Feb 27 22:36 c528mods
-rwxrwxr-x 1 wy1z 506 Feb 27 22:36 c528rx
-rwxrwxr-x 1 wy1z 3792 Feb 27 22:36 c558
-rwxrwxr-x 1 wy1z 4624 Jan 14 19:12 c558-1.mod
-rwxrwxr-x 1 wy1z 4132 Jan 14 19:12 c558.mod
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-rwxrwxr-x 1 wy1z 3191 Feb 27 22:36 c558diag
-rwxrwxr-x 1 wy1z 252 Feb 27 22:36 c558u
-rwxrwxr-x 1 wy1z 938 Feb 27 22:36 c558word
-rwxrwxr-x 1 wy1z 5849 Feb 27 22:36 c5608
-rwxrwxr-x 1 wy1z 803 Feb 27 22:36 c5608da
-rwxrwxr-x 1 wy1z 9281 Jan 14 19:12 c5608da.mod
-rwxrwxr-x 1 wy1z 1819 Feb 27 23:44 st528
-rwxrwxr-x 1 wy1z 0 Feb 27 23:44 stereopw

mods/tandy:
total 329
-rwxrwxr-x 1 wy1z 3444 Feb 27 23:05 49mhz
-rwxrwxr-x 1 wy1z 2182 Feb 27 22:42 dx380
-rwxrwxr-x 1 wy1z 3476 Feb 27 22:42 dx380lon
-rwxrwxr-x 1 wy1z 2830 Jan 15 23:11 dx390-1.mod
-rwxrwxr-x 1 wy1z 2218 Jan 16 21:31 dx390-2.mod
-rwxrwxr-x 1 wy1z 1211 Feb 27 22:42 dx440din
-rwxrwxr-x 1 wy1z 2575 Feb 27 22:42 dx440mod
-rwxrwxr-x 1 wy1z 2790 Feb 27 22:42 dx440mod.1
-rwxrwxr-x 1 wy1z 1596 Feb 27 22:42 dx440r26
-rwxrwxr-x 1 wy1z 1580 Feb 27 22:42 dx440scn
-rwxrwxr-x 1 wy1z 5918 Feb 27 22:42 dx440whi
-rwxrwxr-x 1 wy1z 4023 Feb 27 22:42 dx440wmo
-rwxrwxr-x 1 wy1z 8837 Feb 27 22:42 dx44odin
-rwxrwxr-x 1 wy1z 1055 Feb 27 22:45 frg7
-rwxrwxr-x 1 wy1z 6583 Feb 27 22:42 htx101
-rwxrwxr-x 1 wy1z 6871 Jan 15 23:49 htx101.mod
-rwxrwxr-x 1 wy1z 1229 Feb 27 22:42 htx202
-rwxrwxr-x 1 wy1z 1164 Feb 27 22:42 htx202.1
-rwxrwxr-x 1 wy1z 4988 Feb 27 22:42 htx202.j
-rwxrwxr-x 1 wy1z 1976 Feb 27 22:42 htx202.lit
-rwxrwxr-x 1 wy1z 3047 Feb 27 22:42 htx202.tsp
-rwxrwxr-x 1 wy1z 6443 Feb 27 22:42 htx202b
-rwxrwxr-x 1 wy1z 1896 Feb 27 22:42 htx202ba
-rwxrwxr-x 1 wy1z 849 Feb 27 22:42 htx202la
-rwxrwxr-x 1 wy1z 1410 Feb 27 22:42 htx202nm
-rwxrwxr-x 1 wy1z 1219 Feb 27 22:42 htx202tt
-rwxrwxr-x 1 wy1z 555 Feb 27 22:43 pro2002
-rwxrwxr-x 1 wy1z 31183 Feb 27 22:43 pro2004
-rwxrwxr-x 1 wy1z 5044 Jan 14 19:09 pro2004.mod
-rwxrwxr-x 1 wy1z 651 Feb 27 22:43 pro2005
-rwxrwxr-x 1 wy1z 2544 Jan 14 19:09 pro2005.mod
-rwxrwxr-x 1 wy1z 15216 Feb 27 22:43 pro2005r
-rwxrwxr-x 1 wy1z 18483 Feb 27 22:44 pro2006
-rwxrwxr-x 1 wy1z 12553 Jan 27 13:53 pro2006.mod
-rwxrwxr-x 1 wy1z 586 Feb 27 22:44 pro2006.p
-rwxrwxr-x 1 wy1z 3711 Feb 27 22:44 pro2006.ssb
-rwxrwxr-x 1 wy1z 2999 Feb 27 22:44 pro2006a
-rwxrwxr-x 1 wy1z 3040 Feb 27 22:44 pro2006m
-rwxrwxr-x 1 wy1z 5338 Feb 27 22:44 pro2006p
```

```
-rwxrwxr-x 1 wy1z 4693 Feb 27 22:44 pro2020.mod
-rwxrwxr-x 1 wy1z 2678 Feb 27 22:44 pro2021
-rwxrwxr-x 1 wy1z 3335 Jan 14 19:09 pro2021.mod
-rwxrwxr-x 1 wy1z 2571 Feb 27 22:44 pro2022
-rwxrwxr-x 1 wy1z 2426 Jan 14 19:09 pro2022.mod
-rwxrwxr-x 1 wy1z 1395 Feb 27 22:44 pro2026
-rwxrwxr-x 1 wy1z 1602 Jan 14 19:09 pro2026.mod
-rwxrwxr-x 1 wy1z 1177 Feb 11 01:14 pro2030.mod
-rwxrwxr-x 1 wy1z 901 Feb 27 22:44 pro32nm
-rwxrwxr-x 1 wy1z 1690 Feb 27 22:44 pro34
-rwxrwxr-x 1 wy1z 1201 Jan 14 19:09 pro34.mod
-rwxrwxr-x 1 wy1z 13400 Feb 27 22:44 pro34a
-rwxrwxr-x 1 wy1z 2512 Feb 27 22:44 pro34bir
-rwxrwxr-x 1 wy1z 758 Feb 27 22:44 pro34mod
-rwxrwxr-x 1 wy1z 6511 Feb 27 22:44 pro37
-rwxrwxr-x 1 wy1z 10438 Feb 27 22:44 pro37-8
-rwxrwxr-x 1 wy1z 922 Feb 27 22:44 pro37.800
-rwxrwxr-x 1 wy1z 17902 Jan 14 19:09 pro37.mod
-rwxrwxr-x 1 wy1z 5295 Jan 14 19:09 pro38.mod
-rwxrwxr-x 1 wy1z 2677 Feb 27 22:44 pro39
-rwxrwxr-x 1 wy1z 3501 Feb 27 22:44 pro39.8oo
-rwxrwxr-x 1 wy1z 320 Feb 27 22:44 pro39.c
-rwxrwxr-x 1 wy1z 3297 Jan 14 19:09 pro39.mod
-rwxrwxr-x 1 wy1z 1062 Feb 27 22:44 pro39c
-rwxrwxr-x 1 wy1z 2392 Feb 27 22:44 pro43
-rwxrwxr-x 1 wy1z 2613 Jan 14 19:09 pro43-1.mod
-rwxrwxr-x 1 wy1z 2248 Jan 14 19:09 pro43-2.mod
-rwxrwxr-x 1 wy1z 2860 Feb 27 22:44 pro43.800
-rwxrwxr-x 1 wy1z 10480 Jan 27 13:53 pro43.mod
-rwxrwxr-x 1 wy1z 2684 Jan 15 23:52 rs-freq.mod
-rwxrwxr-x 1 wy1z 1330 Feb 27 23:40 rs2mht

mods/tapr:
total 12
-rwxrwxr-x 1 wy1z 11615 Jan 15 23:53 tapr9600.mod

mods/uniden:
total 3
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 bearcat
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 other
drwxrwxr-x 2 wy1z 512 Mar 15 12:05 regency

mods/uniden/bearcat:
total 89
-rwxrwxr-x 1 wy1z 479 Jan 15 23:48 760xlt.mod
-rwxrwxr-x 1 wy1z 2266 Feb 27 22:13 bc100
-rwxrwxr-x 1 wy1z 2438 Feb 27 22:13 bc100a
-rwxrwxr-x 1 wy1z 1004 Feb 27 22:13 bc140
-rwxrwxr-x 1 wy1z 1008 Jan 14 19:12 bc175xl.mod
-rwxrwxr-x 1 wy1z 19528 Jan 14 19:12 bc200.mod
-rwxrwxr-x 1 wy1z 4184 Feb 27 22:13 bc200mod
```

```
-rwxrwxr-x 1 wy1z 1113 Feb 27 22:13 bc200xlt
-rwxrwxr-x 1 wy1z 2390 Jan 14 19:12 bc200xlt.cpu
-rwxrwxr-x 1 wy1z 4125 Feb 27 22:13 bc205xlt.mod
-rwxrwxr-x 1 wy1z 1748 Feb 27 22:13 bc220
-rwxrwxr-x 1 wy1z 3294 Jan 14 19:12 bc2500.mod
-rwxrwxr-x 1 wy1z 5008 Feb 27 22:13 bc760
-rwxrwxr-x 1 wy1z 802 Feb 27 22:13 bc760.re
-rwxrwxr-x 1 wy1z 1229 Feb 27 22:13 bc760.sqm
-rwxrwxr-x 1 wy1z 8575 Feb 27 22:13 bc760rv
-rwxrwxr-x 1 wy1z 1379 Feb 27 22:13 bc760xlt
-rwxrwxr-x 1 wy1z 3560 Jan 14 19:12 bc855xlt.mod
-rwxrwxr-x 1 wy1z 8431 Feb 27 22:13 bcrepair
-rwxrwxr-x 1 wy1z 4193 Feb 27 22:13 bearcat3
-rwxrwxr-x 1 wy1z 1588 Jan 14 19:23 uni2510.mod

mods/uniden/other:
total 4
-rwxrwxr-x 1 wy1z 3499 Feb 27 23:21 hr25exp

mods/uniden/regency:
total 12
-rwxrwxr-x 1 wy1z 4969 Feb 27 22:59 mx4000mo
-rwxrwxr-x 1 wy1z 2571 Feb 27 22:59 mx5000
-rwxrwxr-x 1 wy1z 1412 Feb 27 22:59 mx7000e
-rwxrwxr-x 1 wy1z 503 Feb 27 22:59 mx7000m
-rwxrwxr-x 1 wy1z 531 Feb 27 22:59 mx7000z

mods/yaesu:
total 513
-rwxrwxr-x 1 wy1z 1055 Feb 27 22:37 frg7
-rwxrwxr-x 1 wy1z 943 Feb 27 22:38 ft1000
-rwxrwxr-x 1 wy1z 1203 Jan 14 19:07 ft1000.mod
-rwxrwxr-x 1 wy1z 2581 Feb 27 22:38 ft101e.mod
-rwxrwxr-x 1 wy1z 1121 Feb 27 22:38 ft101ee
-rwxrwxr-x 1 wy1z 5614 Feb 27 22:38 ft11r
-rwxrwxr-x 1 wy1z 1007 Jan 14 19:07 ft209rh.mod
-rwxrwxr-x 1 wy1z 962 Feb 27 22:38 ft209rhm
-rwxrwxr-x 1 wy1z 4394 Feb 27 22:38 ft211
-rwxrwxr-x 1 wy1z 2674 Feb 27 22:38 ft212
-rwxrwxr-x 1 wy1z 288 Feb 27 22:38 ft212mod
-rwxrwxr-x 1 wy1z 1314 Jan 14 19:07 ft212rh.mod
-rwxrwxr-x 1 wy1z 2623 Jan 14 19:07 ft2200.mod
-rwxrwxr-x 1 wy1z 2938 Feb 27 22:39 ft2200am
-rwxrwxr-x 1 wy1z 5240 Jan 14 19:07 ft23-33-73.mod
-rwxrwxr-x 1 wy1z 4711 Jan 14 19:07 ft23-73-211.mod
-rwxrwxr-x 1 wy1z 4940 Feb 27 22:39 ft233373
-rwxrwxr-x 1 wy1z 670 Feb 27 22:39 ft23pac
-rwxrwxr-x 1 wy1z 758 Feb 27 22:39 ft23r.mod
-rwxrwxr-x 1 wy1z 802 Feb 27 22:39 ft2400
-rwxrwxr-x 1 wy1z 1106 Jan 14 19:07 ft2400-1.mod
-rwxrwxr-x 1 wy1z 942 Jan 14 19:07 ft2400.mod
```

```
-rwxrwxr-x 1 wy1z 677 Feb 27 22:39 ft2400h
-rwxrwxr-x 1 wy1z 1219 Feb 27 22:39 ft26
-rwxrwxr-x 1 wy1z 2615 Jan 14 19:07 ft290.mod
-rwxrwxr-x 1 wy1z 6034 Jan 14 19:07 ft290r.mod
-rwxrwxr-x 1 wy1z 2547 Feb 27 22:39 ft301
-rwxrwxr-x 1 wy1z 2138 Feb 27 22:39 ft411
-rwxrwxr-x 1 wy1z 8103 Jan 14 19:07 ft411-1.mod
-rwxrwxr-x 1 wy1z 1026 Jan 16 00:56 ft411-2.mod
-rwxrwxr-x 1 wy1z 1210 Feb 27 22:39 ft411.key
-rwxrwxr-x 1 wy1z 4698 Jan 14 19:07 ft411.mod
-rwxrwxr-x 1 wy1z 1155 Feb 27 22:39 ft411mod
-rwxrwxr-x 1 wy1z 1023 Feb 27 22:39 ft411ptt
-rwxrwxr-x 1 wy1z 705 Feb 27 22:39 ft415
-rwxrwxr-x 1 wy1z 1641 Jan 14 19:07 ft415-815.mod
-rwxrwxr-x 1 wy1z 1331 Feb 27 22:39 ft415_81
-rwxrwxr-x 1 wy1z 6108 Feb 27 22:39 ft470
-rwxrwxr-x 1 wy1z 37144 Jan 14 19:07 ft470-1.mod
-rwxrwxr-x 1 wy1z 9942 Jan 16 00:56 ft470-2.mod
-rwxrwxr-x 1 wy1z 1951 Jan 16 00:56 ft470-3.mod
-rwxrwxr-x 1 wy1z 2093 Feb 27 22:39 ft470.1
-rwxrwxr-x 1 wy1z 36802 Feb 27 22:39 ft470.lis
-rwxrwxr-x 1 wy1z 27000 Jan 14 19:07 ft470.mod
-rwxrwxr-x 1 wy1z 1309 Feb 27 22:39 ft4700
-rwxrwxr-x 1 wy1z 1195 Jan 16 00:56 ft4700.mod
-rwxrwxr-x 1 wy1z 2191 Feb 27 22:39 ft470hyp
-rwxrwxr-x 1 wy1z 924 Feb 27 22:39 ft470mat
-rwxrwxr-x 1 wy1z 36453 Feb 27 22:39 ft470rd
-rwxrwxr-x 1 wy1z 2177 Feb 27 22:39 ft470rx
-rwxrwxr-x 1 wy1z 3949 Feb 27 22:39 ft470rx1
-rwxrwxr-x 1 wy1z 2181 Feb 27 22:39 ft470rxt
-rwxrwxr-x 1 wy1z 2574 Feb 27 22:39 ft470rxu
-rwxrwxr-x 1 wy1z 8979 Feb 27 22:39 ft470rxu.1
-rwxrwxr-x 1 wy1z 5606 Feb 27 22:39 ft470rxu.2
-rwxrwxr-x 1 wy1z 2487 Feb 27 22:39 ft470war
-rwxrwxr-x 1 wy1z 28137 Feb 27 22:39 ft51-520
-rwxrwxr-x 1 wy1z 1611 Jan 14 19:07 ft5100-1.mod
-rwxrwxr-x 1 wy1z 17382 Jan 14 19:07 ft5100-2.mod
-rwxrwxr-x 1 wy1z 2985 Jan 14 19:07 ft5100.int
-rwxrwxr-x 1 wy1z 2700 Jan 14 19:07 ft5100.mod
-rwxrwxr-x 1 wy1z 857 Feb 27 22:39 ft5100ti
-rwxrwxr-x 1 wy1z 26463 Feb 27 22:39 ft51_200.rd
-rwxrwxr-x 1 wy1z 2278 Feb 27 22:39 ft5200
-rwxrwxr-x 1 wy1z 2368 Feb 27 22:39 ft5200.m0d
-rwxrwxr-x 1 wy1z 5079 Jan 14 19:07 ft5200.mod
-rwxrwxr-x 1 wy1z 856 Feb 27 22:39 ft5200w
-rwxrwxr-x 1 wy1z 2208 Feb 27 22:39 ft5200xb
-rwxrwxr-x 1 wy1z 2107 Feb 27 22:39 ft530
-rwxrwxr-x 1 wy1z 729 Feb 27 22:39 ft530-
-rwxrwxr-x 1 wy1z 2272 Jan 14 14:34 ft530.1
-rwxrwxr-x 1 wy1z 9645 Feb 27 22:40 ft530.193
```

```
-rwxrwxr-x 1 wy1z 1260 Jan 14 14:34 ft530.2
-rwxrwxr-x 1 wy1z 1441 Feb 27 22:40 ft530.293
-rwxrwxr-x 1 wy1z 2458 Jan 14 14:34 ft530.3
-rwxrwxr-x 1 wy1z 2435 Jan 14 14:34 ft530.4
-rwxrwxr-x 1 wy1z 1258 Feb 27 22:40 ft530.cor
-rwxrwxr-x 1 wy1z 10778 Jan 14 19:07 ft530.mod
-rwxrwxr-x 1 wy1z 2572 Feb 27 22:40 ft530.rtx
-rwxrwxr-x 1 wy1z 1660 Feb 27 22:40 ft530am
-rwxrwxr-x 1 wy1z 1068 Feb 27 22:40 ft530am1
-rwxrwxr-x 1 wy1z 2047 Feb 27 22:40 ft53o
-rwxrwxr-x 1 wy1z 999 Jan 14 19:07 ft650.mod
-rwxrwxr-x 1 wy1z 7027 Feb 27 22:40 ft70g
-rwxrwxr-x 1 wy1z 1131 Jan 14 19:07 ft726r.mod
-rwxrwxr-x 1 wy1z 2443 Feb 27 22:40 ft727cat.mod
-rwxrwxr-x 1 wy1z 1045 Jan 14 19:07 ft727r.mod
-rwxrwxr-x 1 wy1z 2172 Feb 27 22:40 ft727rca
-rwxrwxr-x 1 wy1z 11375 Feb 27 22:40 ft727rev
-rwxrwxr-x 1 wy1z 3075 Feb 27 22:40 ft727sof
-rwxrwxr-x 1 wy1z 1735 Jan 14 19:07 ft736r.mod
-rwxrwxr-x 1 wy1z 1083 Feb 27 22:40 ft747
-rwxrwxr-x 1 wy1z 1386 Jan 14 19:07 ft747.mod
-rwxrwxr-x 1 wy1z 1188 Jan 14 19:07 ft747gx.mod
-rwxrwxr-x 1 wy1z 781 Feb 27 22:40 ft757
-rwxrwxr-x 1 wy1z 1091 Jan 14 19:07 ft757.mod
-rwxrwxr-x 1 wy1z 1158 Jan 14 19:07 ft757gx.mod
-rwxrwxr-x 1 wy1z 2193 Feb 27 22:40 ft767
-rwxrwxr-x 1 wy1z 2328 Feb 27 22:40 ft767gx
-rwxrwxr-x 1 wy1z 1423 Jan 14 19:07 ft767gx.mod
-rwxrwxr-x 1 wy1z 1904 Feb 27 22:40 ft767gxm
-rwxrwxr-x 1 wy1z 1235 Feb 27 22:40 ft890
-rwxrwxr-x 1 wy1z 1710 Jan 14 19:07 ft890-1.mod
-rwxrwxr-x 1 wy1z 1537 Jan 14 19:07 ft890.mod
-rwxrwxr-x 1 wy1z 836 Feb 27 22:40 ft990
-rwxrwxr-x 1 wy1z 1188 Jan 14 19:07 ft990-1.mod
-rwxrwxr-x 1 wy1z 1203 Jan 14 19:07 ft990-2.mod
-rwxrwxr-x 1 wy1z 2616 Jan 14 19:07 ft990-3.mod
-rwxrwxr-x 1 wy1z 1138 Jan 14 19:07 ft990.mod

packet-internet:
total 73
-rwxrwxr-x 1 wy1z 48878 Jan 11 19:07 amprnet
-rwxrwxr-x 1 wy1z 227 Jan 11 19:07 ka2qhd
-rwxrwxr-x 1 wy1z 10759 Jan 11 19:07 n0ary
-rwxrwxr-x 1 wy1z 10109 Jan 11 19:07 n6qmy
-rwxrwxr-x 1 wy1z 434 Jan 11 19:07 w2xo
-rwxrwxr-x 1 wy1z 1274 Jan 11 19:07 wb7tpy

part97:
total 132
-rwxrwxr-x 1 wy1z 45110 Dec 21 00:03 Part-97.1
-rwxrwxr-x 1 wy1z 46264 Dec 29 11:08 Part-97.2
```

```
-rwxrwxr-x 1 wy1z 41888 Dec 21 00:03 Part-97.3

pc:
total 6
drwxrwxr-x 7 wy1z 512 Mar 15 12:08 digital
drwxrwxr-x 2 wy1z 512 Mar 15 12:10 dos-utils
drwxrwxr-x 2 wy1z 512 Mar 15 12:06 ham-utils
drwxrwxr-x 2 wy1z 512 Mar 15 12:06 other
drwxrwxr-x 2 wy1z 512 Mar 15 12:10 satellite
drwxrwxr-x 2 wy1z 512 Mar 15 12:06 theory-and-morse

pc/digital:
total 105
-rwxrwxr-x 1 wy1z 50564 Jan 21 13:18 dspmorse.zip
drwxrwxr-x 2 wy1z 512 Mar 15 12:07 f6fbb
-rwxrwxr-x 1 wy1z 34382 Jan 22 21:33 frgsc123.zip
drwxrwxr-x 2 wy1z 512 Mar 15 12:07 misc
-rwxrwxr-x 1 wy1z 15395 Jan 12 07:45 pax285.zip
drwxrwxr-x 2 wy1z 512 Mar 15 12:08 tcpip
drwxrwxr-x 2 wy1z 512 Mar 15 12:07 utils
drwxrwxr-x 2 wy1z 512 Mar 15 12:08 w0rli

pc/digital/f6fbb:
total 44
-rwxrwxr-x 1 wy1z 44472 May 14 1993 f6bbsdox.exe

pc/digital/misc:
total 161
-rwxrwxr-x 1 wy1z 345 Jan 10 23:55 trakbox.txt
-rwxrwxr-x 1 wy1z 155197 Jan 10 22:02 trakbox.zip

pc/digital/tcpip:
total 1098
-rwxrwxr-x 1 wy1z 3127 Mar 12 1993 gr-bugs.bee.Z
-rwxrwxr-x 1 wy1z 10506 Mar 12 1993 gr-notes.bee.Z
-rwxrwxr-x 1 wy1z 831616 Mar 12 1993 gribee08.zip
-rwxrwxr-x 1 wy1z 57488 Mar 5 1993 nosbgnlp.zip
-rwxrwxr-x 1 wy1z 58896 Mar 5 1993 nosbgnpr.zip
-rwxrwxr-x 1 wy1z 137021 Mar 5 1993 nosbgnps.zip

pc/digital/utils:
total 1588
-rwxrwxr-x 1 wy1z 63868 Oct 28 23:22 7plus210.zip
-rwxrwxr-x 1 wy1z 625171 Jan 11 21:00 aprs308.zip
-rwxrwxr-x 1 wy1z 715962 Feb 5 14:48 aprs312.zip
-rwxrwxr-x 1 wy1z 89763 Jan 11 07:42 dual002.zip
-rwxrwxr-x 1 wy1z 21777 Apr 18 1993 pktmon12.lzh
-rwxrwxr-x 1 wy1z 80682 May 27 1993 yapp.arc

pc/digital/w0rli:
total 1128
-rwxrwxr-x 1 wy1z 581243 Mar 9 16:22 cookie.exe
```

```
-rwxrwxr-x 1 wy1z 553726 Mar 9 16:19 mb1701.exe

pc/dos-utils:
total 2264
-rwxrwxr-x 1 wy1z 97442 Mar 11 1993 arj.exe
-rwxrwxr-x 1 wy1z 123413 Sep 10 1993 pcmag01.exe
-rwxrwxr-x 1 wy1z 127131 Sep 10 1993 pcmag02.exe
-rwxrwxr-x 1 wy1z 91340 Sep 10 1993 pcmag03.exe
-rwxrwxr-x 1 wy1z 128638 Sep 10 1993 pcmag04.exe
-rwxrwxr-x 1 wy1z 85709 Sep 10 1993 pcmag05.exe
-rwxrwxr-x 1 wy1z 69760 Sep 10 1993 pcmag06.exe
-rwxrwxr-x 1 wy1z 162806 Sep 10 1993 pcmag07.exe
-rwxrwxr-x 1 wy1z 206365 Sep 10 1993 pcmag08.exe
-rwxrwxr-x 1 wy1z 181737 Sep 10 1993 pcmag09.exe
-rwxrwxr-x 1 wy1z 191489 Sep 10 1993 pcmag10.exe
-rwxrwxr-x 1 wy1z 194299 Sep 10 1993 pcmag11.exe
-rwxrwxr-x 1 wy1z 71614 Sep 10 1993 pcmag12.exe
-rwxrwxr-x 1 wy1z 27632 Mar 5 1993 pcps600.zip
-rwxrwxr-x 1 wy1z 202624 Apr 30 1993 pkz204g.exe
-rwxrwxr-x 1 wy1z 134778 Mar 11 1993 qedit215.zip
-rwxrwxr-x 1 wy1z 3057 Mar 11 1993 settime.zoo
-rwxrwxr-x 1 wy1z 11154 Mar 11 1993 vadol_cd.zoo
-rwxrwxr-x 1 wy1z 23436 Mar 11 1993 zapdir40.zip
-rwxrwxr-x 1 wy1z 55721 Mar 11 1993 zoo210.exe

pc/ham-utils:
total 1289
-rwxrwxr-x 1 wy1z 32230 Nov 15 15:50 dpsqst.zip
-rwxrwxr-x 1 wy1z 198116 Jan 13 21:15 log_eqf.zip
-rwxrwxr-x 1 wy1z 2596 Mar 12 1993 logr10.zoo
-rwxrwxr-x 1 wy1z 44032 Feb 21 1993 pathcalc.zip
-rwxrwxr-x 1 wy1z 40603 Apr 15 1993 pktbat13.lzh
-rwxrwxr-x 1 wy1z 11161 Jan 6 16:40 qexfq194.zip
-rwxrwxr-x 1 wy1z 113528 Apr 14 1993 radiolog.zip
-rwxrwxr-x 1 wy1z 836615 May 13 1993 wrtlog60.zip

pc/other:
total 120
-rwxrwxr-x 1 wy1z 110405 Mar 5 1993 barclogo.pcx

pc/satellite:
total 1632
-rwxrwxr-x 1 wy1z 282757 Feb 28 08:47 pctrk30a.zip
-rwxrwxr-x 1 wy1z 323898 Feb 28 08:47 pctrk30b.zip
-rwxrwxr-x 1 wy1z 199067 Feb 21 23:05 stsorbit.zip
-rwxrwxr-x 1 wy1z 377562 Feb 21 23:05 stsplus.zip
-rwxrwxr-x 1 wy1z 214116 Feb 21 23:05 trak300a.zip
-rwxrwxr-x 1 wy1z 189047 Feb 21 23:05 trak300b.zip

pc/theory-and-morse:
total 260
-rwxrwxr-x 1 wy1z 34781 Jan 3 22:47 cp222c.zip
```

```
-rwxrwxr-x 1 wy1z 59298 Jan 12 07:45 mpp110a.zip
-rwxrwxr-x 1 wy1z 163819 Feb 25 17:45 sm410.exe

tcpip:
total 324
drwxrwxr-x 2 wy1z 512 Mar 15 12:10 Incoming
-rwxrwxr-x 1 wy1z 25847 Mar 10 19:07 domain.zip
-rwxrwxr-x 1 wy1z 294608 Aug 22 1993 nos.zip
-rwxrwxr-x 1 wy1z 163 Sep 14 1993 readme.txt

tcpip/Incoming:
total 0

unix:
total 1
drwxrwxr-x 2 wy1z 512 Mar 15 12:11 morse

unix/morse:
total 91
-rwxrwxr-x 1 wy1z 92208 Apr 28 1993 superiormorse.shar
--
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
================================================================================
```

2994. Ham Radio FTP area on World

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 04:00:10 UTC
From: wy1z@netcom.com
Message-ID: <rec.radio.info-ham.radio.ftp_763790409@ve6mgs.ampr.ab.ca>
Source record: 269646
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info,rec.radio.scanner

This is a periodic reminder that the Boston Amateur Radio Club maintains an FTP area on world.std.com (192.74.137.5) in pub/hamradio.

This area is accessible via: anonymous ftp, gopher, and World Wide Web (and possibly other methods I'm not yet aware of). World is not *fsp*-able yet (I asked them).

Via Gopher, the easiest path to the area is by selecting the following from World's main menu:

18. Membership and Professional Associations

3. Boston Amateur Radio Club

And go from there...

Please feel free to browse through the area.

If anyone has any questions about it, please do not hesitate to e-mail me.

Also, up-to-date copies of the files on the ARRL's information server (info@arrl.org) are available in the directory pub/hamradio/ARRL/Server-files.

All text files are uncompressed, so they are both retrievable and viewable via Gopher and World Wide Web. (If you have any troubles with any text file, please e-mail me).

Source code for programs is always welcome. It can permit people to use those programs on other computers with other operating systems.

Scott

2995. Re: Info Req. Vintage Gear

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 05:40:23 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMqt3C.G3n@news.Hawaii.Edu>
Source record: 269647

In article <1994Mar15.053911.21931@dal1> giddy@ac.dal.ca writes:
>Hi Folks:
>
>I'm new here. Are there people around this group who might be knowledgable
>about older communications receivers?
>
>I am interested in starting to collect some of the gear I and many of my
>contemporaries started out with. (Hammarlund, Hallicrafters, National etc.)
>
>I am concerned about availabiliy of service info and not paying too much
>(I would not pay HRO-60 prices for a Knight Ocean-Hopper :-))
>
>Any direction and comments from like-interested people?

Kevin (and anyone else who might be interested): There is a newsgroup/
email reflector called `boatanchors' that is dedicated to amateur
tube gear. To subscribe send an email to boatanchors-request@gnu.ai.mit.edu
and ask to be placed on the list. You'll get from 20 to 30 articles
via email daily. To post an article just use the above address WITHOUT
the `-request' portion.
Lots of VERY knowledgable and friendly folks on there.

73,
Jeff NH6IL

2996. 2x0 callsigns? (was: 1x1 Callsigns?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 06:07:53 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMquD6.GJy@news.Hawaii.Edu>
Source record: 269648

In article <2lpa6o$gkd@ccnet.ccnet.com> rwilkins@ccnet.com (Bob Wilkins n6fri) writes:
>Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:
>
>: In article <2lo1ii$g94@oak.oakland.edu> prvalko@vela.acs.oakland.edu writes:
>
>: > They should allow for ANY combination of legitimate US-amateur allocated
>: > calls. If I remember correctly, In the US, the call must BEGIN with "A,
>: > K, N, or W" then have a SINGLE DIGIT NUMBER and followed by at LEAST one
>: > letter.
>
>: Based on how some people view me, I'm gonna sign up for A6H. It's look good
>: on the car too.
>
>Someone else we know might like ah6fu I don't think he can get enough
>spark from a tv set to justify a 1x1 call. The call is available as the
>last fellow could not handle it ;)

Hey, who ya talkin' about, Bob? AH6FU is a Hawaii call, and there's only
one Hawaii ham who posts on here.... (oh my God - is he referring to me?)

I guess Hawaii hams will be vying for 2x0 callsigns since we have to
have the mandatory `H6' in the prefix. Not much of a choice:
AH6, KH6, NH6, WH6. Phooey. [Hey, now there's a neat call: PH0OEY.]

Jeff NH6 IL

2997. Re: Licensing in Japan

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 13:11:32 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CMrDz9.3I7@hpqmoea.sqf.hp.com>
Source record: 269649

Well, thanks for the posting. I'm just staggered that there are so many licencees given the synthetic obstacles. I guess Japan may not be alone though, some other countries have overwhelming burocracies. Anyone know the conditions in ,say, India ?

Massive fees and forms for any station change ought to make sure no-one wants to do homebrew, or is that the purpose of the "Guarantee" thing ?

Not planningto emigrate
David GM4ZNX

2998. Re: 2 meter use in London, England?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 13:46:39 UTC
From: prs@oasis.icl.co.uk
Message-ID: <CMrFLs.G8u@oasis.icl.co.uk>
Source record: 269650

In article <16F7AA3A6S85.M14494@mwvm.mitre.org>, M14494@mwvm.mitre.org writes:
> I'm going to be visiting London, England soon (if the IRA ever stops
> taking pot-shots at the airport), and I was wondering about taking
> my 2 meter HT along. Anyone know anything about 1) licensing, and
> 2) frequencies. Any help? Thanks.
>
> Mike, N4PDY

well if you guys stopped funding the IRA, the airport would be a bit
safer....

Here's the latest band plan...

2 metre band plan for London - 144 - 146 MHz

144.000 - 144.150 Unlicensed Taxis

144.150 - 144.500 Wide Unsupressed Interference from QRO SSB rigs

144.500 - 144.700 Packet Data - mostly BBSs with illegal
adverts and people moaning about packet being too slow

144.700 - 145.000 RAINET - Radio Amateur's Interfering Network

145.000 - 145.175 Inputs to Music Broadcast Relays

145.200 - 145.575 Simplex channels for persons who can't ident
because they don't have a licence

145.600 - 145.775 Repeaters outputs - listen on these channels to
hear the Top 40, Raves, etc

145.800 - 146.000 Unlicensed Taxis

Enjoy.

73 G0PUB
Peter.

--... ...-- -.. . --. ----- .--. ..- -... -.- (Pub Inspector)
Peter Swynford is available... TEL: +44 344 472625 FAX: +44 344 473300
or at prs@oasis.icl.co.uk ICL: 7263-2625 AX25: G0PUB@GB7BEQ.GBR.EU
Disclaimer: See Paragraph 2.4.a of section 1.a (article 7) (iii) of the
Town and Country Planning Act, 1967.

2999. 10 GHz EME question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 14:49:45 UTC
From: MOWE%SLUMUS.BITNET@CUNYVM.CUNY.EDU
Message-ID: <16MAR94.10615803.0021.MUSIC@SLUMUS>
Source record: 269651

The Toronto VHF Society (VE3ONT) is beginning to make
plans for EME operations using the 46 m (150') dish at
Algonquin Park later this year.

We have been discussing the possibility of trying EME on
10 GHz. The dish is figured to at least 12 GHz, and is
adequately steerable. The question is this: is there any
point to using such a big dish at 10 GHz for EME? One
argument says "yes, the gain will be humungous." Another
argument says "no, the high gain of the dish will under-
illuminate the Moon so there is no *real* monster gain."

I subscribe to the latter point of view. It seems to me that
an antenna beamwidth of < the Moon's diameter doesn't benefit
the overall link budget. By this argument, 10GHz EME is
optimum with a dish about 4m in diameter (beamwidth about 0.5
degrees, the apparent width of the Moon). The 46 m dish will be
no better than a 4 m dish.

So... am I correct?

MRO

****
Michael R. Owen, Ph.D. a.k.a.: W9IP
Department of Geology Northern Lights Software
St. Lawrence University Star Route, Box 60
Canton, NY 13617 Canton, NY 13617
(315) 379-5975 - voice - (315) 379-0161 (6-9pm)
e-mail: MOWE@SLUMUS FAX - (315) 379-5804
****

3000. Baycom Software info

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 18:18:13 UTC
From: mikeq@sbi.com
Message-ID: <CMrs6E.7DI@meteor.sbi.com>
Source record: 269652

```
---
Hello folks,
Does anyone know where I can get information
on the L2 program used by Baycom. This is the TSR program that
is used to interface the Baycom terminal program with the hardware modem.
I am interested in cpu registers etc. that are used to communicate with
this L2 driver. Any info/sources would be appreciated.

-------------------------------------------------------------
Mike Queally | Email : mikeq@pivot-sts.sbi.com
```

3001. 10 meter repeater...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 18:56:00 UTC
From: Dave.Hockaday%f160.n151.z1@psybbs.durham.nc.us
Message-ID: <763973566.AA01983@psybbs.durham.nc.us>
Source record: 269653

Does (or has) anyone out there have experience with 10 meter repeater construction/installation? I have a machine nearly completed, and would like to share info/ask for voices of experience in this matter. Any input would be appreciated. 73 de WB4IUY 29.680/29.580

X OLX 2.2 X 2 most common elements in the universe:Hydrogen,Stupidity

3002. Re: FT-530 Receive Proble

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 19:08:27 UTC
From: wps@ElSegundoCA.NCR.COM
Message-ID: <5758@tdbunews.teradata.COM>
Source record: 269654

In article t4a@eis.calstate.edu, sadams@eis.calstate.edu (Steven Adams) writes:
--> .
--> . [lines deleted]
--> .
-->
-->Mine just came back last week. Fixed the code squelch problem and
-->something about a new VFO knob??
-->But it still exhibits the problem you described above.
-->
-->Steven Adams
-->sadams@ctp.org
-->KD6KGJ
-->
-->--

Yaesu had problems with the VFO knob. It kept falling off. When mine did that, I drove to Cerritos, since I work about 30 minutes from Yaesu and gave them my FT-530 to fix the problem. The tech did not like the way the squelch was acting on the UHF side, so he noted to repair that also. When they were done, two days since it was under warentee, I had a new VFO knob, fixed squelch, and a world amateur map. The knob is a know problem.

73's

Bill

Bill Starkgraf wps@ElSegundoCA.ncr.com
AT&T Global Information Solutions (310) 524-5754
El Segundo, CA (800) 222-8372 x5754

Call: KD6UQB Simi Settlers ARC
Simi Valley, CA

3003. This Week on Spectrum 03/19/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 19:59:21 UTC
From: spectrum@starcomm.overleaf.com
Message-ID: <2m7oep$rjs@starcomm.overleaf.com>
Source record: 269655
Cross-posted to:
rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.scanner,rec.video.satellite,rec.radio.cb,alt.radio.scanner,alt.radio.pirate

This week on Spectrum we will talk about receivers. Our guest is a man who knows them from antenna jack to speaker. Larry Van Horn answers technical questions all day long on the Monitoring Times answerline. Larry has the opportunity to test almost everything that comes down the pike and with that unique position he can give a great overview of receivers. Bring your questions to Spectrum this weekend and get them answered from the expert.

Next week on Spectrum (Saturday March 26'th) Spectrum will feature a look back at radio and telecommunications history through the ears and eyes of Don Kimberlin. Don worked in all aspects of radio and tellecomm from the 1950's through today. He has an interesting perspective on the communications industry and is a living archive of high-tech history. The only way anyone can know and interpret the future is to see it after understanding and learning from the past. Don is a high-tech historian and you will see why on Spectrum.
--
Spectrum airs live Sunday at 0300 UTC (2200 EST Saturday) on:

WWCR, 5810 KHz, Nashville, TN (World Wide)
WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
KHNC, 1360 AM, Denver, CO (Denver Area)
Omega Radio Network, Galaxy III, X17, 5.8 MHz WIDE audio. (Satellite)

Spectrum is rebroadcast:

Sunday at 1500 EST, on WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Monday at 0400 UTC (2300 EST Sunday),
on WWCR, 7435 KHz, Nashville, TN (World Wide)

--
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spectrum@overleaf.com, askspectrum@attmail.com, spectrumshow@genie.geis.com
+1 800-787-SPECTRUM, +1 908-671-4209 (FAX +1 908-671-2495)

3004. Re: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 20:17:23 UTC
From: flloyd@l1-a.west.sun.com
Message-ID: <2m7pgj$gmr@newsworthy.West.Sun.COM>
Source record: 269656
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <2m4qak$at9@news.iastate.edu> kenman@iastate.edu (Kenneth D Anderson) writes:
>
>I've narrowed my choice of a new rig to either the Yaesu FT-990 or the
>Kenwood TS-850. My interests right now are both ragchewing and DXing using
>both CW and SSB.
>
>I've read the reviews, etc., and would like any input you have about the
>performance of these rigs. If you have had a chance to use both of these
>rigs, a comparison would be great!
>

As many on this newsgroup know, I'm a big TS-850 fan and have owned
more than one - my first being one of the first to arrive into the
local store.

Last weekend, at Phoenix's largest annual swap meet, I saw about
three or four TS-850's for sale, all for around $1250.00 each.

But, I didn't see any FT-990's for sale... Hmmmmm.

I still like my 850, but lot'sa folks really like the 990.

-fred

[Fred Lloyd, AA7BQ Fred.Lloyd@west.sun.com]
[Sun Microsystems, Systems Engineer]
[Phoenix, AZ (602) 224-3517]

3005. Sorting the confusing between World and Oakland

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 20:47:45 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCMrz3L.B6H@netcom.com>
Source record: 269657
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,alt.radio.scanner

I have received many questions about where the ham radio FTP files are -
World or Oakland?

When I posted the message about the switchover from World to Oakland, I'd
completely forgotten about the automated period reminder about the file
availability on World.

I have modified that periodic reminder, and will have it replace the one
mentioning World. It will, instead, mention Oakland.

Sorry for any confusion or inconvenience this may have caused.

Scott Ehrlich, WY1Z

--

```
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
================================================================================
```

3006. Part 97

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 21:16:56 UTC
From: RW884@CONRAD
Message-ID: <2m7t08$o9i@lester.appstate.edu>
Source record: 269658

Is there a way I can get a copy of the revised Part 97 via e-mail?

Shawn Watkins
KE4FPZ

3007. Alinco 180

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 21:20:05 UTC
From: RW884@CONRAD
Message-ID: <2m7t65$o9i@lester.appstate.edu>
Source record: 269659

I have an Alinco 180 (?) 2 meter HT and can't figure out how to enable the extended receive. Does anyone out there know? I can't remember.

KE4FPZ

3008. Re: 10 GHz EME question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 21:58:19 UTC
From: "F. Kevin Feeney" <fkf1@cornell.edu>
Message-ID: <2m7vdrlNNdbl@newsstand.cit.cornell.edu>
Source record: 269660

In article <1994Mar16.171007.15772@ke4zv.atl.ga.us> Gary Coffman,
gary@ke4zv.atl.ga.us writes:
>
>I don't think so. The libration fading will be much reduced by
>illuminating a smaller portion of the Moon. And gain is gain,
>the extra gain will be usable for transmit. For receive it's
>a somewhat different matter. Stations using small dishes will
>be illuminating the entire lunar hemisphere. Your dish will
>only receive part of that energy since the rest will fall outside
>your beamwidth. But the extra dish gain should compensate for
>that, and your receive strength should be similar to that of
>a dish that just illuminates the entire Moon. And, you'll receive
>less thermal noise from the rest of the Moon, and less libration
>fading. So while the big dish won't be that much better for receive,
>it won't be worse, and on transmit it will be a big help to other
>stations because it's reflected signal will behave more like a
>strong point source.
>
>Gary
>--
>Gary Coffman KE4ZV | You make it, |
gatech!wa4mei!ke4zv!gary
>Destructive Testing Systems | we break it. |
uunet!rsiatl!ke4zv!gary
>534 Shannon Way | Guaranteed! |
emory!kd4nc!ke4zv!gary
>Lawrenceville, GA 30244 | |

Our local club had a presentation by one of the people at
the Big Dish in Areciebo and his comments on EME work was that
libration fading was much better □ with the smaller portion of
the moon being illuminated. (He quoted some ridiculously small
spot on the moon, I think I've misremembered it in the thousands
of meters wide (can't be that small, can it?) - but then it is a
spherical dish with 89 db of gain or so on 432 mhz...) Apparently
they use about 10 watts for EME on 432. (and have a big
transmitter in the Megawatt range, before antenna gain, for
radar mapping stuff.) Very interesting talk, wish I had written
some of it down.

Anyway, it seems his comments dovetail with Gary's.

73 de Kevin, WB2EMS
"Question authority and the authorities will question you."

3009. Re: 10 GHz EME question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-16 22:57:21 UTC
From: mraz@maverick.aud.alcatel.com
Message-ID: <9403162257.AA03174@maverick.aud.alcatel.com>
Source record: 269661

Michael R. Owen sez:

>Another argument says "no, the high gain of the dish will under-
>illuminate the Moon so there is no *real* monster gain."

Can you explain the "real monster gain"? It seems to me that, since the
moon's surface is approximately spherical, most of the RF that hits
off-axis will be dispersed into space and not reflected back to the earth.

My seat-of-the-pants tells me to concentrate all RF at the center the moon.
[That is, if the dish has the precision to maintain the center of the moon.]

73
Kris AA5UO
mraz@aud.alcatel.com

3010. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 07:27:18 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <763921475.F00002@ocitor.fidonet>
Source record: 269672

```
The following files were processed Thursday 3-17-94:

HAMLOG [ HAM: Amateur radio logging programs ]
---------------------------------------------------------------------
KB0ZPLOG.EXE ( 326656 bytes) KB0ZP contest logging program Ver.
940105. Shareware
KB0ZPLOG.EXE ( 326656 bytes) KB0ZP contest logging program Ver.
940105. Shareware

---------------------------------------------------------------------
653312 bytes in 2 file(s)

Total of 653312 bytes in 2 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)
```

3011. Re: Body Parts by J. Herman

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 08:52:26 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CMswnE.80x@news.Hawaii.Edu>
Source record: 269662

In article <762477092snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
> Funny, you've followed up on almost all of my postings now trying to
> point out some alledged "fascination" with body parts.
>
> Not trying to avert some attention to your own fascination are you?

<yawn>

Take a sedative, my friend. Oh, you forgot to mention where Conway Yee shot himself.

73,
Jeff NH6IL

3012. Re: Diesel or Taurus fr HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 09:01:30 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CMsx2J.1Jw@hpqmoea.sqf.hp.com>
Source record: 269663

Chain and gears, oh well, another theory down the pan...

I've been accused of having enough curiosity to kill a cattery, I'd have had that lump out and running on a bench, then tried it with the injectors out spinning over driven by a 3 hp electric motor, then with the head off, then with the pistons and rods out etc etc until something finally affected it ?

Did you try exorcism?

I don't blame you for unloading it back whence it came, but the whole thing must really niggle.

Cheers
David

3013. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 10:59:57 UTC
From: M.Willis@ee.surrey.ac.uk
Message-ID: <1994Mar17.105957.6324@ee.surrey.ac.uk>
Source record: 269664
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

In article <CMIACE.D9C@hpqmoea.sqf.hp.com>, dstock@hpqmoca.sqf.hp.com (David Stockton) writes:
|>
|> I'm happy with my choice, a Diesel powered Range-Rover derivative
|> called a "Discovery"
|>
|> Give serious thought to Diesels, no ignition, no computers
|>
|>
|> David GM4ZNX
Yes, but at a mere 18,000 pounds not many can afford such a car. Practically, I found the Cavallier reasonable RF quiet. Fiat Uno, too noisy. Diesels are definately better, they have a bigger battery too.

Mike

3014. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 11:54:39 UTC
From: robs@blade.stack.urc.tue.nl
Message-ID: <2m9gdv$6un@tuegate.tue.nl>
Source record: 269665

In article <2m7v0h$gld@news.iastate.edu>,
William J Turner <wjturner@iastate.edu> wrote:
>In article <763851432snz@g8sjp.demon.co.uk> ip@g8sjp.demon.co.uk writes:
>>Actually, I *have* checked the international agreements. Sadly, I can find no
>>distinction between 'amateur service' and any other callsigns. It is, of
>>course, possible that I'm looking in the worng place.
>
Try the ITU Radio Regulations
>I know I read somewhere (sorry, don't know exactly where :-( ) that amateur
>calls are to follow the pattern I gave earlier (prefix--number--suffix). As I
>understand, this is for ham calls only, although the country designations used
>in the prefixes are used for all radio stations--amateur, commercial,
>government, military, etc.
>
>>As I've said, I have been unable to find anything that differentiates amateur
>>callsigns allocations (at an international level) from other classes.
>>
>>If you accept the premise that *all* callsigns are issued according to
>>international agreement, then either they will have to contain (somewhere) a
>>numeric character, or they will not. Fine. A strange coincidence: callsigns
>>assigned to aircraft (and shipping, for that matter ...) rarely - although
>>the FAA seem to be the very exeception that proves the rule - contain numeric
>>characters.
>

As far as I remember from may days at the Nautical College Rotterdam (Radio
officer training) there really is an imposed standard.
Somewhere I must still have my "Handbook for use in the maritime mobile and
maritime mobile satellite service" being a subset of the Radio Regulations
from the ITU. There might be more info. From my memory:
Shipping: Fixed stations (coast stations): XXX(#(#)) meaning three
alpha's as main callsign, to be used on the general calling frequency's
whereas a numerical suffix (to the call) is allowed to identify different
frequencies in different bands.

Mobile stations (ships): XXXX or XX####(#). De XX####(#) version is often
used for yachts, and non-seagoing vessels. The XXXX is used (by tradition)
by large seaships (cargo vessels, passenger liners etc.)

NB: There is no such thing as prefix here. Just callsign and suffix.

>As I said before, I only heard about this system for amateur calls. There may
>possibly be some system for other calls, also, but I have not read of it
>anywhere that I know of...
>

>>British aircraft registrations and callsigns look like 'GBOAC'. I expect more
>>than a few D.C. area residents have seen that ....
>>
According to same source as above Aircraft use XXXXX as callsign. No
prefix, no suffix. Sometimes there also variations like X(X)#####(#)
probably just like shipping because of limited number of possible XXXXX
calls.
>>Oh - and where's the necessity to have a *number* to separate a prefix from
>>a suffix??? When you operate in another country, don't you (generally) take
>>the prefix (ITU assigned) and separate it from the suffix (your entire call)
>>by a '/' ?
Wasn't that the otherway around these days? <foreign prefix>/<your call>?
>
>I'm sorry to sound as if there must be a number between them; I meant there
>must be *something*. A prefix and suffix must have something to be the prefix
>and suffix of, and in this system it is always a number. This makes it easy
>to tell the prefix and suffix, even in the prefix has a number in it. The
>separator (or the mandatory number as I called it earlier--however misleading
>it was) is always the *last* number. (Thus our recurring A6#XX has # as the
>separaotr.)

According again to above source, I recall the imposed call-sign scheme for
amateur radio is : XX#XX(X). Because many callsigns go back way before these
regulations, old callsign are allowed, provided the prefix is according to
the current prefix allocation.
Country's are free to attach a meaning to the '#' (geographic location or
licence type or clubstation or repeater or whatever) and basically
two-letter suffixes should not be assigned anymore. They should die out of
old age, leaving only three-letter suffixes (but then - we're all going
that way).

I still have some ITU docs lying around somewhere or stashed in a box on
the attic from my sea-going period (stopped in `82). If someone doubt my
response (or rather a lot of someones) I might try to dig 'em up.
73,
Rob Soulier, PA3AXI

3015. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 12:36:19 UTC
From: eckman@eos1.larc.nasa.gov
Message-ID: <2m9is3$b1q@reznor.larc.nasa.gov>
Source record: 269666

With regard to the apparent international regulations requiring a
specific format to an amateur callsign, could someone actually
dig up article 32 of the ITU regulations (which deal with amateur
radio communications) and let us know what it really says?
Drawing analogies with AM radio station callsigns, coast guard,
and airplane designators strikes me as entirely beside the point.
The fact that the Marshall Islands are not using a number following
their V7 prefix is not proof that a number isn't necessary. They
may just be ignoring or ignorant of ITU regs.
Could someone please quote the relevant ITU regs for us? Maybe
someone at ARRL HQ with easy access to the text.

Richard Eckman KO4MR
NASA Langley
eckman@eos1.larc.nasa.gov

3016. ARLX013 HamVention award winners

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 13:53:20 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlx013.1994@ampr.org>
Source record: 269667
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB SPCL @ ARL $ARLX013
ARLX013 HamVention award winners

ZCZC AX45
QST de W1AW
Special Bulletin 13 ARLX013
From ARRL Headquarters
Newington CT March 16, 1994
To all radio amateurs

SB SPCL ARL ARLX013
ARLX013 HamVention award winners

HamVention award winners

For the fourth time in the past five years, an ARRL dignitary has been named the Dayton HamVention Ham of the Year.

Chosen this year was Perry Williams, W1UED, who retires at the end of April as ARRL Washington Area Coordinator, after 40 years of League service.

Perry is featured in a story about the League's Washington office that will appear in April QST.

Receiving the Technical Achievement Award is Dick Newell, AK1A, of Bolton, Massachusetts, the inventor of Packet Cluster. A QST story about Newell appeared in August 1990 QST on page 54.

The DARA Special Achievement Award goes to Russell Kroeker, N7HGE, of Kent, Washington, whom the DARA credits with conceiving the Evergreen Intertie, a system of interlinked repeaters stretching from California to British Columbia. A description of the system is in June 1991 QST, page 83.

Previous Dayton Hams of the Year include former ARRL President Harry Dannals, W2HD (1993); International Amateur Radio Union President and former ARRL General Manager Dick Baldwin, W1RU (1992); and ARRL Hudson Division Director Steve Mendelsohn, WA2DHF (1990).

The awards will be presented at the Dayton HamVention, April 29 to May 1, 1994.
NNNN
/EX

3017. Converting CB to 10 meters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 14:21:33 UTC
From: erik@csn.org
Message-ID: <CMtBvy.ID3@csn.org>
Source record: 269668
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

I have had several QSOs with people on 10 meters who were using converted
CBs. I have a CB sitting in my junk box and was wondering if it could be put
to use in the 10 meter band. Is there some service center I can send it
to have it done? Is it something I can do myself? (The CB in question is
a Cobra Model 19 Plus, manufactured in 1988.) In general, how hard is it
to do this (ie maybe easier on older model CBs)?

Enquiring minds want to know. :-)

TNX and 73,
Erik
--
Erik Mugele * erik@csn.org * "O child learn your ABZ's
* mugele@sil.org * and memorize them well
Ham Radio: N5XYX * No NeXTMail yet! * and you shall learn to talk and think
DoD #: 1030 * Phone: 719.550.6202 * and read and write and spel."

3018. Re: Icom 737 CW Filter Switching Mod.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 14:22:53 UTC
From: Greg@epitome.er.doe.gov
Message-ID: <2m9p3t$768@cronkite.nersc.gov>
Source record: 269669

I am WITHDRAWING this modification!!!!!

I am embarassed to say that this mod works, BUT may effect switching in other modes (SSB,AM/FM). I will fix the mod and post a new one once I fix the existing problem. I apoligize for my lack of test equipment!

Greg

Greg Chartrand _/_/ _/_/ _/_/ _/_/
_/ _/ _/ _/ _/
_/ _/_/_/ _/_/_/ _/_/_/ _/ _/_/_/
_/ _/ _/ _/ _/ _/ _/
_/_/_/ _/ _/ _/_/_/ _/_/_/

3019. Re: HAM Origin?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 15:17:32 UTC
From: flanagan@niagara.Tymnet.COM
Message-ID: <2m9sac$qq8@tymix.Tymnet.COM>
Source record: 269670

In article <p68NQy5.edsorensen@delphi.com> Edward Sorensen <edsorensen@delphi.com> writes:
>
>I have a father-in-law who is a ham Chuck Kramer (KE4BWG) he asked where and
>when the word "HAM" came to be...

Back in the early days of radio, the US Navy was the primary user. As more and more Amateurs took to the airwaves, their interference to the Navy ops grew. It was during one particularly bad QRM experience that some Navy operator whose name is lost to history referred to the source of his QRM as "those hams!" He was not pleased and the reference was derrogatory, but the Amateurs thaought it was great and took it as their own. I guess that shows that Amateurs had "attitude" even back then! :)

Dick

--
Dick Flanagan, W6OLD dick@libelle.com
Libelle Productions, Minden, NV, USA MCI Mail: 412-2140
Voice: +1 702 782 0806 GEnie: FLANAGAN

3020. Re: FT1000D & Heil Pro-set 4?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 15:18:40 UTC
From: "William P. Osborne" <wosborne@nmsu.edu>
Message-ID: <18056.wosborne@nmsu.edu>
Source record: 269671

On Tue, 15 Mar 1994 21:12:49 GMT, Sandy Lynch wrote:

>
>I have recently ordered the new Heil Pro-set 4 headset to go with
>my FT-1000D. Unfortunately, since I am still in temporary digs, I have
>no antenna and no way to use the rig - yet. However, I have heard
>that there may be some difficulties in getting enough audio drive
>out of the FT1000 to the Pro-set headset. Does anyone have first-hand
>experience with this? Is there really a potential problem?
>
>Cheers de Sandy WA6BXH/7J1ABV slay@netcom.com WA6BXH@N0ARY
Sandy: I have the new Heil Pro-Headset and an FT 1000D and their is a problem. The headphone jack in the 1000 is driven by a low level stero signal for seperation of the two rx. when in the dual mode. The normal speaker output is a both signals summed output at higher level. the Heil set appears to be a 4-8 ohm device looking for the kind of drive available from the speaker jack. The haedset works fine if I connect it to the speaker output but has far too low audio level if I connect it to my headphone jack. 73 Bill

3021. E-mail gateway translator?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 15:35:59 UTC
From: uf484@freenet.Victoria.BC.CA
Message-ID: <CMtFC0.4zA@suncad.camosun.bc.ca>
Source record: 269673

Is there anyone out there who knows if there is an Internet
site which translates e-mail into either mcode or sw, then
sends it to a specific callsign? I'd like to reach my friend
who is an avid ham, but doesn't use e-mail.

Regards,
Daniel Hertz (uf484@freenet.victoria.bc.ca)
--
Uncorked! The Wine Consultants

3022. Who was coordinating the GPS board purchase?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 15:51:02 UTC
From: umthoma5@cc.umanitoba.ca
Message-ID: <2m9u96$ci8@canopus.cc.umanitoba.ca>
Source record: 269674

Could the person that offered to coordinate the group purchase of the
Motorola GPS boards please e-mail me? I am unable to search back to
find your address and there are a few people here that are interested in
getting on the want list.

Thanks!

--
Craig Thomasson VE4 CET "If your parents didn't have kids,
umthoma5@cc.umanitoba.ca chances are, you won't either."
Model Railroading... Amateur Radio... Computers... Engineering...
More fun than any human being should be allowed to endure...

3023. PC-COM TNC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 16:43:23 UTC
From: cottle@prism.sps.mot.com
Message-ID: <1994Mar17.164323.23121@newsgate.sps.mot.com>
Source record: 269675

Has anyone used the PC-COM TNC? I am having a little
trouble with it releasing the PTT on my HTX202. Any
other experiences would be helpful.

Thx
--
R i c k C o t t l e
N7ZZD
Email:rrbk50@email.sps.mot.com

3024. 2 meter use in London, England?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 17:00:59 UTC
From: jangus@skyld.grendel.com
Message-ID: <763923659snx@skyld.grendel.com>
Source record: 269676

In article <763839799snz@g8sjp.demon.co.uk> ip@g8sjp.demon.co.uk writes:
> In article <CMrFLs.G8u@oasis.icl.co.uk>
> prs@oasis.icl.co.uk "Peter Swynford" writes:
>
> > well if you guys stopped funding the IRA, the airport would be a bit
> > safer....
> [assorted drivel deleted]
> > 73 G0PUB Peter.
>
> I tried *very* hard to find a 'smiley' in this message. In my opinion, I'm
> ashamed for British radio amateurs that such a person should appear to be
> representative of the breed. Makes my flesh crawl, just thinking about it.
>
> Iain Philipps

What part are you taking offense at Iain, the bit about the IRA funding or the alledged bandplan for London? It's a bit unclear from the way you edited his posting.

There are more deaths from gang activities in Los Angeles County alone in one month then there are from IRA bombings for the whole year.

I'd almost rather be living in Ireland, except that it is *in* Ireland.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3025. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 17:33:52 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <CMtKsI.8ty@hpqmoea.sqf.hp.com>
Source record: 269677

ITU regulations govern what sorts of radio transmissions a country may permit. The country is free to choose not to permit all of the things that it could.

All callsigns issued by a country must use the assigned initial characters, but the subsequent characters are chosen freely by that country, and assigned to permitted stations however that country wishes.

That's why there's so much variation in how countries handle regional and licence class differences.

The UK got G, M, and some things beginning with 2 when the alphabet got shared out and decided to use G, possibly a second letter, digit for amateurs, and all letter calls beginning with M for government stuff. As a 1-off special offer, M0RSE was issued for a limited period to an amateur group. The new novice licence uses the 2 series.

I've no idea who chose an allocation with such a memorable mnemonic for the US. T'wasn't me, I wasn't born then....

Cheers
david GM4ZNX

3026. Grounding and lightning protection--KE4ZV

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 17:43:58 UTC
From: mikemr@microsoft.COM
Message-ID: <9403171749.AA02747@netmail2.microsoft.com>
Source record: 269678

Gary, you mentioned that a typical lightning strike has an energy
of about 20J. Is this really correct? I did a comparison to the energy
stored in a 50uF capacitor charged to 3kV (E=C*V**2), which is 450J,
and I was surprised that the charged cap stored almost 25 times
the energy of a typical lightning strike (not to say that a 50uF filter
cap in an amplifier is anything to sneeze at!). Have I miscalculated
something?

Mike N6MZ mikemr@microsoft.com

3027. qsl info

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 17:57:28 UTC
From: hellman@cbnewsm.cb.att.com
Message-ID: <CMtLw0.D6q@cbnewsm.cb.att.com>
Source record: 269679

I worked 5B4ADA in the cw contest. I got his PO Box from
Dx Clusters but not his name. He's not in the 92 callbook.
Anyone know his name?
(Shees what a concept, you work a guy and all ya get is 599,
you don't even learn his name)

Shel Darack WA2UBK dara@physics.att.com

3028. Daily Summary of Solar Geophysical Activity for 16 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 18:47:22 UTC
From: oler@rho.uleth.ca
Message-ID: <9403171847.AA28118@rho.uleth.ca>
Source record: 269680
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

16 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 16 MARCH, 1994

NOTE: Minor stratospheric warming is continuing over eastern Siberia, Alaska,
and the Canadian Arctic. Temperature gradient is reversed between 60N
and the pole in the middle and upper stratosphere from 30 HPA upwards.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 075, 03/16/94
10.7 FLUX=086.2 90-AVG=106 SSN=031 BKI=4332 3423 BAI=016
BGND-XRAY=A4.2 FLU1=7.6E+06 FLU10=2.0E+04 PKI=4343 3433 PAI=018
BOU-DEV=055,027,039,016,025,042,018,021 DEV-AVG=030 NT SWF=00:000
XRAY-MAX= B1.6 @ 1603UT XRAY-MIN= A2.9 @ 1949UT XRAY-AVG= A6.3
NEUTN-MAX= +004% @ 1450UT NEUTN-MIN= -003% @ 0410UT NEUTN-AVG= +0.3%
PCA-MAX= +0.1DB @ 0230UT PCA-MIN= -0.4DB @ 2355UT PCA-AVG= -0.1DB
BOUTF-MAX=55350NT @ 0236UT BOUTF-MIN=55301NT @ 1705UT BOUTF-AVG=55332NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+078,+000,+000
GOES6-MAX=P:+128NT@ 1823UT GOES6-MIN=N:-097NT@ 0609UT G6-AVG=+097,+023,-047
FLUXFCST=STD:085,085,090;SESC:085,085,090 BAI/PAI-FCST=015,010,010/015,010,010
KFCST=2334 5222 1234 4322 27DAY-AP=008,007 27DAY-KP=2233 2222 2223 2213
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MINSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 15 MAR 94 was 36.5.
The Full Kp Indices for 15 MAR 94 are: 5o 6- 5+ 5o 5- 5- 4- 4-
The 3-Hr Ap Indices for 15 MAR 94 are: 45 63 59 48 43 39 23 21
Greater than 2 MeV Electron Fluence for 16 MAR is: 3.1E+09

SYNOPSIS OF ACTIVITY

Solar activity was very low. Regions 7688 (N19W06) and
7692 (N18E57) are the sole spot groups visible. Both have been
quiet.

Solar activity forecast: solar activity is expected to be
very low throughout the interval.

The geomagnetic field has been quiet to active at middle latitude sites. High latitudes experienced unsettled to active conditions. The greater than 2 MeV electron fluxes remained at levels comparable to those observed over the past week.

STD: Total daily electron fluence reached a maximum of 3.1E+09 electrons/cm^2-ster-day, surpassing the previous maximum of 2.4E+09 set on 12 March, about 3 days after this event began. Electrons today reach high to very high levels.

Geophysical activity forecast: the geomagnetic field is expected to be predominantly unsettled for the next three days. Episodes of active to minor storm conditions may occur during local nighttime hours.

Event probabilities 17 mar-19 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 17 mar-19 mar

A. Middle Latitudes
Active 30/25/15
Minor Storm 20/15/10
Major-Severe Storm 10/05/05

B. High Latitudes
Active 35/25/20
Minor Storm 25/20/15
Major-Severe Storm 10/05/05

HF propagation conditions improved over the last 24 hours, but were still somewhat degraded over the high and polar latitude paths. Most middle latitude paths are seeing near-normal conditions with sporadic night-sector instabilities. Periods of additional night-sector geomagnetic and auroral substorming should continue to produce occasional minor signal degradation from the middle to polar latitudes. Otherwise, gradual improvements should persist over the next 72 hours. Most regions should see near-normal propagation by about 18 March.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 16/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7688 N19W06 225 0100 CAO 09 010 BETA
7692 N18E58 161 0090 HSX 02 001 ALPHA

7691 N07W18 237 PLAGE
REGIONS DUE TO RETURN 17 MARCH TO 19 MARCH
NMBR LAT LO
7683 S18 090

LISTING OF SOLAR ENERGETIC EVENTS FOR 16 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
1328 1329 1329 140

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 16 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 16/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
70 N37E53 S19E40 N02E12 N50E44 190 ISO POS 029 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
15 Mar: 0106 0131 0146 B1.2
0341 0410 0432 B2.2
1125 1132 1136 B4.0
1305 1309 1313 B1.5
1451 1452 1459 SF 7688 N16E07

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7688: 0 0 0 1 0 0 0 0 001 (20.0)
Uncorrellated: 0 0 0 0 0 0 0 0 004 (80.0)

Total Events: 005 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
15 Mar: 1125 1132 1136 B4.0 Surge
1451 1452 1459 SF 7688 N16E07 III,V

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce

associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3029. ho

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 19:43:54 UTC
From: allanw@fc.hp.com
Message-ID: <CMtqt6.ALF@fc.hp.com>
Source record: 269681

```
--
--
Allan
--
Allan Weaver, W0PTU | Voice: (303) 229-3559
Hewlett-Packard Company | Internet: allanw@fc.hp.com
Fort Collins, Colorado 80525-9599 |
```

3030. QSL info: HV4NAC TI9CF 8P6AW?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 20:36:46 UTC
From: slay@netcom.com
Message-ID: <slayCMtt9B.8LL@netcom.com>
Source record: 269682

I would appreciate some help in getting QSL address info any of the
following:

HV4NAC via IK0FVC
8P6AW
TI9CF via TI2CF
FY5YP

Thanks and 73 de Sandy
WA6BXH/7J1ABV slay@netcom.com

3031. QSL-Manager for JW1BJA/JW5VK

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-17 23:20:55 UTC
From: tomrune@mac_inge
Message-ID: <2maokn$pvn@ratatosk.uninett.no>
Source record: 269683

Hello everybody!
All is now ready for my little dx'pedition to Svalbard
Isl. We will go up there tomorrow, March 18, and we will
be there until Monday 21.
We will try to be as active as possible on all bands,
including WARC bands.
This is maybe the first time JW is activated on SSB on
the "new" WARC bands.

The QSL-MANAGER for both me (JW1BJA), and my father (JW5VK)
will be:

direct/bureau to LA5VK

73s and Good DX!

3032. Weekly Solar Terrestrial Forecast & Review for 18 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 00:57:32 UTC
From: oler@rho.uleth.ca
Message-ID: <9403180057.AA00444@rho.uleth.ca>
Source record: 269684
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

```
--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
March 18 to March 27, 1994

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

---------

SKYCOM Version 1.0
Ionospheric Signal Analyst

ONLY TWO WEEKS LEFT FOR THE SPECIAL LIMITED-TIME OFFER

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- Compute the Signal Quality between any two geographical locations, for
any date or time, and for any level of geomagnetic activity.
- Generate Broadcast Coverage Signal Quality Maps for any time of day or
level of activity.
- Generate Broadcast Coverage Multipath Range Maps showing regions of
high or low signal multipathing.
- Produce Global Maps of Critical F2-layer frequencies for any date and
time or level of geomagnetic activity.
- Using a Mouse, play with various signal paths and determine what paths
cross into the auroral zones, enter regions of sporadic-E, or cross the
sunrise/sunset terminator or grayline for any date/time, or level of
geomagnetic activity.

MUCH MORE . . . By far, one of the most elaborate propagation packages
available for amateurs and professionals.

For more information, contact "Oler@Rho.Uleth.CA", or
"COler@Solar.Stanford.Edu". Pricing information can be obtained from the
e-mail address above, by writing to us through postal mail, or by calling
the recorded message at: 403-756-2386 (approx. 3 min). A special offer
applies until 31 March 1994.

---------

SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE
----------------------------------------------------

|10.7 cm|HF Propagation +/- CON|SID AU.BKSR DX| Mag| Aurora |
|SolrFlx|LO MI HI PO SWF %MUF %|ENH LO MI HI LO MI HI %|K Ap|LO MI HI|
--|-------|----------------------|-------------------------|----|--------|
```

```
18| 085 | G F P P 05 -30 70| 05 NA NA NA 03 20 40 25|5 25|NV LO MO|
19| 085 |VG F P P 05 -20 70| 05 NA NA NA 02 15 30 30|4 20|NV LO MO|
20| 090 |VG G P P 05 -15 70| 05 NA NA NA 01 10 25 30|3 15|NV NV MO|
21| 090 |VG G F F 05 -10 70| 05 NA NA NA 01 05 20 35|2 12|NV NV LO|
22| 090 |VG G F F 10 -05 70| 10 NA NA NA 01 05 15 35|2 10|NV NV LO|
23| 095 |VG G F F 15 00 70| 15 NA NA NA 01 05 15 35|2 10|NV NV LO|
24| 095 |VG G F F 15 00 65| 15 NA NA NA 01 05 15 35|2 10|NV NV LO|
25| 095 |VG G F F 15 00 65| 15 NA NA NA 02 05 15 40|2 10|NV NV LO|
26| 100 |VG G F F 20 00 65| 20 NA NA NA 02 05 15 40|2 10|NV NV LO|
27| 100 |VG G F F 20 00 65| 20 NA NA NA 02 05 15 40|2 10|NV NV LO|
```

PEAK PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (18 MAR - 27 MAR)

```
_____________________________________________________________________
| EXTREMELY SEVERE | | | | | | | | | HIGH |
| VERY SEVERE STORM | | | | | | | | | HIGH |
| SEVERE STORM | | | | | | | | | MODERATE |
| MAJOR STORM | | | | | | | | | LOW - MOD. |
| MINOR STORM | * | | | | | | | | LOW |
| VERY ACTIVE |***| * | | | | | | | NONE |
| ACTIVE |***|***| * | | | | | | NONE |
| UNSETTLED |***|***|***|***|** |** |** |** |** | NONE |
| QUIET |***|***|***|***|***|***|***|***|***| NONE |
| VERY QUIET |***|***|***|***|***|***|***|***|***| NONE |
|-------------------|---|---|---|---|---|---|---|---|---|------------|
| Geomagnetic Field |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| Anomaly |
| Conditions | Given in 8-hour UT intervals | Intensity |
|_____________________________________________________________________|
```

CONFIDENCE LEVEL: 70%

NOTES:
Predicted geomagnetic activity is based heavily on recurrent phenomena. Transient energetic solar events cannot be predicted reliably over periods in excess of several days. Hence, there may be some deviations from the predictions due to the unpredictable transient solar component.

60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACTIVITY

```
_____________________________________________________________
60 | J |
57 | J JJ |
54 | JJJ JJ |
51 | JJJ JJ J |
48 | JJJ JJ J |
45 | JJJ JJ M J |
42 | JJJ JJ M J M |
39 | JJJ M JJ MMJ M |
36 | JJJ MM JJ MMJ MM M |
33 | JJJM MM JJ MMJMMM M |
30 | JJJMMMM JJ MMJMMM M |
27 | JJJMMMMAA JJ A MMJMMM AM |
24 | AJJJMMMMAA JJ A MMJMMM AM |
```

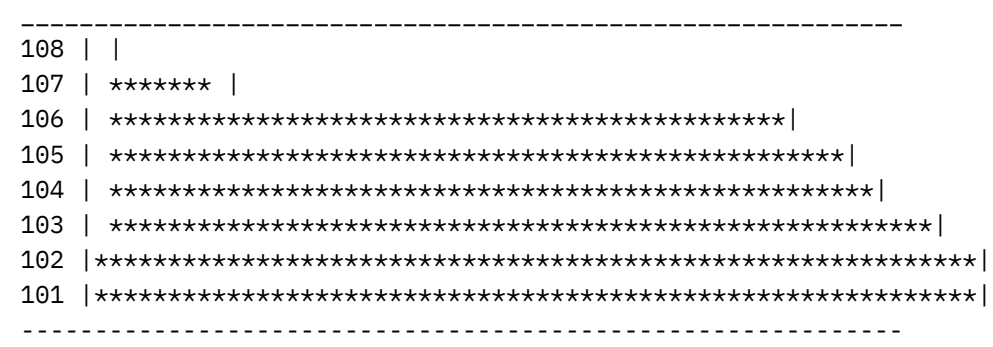
```
21 | AA AJJJMMMMAA JJ A MMJMMMAAM |
18 | AAA AA AJJJMMMMAAA JJ A MMJMMMAAMA|
15 | AAA AAA U AJJJMMMMAAAU A JJ A MMJMMMAAMA|
12 |UAAAU AAA U AJJJMMMMAAAU AUJJ U UA MMJMMMAAMA|
9 |UAAAU AAA U UU AJJJMMMMAAAU AUJJU U UUA UMMJMMMAAMA|
6 |UAAAUUU AAAUUUQUUUAJJJMMMMAAAUUUAUJJU U UUUUA UMMJMMMAAMA|
3 |UAAAUUUQQQAAAUUUQUUUAJJJMMMMAAAUUUAUJJUQUQUUUUAQQUMMJMMMAAMA|
0 |UAAAUUUQQQAAAUUUQUUUAJJJMMMMAAAUUUAUJJUQUQUUUUAQQUMMJMMMAAMA|
-------------------------------------------------------------
Chart Start Date: Day #016
```

NOTES:
This graph is determined by plotting the greater of either the planetary A-index or the Boulder A-index. Graph lines are labelled according to the severity of the activity which occurred on each day. The left-hand column represents the associated A-Index for that day.
Q = Quiet, U = Unsettled, A = Active, M = Minor Storm,
J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

```
-------------------------------------------------------------
134 | |
132 | * |
130 | * |
128 | *** |
126 | *** |
124 | *** |
122 | *** |
120 | **** |
118 | ****** |
116 | ****** |
114 | ****** |
112 | ******* |
110 | ******** |
108 | ******** ** |
106 | ******** **** ** |
104 | * ********* ********** |
102 | * ********** ********** |
100 |************** * ********** * |
098 |**************** * * ************ *** |
096 |**************** ** * * ************** ***** |
094 |******************** ***** ***************** ****** |
092 |************************************************** * |
090 |************************************************** ** |
088 |********************************************************** |
086 |************************************************************|
084 |************************************************************|
-------------------------------------------------------------
Chart Start: Day #016
```

GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX



NOTES:
The 10.7 cm solar radio flux is plotted from data reported by the Penticton Radio Observatory (formerly the ARO from Ottawa). High solar flux levels denote higher levels of activity and a greater number of sunspot groups on the Sun. The 90-day mean solar flux graph is charted from the 90-day mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS

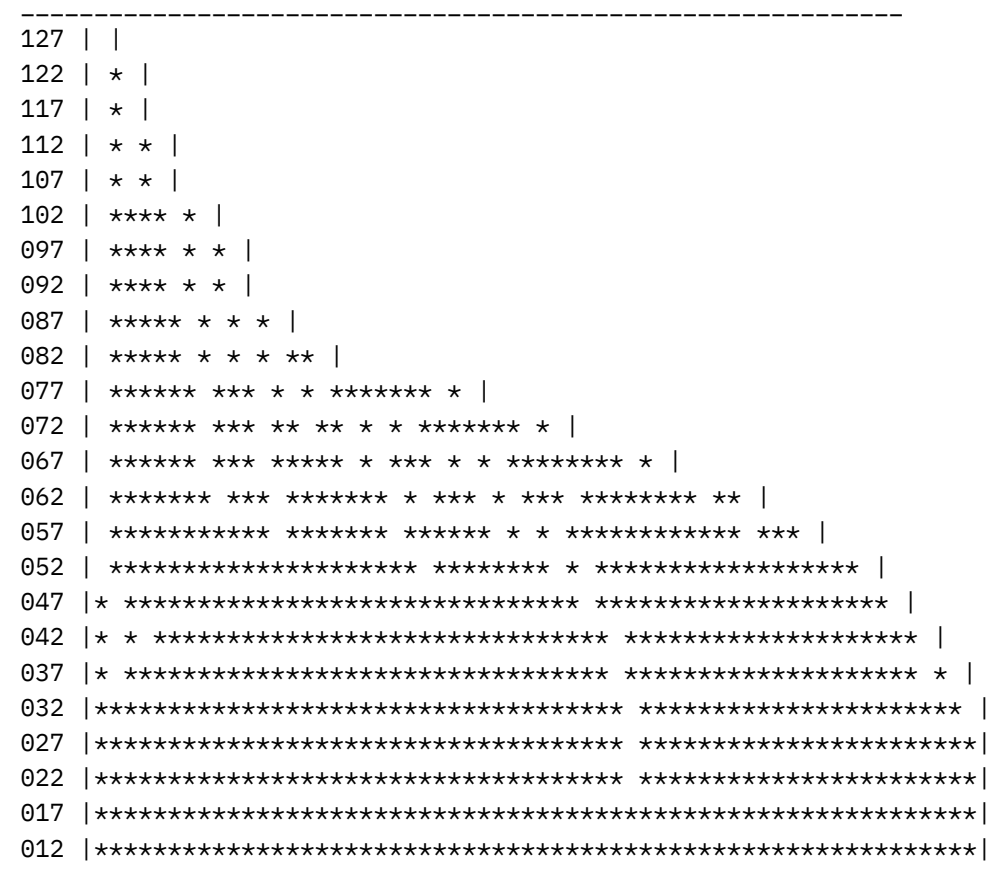


Chart Start: Day #016

NOTES:
The graphical chart of sunspot numbers is created from the
daily sunspot number counts as reported by the SESC.

HF RADIO SIGNAL PROPAGATION PREDICTIONS (18 MAR - 27 MAR)

High Latitude Paths

```
-----------------------------------------------------------
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD | | | | | | | | | |
LEVEL | FAIR | * | * | **| **|***|***|***|***|***|***|
------- | POOR |* *|* *|* |* | | | | | | |
65% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------------
```

Middle Latitude Paths

```
-----------------------------------------------------------
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD | **| **|***|***|***|***|***|***|***|***|
LEVEL | FAIR |* |* | | | | | | | |
------- | POOR | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------------
```

Low Latitude Paths

```
-----------------------------------------------------------
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | | | * | * | * | * | * | * | * | * |
CONFIDENCE | GOOD |***|***|* *|* *|* *|* *|* *|* *|* *|* *|* *|
LEVEL | FAIR | | | | | | | | | |
------- | POOR | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------------
```

NOTES:
NORTHERN HEMISPHERE SOUTHERN HEMISPHERE
High latitudes >= 55 deg. N. | High latitudes >= 55 deg. S.

Middle latitudes >= 40 < 55 deg. N. | Middle latitudes >= 30 < 55 deg. S.
Low latitudes < 40 deg. N. | Low latitudes < 30 deg. S.

POTENTIAL VHF DX PROPAGATION PREDICTIONS (18 MAR - 27 MAR)
INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

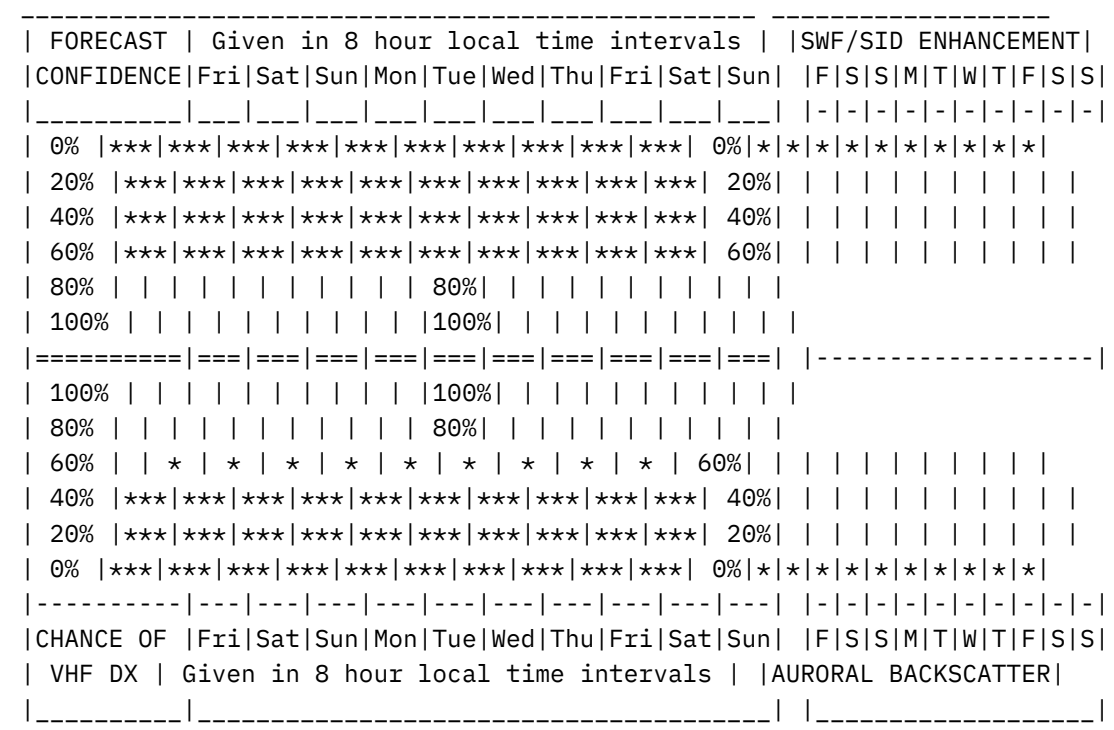
HIGH LATITUDES

```
_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | | | |
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% | | | | * | * | * | * | * | * | * | 60%| | | | | | | | | |
| 80% | | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |-------------------|
| 100% | | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | | | | | | | 60%| | | | | | | | | |
| 40% | | | | * | * | * | * | * | * | * | 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*| | | | | | |
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

MIDDLE LATITUDES

```
_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | | | |
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% |***|***|***|***|***|***|***|***|***|***| 60%| | | | | | | | | |
| 80% | | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |-------------------|
| 100% | | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | | | | | | | 60%| | | | | | | | | |
| 40% | * | * | **| **| **| **| **| **| **| **| 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | | | |
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

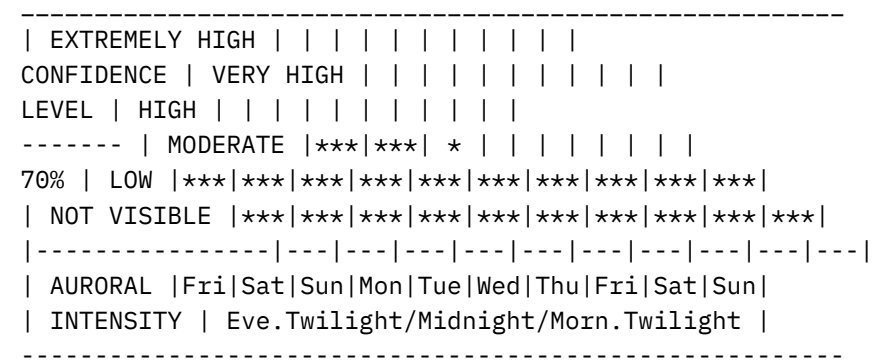
LOW LATITUDES


FORECAST | Given in 8 hour local time intervals | SWF/SID ENHANCEMENT
CONFIDENCE Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun F S S M T W T F S S
0% *** *** *** *** *** *** *** *** *** *** 0% * * * * * * * * *
20% *** *** *** *** *** *** *** *** *** *** 20%
40% *** *** *** *** *** *** *** *** *** *** 40%
60% *** *** *** *** *** *** *** *** *** *** 60%
80% 80%
100% 100%
100% 100%
80% 80%
60% * * * * * * * * * * 60%
40% *** *** *** *** *** *** *** *** *** *** 40%
20% *** *** *** *** *** *** *** *** *** *** 20%
0% *** *** *** *** *** *** *** *** *** *** 0% * * * * * * * * *
CHANCE OF Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun F S S M T W T F S S
VHF DX | Given in 8 hour local time intervals | AURORAL BACKSCATTER

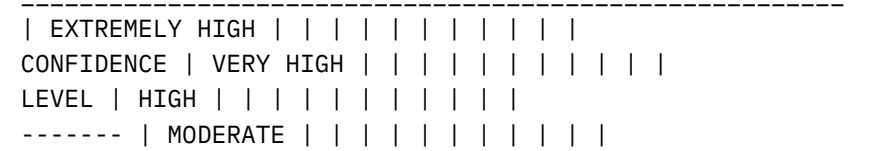
NOTES:
These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACTIVITY PREDICTIONS (18 MAR - 27 MAR)

High Latitude Locations


EXTREMELY HIGH
CONFIDENCE VERY HIGH
LEVEL HIGH
MODERATE *** *** *
70% LOW *** *** *** *** *** *** *** *** *** ***
NOT VISIBLE *** *** *** *** *** *** *** *** *** ***
AURORAL Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun
INTENSITY Eve.Twilight/Midnight/Morn.Twilight

Middle Latitude Locations



```
| NOT VISIBLE |***|***|***|***|***|***|***|***|***|***|
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INTENSITY | Eve.Twilight/Midnight/Morn.Twilight |
-----------------------------------------------------------

Low Latitude Locations
_____________________________________________________________
| EXTREMELY HIGH | | | | | | | | | |
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | |
90% | LOW | | | | | | | | | |
| NOT VISIBLE |***|***|***|***|***|***|***|***|***|***|
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INTENSITY | Eve.Twilight/Midnight/Morn.Twilight |
-----------------------------------------------------------

NOTE:
Version 2.00b of our Professional Dynamic Auroral Oval Simulation
Software Package is now available. This professional software is
particularly valuable to radio communicators, aurora photographers,
educators, and astronomers. For more information regarding this software,
contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the
document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca"
or to: "COler@Solar.Stanford.Edu". This document, as well as others and
related data/forecasts exist on the STD BBS at: (403) 756-3008.

** End of Report **
```

3033. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 01:11:48 UTC
From: roberts@rdz.stjohns.EDU
Message-ID: <199403180111.AA03638@rdz.stjohns.edu>
Source record: 269685

```
subscribe info-hams Robert Schonfeld
```

3034. Re: FTP HAM sites for Mac?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 03:15:46 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCMuBqB.BLr@netcom.com>
Source record: 269686

```
In article <2m8djs$km6@news.iastate.edu> bwehr@iastate.edu (BDW) writes:
>
>hey all. looking for some ham FTP sites for the Mac. If anyone has a listing
>of them drop me some mail it would be appreciated.
>
>
>-Brant
>
>
>_____________________________________________________________________________ Brant Wehr
N0UTT
> internet bwehr@iastate.edu
> Activities Director CARC
> Electrical Engineering
>_____________________________________________________________________________
>--
>Brant
>bwehr@iastate.edu

Check out the Boston ARC's archives on oak.oakland.edu /pub/hamradio/mac

The archives were formerly on World (ftp.std.com)

Scott

--
=============================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|---------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
=============================================================================
```

3035. Daily Summary of Solar Geophysical Activity for 17 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 04:07:46 UTC
From: oler@rho.uleth.ca
Message-ID: <9403180407.AA02901@rho.uleth.ca>
Source record: 269687
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

17 MARCH, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 17 MARCH, 1994

SESC NOTICE: Planning for future solar optical and solar radio
observations is in progress. Consideration is being given to having
no regular solar activity patrol in the optical and radio wavelengths.
There is also a possibility of no synoptic images. Can you describe
to us any critical impacts such actions would have on your operations
or research? Please reply to SESC no later than 23 March 1994.
Contact by phone (303) 497-5127 or FAX (303) 497-7392

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 076, 03/17/94
10.7 FLUX=085.1 90-AVG=106 SSN=030 BKI=4554 3333 BAI=026
BGND-XRAY=A4.0 FLU1=5.9E+06 FLU10=1.6E+04 PKI=4555 4343 PAI=032
BOU-DEV=044,078,073,058,022,021,027,021 DEV-AVG=043 NT SWF=00:000
XRAY-MAX= B2.3 @ 0504UT XRAY-MIN= A3.1 @ 1843UT XRAY-AVG= A5.6
NEUTN-MAX= +002% @ 2355UT NEUTN-MIN= -002% @ 0650UT NEUTN-AVG= +0.1%
PCA-MAX= +0.1DB @ 2355UT PCA-MIN= -0.3DB @ 0330UT PCA-AVG= -0.0DB
BOUTF-MAX=55352NT @ 0426UT BOUTF-MIN=55299NT @ 1800UT BOUTF-AVG=55325NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+074,+000,+000
GOES6-MAX=P:+135NT@ 1828UT GOES6-MIN=N:-114NT@ 0855UT G6-AVG=+092,+021,-048
FLUXFCST=STD:085,085,090;SESC:085,085,090 BAI/PAI-FCST=015,010,010/025,015,010
KFCST=3344 5322 2334 4322 27DAY-AP=007,017 27DAY-KP=2223 2213 3344 3343
WARNINGS=*GSTRM;*AURMIDWCH
ALERTS=**MINSTRM
!!END-DATA!!

NOTE: The Effective Sunspot Number for 16 MAR 94 was 30.0.
The Full Kp Indices for 16 MAR 94 are: 4o 3+ 4- 3- 3+ 4- 3- 3o
The 3-Hr Ap Indices for 16 MAR 94 are: 30 17 21 12 18 24 13 15
Greater than 2 MeV Electron Fluence for 17 MAR is: 1.6E+09

SYNOPSIS OF ACTIVITY

Solar activity was very low. There are but two simple
active regions visible, 7688 (N19W20) and 7692 (N19E45).

Solar activity forecast: solar activity is expected to be
very low.

The geomagnetic field has been at unsettled to minor storm
levels with substorms persisting during nighttime. The greater
than 2 MeV electron flux remains elevated, in excess of 5.0E+04
at various times during the interval.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled to active early, then calm to mostly
unsettled levels by the end of the period. Episodes of minor
storming may occur during local nighttimes.

Event probabilities 18 mar-20 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 18 mar-20 mar

A. Middle Latitudes
Active 30/25/15
Minor Storm 20/15/10
Major-Severe Storm 10/05/05

B. High Latitudes
Active 35/35/25
Minor Storm 20/20/15
Major-Severe Storm 10/10/05

HF propagation conditions continue to very slowly improve
over all regions, but are still mostly below normal for the
polar and high latitude paths. Middle latitude paths are
returning to normal and should be near-normal on 18 or 19
March. Near-normal propagation conditions are expected over
all regions by about 19 March (or 20 March for higher latitude
transauroral and/or transpolar paths).

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 17/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7688 N19W19 225 0070 CAO 09 009 BETA
7692 N18E45 161 0060 HSX 02 001 ALPHA
7691 N07W31 237 PLAGE
REGIONS DUE TO RETURN 18 MARCH TO 20 MARCH
NMBR LAT LO
7683 S18 090

LISTING OF SOLAR ENERGETIC EVENTS FOR 17 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 17 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 17/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
70 N39E49 S20E26 S04W01 N44E35 189 ISO POS 020 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
16 Mar: 0722 0722 0729 SF 7688 N16E01
1555 1605 1615 B1.6

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Region 7688: 0 0 0 1 0 0 0 0 001 (50.0)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (50.0)

Total Events: 002 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
16 Mar: 0722 0722 0729 SF 7688 N16E01 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep

Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3036. WARNING: Potential Satellite Anomaly Warning Update - 17 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 04:26:57 UTC
From: oler@rho.uleth.ca
Message-ID: <9403180427.AA04542@rho.uleth.ca>
Source record: 269688
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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POTENTIAL SATELLITE ANOMALY WARNING

UPDATED: 03:50 UT, 18 MARCH

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ATTENTION:

Energetic electrons at greater than 2 MeV continue to be elevated.
Highest fluence levels for this event were observed yesterday (16 March) at
3.1E+09 electrons/cm^2-ster-day. Electron densities dropped somewhat to
moderate to occasionally high levels today.

This event is expected to begin decaying back toward background levels
and finally end over the next 24 to 72 hours.

** End of Warning **

3037. QRZ CDROM Update Information

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 04:42:30 UTC
From: flloyd@pinyon.libre.com
Message-ID: <2mbbfm$4ee@pinyon.libre.com>
Source record: 269689

----Subject: QRZ CDROM Update
----From: Fred Lloyd, AA7BQ

I am currently in the process of gathering data for the third edition of the QRZ! Ham Radio CDROM and am actively looking for data and shareware submissions for it.

Some of the new features of the May edition will be: Native OS/2 support, native AIX support, and if I get time, some user callable Windows .DLL's to access the database.

The May edition will for the first time include the callsign database for Italy and Great Britian, and the Canadian listings are being updated. A fresh copy of the US Callsign database will also be included which we can expect to contain approximately 650,000 callsigns.

I'm especially interested in aquiring more International callsigns and will offer anyone a year's subscription to QRZ! in exchange for any countries that I do not yet have (which is most of them). I reserve the right to limit this offer to the first submitter of a given country, and to require that at least 1000 callsigns, total or aggregate if multiple countries, be submitted. If your country has less than 1000 callsigns, but is important, then send it to me anyway as I'll review them on a case by case basis.

In addition, any ham software or shareware authors are invited to submit their programs for inclusion on the CD - at no charge. QRZ is a great publicity vehicle for your product, or your club or ham related organization.

And finally, SEND ME YOUR CLUB CALLSIGN LISTINGS! If you're a member of a radio club which has its own callsign, please send me the following information so that I can place it into the database:

Callsign, Name, Address, License Class, Issue Date, Expiration Date

There is no charge for submitting these listings. We would get them from the FCC but they don't seem to keep them on their computer.

P.S. Please don't send me any data taken from the Buckmaster CDROM.

If you have questions or need more info contact:

flloyd@qrz.com

For an automatic e-mail reply about the QRZ! CDROM send a blank message to:

info@qrz.com

Thanks,

-fred

--

| Fred Lloyd, AA7BQ - Author, QRZ! Ham Radio CDROM - flloyd@qrz.com|

3038. Re: Ham Radio FTP area on Oakland

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 10:09:17 UTC
From: brett_miller@ccm.hf.intel.com
Message-ID: <brett_miller.23.000A27E9@ccm.hf.intel.com>
Source record: 269711
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner,alt.radio.scanner

In article <wy1zCMuxsM.Hvt@netcom.com> wy1z@netcom.com (Scott Ehrlich) writes:

>This is a periodic reminder that the Boston Amateur Radio Club maintains an
>FTP area on oak.oakland.edu (141.210.10.117) in /pub/hamradio.

>On most systems, the command needed is: ftp oak.oakland.edu
> or: ftp 141.210.10.117
> For Gopher: gopher gopher.oakland.edu 70
> World Wide Web URL: http://www.acs.oakland.edu
^^^^^^^^^^^^^^^^^^^^^^

I just wanted to make a comment on WWW here. I've been using Internet stuff for about 4 years, but last week a guy gave me a program called Mosaic that is a software interface to World Wide Web. All I can say is: WOW!! WWW allows a point and click interface to the Internet. Instead of cryptic unix commands you can see everything and click the mouse on what you want. You can click on a line and have a high resolution movie play on your computer with sound! You can navigate FTP like Program Manger in Windows. I clicked on a few lines and was reading the Dead Sea Scrolls which had pictures of the original manuscripts. It is amazing! All I'm saying here is that if you can get WWW access, get it. It is a full multimedia superhighway - who needs Al Gore!

Now we return to your regularly scheduled scanner discussions...

Brett Miller N7OLQ brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

3039. Re: Heath 2036 manual

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 10:59:21 UTC
From: ka4hpb@freenet2.scri.fsu.edu
Message-ID: <2mc1i9$n15@freenet3.scri.fsu.edu>
Source record: 269690

Ty:

How you doing.....I have a Heath HW-2036a and its manual,although
I am not willing to part with the manual,I may be talked into copying
parts of the manual,I assume that the radio is already put together
so he probably won't neet the assembly instructions,so if he thinks
I can help,just let me know,you can respond to me via freenet, the
address is KA4HPB@Freenet.SCRI.FSU.EDU.............see ya.........

Joe,

3040. Ham Radio FTP area on Oakland

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 11:12:21 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCMuxsM.Hvt@netcom.com>
Source record: 269726
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner,alt.radio.scanner

```
This is a periodic reminder that the Boston Amateur Radio Club maintains an
FTP area on oak.oakland.edu (141.210.10.117) in /pub/hamradio.

Oakland is available via the following methods:

On most systems, the command needed is: ftp oak.oakland.edu
or: ftp 141.210.10.117
For Gopher: gopher gopher.oakland.edu 70
World Wide Web URL: http://www.acs.oakland.edu

Please feel free to browse through the area.

If anyone has any questions about it, please do not hesitate to e-mail
either of the co-moderators listed below.

Also, up-to-date copies of the files on the ARRL's information server
(info@arrl.org) are available in the directory /pub/hamradio/ARRL/Server-files

Source code for programs is always welcome. It can permit people to use
those programs on other computers with other operating systems.

Scott Ehrlich, WY1Z, co-moderator
wy1z@netcom.com

Phil Temples, K9HI, co-moderator
k9hi@netcom.com
--
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
================================================================================
```

3041. Lightning protection ...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 11:33:32 UTC
From: Gary_Thorburn@UB.COM
Message-ID: <9403181859.AA0113@smtp.UB.com>
Source record: 269691

I've been following Gary Coffman's recent exchange about lightning.

I understand that small radii (sharp points) discharge at lower voltages.
Therefore,
if an instant in time occurs when a surface has an even and high potential, then
certainly the sharp point will be preferentially hit.

However, part of lightning rod theory as I understand it, is that lightning
will be LESS LIKELY to strike when properly installed lightning rods are
present.
This is precisely because the sharp points begin to discharge the surrounding
area
at relatively low voltages, making it less likely that the potential difference
required for a mondo-strike will ever build up.

I think this is the principal behind the multiple tiny sharp rods located along
a braid across the ridge of a barn or home.

Conjectures? Refutations? Anyone up for an experiment? ;-)

/***
Gary W. Thorburn gthorbur@ub.com KD1TE
***/

3042. VK2SG RTTY DX Notes, 18 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 11:47:39 UTC
From: bulletin@n8emr.cmhnet.org
Message-ID: <1994Mar18.114739.10810@n8emr.cmhnet.org>
Source record: 269692
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
============================================================
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
============================================================

SB DX @ WW $RTDX0318
VK2SG RTTY DX Notes, 18 March
VK2SG RTTY DX Notes for week ending 18 March 1994 (BID RTDX0318)

Looking for new countries in RTTY? Well here is your chance to snag
'em. BARTG Spring RTTY Contest, sponsored by the British Amateur
Radio Teledata Group (BARTG) starts 19 March at 0200Z and ends 20
March at 0200Z. Exchange RST, serial number and UTC. For details,
QST and RTTY Digital Journal, February 1994.

Our information this week came from 9X5LJ, DJ3IW and the Central-
Europe DX Cluster Node DB0SPC, I5FLN, IK5AAX and the IK5PWJ Packet
Cluster, N2DBI, W2JGR and the NJ0M node of the Twin-Cities DX Packet
Cluster, W5KSI and ZS5S. Thank you all for your assistance.

Bandpass

Friday 11
0237-14086 FG5GI
1334-14087 YI1AL
1336-14090 UU9JWB
1426-14086 SV5AZP
2146-21088 C21/YI see notes
2146-14088 TU4EI QSL W3HCW

Saturday 12
0131-14087 ZP5JCY
1242-14089 RU9CX
1244-14082 UU9JWB
1249-14089 ES4MM
1250-14086 HK0DPA
1351-14082 KG4CW
1509-14089 ES4MM
1514-14090 J28JJ
1545-21083 ZD7DP
2120-14088 CO2KG
2128-14089 HK0DPA
2203-14088 KG4CW
2313-14084 CO2KG
```

Sunday 13
1212-14086 UY0IO
1212-14084 SV1CQO
1324-14087 ES4MM
1452-21083 ZD7DP

Monday 14
1553-14086 UT5DX
1611-14083 SV1CQO
1627-14088 4X6UO
1842-21086 ZK1AIQ So. Cook
2148-14088 HK0DPA

Tuesday 15
0257-14085 ZK1AIQ
1647-14085 CU1AC
2221-14088 TU2EI

Wednesday 16
1554-14087 OD5PL
1558-14090 UU8JA
1618-14090 EI3GZ
1621-14087 OK1DXS
1733-14083 HG6N
1830-14086 UT5DG
2000-14085 9I2Z QSL DL7VRO
2157-14087 CO2KG
2204-21087 XE3LMV inverted

Thursday 17
0026-14085 CX3ABE
0103-14084 TI2KSR
1550-14085 UR4UYI
1550-14084 RW3GK
1615-14087 4N7M
1714-14090 UU8JA
1740-14087 OZ1GML Zealand Is. EU-01908-14090 S92ZM
2051-21084 J28BS
2103-21083 ZD7DP
2143-14088 J28BS

Notes of Interest.

Nauru, C21. C21/MI and C21/YI are the callsigns issued to JF2MBF,
Mitsunobu Ichino and JI1NJC, Yasunori Iitsuka for their operation.
C21 with the portable designator consisting of their initials.
QSL JR2KDN.

Spratly Islands, 9M0. the next operation from Spratly Is scheduled
for sometime around April 2. Callsigns will be 9M0A, 9M0AG and 9M0BZ,
to be active on RTTY, AMTOR, Pactor and Packet. Look for them on RTTY
frequencies, 7030, 14085, 21085 and 28085.

DXAC Proposed March Schedule. DXAC Chairman W4VQ, Robert Beatty, announced a proposed vote. One of the topics is the deletion of Mount Athos. More on this later.

For next week's Bulletin, send your Bandpass and Notes of Interest to Jules, W2JGR @ W2TKU.#SRQ.FL.USA.NA

Remember, DX Don't Sleep.
GL DE Bob, WB2CJL @ W5KSI.#NOLA.LA.USA.NA
/EX
SP KT7H @ N7DUO.WA.USA.NA

3043. qsl route for TI9CF

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 12:32:57 UTC
From: bjp@icd.ab.com
Message-ID: <2mc71p$93l@news1.hh.ab.com>
Source record: 269693

Thanks,

Brian (N8RPA)

3044. ORBS$077.OSCAR.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 13:28:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8944.99.0C38A4E1@drig.com>
Source record: 269694

```
SB KEPS @ AMSAT $ORBS-077.O
Orbital Elements 077.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH,TX March 18, 1994
BID: $ORBS-077.O
TO ALL RADIO AMATEURS BT

Satellite: AO-10
Catalog number: 14129
Epoch time: 94074.03621199
Element set: 269
Inclination: 27.1901 deg
RA of node: 337.1540 deg
Eccentricity: 0.6022168
Arg of perigee: 162.1847 deg
Mean anomaly: 234.6755 deg
Mean motion: 2.05878068 rev/day
Decay rate: -1.07e-06 rev/day^2
Epoch rev: 8084
Checksum: 302

Satellite: UO-11
Catalog number: 14781
Epoch time: 94076.08262229
Element set: 674
Inclination: 97.7911 deg
RA of node: 95.1034 deg
Eccentricity: 0.0010946
Arg of perigee: 200.8625 deg
Mean anomaly: 159.2135 deg
Mean motion: 14.69171604 rev/day
Decay rate: 3.87e-06 rev/day^2
Epoch rev: 53678
Checksum: 318

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94075.40199974
Element set: 882
Inclination: 82.9231 deg
RA of node: 37.4191 deg
Eccentricity: 0.0010266
Arg of perigee: 287.1702 deg
Mean anomaly: 72.8326 deg
```

Mean motion: 13.72333370 rev/day
Decay rate: 4.1e-07 rev/day^2
Epoch rev: 33718
Checksum: 300

Satellite: AO-13
Catalog number: 19216
Epoch time: 94072.40935734
Element set: 893
Inclination: 57.8759 deg
RA of node: 263.4718 deg
Eccentricity: 0.7210812
Arg of perigee: 336.8024 deg
Mean anomaly: 2.5676 deg
Mean motion: 2.09719189 rev/day
Decay rate: 1.66e-06 rev/day^2
Epoch rev: 4400
Checksum: 322

Satellite: FO-20
Catalog number: 20480
Epoch time: 94071.45658699
Element set: 668
Inclination: 99.0216 deg
RA of node: 241.6090 deg
Eccentricity: 0.0540420
Arg of perigee: 198.5456 deg
Mean anomaly: 159.5252 deg
Mean motion: 12.83224395 rev/day
Decay rate: -2.1e-07 rev/day^2
Epoch rev: 19172
Checksum: 314

Satellite: AO-21
Catalog number: 21087
Epoch time: 94072.89324047
Element set: 444
Inclination: 82.9367 deg
RA of node: 213.2088 deg
Eccentricity: 0.0035958
Arg of perigee: 352.1754 deg
Mean anomaly: 7.8836 deg
Mean motion: 13.74535804 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 15649
Checksum: 329

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94075.53910009
Element set: 672

Inclination: 82.9174 deg
RA of node: 80.1605 deg
Eccentricity: 0.0030126
Arg of perigee: 9.5405 deg
Mean anomaly: 350.6312 deg
Mean motion: 13.74037277 rev/day
Decay rate: 5.7e-07 rev/day^2
Epoch rev: 15592
Checksum: 286

Satellite: ARSENE
Catalog number: 22654
Epoch time: 94064.50000000
Element set: 246
Inclination: 1.6510 deg
RA of node: 105.2680 deg
Eccentricity: 0.2927552
Arg of perigee: 173.8780 deg
Mean anomaly: 198.1380 deg
Mean motion: 1.42201225 rev/day
Decay rate: -1.19e-06 rev/day^2
Epoch rev: 299
Checksum: 250

/EX

3045. ORBS$077.MICRO.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 13:31:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8945.99.0C38A4E2@drig.com>
Source record: 269695

```
SB KEPS @ AMSAT $ORBS-077.D
Orbital Elements 077.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH,TX March 18, 1994
BID: $ORBS-077.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94072.21549149
Element set: 973
Inclination: 98.5925 deg
RA of node: 158.2846 deg
Eccentricity: 0.0011701
Arg of perigee: 110.0876 deg
Mean anomaly: 250.1559 deg
Mean motion: 14.29829808 rev/day
Decay rate: 7.2e-07 rev/day^2
Epoch rev: 21587
Checksum: 323

Satellite: AO-16
Catalog number: 20439
Epoch time: 94076.19336562
Element set: 774
Inclination: 98.6002 deg
RA of node: 163.3475 deg
Eccentricity: 0.0012127
Arg of perigee: 99.9777 deg
Mean anomaly: 260.2776 deg
Mean motion: 14.29885704 rev/day
Decay rate: 6.5e-07 rev/day^2
Epoch rev: 21645
Checksum: 337

Satellite: DO-17
Catalog number: 20440
Epoch time: 94076.22662674
Element set: 773
Inclination: 98.6015 deg
RA of node: 163.6736 deg
Eccentricity: 0.0012240
Arg of perigee: 99.1450 deg
Mean anomaly: 261.1119 deg
```

Mean motion: 14.30024568 rev/day
Decay rate: 7.4e-07 rev/day^2
Epoch rev: 21647
Checksum: 290

Satellite: WO-18
Catalog number: 20441
Epoch time: 94072.21203773
Element set: 774
Inclination: 98.6013 deg
RA of node: 159.7138 deg
Eccentricity: 0.0012829
Arg of perigee: 111.2783 deg
Mean anomaly: 248.9762 deg
Mean motion: 14.29998941 rev/day
Decay rate: 5.9e-07 rev/day^2
Epoch rev: 21590
Checksum: 327

Satellite: LO-19
Catalog number: 20442
Epoch time: 94076.18464293
Element set: 773
Inclination: 98.6015 deg
RA of node: 163.8733 deg
Eccentricity: 0.0013183
Arg of perigee: 99.4776 deg
Mean anomaly: 260.7899 deg
Mean motion: 14.30094641 rev/day
Decay rate: 8.0e-07 rev/day^2
Epoch rev: 21648
Checksum: 333

Satellite: UO-22
Catalog number: 21575
Epoch time: 94075.24420930
Element set: 475
Inclination: 98.4400 deg
RA of node: 151.5895 deg
Eccentricity: 0.0007108
Arg of perigee: 202.4817 deg
Mean anomaly: 157.6059 deg
Mean motion: 14.36899328 rev/day
Decay rate: 9.7e-07 rev/day^2
Epoch rev: 13973
Checksum: 324

Satellite: KO-23
Catalog number: 22077
Epoch time: 94076.18255996
Element set: 370

Inclination: 66.0833 deg
RA of node: 112.6185 deg
Eccentricity: 0.0011519
Arg of perigee: 310.3641 deg
Mean anomaly: 49.6367 deg
Mean motion: 12.86285535 rev/day
Decay rate: -3.7e-07 rev/day^2
Epoch rev: 7495
Checksum: 316

Satellite: AO-27
Catalog number: 22825
Epoch time: 94072.21774410
Element set: 270
Inclination: 98.6611 deg
RA of node: 148.9612 deg
Eccentricity: 0.0009401
Arg of perigee: 126.7150 deg
Mean anomaly: 233.4895 deg
Mean motion: 14.27613170 rev/day
Decay rate: 1.13e-06 rev/day^2
Epoch rev: 2399
Checksum: 287

Satellite: IO-26
Catalog number: 22826
Epoch time: 94072.20569811
Element set: 270
Inclination: 98.6611 deg
RA of node: 148.9734 deg
Eccentricity: 0.0009962
Arg of perigee: 126.0055 deg
Mean anomaly: 234.2050 deg
Mean motion: 14.27715988 rev/day
Decay rate: 1.34e-06 rev/day^2
Epoch rev: 2399
Checksum: 312

Satellite: KO-25
Catalog number: 22830
Epoch time: 94076.16166154
Element set: 274
Inclination: 98.5601 deg
RA of node: 151.1197 deg
Eccentricity: 0.0012546
Arg of perigee: 85.4566 deg
Mean anomaly: 274.8057 deg
Mean motion: 14.28040646 rev/day
Decay rate: 7.7e-07 rev/day^2
Epoch rev: 2456
Checksum: 307

/EX

3046. ORBS$077.WEATH.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 13:34:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8946.99.0C38A4E3@drig.com>
Source record: 269696

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SB KEPS @ AMSAT $ORBS-077.W
Orbital Elements 077.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX March 18, 1994
BID: $ORBS-077.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94074.03402688
Element set: 750
Inclination: 99.0656 deg
RA of node: 123.3704 deg
Eccentricity: 0.0015705
Arg of perigee: 122.8642 deg
Mean anomaly: 237.4045 deg
Mean motion: 14.13597974 rev/day
Decay rate: 1.26e-06 rev/day^2
Epoch rev: 47704
Checksum: 309

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94073.99072129
Element set: 647
Inclination: 98.5121 deg
RA of node: 85.8616 deg
Eccentricity: 0.0012156
Arg of perigee: 244.1267 deg
Mean anomaly: 115.8662 deg
Mean motion: 14.24872785 rev/day
Decay rate: 1.08e-06 rev/day^2
Epoch rev: 38919
Checksum: 338

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94076.18240290
Element set: 272
Inclination: 82.5456 deg
RA of node: 341.7797 deg
Eccentricity: 0.0018514
Arg of perigee: 79.0102 deg
Mean anomaly: 281.3131 deg
```

Mean motion: 13.84711418 rev/day
Decay rate: 1.27e-06 rev/day^2
Epoch rev: 30962
Checksum: 295

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94072.89393314
Element set: 268
Inclination: 82.5411 deg
RA of node: 31.1102 deg
Eccentricity: 0.0017651
Arg of perigee: 137.2192 deg
Mean anomaly: 223.0298 deg
Mean motion: 13.16965600 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 27071
Checksum: 276

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94073.96248747
Element set: 559
Inclination: 99.1660 deg
RA of node: 60.5963 deg
Eccentricity: 0.0012728
Arg of perigee: 40.9981 deg
Mean anomaly: 319.2144 deg
Mean motion: 14.12967309 rev/day
Decay rate: 8.6e-07 rev/day^2
Epoch rev: 28191
Checksum: 333

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94075.85339731
Element set: 271
Inclination: 82.5182 deg
RA of node: 217.5195 deg
Eccentricity: 0.0015409
Arg of perigee: 122.8587 deg
Mean anomaly: 237.3935 deg
Mean motion: 13.84358686 rev/day
Decay rate: 2.7e-07 rev/day^2
Epoch rev: 25491
Checksum: 342

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94075.88142870
Element set: 4

Inclination: 82.5576 deg
RA of node: 333.8085 deg
Eccentricity: 0.0006499
Arg of perigee: 152.2875 deg
Mean anomaly: 207.8581 deg
Mean motion: 13.04425109 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 21086
Checksum: 300

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94075.63449506
Element set: 773
Inclination: 82.5434 deg
RA of node: 281.9855 deg
Eccentricity: 0.0017468
Arg of perigee: 47.7992 deg
Mean anomaly: 312.4642 deg
Mean motion: 13.84190213 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 18781
Checksum: 330

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94076.22426307
Element set: 919
Inclination: 98.8393 deg
RA of node: 99.2948 deg
Eccentricity: 0.0013308
Arg of perigee: 265.4548 deg
Mean anomaly: 94.5096 deg
Mean motion: 14.01312219 rev/day
Decay rate: -1.72e-06 rev/day^2
Epoch rev: 18082
Checksum: 326

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94071.91097536
Element set: 781
Inclination: 82.5228 deg
RA of node: 222.5667 deg
Eccentricity: 0.0012920
Arg of perigee: 323.8660 deg
Mean anomaly: 36.1626 deg
Mean motion: 13.83574515 rev/day
Decay rate: 5.9e-07 rev/day^2
Epoch rev: 17444
Checksum: 309

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94071.87651682
Element set: 679
Inclination: 82.5362 deg
RA of node: 237.6665 deg
Eccentricity: 0.0014715
Arg of perigee: 65.8899 deg
Mean anomaly: 294.3776 deg
Mean motion: 13.16460820 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 13868
Checksum: 339

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94074.00396538
Element set: 964
Inclination: 98.6278 deg
RA of node: 103.8182 deg
Eccentricity: 0.0013418
Arg of perigee: 145.8585 deg
Mean anomaly: 214.3456 deg
Mean motion: 14.22379795 rev/day
Decay rate: 1.80e-06 rev/day^2
Epoch rev: 14714
Checksum: 320

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94076.19735930
Element set: 687
Inclination: 82.5556 deg
RA of node: 181.6999 deg
Eccentricity: 0.0014730
Arg of perigee: 67.7742 deg
Mean anomaly: 292.4937 deg
Mean motion: 13.16828055 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 12435
Checksum: 340

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94072.07378319
Element set: 281
Inclination: 82.5479 deg
RA of node: 282.6058 deg
Eccentricity: 0.0022877
Arg of perigee: 131.3043 deg
Mean anomaly: 229.0093 deg
Mean motion: 13.83002641 rev/day

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Decay rate: 4.4e-07 rev/day^2
Epoch rev: 2680
Checksum: 292

/EX
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3047. ORBS$077.MISC.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 13:35:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8947.99.0C38A4E4@drig.com>
Source record: 269697

```
SB KEPS @ AMSAT $ORBS-077.M
Orbital Elements 077.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH,TX March 18, 1994
BID: $ORBS-077.M
TO ALL RADIO AMATEURS BT

Satellite: POSAT
Catalog number: 22829
Epoch time: 94072.24139185
Element set: 263
Inclination: 98.6566 deg
RA of node: 149.0227 deg
Eccentricity: 0.0010769
Arg of perigee: 114.2722 deg
Mean anomaly: 245.9582 deg
Mean motion: 14.28010738 rev/day
Decay rate: 7.3e-07 rev/day^2
Epoch rev: 2400
Checksum: 291

Satellite: MIR
Catalog number: 16609
Epoch time: 94075.82181288
Element set: 177
Inclination: 51.6463 deg
RA of node: 289.2936 deg
Eccentricity: 0.0015053
Arg of perigee: 41.3927 deg
Mean anomaly: 318.8353 deg
Mean motion: 15.58193902 rev/day
Decay rate: 7.619e-05 rev/day^2
Epoch rev: 46164
Checksum: 330

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94073.54142216
Element set: 457
Inclination: 28.4691 deg
RA of node: 123.9060 deg
Eccentricity: 0.0006308
Arg of perigee: 177.0781 deg
Mean anomaly: 182.9845 deg
```

Mean motion: 14.90525553 rev/day
Decay rate: 1.087e-05 rev/day^2
Epoch rev: 1525
Checksum: 291

Satellite: GRO
Catalog number: 21225
Epoch time: 94074.15950667
Element set: 73
Inclination: 28.4604 deg
RA of node: 164.6497 deg
Eccentricity: 0.0003468
Arg of perigee: 223.7721 deg
Mean anomaly: 136.2602 deg
Mean motion: 15.40375395 rev/day
Decay rate: 5.538e-05 rev/day^2
Epoch rev: 4242
Checksum: 294

Satellite: UARS
Catalog number: 21701
Epoch time: 94076.25976255
Element set: 487
Inclination: 56.9834 deg
RA of node: 167.4368 deg
Eccentricity: 0.0004269
Arg of perigee: 96.1849 deg
Mean anomaly: 263.9671 deg
Mean motion: 14.96533180 rev/day
Decay rate: 2.830e-05 rev/day^2
Epoch rev: 13717
Checksum: 339

/EX

3048. ORBS$077.2L.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 13:38:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.8948.99.0C38A4E5@drig.com>
Source record: 269698

```
SB KEPS @ AMSAT $ORBS-077.N
2Line Orbital Elements 077.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX March 18, 1994
BID: $ORBS-077.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10
1 14129U 83058B 94074.03621199 -.00000107 00000-0 10000-3 0 2699
2 14129 27.1901 337.1540 6022168 162.1847 234.6755 2.05878068 80842
UO-11
1 14781U 84021B 94076.08262229 .00000387 00000-0 73489-4 0 6746
2 14781 97.7911 95.1034 0010946 200.8625 159.2135 14.69171604536786
RS-10/11
1 18129U 87054A 94075.40199974 .00000041 00000-0 28565-4 0 8829
2 18129 82.9231 37.4191 0010266 287.1702 72.8326 13.72333370337187
AO-13
1 19216U 88051B 94072.40935734 .00000166 00000-0 10000-4 0 8939
2 19216 57.8759 263.4718 7210812 336.8024 2.5676 2.09719189 44000
FO-20
1 20480U 90013C 94071.45658699 -.00000021 00000-0 25451-4 0 6688
2 20480 99.0216 241.6090 0540420 198.5456 159.5252 12.83224395191726
AO-21
1 21087U 91006A 94072.89324047 .00000094 00000-0 82657-4 0 4443
2 21087 82.9367 213.2088 0035958 352.1754 7.8836 13.74535804156493
RS-12/13
1 21089U 91007A 94075.53910009 .00000057 00000-0 44794-4 0 6721
2 21089 82.9174 80.1605 0030126 9.5405 350.6312 13.74037277155921
ARSENE
1 22654U 93031B 94064.50000000 -.00000119 00000-0 00000 0 0 2469
2 22654 1.6510 105.2680 2927552 173.8780 198.1380 1.42201225 2991
UO-14
1 20437U 90005B 94072.21549149 .00000072 00000-0 44764-4 0 9737
2 20437 98.5925 158.2846 0011701 110.0876 250.1559 14.29829808215874
AO-16
1 20439U 90005D 94076.19336562 .00000065 00000-0 42387-4 0 7743
2 20439 98.6002 163.3475 0012127 99.9777 260.2776 14.29885704216451
```

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DO-17
1 20440U 90005E 94076.22662674 .00000074 00000-0 45623-4 0 7730
2 20440 98.6015 163.6736 0012240 99.1450 261.1119 14.30024568216474
WO-18
1 20441U 90005F 94072.21203773 .00000059 00000-0 39794-4 0 7743
2 20441 98.6013 159.7138 0012829 111.2783 248.9762 14.29998941215900
LO-19
1 20442U 90005G 94076.18464293 .00000080 00000-0 47723-4 0 7734
2 20442 98.6015 163.8733 0013183 99.4776 260.7899 14.30094641216486
UO-22
1 21575U 91050B 94075.24420930 .00000097 00000-0 47355-4 0 4757
2 21575 98.4400 151.5895 0007108 202.4817 157.6059 14.36899328139730
KO-23
1 22077U 92052B 94076.18255996 -.00000037 00000-0 10000-3 0 3705
2 22077 66.0833 112.6185 0011519 310.3641 49.6367 12.86285535 74950
AO-27
1 22825U 93061C 94072.21774410 .00000113 00000-0 63718-4 0 2702
2 22825 98.6611 148.9612 0009401 126.7150 233.4895 14.27613170 23998
IO-26
1 22826U 93061D 94072.20569811 .00000134 00000-0 71926-4 0 2702
2 22826 98.6611 148.9734 0009962 126.0055 234.2050 14.27715988 23995
KO-25
1 22830U 93061H 94076.16166154 .00000077 00000-0 48244-4 0 2746
2 22830 98.5601 151.1197 0012546 85.4566 274.8057 14.28040646 24568
NOAA-9
1 15427U 84123A 94074.03402688 .00000126 00000-0 90853-4 0 7505
2 15427 99.0656 123.3704 0015705 122.8642 237.4045 14.13597974477046
NOAA-10
1 16969U 86073A 94073.99072129 .00000108 00000-0 64636-4 0 6475
2 16969 98.5121 85.8616 0012156 244.1267 115.8662 14.24872785389191
MET-2/17
1 18820U 88005A 94076.18240290 .00000127 00000-0 99308-4 0 2729
2 18820 82.5456 341.7797 0018514 79.0102 281.3131 13.84711418309624
MET-3/2
1 19336U 88064A 94072.89393314 .00000051 00000-0 10000-3 0 2689
2 19336 82.5411 31.1102 0017651 137.2192 223.0298 13.16965600270718
NOAA-11
1 19531U 88089A 94073.96248747 .00000086 00000-0 71361-4 0 5590
2 19531 99.1660 60.5963 0012728 40.9981 319.2144 14.12967309281919
MET-2/18
1 19851U 89018A 94075.85339731 .00000027 00000-0 10933-4 0 2716
2 19851 82.5182 217.5195 0015409 122.8587 237.3935 13.84358686254919
MET-3/3
1 20305U 89086A 94075.88142870 .00000044 00000-0 10000-3 0 43
2 20305 82.5576 333.8085 0006499 152.2875 207.8581 13.04425109210860
MET-2/19
1 20670U 90057A 94075.63449506 .00000024 00000-0 79036-5 0 7734
2 20670 82.5434 281.9855 0017468 47.7992 312.4642 13.84190213187814
FY-1/2
1 20788U 90081A 94076.22426307 -.00000172 00000-0 -85968-4 0 9199
```

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2 20788 98.8393 99.2948 0013308 265.4548 94.5096 14.01312219180823
MET-2/20
1 20826U 90086A 94071.91097536 .00000059 00000-0 40218-4 0 7814
2 20826 82.5228 222.5667 0012920 323.8660 36.1626 13.83574515174445
MET-3/4
1 21232U 91030A 94071.87651682 .00000051 00000-0 10000-3 0 6792
2 21232 82.5362 237.6665 0014715 65.8899 294.3776 13.16460820138681
NOAA-12
1 21263U 91032A 94074.00396538 .00000180 00000-0 10013-3 0 9646
2 21263 98.6278 103.8182 0013418 145.8585 214.3456 14.22379795147143
MET-3/5
1 21655U 91056A 94076.19735930 .00000051 00000-0 10000-3 0 6877
2 21655 82.5556 181.6999 0014730 67.7742 292.4937 13.16828055124353
MET-2/21
1 22782U 93055A 94072.07378319 .00000044 00000-0 26732-4 0 2819
2 22782 82.5479 282.6058 0022877 131.3043 229.0093 13.83002641 26809
POSAT
1 22829U 93061G 94072.24139185 .00000073 00000-0 47209-4 0 2637
2 22829 98.6566 149.0227 0010769 114.2722 245.9582 14.28010738 24007
MIR
1 16609U 86017A 94075.82181288 .00007619 00000-0 10511-3 0 1779
2 16609 51.6463 289.2936 0015053 41.3927 318.8353 15.58193902461643
HUBBLE
1 20580U 90037B 94073.54142216 .00001087 00000-0 93515-4 0 4574
2 20580 28.4691 123.9060 0006308 177.0781 182.9845 14.90525553 15255
GRO
1 21225U 91027B 94074.15950667 .00005538 00000-0 12661-3 0 737
2 21225 28.4604 164.6497 0003468 223.7721 136.2602 15.40375395 42424
UARS
1 21701U 91063B 94076.25976255 .00002830 00000-0 26775-3 0 4872
2 21701 56.9834 167.4368 0004269 96.1849 263.9671 14.96533180137174
/EX
```

3049. ARLD015 DX news

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 14:16:20 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arld015.1994@ampr.org>
Source record: 269699
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ARL $ARLD015
ARLD015 DX news

ZCZC AE13
QST de W1AW
DX Bulletin 15 ARLD015
From ARRL Headquarters
Newington CT March 17, 1994
To all radio amateurs

SB DX ARL ARLD015
ARLD015 DX news

The items in this week's bulletin are courtesy of Jacques, F2YS/W2, Bob, W5KNE, QRZ DX, Chod, VP2ML, The DX Bulletin, the Ohio/Penn DX Bulletin, the Yankee Clipper Contest Club PacketCluster network and Contest Corral in QST. Thanks.

SPRATLY ISLANDS. The next operation is slated for April 2 to 5 by operators 9M6BZ, JA9AG, JQ1WSL, JS1QHO and G3NOM from Swallow Reef. Listen for 9M0A, 9M0AG and 9M0BZ on CW, SSB, FM, RTTY, AMTOR, PacTOR and packet. On CW try 1825, 3505, 7005, 10105, 14005, 18070, 21005, 24895 and 28005 kHz. On SSB try 3790, 7080, 14195, 18145, 21295, 24945 and 28495 kHz. FM will be on 29240 kHz. RTTY will be around 7030, 14085, 21085 and 28085 kHz.

SVALBARD ISLANDS. From March 18 through 21, Tom, LA1BJA, and Inge, LA5VK, will be signing JW1BJA and JW5VK, respectively. They will operate all bands, including WARC, mostly with SSB. Phone operation on 17 and 12 meters was authorized for Norwegian amateurs on January 1, 1994, so this may be the first JW voice activity on these bands. QSL to JW5VK, Inge Johan Lauknes, Oldersneia 10, N-9100 Kvaloysletta, Norway.

TRINDADE ISLAND. Mendonca, PY1UP, will be starting a four month visit in about three or four weeks. He now has a higher class license enabling him to operate on more bands. Listen for PY0TUP.

FERNANDO DE NORONHA ISLAND. Peter, PY5CC, will be active until April 1st, as PY0FM. He will be active on 160-2 meters, including WARC bands and on CW/SSB. Try 160 meters around 0415z, 80 meters around 0245z, and 40 meters around 2100z. He has also been heard on 30 meters, a rarity for a Brazilian station. QSL via PY5CC.

SOUTHERN SUDAN. John, PA3CXC, is signing /ST0, though his length of stay is unknown. Listen for him on 18072 kHz at 1745z and 24892 kHz

at 1830z.

COCOS ISLAND. TI2CF and TI2JJP have been very active as TI9CF and TI9JJP. Carlos operates both phone and CW. Jose prefers SSB. Try 1833 kHz at 0500z, 3795 at 0412, 7007 at 0415, 7052 at 0235, 10104 at 0130, 14024 at 0230, 14195 at 1725, 18145 at 0100, 21025 at 1712, 21295 at 1838, 28025 at 1905, and 28495 at 1916. QSL via TI2CF and TI2AOC respectively.

LORD HOWE ISLANDS. VK9LA has been on a net on 7084 kHz at around 1145z.

NORTHERN MARIANA ISLANDS. Tosy, JA5VZB will sign AH0T from Rota Island sometime this month. Activity will include a stint in the CQ WW WPX SSB contest. Outside the contest hours he will be on 160 through 10 meters, concentrating on 160 meters and RTTY. Check 1824 kHz. All non-JA stations QSL via JA6BSM, JAs via the bureau only.

JUAN DE NOVA. Listen for FR5ZQ/J between March 21 and April 25 operating SSB only. QSL his home call.

EUROPA. FR5ZU/E will be on from March 28 to April 25 with SSB and RTTY. QSL via VE2NW.

THAILAND/NEPAL. Rana, WB4NFO, will be on the air soon signing HS0ZBK. A trip to Nepal is planned and an effort will be made to obtain a license there.

JOHNSTON ISLAND. AH6IO will sign /KH3 May 4 to 9 with NH6UY. Operations will be 160 through 6 meters and satellites. QSL direct only to home calls.

UNITED ARAB EMIRATES, UAE. Don, WB2DND, will sign A61AD March 23 to 26, concentrating on the lower bands. QSL via WB2DND.

THIS WEEKEND ON THE RADIO. BARTG Spring RTTY Contest, sponsored by the British Amateur Radio Teledata Group, is from 0200z March 19 to 0200z March 20. Exchange signal report, serial number and UTC time.

Bermuda Contest, sponsored by the Radio Society of Bermuda, runs from 0000z March 19 to 2400z March 20. Work as many VP9 stations as possible exchanging signal report and serial number.

For more information on both events, check page 111 of February QST.
NNNN
/EX

3050. Re: QRP fun (was: JARGON)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 15:26:24 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar18.152624.26129@ke4zv.atl.ga.us>
Source record: 269700

In article <CMozz7.2sA@news.Hawaii.Edu> jherman@uhunix.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>jlw3@cec3.wustl.edu (Jesse L Wei) writes:
>: Now this is my question: do hams *ever* talk about anything besides what
>: kind of rig (s)he's got, ham problems, ham equipment, etc? As a waiting
>: (as in for my ticket) prospective, I've liistened to the local repeaters,
>: and personally, the conversations seem pretty boring if that's all you
>: ever talk about. Have I missed anything? or something? Is the purpose
>: of ham radio to talk about the technicalities of it? I know that the
>: whole nature of it requires technicality, but isn't there more to
>: it than that?
>
>Folks on here and on .policy have been complaining about QSO content
>lately, particularly on the HF bands. But some of us feel that just
>establishing contact with someone, whether they be a dozen miles or a
>thousand miles away is enough in itself, especially when using QRP
>(5 watts or less), and even more so if running QRPp (1 watt or less).

[delete]

>An RST of 579 into Hungary with only 10 milliwatts? And 1 mw brought
>a 559 report? So you see, QSO content might not be as important as just
>making contact.

Jeff has a point about exotic contact methods. Certainly the QSO content of an EME contact is rather thin, but it's the fact of the contact itself that's the primary goal. A few milliwatts on HF isn't quite so exotic, its worked rather well for many years when the ionosphere cooperates, but it's still more of a challenge than making the same contact with 100 watts. However, the bulk of contacts made on HF, or VHF/UHF, aren't attempts to press the limits of propagation. It's that majority of contacts that we lament as contentless. There's little challenge to making the contact when both sides are running substantial power over well established paths (or certainly when through a repeater). The emphasis isn't on making the contact, that's trivial, the emphasis has to be on the content since that's the only novel aspect of the exchange.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3051. Re: Diesel or Taurus fr HF/VHF mobile??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 15:27:39 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar18.152739.26208@ke4zv.atl.ga.us>
Source record: 269701

In article <CMsx2J.1Jw@hpqmoea.sqf.hp.com> dstock@hpqmoca.sqf.hp.com (David Stockton) writes:
>
> Did you try exorcism?

Yeah, but getting the chicken blood off the seats was a chore. :-)

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3052. Re: IPS Daily Report - 17 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 16:21:02 UTC
From: dmb@abacus.demon.co.uk
Message-ID: <CMvC32.3I5@abacus.demon.co.uk>
Source record: 269702
Cross-posted to: aus.radio,rec.radio.amateur.misc

In article <1994Mar17.235432.2767@ips.oz.au>,
Regional Warning Centre <rwc@flare.syd.ips.oz.au> wrote:
>SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
>ISSUED AT 17/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES

>3A. GLOBAL HF PROPAGATION SUMMARY
> LATITUDE BAND
>DATE LOW MIDDLE HIGH
>17 Mar normal normal-fair fair
>PCA Event : None.
>3B. GLOBAL HF PROPAGATION FORECAST
> LATITUDE BAND
>DATE LOW MIDDLE HIGH
>18 Mar normal fair-normal fair
>19 Mar normal fair-normal fair
>20 Mar normal normal fair-normal

What latitudes are in each of the LOW/MIDDLE/HIGH bands. Specifically,
int the UK, are we high or middle ?

David.
--
David Byrne, Abacus Software, London, UK Tel: +44 (0)71 930 4884
Email: dmb@abacus.demon.co.uk Fax: +44 (0)71 839 7445
Here's a koan: If you have ice-cream I will give you some. If you have none,
I will take it away from you. (it's an ice-cream koan).

3053. Re: Q codes?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 16:41:24 UTC
From: wps@ElSegundoCA.NCR.COM
Message-ID: <5788@tdbunews.teradata.COM>
Source record: 269703

pull them from the ARRL server (this is only one place) they will get mailed to you. send mail to: info@arrl.org. Your message (text body of the message) should only include:

send q-signals
quit

Another way it to anonymous ftp them from one of the loactions out there that has the ham files.
oak.oakland.edu
ftp.cs.buffalo.edu

Bill

Bill Starkgraf wps@ElSegundoCA.ncr.com
AT&T Global Information Solutions (310) 524-5754
El Segundo, CA (800) 222-8372 x5754

Call: KD6UQB Simi Settlers ARC
Simi Valley, CA

3054. Re: Ten-Tec question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 16:42:36 UTC
From: kchen@apple.com
Message-ID: <2mclls$5br@apple.com>
Source record: 269704

mosier@fagan.uncg.edu (Stephen Mosier) writes:

>In article <1994Mar8.174004.7646@rsg1.er.usgs.gov>
>junger@rsg1.er.usgs.gov (John Unger) writes:

>>>better use with SSB. By virtue of its name I would say the blanker
>>>reduces the background static. Am I far wrong and is this a useful
>>>feature on this rig?
>>
>>I have a TenTec Corsair II with a noise blanker and have yet to find
>>any conditions where it has been helpful to reduce general static-type

>Ditto for the noise blanker on my TenTec OMNI VI.

I once found that the noise blanker on my Omni V actually worked on
some kind of impulsive noise. But it so rarely does anything useful
that I never bothered to figure out just when it does work and for
ages now, I have abandoned even trying it.

Ten-Tec can probably save us all a few bucks and not include their
noise blanker wannabe :-). That, and the zillions of birdies are
the weak spots of the Omni V.

Otherwise, Ten-Tec rigs are WONDERFUL.

73

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

3055. Re: HAM Origin?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 16:44:54 UTC
From: mack@helix.nih.gov
Message-ID: <1994Mar18.164454.12373@alw.nih.gov>
Source record: 269705

In article <CMsJCA.IMx@ucdavis.edu> ez006683@chip.ucdavis.edu (Daniel D. Todd) writes:
>Edward Sorensen (edsorensen@delphi.com) wrote:

> Lid came from the habit of poor telegraph operators to set
>there 'receivers' on a tin lid to amplify the sound.
>
In the book which accompanied a PBS special on Armstrong, Sarnoff and
DeForest, the term LID is described as originating withe the marking
L.I.D. (later in day) marked on low priority telegrams, which were
given
to poorer operators, while the urgent messaes were given to the good
opreators.

Joe Mack NA3T
mack@ncifcrf.gov

3056. Re: 25_years_of_portable_phone

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 16:46:59 UTC
From: dmb@abacus.demon.co.uk
Message-ID: <CMvDAC.3Mw@abacus.demon.co.uk>
Source record: 269706

In article <2093.9403171933@wrtfac.udev.cdc.com>,
Dave Sweigert <sweigert@wrtfac.udev.cdc.COM> wrote:
>
>George Sweigert, now 74, licensed as N9LC since 1975 and formerly
>W8ZIS, was granted a patent in June, 1969 for a wireless portable
>telephone device. The specific patent claim was for "full duplex
>radio communications".
>

Hello Dave,

I'm not sure whether this is the first wireless telephone. I've got a copy
of the 10th ed. World Radio Handbook (1957) which was the predecessor of the
WRTH, in which Storno have an ad for a radiophone if I remember correctly.

Admittedly it's the size of a large suitcase with about a 4-foot whip, and
the guy carrying it (in trenchcoat and trilby) looks like the main actor in
a bad spy movie, but if I read it correctly, and it connects to the PSTN rather
than just a 2-way portable (haulable ? :-)), this would pre-date the above
claim by 22 years ! I'll check it out over the weekend ..

The same edition has the latest in VCR technology. This domestic wonder was
reel-to-reel, and looks to about the same size as a small automobile !

73

David
--
David Byrne, Abacus Software, London, UK Tel: +44 (0)71 930 4884
Email: dmb@abacus.demon.co.uk Fax: +44 (0)71 839 7445
Here's a koan: If you have ice-cream I will give you some. If you have none,
I will take it away from you. (it's an ice-cream koan).

3057. IC22S

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 16:59:12 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940318085912_5@ccm.hf.intel.com>
Source record: 269707

Text item: Text_1

>Would like to get mods for +5K and +10K steps for prog freq. Want to
>know if it is possible to modify for transmit from 144Mhz to 148Mhz.
> Dwight, morgdw@saturn.wwc.edu

TechnoLogic Concepts, 1803 Mission St., Suite 308, Santa Cruz, CA 95060
offers a kit for the ICOM-22S that allows continuous coverage from 144.62
to 147.90 MHz in 5khz steps.

73, Cecil, kg7bk@indirect.com (I do not speak for Intel on Internet)

3058. Looking for crystals

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 17:08:36 UTC
From: bgreschk@Mr-Hyde.aoc.nrao.edu
Message-ID: <1994Mar18.170836.17191@Mr-Hyde.aoc.nrao.edu>
Source record: 269708

Hello.

I'm no where near home so I don't want to read through everything here to
see if this is a dumb question, so I'll just assume that it is (I don't
normally read this group either).

I'm not a ham (yet) but there is one in the Philippines that is looking
for crystals for an old transceiver (I don't don't know the make/model).
He needs crystals for the following frequencies

15620 KHz
15610
15970
15870

A mail order source would be real nice since that would then give everyone
in the Western Pacific a catalog to drool over. :-)

Thanks!
Bob
--
Bob Greschke | If you think the traffic is bad now just wait
Socorro, New Mexico USA | until the Information Dirt Road gets paved!
-------------------------+
Internet: bgreschk@aoc.nrao.edu

3059. MEDIUM WAVE CIRCLE

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 17:16:40 UTC
From: whitt_s@bt-web.bt.co.uk
Message-ID: <94Mar18.101746-0700.18522-3@scapa.cs.ualberta.ca>
Source record: 269709
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.misc,uk.radio.misc,rec.radio.info

MEDIUM WAVE CIRCLE * MEDIUM WAVE CIRCLE *** MEDIUM WAVE CIRCLE ***

137A Hampton Road, Southport PR8 5DY, England

Dear Radio Enthusiast,

We would like to take this opportunity to introduce you to the only UK-based club specially for the radio enthusiast interested in Medium Wave and Long Wave radio.

HISTORY:
The Medium Wave Circle was founded in 1955 by Ken Brownless who ran affairs single handledly from his home in York until his death in 1984. Since 1984 the Circle has been run by an organising committee consisting of an Honorary President, Secretary, Treasurer and the General Editor of the club journal, Medium Wave News.

MEDIUM WAVE NEWS:
The prime activity of the Circle has been the publication of Medium Wave News. This started life as a single stencilled page appearing in December 1954 and grew to eight mimeographed pages by the 1970s. Over the past few years we have continued to improve and expand Medium Wave News. In 1987 we changed from the traditional loose leaf broadsheet style to a 16 page A5 size booklet. This doubled the amount

of information we could carry in each issue. In the following years we increased the number of issues from 8 per year, through 9 to the present level of 10 copies each year. In parallel, the size of the magazine increased from 16 to 20 pages per issue. Now we regularly produce 24 pages per issue which represents a full three fold increase of magazine contents since 1987! In 1993 the contents of Medium Wave News increased by 10% and we are planning a similar further expansion in 1994.So that you can appreciate the scope of Medium Wave News, the 1992-3 Annual Index is attached.

OTHER ACTIVITIES:
Although the prime activity of the club is still producing Medium Wave

News regularly for members in the UK and overseas, the club continues to develop its activities on several fronts. The club maintains a portfolio of Reprint Publications for the benefit of members. This year we are manning a stand at the Leicester Amateur Radio Show to promote the hobby of medium wave listening and DXing more widely. Members also stage regular DX-peditions in the search for new and elusive stations.

MEMBERSHIP:
Membership of the Circle is open to anyone with an interest in LW/MW radio, whether it be radio listening, technical development or enthusiastic DXing. Indeed we cover the ground between 100kHz and 1700kHz. Although we are a specialist radio club we welcome all listeners; neither age nor experience (or lack of it) are a barrier to

membership. In fact despite being UK-based, we always welcome our overseas friends.

JOINING:
The club works with a membership renewal system based on an April renewal for all members. If you join part way through the year membership fees are charged pro-rata unless you would like to receive back issues of Medium Wave News to the preceeding April. If you wish to join please carefully complete and return (by post) the attached form. If on the otherhand you would like to see a sample copy of Medium Wave News before joining please send the form with either 4 International Reply Coupons or US$3 bills (or equivalent in any major currency).

I trust you'll feel inclined to join the Medium Wave Circle. I look forward to hearing from you and I shall personally see that your name is immediately added to the members' register.

73s and good listening,

Steve Whitt
on behalf of the Medium Wave Circle

----------please cut and return completed form----
|
| To: Medium Wave Circle,
| I would like to subscribe to Medium Wave News as indicated
| below (please tick your choice):
|
| UK 2 years GBP21 ****save 10% now!****
| UK 1 year GBP12
| Europe (inc Eire) 1 year GBP15 (US$25, 35DM, 150FF)
| The Americas 1 year GBP18 (US$28 or equivalent)
| Rest of World 1 year GBP20 (US$30 or equivalent)
| One year membership expires in March 1995;
| Two year membership expires in March 1996
|
|
| Your Name:_____
|
| Your Address:_____
|
| Town/ City:_____
|
| Post (Zip) Code:_____ Country:_____

Please return this form with payment to Medium Wave Circle, 43 Atwood Drive, Bristol BS11 0SR, England. On joining the club you will receive

a membership number which will appear on the address label of Medium Wave News. It helps us if you use this number in all communications with the club. You will also receive a welcome pack containing some useful publications that we are sure you will appreciate.
All payments should be made to "Medium Wave Circle". In the UK a cheque or PO is preferred. All overseas non-cash payments (eg bank draft, International Postal Money Order, Eurocheque) must be in GBP Sterling. Cash payments can be in any major negotiable currency such as US $, German DM, French FF (but send no coins through the post). We

recommend using registered post for cash sent via the post. If you cannot transfer money we will accept International Reply Coupons at a rate of 2.5 per # (e.g. 25IRCS = #10)

For office use Date received: Member No: Payment method:

---------- cut form here----------

MEDIUM WAVE CIRCLE * MEDIUM WAVE CIRCLE *** MEDIUM WAVE CIRCLE ***

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MEDIUM WAVE CIRCLE * MEDIUM WAVE CIRCLE *** MEDIUM WAVE CIRCLE ***

3060. * SpaceNews 21-Mar-94 *

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 17:40:38 UTC
From: kd2bd@ka2qhd.DE.COM
Message-ID: <9403181740.AA00169@ka2qhd.de.com>
Source record: 269710

SB NEWS @ AMSAT $SPC0321
* SpaceNews 21-Mar-94 *

BID: $SPC0321

=========
SpaceNews
=========

MONDAY MARCH 21, 1994

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited distribution.

* SAREX FACT SHEET - STS-59 *
============================
WHO: Space Shuttle Endeavour crew

WHAT: Talk via Amateur Radio with students on earth.

WHERE: Earth Orbit. 57 degrees inclination. Altitude 220 kilometers.

WHEN: April 7, 1994 (9 day mission)

WHY: As part of the Shuttle Amateur Radio EXperiment (SAREX) component of the STS-59 mission.

LAUNCH: Scheduled for April 7, 1994 at 1207 UTC from the Kennedy Space Center, Cape Canaveral, Florida.

AMATEUR RADIO
LICENSED CREW
MEMBERS: Dr. Jay Apt, N5QWL, Mission Specialist
Dr. Linda Godwin, N5RAX, Payload Commander

PAYLOAD: Primary Payload--Shuttle Radar Laboratory 1 (SRL-1). Apt is the commander of the Blue Shift and will operate the shuttle systems during the "night" shift, while Godwin is responsible for overall operation of three large radars in the shuttle's cargo bay during the "day" shift.

Secondary Payload--Shuttle Amateur Radio EXperiment or SAREX, configuration C.

SPONSORS: The American Radio Relay League (ARRL), The Radio Amateur Satellite Corporation (AMSAT) and The National Aeronautics and Space Administration (NASA). SAREX is supported by the Federal Communications Commission (FCC).

SAREX RADIO
FREQUENCIES:Voice Downlink: (Worldwide) 145.55 MHz [Receive Only]
Voice Uplink: 144.91, 144.93, 144.95, 144.97,
144.99 MHz
Voice Uplink: (Europe only) 144.70, 144.75,
144.80 MHz
Packet Downlink: 145.55 MHz
Packet Uplink: 144.49 MHz

HAM RADIO FM Voice: call signs N5RAX and N5QWL
CALL SIGNS: FM Packet: call sign W5RRR-1

QSL VIA: Send reports and QSLs to ARRL EAD, STS-59 QSL, 225 Main Street, Newington, CT 06111, USA. Include the following information in your QSL or report: STS-59, date, time in UTC, frequency and mode (FM voice or packet). In addition, you must also include an SASE using a large, business-sized envelope if you wish to receive a card. The Orange Park Amateur Radio Club in Florida has generously volunteered to manage the cards for this mission.

INFORMATION:Goddard Amateur Radio Club (Greenbelt, MD) Amateur Radio station (call sign WA3NAN) news and retransmissions on Amateur Radio high frequency (HF) bands at 3.86, 7.185, 14.295, 21.395, and 28.65 megahertz (MHz) and on very high frequency (VHF) bands at 147.45 MHz.

Johnson Space Center Amateur Radio Club (Houston, TX) Amateur Radio station (call sign W5RRR) news bulletins on HF bands at 3.850, 7.227, 14.280, 21.350, and 28.400 MHz and VHF at 146.64 MHz.

ARRL (Newington, CT) Amateur Radio station (call sign W1AW) news bulletins (9:45 PM, 12:45 AM EST) on HF bands at 3.99, 7.29, 14.29, 18.16, 21.39, 28.59 and VHF at 147.555 MHz.

SHUTTLE
TRACKING: Current Keplerian elements to track the Shuttle are available from the NASA Spacelink computer information system BBS (205) 895-0028 and the ARRL BBS (203) 666-0578.

FOR FURTHER
INFORMATION:Tracy Bedlack, N1QDO, Educational Activities Department, American Radio Relay League 203-666-1541 email: ead@arrl.org

SAREX configuration C consists of the handheld transceiver, I/F module, PGSC, spare battery set, window antenna, packet module, SAREX headset assembly, personal recorder, and the required cable assemblies. The packet] module contains a power supply and packet TNC. The power supply provides power for the TNC and the handheld transceiver. The TNC interconnects with a radio transceiver so that data to and from the computer is transmitted to and received from other amateur radio stations.

Configuration C is capable of operating in either the voice or data mode in communications with amateur stations within LOS of the Orbiter. This

configuration can be operated in the attended mode for voice communication
and either the attended or automatic mode for data communications.

The payload control weights are as follows:
Configuration C 45 lb (20.41 kg)

STS-59 Keplerian elements for a 1207 UTC launch:

STS-59
1 00059U 94097.56425350 .00234441 00000-0 12190-3 0 55
2 00059 57.0018 277.1957 0008733 268.0585 91.9530 16.19594525 26

Satellite: STS-59
Catalog number: 00059
Epoch time: 94097.56425350 = (07 APR 94 13:32:31.50 UTC)
Element set: 005
Inclination: 57.0018 deg
RA of node: 277.1957 deg Space Shuttle Flight STS-59
Eccentricity: .0008733 Prelaunch Element set JSC-005
Arg of perigee: 268.0585 deg Launch: 07 APR 94 12:07 UTC
Mean anomaly: 91.9530 deg
Mean motion: 16.19594525 rev/day Gil Carman, WA5NOM
Decay rate: 2.34441e-03 rev/day*2 NASA Johnson Space Center
Epoch rev: 2
Checksum: 307

[Info via the ARRL]

* FO-20 SCHEDULE *
==================
The FO-20 command station announced that FO-20 will be placed in Mode JA
(Analog transponder mode) during Field Day 1994 (25-Jun-94 18:00 UTC through
26-Jun-94 18:00 UTC).

The current operating schedule is as follows:

Analog mode:
23-Mar-94 07:52 -to- 30-Mar-94 08:15 UTC

Digital mode: Unless otherwise noted above.

[Info via Kazu Sakamoto, JJ1WTK]

* THANKS! *
===========
Thanks for all the messages of appreciation sent to SpaceNews this week
especially:

IW1QH KZ1Z VK2TFG AD4HJ KD4VGD KD6DSI G8MWF Erik Simonsen
Nihat Tsolak

* FEEDBACK/INPUT WELCOMED *
==========================
Mail to SpaceNews should be directed to the editor (John, KD2BD) via any

of the following paths:

FAX : 1-908-747-7107
PACKET : KD2BD @ N2KZH.NJ.USA.NA
INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD
Department of Engineering and Technology
Advanced Technology Center
Brookdale Community College
Lincroft, New Jersey 07738
U.S.A.

<<=- SpaceNews: The first amateur newsletter read in space! -=>>

/EX

--
John A. Magliacane, KD2BD * /\/\ * Voice : 1-908-224-2948
Advanced Technology Center |/\/\/\| Packet : KD2BD @ N2KZH.NJ.USA.NA
Brookdale Community College |\/\/\/| Internet: kd2bd@ka2qhd.ocpt.ccur.com
Lincroft, NJ 07738 * \/\/ * Morse : -.- -.. ..--- -... -..

3061. Is there any patch for HTX-202?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 18:33:53 UTC
From: lazarza@academ01.mty.itesm.mx
Message-ID: <lazarza.764015633@mtecv2>
Source record: 269712

I wonder if this is the right place to post this question.

Is there any patch available to expand the frequency range of the HTX-202?

If possible, replay to me directly, and if there is interest, i'll post the answers.

Thanks in advance

Luis Zarza
lazarza@mtecv2.mty.itesm.mx

3062. eggbeater const. art. in QST????

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 19:07:08 UTC
From: brunelli_pc@delphi.com
Message-ID: <5uyvoFE.brunelli_pc@delphi.com>
Source record: 269713

I remember seeing an article on constructing an
eggbeater style sat antenna on ..... in an issue of QST.

have torn the shack apart and no DICE!!!

anyone with a reference or an alt. source for an eggbeater sdesign?
i would be very interested.

thanks

pete n1qdq

3063. Re: 1994 Contest calendar enclosed

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 19:14:13 UTC
From: charlier@lsid.hp.com
Message-ID: <CMvK3q.IBC@hpcvsnz.cv.hp.com>
Source record: 269530

Thanks for typing that in and posting, Dave. I found a couple of typos,
though:

Dave Bushong (dbushong@wang.com) wrote:

: Here is the 1994 contest calendar from CQ. Each of the fields is

: Contest Weekend/Month Hours
: ARRL VHF Sweepstakes 33
Should be: 4/Jan

: ARRL DX Contest 4/May 14
That should read: ARAL DX contest. (though I'm not sure who the ARAL
is, they gotta be crazy to hold a DX contest the same weekend as the WPX
CW!)

: CO WW WPX CW Contest last/May 48
Of course thats C*Q* not CO.

--
Charlie Panek KX7L Hewlett Packard Company
charlier@lsid.hp.com Lake Stevens Instrument Division
Everett, Washington

3064. Mounting Cushcraft R7 Vertical on Towers

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 19:30:29 UTC
From: CUNNINGHAM_A@whqvax.picker.com
Message-ID: <1994Mar18.193029.6834@picker.com>
Source record: 269714

SUMMARY : Comments on R7 on Towers

A few weeks ago Trevor Hilfer, WD8QBP, and myself asked if it was
advisable to mount the Cushcraft R7 vertical at the top of a tower.
We also were curious about the resulting DX performance. Nick, W8XD, advised
against tower mounting, as his R7 bent somewhat in our high Cleveland winds.
This is a summary of the (mixed opinion) comments received over the reflectors.

Al Cunningham N8AGU

++

From: Rick_Aldom-AYKA60@email.sps.mot.com

Hi,
Our club has a R7 mounted atop a 30' or so mast. The mast is a three section
with guys North, South, West and East Northeast. Each compass point goes to
the top and to the top of the second section. Just after we put it up we had a
front come through, and the R7 really leaned over. The mast took it OK, but
the R7 looked like we were going to find wadded up in a heap the next day.
However, the R7 did just fine, and so did the mast. We have been very happy
with the setup.

One more note...

Our club, MARCA (Motorola Amateur Radio Club of Arizona) set the mast for our
antenna on the top of our plant in Tempe. The roof is about 25'-30' up and
then we are another 30' from there. The mast and antenna see a fair amount of
un-disturbed wind up there and it takes it just fine.

I hope this information is of some use.

Rick Aldom
++

Skip it. Cushcraft recommends mounting the R4/R5/R7 between 5 and 10
feet off the ground.

73 ES GUD DX
- Mark

....
: Mark A. Feit, KR4FH : Internet: mark@era.com :
: Engineering Research Associates : USENET: ...!uunet!era!mark :
....

++

From: "Skelton, Tom" <TSkelton@engineer.clemsonsc.NCR.COM>

Hi Al....a good friend of mine in Alabama, Eric/ WB4QNP, put an R7 at the top of his 110 ft 45G tower. The R7 is a pretty resilient antenna, except for the 30 meter coil, and Eric said it withstood some bad winds. I just re-installed this same antenna for a friend here in Greenville, SC, and can attest that I would have no concerns putting it on top of a tower. Matter of fact, Eric said it worked quite well on top of the tower...but of course it was mounted at 125 ft (110 ft of tower plus 15 ft mast extending out the top). 73 and gl!

Tom WB4iUX

++

-->
--> I had the same plans here in the Netherlands but was advised not to
--> do so. Even if the R7 is mounted on the ground I was advised to use
--> guide wires. We have some storms every year and the mechanical
--> construction of the R7 doesn't look like a storm surviver!
-->
--> Therefor I decided not to buy the R7 but mount an ordinarry doublet
--> of 2 times 20 mtrs with an open feeder and symetrical atu.
-->
--> Advantage is the tunablity of this system on all bands.
-->
--> Also the R7 isn't realy performing on 80 mtrs.
-->
--> Regards,
-->
-->Dick Hissink PA3DSP
-->Email:dihi@bsdihi.atr.bso.nl

++

From: levine@mc.com (Bob Levine)

I have had an R7 mounted on my chimney (a 3 flue job) with 3 custom stainless steel brackets I made for > 2 years now. It withstood 80mph winds last March while caked with ice. I have seen it bent at least 30 degrees from vertical. It is still as vertical (with no wind) now as it was when I installed it. It still works the same and I will never sell it, even though I have since constructed a tower. Although I have a G5RV, I still prefer it for WARC and 40m DX.

If anyone is considering buying one (R7) and wants to see it's SWR curves, send me a SASE and I'll send you the printout from my AEA HF SWR Analyzer. (I built the interface to the PC for that great thing!)

It wasn't designed for 80m either. R7 := 7 bands (10,12,15,17,20,30,40)

Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599

++

From: bhorn@netcom.com (Bruce Horn)

Hi Al,

I have an R-7 but have not put it on the top of my tower.
However, a friend as put his R-7 on the top of his mast on
the top of his 89 ft US Tower with no problems.

73 de Bruce, WA7BNM

++

From: SMTP%"XMSJ29A@prodigy.com" 28-FEB-1994 11:44:14.32

The refelctor is great for sharing ideas...especially when someone else has
exactly the same question as you do!

After the ARRL CW weekend W1CW and I were discussing moving the R7 to the
top of the big tower, coincidence-I think not.

We currently have it up about 35 feet and it works OK...wondering if
putting it up at 135 would make it "hot"....

I too have wondered about wind load, etc...fortunately the tower is very HD
Rohn 55 and I think we could put a pickup truck up there with no problem...
but, I would like to hear what you get in the way of feedback. Seems like with
it it so "in the clear" it should perform without hinderance...mebbe there's
a down side. If you do not post your feedback to the general cq-contest
public please lemme know what you hear. Thanks.

73, Jim K1ZX
XMSJ29A@Prodigy.com

++

3065. Help Needed on 75M WAS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 19:30:49 UTC
From: carrigan@pica.army.mil
Message-ID: <9403181430.aa27730@COR3.PICA.ARMY.MIL>
Source record: 269715

HELP...

Any Extra Class hams out there who can help me complete some endorsements for the 75M WAS (aka GERATOL) net? Out of over two dozen various endorsements available, I have whittled my list down to only a state or two for certain ones; that is, if I can work stations having the call sign formats following for the states listed, I can finish off these endorsements. The call sign formats and states needed are:

Callsign #
Format Example Needed States

N 1x2 N2KK (2) AR, WV

A 2x1 AB3C (2) HI, ND

K 2x1 KC8X (1) WV

W 2x1 WA4X (3) AL, ID, UT

If any of you Extras out there having a call sign with the above format and state can schedule a quick contact with me (shouldn't take any more then a minute or so) in the 75M Extra Subband before it gets too noisy, pls send an email reply direct to me, and we'll work something out. Thanks in advance to anyone out there who can help me out!

73 Chuck W2RK (75M WAS #992)

3066. Re: Part 97

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 20:22:46 UTC
From: dubner@spk.hp.com
Message-ID: <CMvn9y.B6I@spk.hp.com>
Source record: 269716

Jack C. Lockhart (lockhart@mothra.nts.uci.edu) wrote:
: In article <2m7t08$o9i@lester.appstate.edu>,
: Watkins, Robert Shawn <RW884@CONRAD> wrote:
: >Is there a way I can get a copy of the revised Part 97 via e-mail?
: >
: > Shawn Watkins
: > KE4FPZ
:
:
: I just got mine from.
:
: ftp.cs.buffalo.edu in pub/ham-radio/ fcc_part-97-1
: fcc_part-97-2
: fcc_part-97-3

I found fcc_part-97-1 on 'buffalo' to be badly truncated and would
instead recommend what Bill Starkgraf (wps@ElSegundoCA.NCR.COM) wrote:
: Get a copy via ftp from oak.oakland.edu (/pub/hamradio/Part97)
: ^
: It is cut into 3 pieces. |
|
That is /pub/hamradio/part97 ----------

73,
Joe, K7JD

Joe Dubner K7JD | Hewlett-Packard Company | dubner@spk.HP.COM
| PO Box 2500 M.S. 2I |
| Spokane, WA 99220-2500 | (509) 921-3514

3067. Re: FT1000D & Heil Pro-set 4?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 20:26:15 UTC
From: levine@mc.com
Message-ID: <2md2p7$3sf@jericho.mc.com>
Source record: 269717

Heil knows about it.

Call them up and ask for the FT1000 mod.

Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599

3068. Re: HAM Origin?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 20:40:45 UTC
From: soubeih@sage.cc.purdue.edu
Message-ID: <soubeih.764023245@sage.cc.purdue.edu>
Source record: 269718

Edward Sorensen <edsorensen@delphi.com> writes:

>
>I have a father-in-law who is a ham Chuck Kramer (KE4BWG) he asked where and
>when the word "HAM" came to be... Is it an acronymn? We have asked many
>HAMS and even consulted Encyclopedia Brittanica and still no luck...
>Please help, Maybe I can also prove to him that the Internet is worth more

I have heard somewhere that this is the proper origin. There was a magazine published named Home Amateur Mechanic, in this magazine an artice was posted on how to build an amateur radio. It was one of the first plans that was publically published. Therefore, as you can see, the nickname of this radio became a HAM radio. This may not be accurate since it just came through the grape vine, but that is where everything in this hobby comes from.

Hope I Helped,

Jabran, N9KZA
Purdue University (Destination, Final Four)

3069. Packet, Internet & the FCC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 22:16:00 UTC
From: jrimmer@netcom.com
Message-ID: <netnewsCMvvLn.964@netcom.com>
Source record: 269532

I've been seeing snippets of messages here and there about the Amateur rules and Packet, but've been unable to gleen a straight answer. What are the current rules for message forwarding? i.e. I want to set my computer up to recieve Internet mail, and then forward it over packet, is this kosher? According to a year old FAQ, it is as long as you "hand" forward the messages. I really don't want to do that... Furthermore, the FAQ specifies that the FCC sees Internet mail as third-party traffic, therefore must be screened by the control-op.
Do these rules still apply? Or has Internet Mail forwarding been given a blessing by the FCC? What's up?

Jason Rimmer
Eclectic Technologies
jrimmer@netcom.com
Where technology and your desk meet (most of the time)

3070. IPS Daily Report - 18 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 23:30:42 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar18.233042.25396@ips.oz.au>
Source record: 269719
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 18/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 18 MARCH AND FORECAST UP TO 21 MARCH

IPS Warning 09 was issued on 18 MAR and is still current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 087/030

1B. SOLAR FORECAST
19 March 20 March 21 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : unsettled to active

Estimated Indices : A K Observed A Index 17 March
Learmonth 19 3333 4434
Fredericksburg 18 25
Planetary 20 32

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
19 Mar 15 Unsettled.
20 Mar 35 Active to minor storm.
21 Mar 25 Active.

2C. MAGNETIC COMMENT
Expected activity is due to a recurring coronal hole.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
18 Mar normal fair-normal fair-normal

PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
19 Mar normal fair-normal fair-normal
20 Mar normal normal normal
21 Mar normal normal-fair fair
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were depressed 15-30% until 12UT and near normal
thereafter. Spread F conditions were observed during local night.

Observed T index for 18 March: -6

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
19 Mar 20 About 15% below predicted monthly values.
20 Mar 30 Near predicted monthly values.
21 Mar -10 20 to 30% below predicted monthly values.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331 |PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329 |West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330 |AUSTRALIA

3071. Re: 93 Quest-How to Mount A 2m Antenna?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-18 23:48:04 UTC
From: dparker@netcom.com
Message-ID: <dparkerCMvws5.1G3@netcom.com>
Source record: 269533
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna

Miles Abernathy (miles@mbs.telesys.utexas.edu) wrote:
: It all seemed so easy, there was so much open space up there for an
: antenna. I went out and bought an NMO mount and a 2-meter quarter-wave
: whip. Now I realize that I can't figure out how to get the headliner out to
: drill the hole.

You might check with the dealer, or even a cell phone installer for
tips, but I would suggest a nice diamond or comet gutter mount with
one of these ground independent gain antennas. I have had great luck
on my 93 Caravan using this same set-up. I hit all the repeaters that
I need to, plus great simplex range, and no holes in the roof!

Dave, KD6RRS
Tracy, CA.

3072. Re: Alinco 180

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 03:40:12 UTC
From: clifto@indep1.chi.il.us
Message-ID: <2773@indep1.chi.il.us>
Source record: 269720

In article <2m7t65$o9i@lester.appstate.edu> RW884@CONRAD (Watkins, Robert Shawn) writes:
>I have an Alinco 180 (?) 2 meter HT and can't figure out how to enable
>the extended receive. Does anyone out there know? I can't remember.

To enable the extended receive on the DJ180, you'll have to reset the rig
in the process. Turn the rig off; hold the Func button and the Lamp button
down while turning the rig back on. Then reprogram all your memories.

--
+---+
| Cliff Sharp | |
| WA9PDM | |
+---+

3073. Re: E-mail gateway translator?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 03:51:24 UTC
From: david@stat.com
Message-ID: <Dw2eJc8w165w@stat.com>
Source record: 269721

uf484@freenet.Victoria.BC.CA (Daniel Hertz) writes:

> Is there anyone out there who knows if there is an Internet
> site which translates e-mail into either mcode or sw, then
> sends it to a specific callsign? I'd like to reach my friend
> who is an avid ham, but doesn't use e-mail.

How to Use the WB7TPY
Packet <-> Internet Gateway

First, some brief operational notes:

(1) Messages must not contain any foul language, or commercial purpose.
(2) Messages can only be sent to countries that the United States has
a third-party agreement. All others will be destroyed.
(3) Messages from the internet should be less then 5K in length.
No files should be sent.
(4) If you have questions, please do not hesitate to contact me either on
packet radio: WB7TPY@WB7TPY.AZ.USA.NA -or-
Internet : david@stat.com

(5) Have fun. Use the gateway as much as you like. That is what it is
there for.

From Internet to Packet

Send mail to the internet address of:

gate@wb7tpy.ampr.org

The first line of text must contain a full packet address, preceded with the
word "Packet:"

For example, mail to my packet address, would have the first line of text;

Packet: wb7tpy@wb7tpy.az.usa.na

** NOTE: this line MUST be left justified.

From Packet to Internet

Send as private mail (never a bulletin) to the packet address of:

gate@wb7tpy.az.usa.na

The first line of text must contain a full domained internet address,
proceeded with the word "Internet:"

For example, mail to my internet address, would have the first line of text;

Internet: david@stat.com

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

3074. Can you help me with this QRM question?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 05:04:11 UTC
From: auchd@acad2.alaska.edu
Message-ID: <1994Mar19.010411.1@acad2.alaska.edu>
Source record: 269722

I have had some problems with interference at my station for the past several years are so. Here are some characteristics of the interference:

The interference occurs slightly after sunset
The interference appears as hash up and down the spectrum from 1 to 30 mhz, although it is most intense in the 3.5 to 9.0 mhz range. It seems to follow a sporadic pattern, increasing in intensity for several seconds, followed by no interference. Then after a minute or two, the noise comes on again building in intensity until the next intermission.

Now, let me tell you what I've tried to do to get rid of it:

I've grounded the rig
I've tried ferrite cores on the power supply line and antenna lines
I've tried an AC line filter
I've tried operating the rig on D.C. power and still pick up the interference
With a dummy load on, I can still pick up the interference although it is less pronounced than on my dipole or vertical.
I've tried switching the main power supply off in my house to check if the source was in the house, the noise continued.

So, I went hunting in the backyard with a pocket radio. I traced the hash to the underground power transformer. I called the power company, they came out and looked at it, but I still had the problem. I then took the transformer out into the streets and traced it to the helium gas streetlights. It seemed to be most pronounced from two lights where the bulb pops off and then comes back on, But interestingly, this hash seems to be radiating into the powerlines in the neighborhood.

Has anyone had similar experience with this type of interference in their neighborhood? Any suggestions for how to deal with this "agonizing" interference would be greatly appreciated. It sure is difficult to deal with when your trying to get a positive ID!!

73's WL7NO

3075. Re: Phonetic Alphabets

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 05:15:21 UTC
From: cs90nrs@brunel.ac.uk
Message-ID: <CMvsHE.A1A@brunel.ac.uk>
Source record: 269723

In article <2maglb$dj@agate.berkeley.edu>, <stoll@OCF.Berkeley.EDU> writes:
> Path:
brunel!uknet!EU.net!howland.reston.ans.net!cs.utexas.edu!swrinde!ihnp4.ucsd.edu
!agate!stoll
> From: stoll@OCF.Berkeley.EDU (Cliff Stoll)
> Newsgroups: rec.radio.amateur.misc
> Subject: Phonetic Alphabets
> Date: 17 Mar 1994 21:04:43 GMT
> Organization: U.C. Berkeley Open Computing Facility
> Lines: 26
> Message-ID: <2maglb$dj@agate.berkeley.edu>
> NNTP-Posting-Host: bigbang-ether.berkeley.edu
>
> I found these posted to a bbs, so I checked 'em & added references.
> Enjoy!
>
> Cliff Stoll K7TA
> (please don't send me e-mail for a while, my mailbox overfloweth)
>
>
> Phonetic Alphabet for World War II:
> [source: ARRL 1945 Handbook pg 359 "Used by Armed services of USA & GB"]
>
> Able, Baker, Charlie, Dog, Easy, Fox, George, How, Item,
> Jig, King, Love, Mike, Nan, Oboe, Peter, Queen, Roger,
> Sugar, Tare, Uncle, Victor, William, Xray, Yoke, Zebra.
>
>
> Phonetic Alphabet for NATO: [source??]
>
> Alfa, Bravo, Charlie, Delta, Echo, Foxtrot, Gold, Hotel, India,
> Juliet, Kilo, Lima, Mike, November, Oscar, Papa, Quebec, Romeo,
> Sierra, Tango, Uniform, Victor, Whiskey, Xray, Yankee, Zulu.
>
>
> Phonetic Alphabet for ITU: [from ARRL '93 Handbook, pg 37-7]
>
> (same as that NATO list except "Golf" instead of "Gold"
>
The NATO alphabet is identical. It should be Golf, not Gold. Notice
that Quebec should not be pronounced correctly (kwe-bec instead of
ke-bec)!

Nick, G7ENS

3076. Daily Summary of Solar Geophysical Activity for 18 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 05:36:35 UTC
From: oler@rho.uleth.ca
Message-ID: <9403190536.AA08541@rho.uleth.ca>
Source record: 269724
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

18 MARCH, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 18 MARCH, 1994

NOTE: Minor warming over Eastern Siberia, the Canadian Arctic, and Greenland
continues and a warming over southern Europe is spreading northwards
today. The temperature gradient is reversed between 60N and the pole
at 10 HPA and above.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 077, 03/18/94
10.7 FLUX=087 90-AVG=106 SSN=024 BKI=4542 3213 BAI=018
BGND-XRAY=A5.0 FLU1=2.6E+06 FLU10=1.6E+04 PKI=4442 3223 PAI=018
BOU-DEV=063,075,042,013,029,012,005,034 DEV-AVG=034 NT SWF=00:000
XRAY-MAX= B2.7 @ 0318UT XRAY-MIN= A4.4 @ 0200UT XRAY-AVG= A8.3
NEUTN-MAX= +002% @ 2120UT NEUTN-MIN= -003% @ 0515UT NEUTN-AVG= +0.2%
PCA-MAX= +0.2DB @ 0115UT PCA-MIN= -0.4DB @ 0730UT PCA-AVG= +0.0DB
BOUTF-MAX=55346NT @ 0313UT BOUTF-MIN=55319NT @ 1945UT BOUTF-AVG=55329NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+073,+000,+000
GOES6-MAX=P:+125NT@ 1821UT GOES6-MIN=N:-117NT@ 0359UT G6-AVG=+093,+024,-047
FLUXFCST=STD:090,090,090;SESC:090,090,090 BAI/PAI-FCST=015,010,010/015,010,010
KFCST=3344 5221 2334 4222 27DAY-AP=017,013 27DAY-KP=3344 3343 4333 3222
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 17 MAR 94 was 31.0.
The Full Kp Indices for 17 MAR 94 are: 4o 5o 5+ 5o 4o 3o 4- 3o
The 3-Hr Ap Indices for 17 MAR 94 are: 26 45 54 47 28 16 21 16
Greater than 2 MeV Electron Fluence for 18 MAR is: 1.2E+09

SYNOPSIS OF ACTIVITY

Solar activity was very low. Little of significance was
reported. A new spot group may be forming near N15W10.

Solar activity forecast: solar activity is expected to be
very low.

The geomagnetic field has been at quiet to minor storm
levels over the past 24 hours. Nighttime substorming
continues, as does the prolonged greater than 2 MeV electron
enhancement.

Geophysical activity forecast: the geomagnetic field is
expected to be mostly unsettled. Nighttime substorms should
persist for the next few days.

Event probabilities 19 mar-21 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 19 mar-21 mar

A. Middle Latitudes
Active 25/25/15
Minor Storm 15/15/10
Major-Severe Storm 05/05/05

B. High Latitudes
Active 40/25/25
Minor Storm 15/15/15
Major-Severe Storm 05/05/05

HF propagation conditions were improving to near-normal
over most regions today, including the polar and high latitude
regions. Near-normal propagation is expected over the next
three days at least, with only occasional minor signal
degradation for night-sector high-latitude transauroral paths.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 18/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7688 N19W36 229 0020 HRX 02 003 ALPHA
7692 N18E32 161 0050 HSX 02 001 ALPHA
7691 N07W44 237 PLAGE
REGIONS DUE TO RETURN 19 MARCH TO 21 MARCH
NMBR LAT LO
7683 S18 090
7682 S19 071

LISTING OF SOLAR ENERGETIC EVENTS FOR 18 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 18 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
18/ 0235 0320 0539 LDE B2.7 184

MINOR CORRECTION: THE JOINT SESC/USAF CORONAL MASS EJECTION REPORT
INDICATED A SIZE C2.7 LDE EVENT AT 03:20 UTC ON 18 MARCH. THIS SHOULD
BE A SIZE B2.7 EVENT AS GIVEN ABOVE.

INFERRED CORONAL HOLES. LOCATIONS VALID AT 18/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
17 Mar: 0458 0503 0505 B2.3 SN 7688 N19W13
0508 0511 0513 B1.0

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7688: 0 0 0 1 0 0 0 0 001 (50.0)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (50.0)

Total Events: 002 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
17 Mar: 0458 0503 0505 B2.3 SN 7688 N19W13 III
0508 0511 0513 B1.0 III

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event

Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3077. ICOM 24AT Software Reset?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 06:08:23 UTC
From: david@stat.com
Message-ID: <o98eJc1w165w@stat.com>
Source record: 269725

I can't find any of my manuals, and my 24AT is acting very strangely.

Is there a way to do a software reset?

David WB7TPY

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

3078. Bearcat scanner service

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 09:03:54 UTC
From: pascoe@MathWorks.Com
Message-ID: <2mef5q$jqg@europa.eng.gtefsd.com>
Source record: 269541
Cross-posted to: rec.radio.amateur.misc,alt.radio.scanner

Anyone know of a good place (good means reasonably priced and does a good job) to have a Bearcat hand-held scanner serviced?

--
Dave Pascoe The MathWorks, Inc.
KM3T 24 Prime Park Way
pascoe@mathworks.com Natick, MA 01760 USA
http://www.mathworks.com Tel: 508-653-2452 (x362)

3079. Information about Repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 12:10:43 UTC
From: jrimmer@netcom.com
Message-ID: <jrimmer.1.0631570C@netcom.com>
Source record: 269727

I've searched a few FTP sites, but've been unable to find any information about the hardware, setup, etc. of repeaters. I asked an individual here who runs a local repeater group about such things, and he dodged the subject. I'm assuming this is because he operates a local "closed" repeater group and doesn't want any competition. Oh well...
Any information would be appreciated...

Jason Rimmer
Eclectic Technologies
jrimmer@netcom.com

Object technology for the masses...

3080. DARA Hamfest CQ WPX Multi/Single Class station Impromptumeeting

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 14:39:43 UTC
From: apontej@dmapub.dma.org
Message-ID: <CMx229.A12@dmapub.dma.org>
Source record: 269528

Disclaimer Notice: This impromtu meeting is being set up by me KP4UY.
DARA and/or Hamfest are not sponsoring it, & it would probably be held
somewhere else I can get a room at no cost for it that fits the amount
of people that express an interest onthe subject. At present such a station
as described here doesnot exist to the best of my knowledge anyone who
knows of one please msg me.

My name is Jose Prieto Aponte (KP4UY), I will be working in the Forums/Speaker
Commitee which has a table to register the speakers last year it was outside
one of the conference room & it may be in the HARA Hamfest map (??) this year.
Anyone wishing to contact me during the show please leave a message at this table
since I will be at the various forums on the floor or message me here. If you
wish a temporary ID for internet email while you are attending the Hamfest
you can msg me or call this bbs which has full internet email access.. it cannot
be telnet into it (firewalled). There are other that are with local telephone &
telnet, ftp access to get an ID on either prior to comming to dayton msg me
here at apontej@dmapub.dma.org (free one) or at advisor@dayton.fsp.com (small fee but
telnet priviliges full internet). I will have a small portable terminal
a ti707 with me during the show.

that takes care of the communications...

regarding the subject of the meeting is to discuss a multi-single cq wpx
contest station operated by 5 or more concurrent operators remotely sharing the
transmitter resource, they are all in the same band and get a 3-15 second multiplex
slice of the transmitter while they listen from their remote receiver. the discussion
should focus on technical issues first then perhaps on contest rules issues as I
understand them the rule for cq wpx is that the transmitternneds to be physically
connected to the antenna. with this type of set up it is. another issue is
control of antennas direction, how far should the remote operator reciever
be, close enough to hear the station it is transmitting to but far enough
not to overload the receiver when it is transmiting in an adjoining freq. on hte
same band.anyone has experiemnted with this? then there are multiple issues
of real time digital control, what an effective transport to the remote pc
should be modems? tcp/ip.. packet is ou tof the question because of rules &
speed. ISDN? D channel not enough of them. I guess that about cover it
please msg me with expressionof interest to attend. here at
apontej@dmapub.dma.org or advisor@dayton.fsp.com
feel free to post or email elsewhere hope to see u at Hamfest

73's de KP4UY (Jose')

3081. Re: QSL info: HV4NAC TI9CF 8P6AW?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 15:11:35 UTC
From: slay@netcom.com
Message-ID: <slayCMx3JB.Gxp@netcom.com>
Source record: 269529

Thanks to AA6TY for the following info:

TI9CF via TI2CF
Sr. Carlos M Fonseca Q
Box 4300
San Jose, 1000
COSTA RICA

Still need:
: HV4NAC via IK0FVC
: 8P6AW
: FY5YP

Any help out there?
73 de Sandy

3082. QSL info: ZF2WH

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 18:44:02 UTC
From: Keith Poole <kp2a+@andrew.cmu.edu>
Message-ID: <ghWoTmC00iV683=bZv@andrew.cmu.edu>
Source record: 269531

Does anyone know the QSL route for ZF2WH?

Thanks. 73

Keith Poole K7MOA/3 Pittsburgh, PA
K7MOA/7 St. Helens, OR
W6UE Pasadena, CA

3083. Re: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 19:39:18 UTC
From: kchen@apple.com
Message-ID: <2mfkd6$8p4@apple.com>
Source record: 269549
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

uri@watson.ibm.com (Uri Blumenthal) writes:

>In article <2m4sff$423@doc.cc.utexas.edu>, kreblon@doc.cc.utexas.edu (Bob Nagy) writes:
>> Ken..I own the 850..The reliability is better on the 990...

>I beg to differ! I'm quite pleased with the reliability of
>my FT-990 <knock-knock on the wood! :-> 'cause so far it
>didn't give me a single problem, nor to anybody of my
>friends, who seeing my 990 chose to buy similar rig
>for themselves.

Don't get too excited :-), you both said the same thing!

I also run an FT-990, for over a year now, I think. Not a single
problem so far.

I use the Yaesu side by side with an Ten-Tec Omni V and actually
prefer the FT-990 over the Omni for all modes except CW. If you
know the Omni, that is saying a lot. Very sweet rig.

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

3084. Re: PY0FM and 6Y5IC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 19:50:25 UTC
From: kchen@apple.com
Message-ID: <2mfl21$9ob@apple.com>
Source record: 269551

michaela@freenet2.scri.fsu.edu (Michael Christie) writes:

>I talked to him briefly on 17-meters earlier this week. The
>QSL route was definitely via PY5CC.

Some DX bulletin I read on the air mentioned that PY5CC is the
home call of PY0FM.

"He is not just the hair club president, he is also a member." :-)

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

3085. ARLD015 DX news

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 20:35:27 UTC
From: bulletin@n8emr.cmhnet.org
Message-ID: <1994Mar19.203527.21338@n8emr.cmhnet.org>
Source record: 269556
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
============================================================
| Automatic relayed from packet radio via |
| N8EMR's Ham BBS, 614-895-2553 |
============================================================

SB DX @ ARL $ARLD015
ARLD015 DX news

ZCZC AE13
QST de W1AW
DX Bulletin 15 ARLD015
>From ARRL Headquarters
Newington CT March 17, 1994
To all radio amateurs

SB DX ARL ARLD015
ARLD015 DX news

The items in this week's bulletin are courtesy of Jacques, F2YS/W2,
Bob, W5KNE, QRZ DX, Chod, VP2ML, The DX Bulletin, the Ohio/Penn DX
Bulletin, the Yankee Clipper Contest Club PacketCluster network and
Contest Corral in QST. Thanks.

SPRATLY ISLANDS. The next operation is slated for April 2 to 5 by
operators 9M6BZ, JA9AG, JQ1WSL, JS1QHO and G3NOM from Swallow Reef.
Listen for 9M0A, 9M0AG and 9M0BZ on CW, SSB, FM, RTTY, AMTOR, PacTOR
and packet. On CW try 1825, 3505, 7005, 10105, 14005, 18070, 21005,
24895 and 28005 kHz. On SSB try 3790, 7080, 14195, 18145, 21295,
24945 and 28495 kHz. FM will be on 29240 kHz. RTTY will be around
7030, 14085, 21085 and 28085 kHz.

SVALBARD ISLANDS. From March 18 through 21, Tom, LA1BJA, and Inge,
LA5VK, will be signing JW1BJA and JW5VK, respectively. They will
operate all bands, including WARC, mostly with SSB. Phone operation
on 17 and 12 meters was authorized for Norwegian amateurs on January
1, 1994, so this may be the first JW voice activity on these bands.
QSL to JW5VK, Inge Johan Lauknes, Oldersneia 10, N-9100
Kvaloysletta, Norway.

TRINDADE ISLAND. Mendonca, PY1UP, will be starting a four month
visit in about three or four weeks. He now has a higher class
license enabling him to operate on more bands. Listen for PY0TUP.

FERNANDO DE NORONHA ISLAND. Peter, PY5CC, will be active until
April 1st, as PY0FM. He will be active on 160-2 meters, including
WARC bands and on CW/SSB. Try 160 meters around 0415z, 80 meters
```

around 0245z, and 40 meters around 2100z. He has also been heard on 30 meters, a rarity for a Brazilian station. QSL via PY5CC.

SOUTHERN SUDAN. John, PA3CXC, is signing /ST0, though his length of stay is unknown. Listen for him on 18072 kHz at 1745z and 24892 kHz at 1830z.

COCOS ISLAND. TI2CF and TI2JJP have been very active as TI9CF and TI9JJP. Carlos operates both phone and CW. Jose prefers SSB. Try 1833 kHz at 0500z, 3795 at 0412, 7007 at 0415, 7052 at 0235, 10104 at 0130, 14024 at 0230, 14195 at 1725, 18145 at 0100, 21025 at 1712, 21295 at 1838, 28025 at 1905, and 28495 at 1916. QSL via TI2CF and TI2AOC respectively.

LORD HOWE ISLANDS. VK9LA has been on a net on 7084 kHz at around 1145z.

NORTHERN MARIANA ISLANDS. Tosy, JA5VZB will sign AH0T from Rota Island sometime this month. Activity will include a stint in the CQ WW WPX SSB contest. Outside the contest hours he will be on 160 through 10 meters, concentrating on 160 meters and RTTY. Check 1824 kHz. All non-JA stations QSL via JA6BSM, JAs via the bureau only.

JUAN DE NOVA. Listen for FR5ZQ/J between March 21 and April 25 operating SSB only. QSL his home call.

EUROPA. FR5ZU/E will be on from March 28 to April 25 with SSB and RTTY. QSL via VE2NW.

THAILAND/NEPAL. Rana, WB4NFO, will be on the air soon signing HS0ZBK. A trip to Nepal is planned and an effort will be made to obtain a license there.

JOHNSTON ISLAND. AH6IO will sign /KH3 May 4 to 9 with NH6UY. Operations will be 160 through 6 meters and satellites. QSL direct only to home calls.

UNITED ARAB EMIRATES, UAE. Don, WB2DND, will sign A61AD March 23 to 26, concentrating on the lower bands. QSL via WB2DND.

THIS WEEKEND ON THE RADIO. BARTG Spring RTTY Contest, sponsored by the British Amateur Radio Teledata Group, is from 0200z March 19 to 0200z March 20. Exchange signal report, serial number and UTC time.

Bermuda Contest, sponsored by the Radio Society of Bermuda, runs from 0000z March 19 to 2400z March 20. Work as many VP9 stations as possible exchanging signal report and serial number.

For more information on both events, check page 111 of February QST.
NNNN
/EX

3086. HAMS and hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 20:45:02 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2mfo8e$c69@geraldo.cc.utexas.edu>
Source record: 269554

Someone asked:

>I have a father-in-law who is a ham Chuck Kramer (KE4BWG) he asked where and
>when the word "HAM" came to be...

Regardless of the origin of the word "ham", several of us are on
a quest to discover why so many newcomers write ham as HAM. We
have asked several posters why they do this, and of the few who
bother to reply, most say "I thought that was how you were supposed
to write it".

The typical context is "I want to get into HAM and don't know how to
get started". Why "HAM" and not "ham radio"?

I can only think that since everyone has heard of CB and that is
always capitalized, they think that "ham" must stand for something
and therefore write it HAM. Just as one goes and buys a "CB" (radio),
perhaps they think that you can also buy a HAM [radio]?

Perhaps someone who used to think it is capitalized and now knows
better can tell me why they used to think this. It would clear up
a problem and make several people who have nothing better to worry
about much happier.

Derek "vegetarian HAM" Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

3087. Re: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 21:21:53 UTC
From: NADO000 <NADO@UNB.CA>
Message-ID: <19MAR94.18754189.0121@UNBVM1.CSD.UNB.CA>
Source record: 269557
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <2mfkd6$8p4@apple.com> kchen@apple.com (Kok Chen) writes:
>>didn't give me a single problem, nor to anybody of my
>>friends, who seeing my 990 chose to buy similar rig
^^^^^^^^^^

I don't think one should pick a radio just on looks. I have an 850S-AT with the optional 1.8 SSB filter and enjoy a lot of low band work (160 and 75m) I tried a friend's Yeasu 890AT for two weeks, side by side, using a Daiwa switch in reverse and did a lot of *listening* (as opposed to *seeing*) switching rapidly from one radio to the next. The Kenwood 850 is a lot "noisier", i.e., the human voice is not clearly separated from the background noise, unless you cut back considerably on the RF gain. With the Yeasu, it is seldom necessary to play with the RF gain.

A friend has both the Yeasu 757 and a Kenwood 440AT and he confirms the same findings. The Yeasu is more pleasant to listen to and most of us do a lot more listening than talking. My next rig is likely to be a Yeasu.

The above impression is about SSB reception only. I have not tried anything else really. To be fair, the 850SAT is a little better at avoiding strong QRM, but in practice this was not very important, through the 2 weeks I tried both rigs. The 850SAT is also a quicker rig to utilize and its tuner is faster. My 2 year-old rig has not had a single problem since I bought it new.

Luis Nadeau VE9LN
>.

3088. Re: IC-22S

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 22:48:12 UTC
From: Cecil Moore <cecilmoore@delphi.com>
Message-ID: <hM1swvc.cecilmoore@delphi.com>
Source record: 269534

DWIGHT CLINTON MORGAN <morgdw@saturn.wwc.edu> writes:

>Would like to get mods for +5K and +10K steps for prog freq.
>
>Want to know if it is possible to modify for transmit from 144Mhz to 148Mhz.
>

TechnoLogic Concepts has a kit for the ICOM-22S that allows continuous
coverage from 144.62 to 147.90 MHz. The 22S PLL won't lock below 144.62 MHz.
TLC's address is 1803 Mission St., Suite 308, Santa Cruz, CA 95060 and their
email address is TLCDHCONSULT@DELPHI.COM.

73, KG7BK, CecilMoore@delphi.com

3089. IPS Daily Report - 19 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 23:29:43 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar19.232943.4373@ips.oz.au>
Source record: 269562
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 19/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 19 MARCH AND FORECAST UP TO 22 MARCH

IPS Warning 09 was issued on 18 MAR and is still current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 089/033

1B. SOLAR FORECAST
20 March 21 March 22 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : quiet to unsettled

Estimated Indices : A K Observed A Index 18 March
Learmonth 11 2323 3322
Fredericksburg 13 18
Planetary 15 18

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
20 Mar 35 Quiet to unsettled for the first half day, then
active to minor storm levels are expected.
21 Mar 25 Active.
22 Mar 15 Quiet to unsettled.

2C. MAGNETIC COMMENT
Expected activity is due to a recurring coronal hole.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH

19 Mar normal normal normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
20 Mar normal normal normal
21 Mar normal normal-fair fair
22 Mar normal normal-fair fair
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were near predicted monthly values.

Observed T index for 19 March: 43

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
20 Mar 40 Near predicted monthly values.
21 Mar -10 15 to 30% below predicted monthly values.
22 Mar 10 15 to 20% below predicted monthly values.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331 |PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329 |West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330 |AUSTRALIA

3090. Re: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-19 23:38:33 UTC
From: hamilton@BIX.com
Message-ID: <hamilton.764120313@BIX.com>
Source record: 269535
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

NADO000 <NADO@UNB.CA> writes:

>I don't think one should pick a radio just on looks. I have an
>850S-AT with the optional 1.8 SSB filter and enjoy a lot of low band
>work (160 and 75m) I tried a friend's Yeasu 890AT for two weeks,
>side by side, using a Daiwa switch in reverse and did a lot of
>*listening* (as opposed to *seeing*) switching rapidly from one
>radio to the next. The Kenwood 850 is a lot "noisier", i.e., the
>human voice is not clearly separated from the background noise,
>unless you cut back considerably on the RF gain. With the Yeasu, it
>is seldom necessary to play with the RF gain.

>A friend has both the Yeasu 757 and a Kenwood 440AT and he confirms
>the same findings. The Yeasu is more pleasant to listen to and most
>of us do a lot more listening than talking. My next rig is likely to
>be a Yeasu.

>The above impression is about SSB reception only. I have not tried
>anything else really. ...

I have an FT-990 that I bought about 2 months ago after a *lot* of
time spent soliciting opinions, reading reviews (if you're thinking
of buying a radio and haven't yet bought the two volumes of collected
QST reviews that the ARRL offers, you should!), and sitting in front
of the units I was considering at the local Ham Radio Outlet.

I'm _very_ pleased with the 990. I haven't tried transmitting anything
yet (I just took and passed my Novice, Tech, General and Advanced tests
about 5 weeks ago and am still waiting for my ticket) but have spent
a lot of time listening. I'll confirm that the the 990 is a very
pleasant radio to listen to. On CW, it's terrific. The built-in
audio filters allow you to zero right in on a signal.

Regards,
Doug Hamilton hamilton@bix.com Ph 508-358-5715
Hamilton Laboratories, 13 Old Farm Road, Wayland, MA 01778-3117

3091. Re: License Time For 1a Element?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 01:51:02 UTC
From: twright@freenet2.scri.fsu.edu
Message-ID: <2mga66$1fc@freenet3.scri.fsu.edu>
Source record: 269536

auchd@acad2.alaska.edu writes:
> I passed a 1a element for upgrade to Technician Plus on December 1. It is now
> the middle of March and I havn't received a new license. Is the FCC issuing

> new licenses for 1a element upgrades?

No they're not but you must retain your CSCE along with your license
until you are ready for your general upgrade.

Tim KD4OVM

--
Tim Wright KD4OVM | T.Wright@msuacad.morehead.edu | Morehead State University
| TWright@freenet.fsu.edu | Tallahassie Freenet Service
| AR098@yfn.ysu.edu | Youngstown Ohio Freenet Service
| KD4OVM@WSU.N8FOW.AMPR.ORG | Try one, I'll get it.

3092. WANTED: V/UHF DOS logging program

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 02:21:48 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCMxyKD.L5H@netcom.com>
Source record: 269537

I have received some requests for VHF/UHF logging programs - preferably
public domain.

I don't believe K1EA works on the higher frequencies (above 50 Mhz).

If anyone can point me in the right direction, I'd really appreciate it.

Thanks much!

Scott

--
```
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
================================================================================
```

3093. Re: Information about Repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 02:40:37 UTC
From: ez006683@chip.ucdavis.edu
Message-ID: <CMxzFp.EB4@ucdavis.edu>
Source record: 269538

Jason Rimmer (jrimmer@netcom.com) wrote:
: I've searched a few FTP sites, but've been unable to find any information
: about the hardware, setup, etc. of repeaters. I asked an individual here who
: runs a local repeater group about such things, and he dodged the subject. I'm
: assuming this is because he operates a local "closed" repeater group and
: doesn't want any competition. Oh well...
Competition? he he
he's probably trying to save you the heartache. If you are really
interested try asking someone at one of the local radio places or call
one of the mail order places. They make money doing this, they'll tell
you how. There was also an article in the QRZ CD of Nov. that described
modifying a moto. unit into mobile service. In short all you really need
is a radio, a duplexer and an antenna. The two hardest things to find
are a site (fairly difficult) and most difficult a frequency pair. The
former might be a matter of begging and the latter needs to be taken up
with your local coordinator.

Good luck,
Dan
--
---
* Daniel D. Todd Packet: KC6UUD@KE6LW.#nocal.ca.usa *
* Internet: ddtodd@ucdavis.edu *
* Snail Mail: 1750 Hanover #102 *
* Davis CA 95616 *
---
* All opinions expressed herein are completely ficticious any *
* resemblence to actual opinions of persons living or dead is *
* completely coincidental. *

3094. Re: TX Amp for 20 mtrs QRP rigs.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 04:08:17 UTC
From: leigh@coyote.rain.org
Message-ID: <leigh.764136230@coyote>
Source record: 269539
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

asirene@ntuvax.ntu.ac.sg writes:

>Hi,

> Need recommendation for a small TX amp kit which takes about 4 watts output from my QRP rig and puts out 20-30 watts with
>built in T-R switching (preferably solid-state T-R) and runs off 12-13.8v DC power supply. Must be small so I can fit it into my
>existing rig's casing. Should be something similar to the QAMP-20 from Ramsey Hobby kits. BTW, this is for 20 meters. Tks.

>73,
>Daniel

Daniel, if you stumble upon a small CB ampflier, you might try using it
with your 20 meter QRP rig. Many of these amps are very broad banded, if
sometimes somwhat dirty. I know of a local ham who sometimes steps up
his 5 watt Ten Tec rig to about 50 watts on 40 meters, using a CB amp.

--Leigh/KM6JE.

3095. Re: Ten-Tec question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 06:20:18 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <CMy9Lu.KJ8@odin.corp.sgi.com>
Source record: 269540

At this time of the year, when the power lines dry out in the country and after a relatively cold winter, I find that the power line noise starts back up. The noise blanker on the Argosy does kill the noise with very little degradation of the desired signal.

The power company is very good about coming out and fixing the problem(s) when I report them. Once you establish a communication link with someone in the power company, treat them with respect, and prove that you are not some bozo just causing trouble, they will listen to you. People who act like jerks get treated in the same manner.

dit dit

--
Chuck Adams K5FO CP-60
adams@sgi.com

3096. Re: <world|ftp>.std.com and ftp

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 08:12:23 UTC
From: jeffrey@kahuna.tmc.edu
Message-ID: <CMyEsn.534@news.Hawaii.Edu>
Source record: 269564

In article <763369646snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:
>
>73 es GE from Jeff

Oh, how nice! Glad to see you finally took the medication for your hyperactivity. Now don't forget to take it in the future, okay?

Jeff#1 NH6IL

3097. Re: Why no 10 meter activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 09:05:51 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <764154351snz@g8sjp.demon.co.uk>
Source record: 269542

In article <017209JVQBRRRBFKXDGV@theden.c>
sschultz@theden.c "MajorBBS: Scott S." writes:

> time you want. There is also a phenomenon called Sporatic E. This is
> where there might seem to be a "pipeline" to specific areas. These

Umm ... 'sporadic', methinks ....

> CQ a few times. If everyone thinks the band is dead and no one calls CQ,
> then an otherwise active band may only SEEM dead! You might be surprised
> at the results! Good Luck es Good DX. Scott, N0UVM

Well, you could do that. You could also monitor the frequency of a distant
beacon - that seems to work quite well for me :-) Of course, there's always
DX Cluster ....

--
Iain Philipps

3098. Re: Reciprocal Licenses

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 09:10:36 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <764154636snz@g8sjp.demon.co.uk>
Source record: 269543

In article <9403201740.AA01020@sword.connectinc.com>
rgordon@connectinc.COM writes:

> Does anyone out there know how to go about getting a reciprocal
> license for England? I expect to visit there in a couple of months and
> would like to try transmitting from there.

The people (in the UK) to contact are:

Radio Licencing Centre
Subscription Services Ltd
PO Box 885
BRISTOL, BS99 5LG

Helpdesk: +44-272-258333

You may, however, be wise to consult ARRL who could make a lot of relevant
information available to you.

--
Iain Philipps

3099. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 09:39:50 UTC
From: stankus@leland.Stanford.EDU
Message-ID: <2mh5l6$1jt@nntp2.Stanford.EDU>
Source record: 269568

In article <2m0b2h$dn7@ivy.bga.com> davros@bga.com (Buddy Brannan) writes:
>OK, since everyone else is dreaming of confusing calls, how about if I get:
>W5HSI
>
>Try sending that one in cw, with a paddle, especially at hi speed.
>

My brother Joe has N5EHE (one dah and all dits)

My dad always jokes that I have a 1x1 call phonetically N5PEE
Maybe I'll try to get N5P if 1x1's come availible. :)

Did think about changing my call once (not for the obvious reason,
three e sounds in a row doesn't quite flow), but was encouraged to
keep it by some of the guys at the Stanford Club, W2FRT and AB6BM (we
used to joke about having all phases represented)

John Stankus N5PEE

3100. Mobile Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 11:10:03 UTC
From: jestevez@pro-janin.cts.com
Message-ID: <CMz5Fy.LL@hatch.socal.com>
Source record: 269544

```
Remote Server Commands
======================

Server commands are specified in the Subject line of regular mail messages
addressed to server@pro-janin.cts.com (where amateur mobile operators request
information). The request commands are:

HELP Send server help file
INDEX [dir] Send server index for the given [dir] hierarchy
SEND [dir/]file Send file (or one in the named subdirectory)
DIR [dir] Send server directory for the given [dir] hierarchy

(Items in [brackets] are optional; do not enter the brackets).

Examples:

Subject: help [ Sends the help file]
Subject: index [ Sends the server's index(es) ]
Subject: dir amateur manual [ Sends directory listings ]
Subject: send chart [ Sends a file ]
```

3101. Land-Mobile Radio Mailing List

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 15:46:42 UTC
From: david@stat.com
Message-ID: <JoTHJc1w165w@stat.com>
Source record: 269545
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Welcome to the Land Mobile Radio Mailing List!

The purpose of this sig is to promote technical conversation regarding commercial land mobile two-way radio communications and associated systems and accessories. In addition to conversation buying, selling and trading of commercial land mobile equipment is allowed.

To Add Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

(for regular mailing list)

subscribe land-mobile-radio

(for digest version of mailing list)

subscribe land-mobile-radio-digest

As The First Line of Your Message.

To Remove Yourself From This Server, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

Unsubscribe land-mobile-radio

or

Unsubscribe land-mobile-radio-digest

As The First Line of Your Message.

Requests For Help Should Be Sent To:

land-mobile-radio-request@stat.com

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

3102. Land-Mobile Radio Mailing List

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 15:47:51 UTC
From: david@stat.com
Message-ID: <gqTHJc2w165w@stat.com>
Source record: 269546

Welcome to the Land Mobile Radio Mailing List!

The purpose of this sig is to promote technical conversation regarding commercial land mobile two-way radio communications and associated systems and accessories. In addition to conversation buying, selling and trading of commercial land mobile equipment is allowed.

To Add Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

(for regular mailing list)

subscribe land-mobile-radio

(for digest version of mailing list)

subscribe land-mobile-radio-digest

As The First Line of Your Message.

To Remove Yourself From This Server, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

Unsubscribe land-mobile-radio

or

Unsubscribe land-mobile-radio-digest

As The First Line of Your Message.

Requests For Help Should Be Sent To:

land-mobile-radio-request@stat.com

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

3103. ANS-078 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 16:44:24 UTC
From: cowdin@pogo.DEn.mmc.COM
Message-ID: <199403201647.IAA11085@AMSAT.Org>
Source record: 269574

SB SAT @ AMSAT $ANS-078.01
PHASE-3D STATUS REPORT

HR AMSAT NEWS SERVICE BULLETIN 078.01 FROM AMSAT HQ
SILVER SPRING, MD MARCH 19, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-078.01

AMSAT PHASE 3-D INTERNATIONAL SATELLITE BUILDERS MEET IN
MARBURG--PROPELLANT TANKS DELIVERED

During the week of February 10-16, 1994, Dr. Karl Meinzer, DJ4ZC, AMSAT-DL President and Project Leader for the International AMSAT Phase-3D satellite, and Werner Haas, DJ5KQ, Vice-President of AMSAT-DL hosted a working meeting in Marburg, Germany to discuss recent progress on the project. Agenda items centered primarily around the spacecraft's electronic systems including the on-board computer (IHU) and RUDAK systems, as well as the progress now being made by team members on the spacecraft's other electronic modules.

Also during the meeting, the team took delivery of P3-D's main propellant tanks. The tanks were manufactured in Russia under contract from AMSAT-DL and in accordance with AMSAT specifications. Seven tanks were delivered, although one had been subjected to a destructive pressure test by its Russian manufacturer.

Not only have all the propellant tank specifications been fully achieved, but they've actually been significantly surpassed. Each tank can accommodate almost 50 liters of propellant. Favorable conditions for the purchase and delivery of these tanks was arranged through the efforts of AMSAT-UA (Russia). Following a brief inspection, the tanks were immediately shipped to Orlando, Florida, where integration of the satellite is now slated to begin this summer.

Dick Jansson, WD4FAB, AMSAT-NA Vice-President for Engineering, also attended the meeting, principally to discuss various aspects of the satellite's structure with Dr. Meinzer and Konrad Mueller, DG7FDQ. He reported on the good progress of the flight model structure's construc-tion, currently underway at Weber State University in Utah.

Also in attendance were Lyle Johnson, WA7GXD, Peter Guelzow, DB2OS, and Gerhard Metz, DG2CV. Lyle is known through his work with the Tucson Amateur Packet Radio (TAPR) group (which he co-founded) as well as for his work on the Microsats and on the P3-D GPS project. After much discussion, the team decided to again employ a cable wiring harness arrangement for Phase 3-D, similar to that used on AO-10 and AO-13,

rather than an AART-based LAN design. However, the team decided to also fly a CAN bus and DB2OS's experimental LAN controller as part of the spacecraft's digital (RUDAK) transponder.

In a related decision, the group concluded that the AO-10/AO-13 1802-based Internal Housekeeping Unit (IHU) computer design would still be adequate for P3-D with some minor modifications. Lyle Johnson announced his willingness to redesign the IHU and to construct a flight unit. His offer was greatfully accepted.

Other meeting items centered on P3-D's RUDAK work now being done by Peter Guelzow, Gerhard Metz, and Dr. Stefan Eckart, DL2MDL. This team has now decided to build two RUDAKs. The first will be a user-oriented digital communications module constructed by Lyle Johnson, in close cooperation with Peter Guelzow. This RUDAK, which has yet to be formally named, will be the one most P3-D satellite users will operate. A second, more experimental RUDAK (called RUDAK-E), will be built in Germany. It will promote experiments with advanced high speed modems, Digital Signal Processing (DSP) techniques, and new communications protocols.

In a host of other issues, Daniel Orban, ON4AOD, discussed details of the 24 GHz transmitter. Konrad Hupfer, DJ1EE, reported his progress in building the 250 watt U-Band (70 cm) final amplifier. Werner Haas displayed his first flight hardware consisting of two command receivers, a digital section, and the 70 cm exciter that will drive Konrad's 70 cm final amplifier. Freddy de Guchteneirie, ON6UG, reported his progress on the construction of dual V-Band and U-Band receiver "front-ends". Dr. Matjaz Vidmar, S51MV, reported he has now begun construction of the HF-Band, C-Band and S-Band receivers. He expects to deliver working prototypes in May.

While much work still remains to be done, Dr. Meinzer expressed his approval and sincere thanks to all participants for their superb work and close cooperation on this vitally important AMSAT international project. A complete text of this meeting's minutes has been prepared by Peter Guelzow, and has since been translated by Don Moe, DJ0HC/KE6MN. The text will be made available to the various international AMSAT Journals for possible inclusion in their upcoming editions.

[The AMSAT News Service (ANS) would like to thank Peter Guelzow, DB2OS, Don Moe, DJ0HC/KE6MN, Lyle Johnson, WA7GXD, and Keith Baker, KB1SF, for their assistance in writing, translating, and formatting the information contained in this bulletin item.]

/EX
SB SAT @ AMSAT $ANS-078.02
ITAMSAT-OSCAR-26 PROBLEM

HR AMSAT NEWS SERVICE BULLETIN 078.02 FROM AMSAT HQ
SILVER SPRING, MD MARCH 19, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-078.02

ITAMSAT-OSCAR-26 (IO-26) Ground Team Discovers Problem

Starting last week the PSK modulation on the primary trasmitter became more and more difficult to decode. A residual carrier and lower output power seem to indicate a failure in the PSK balanced modulator, being worse at the current low power setting. Increasing the power level makes the de-modulation better but is not accetable due to power budget constraints. Ground controllers decided to switch to the secondary PSK trasmitter on 435.822 MHz. The first two passes over Italy confirmed the correct operation of the spacecraft and WOD are being taken to analize the per-formance of the satellite in this new configuration. BBS is working as usual and status bulletin will be uploaded in the next few days.

73 de ITAMSAT (IO-26) Command Team

/EX
SB SAT @ AMSAT $ANS-078.03
AO-13 OPERATIONS NET SCHEDS

HR AMSAT NEWS SERVICE BULLETIN 078.03 FROM AMSAT HQ
SILVER SPRING, MD MARCH 19, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-078.03

Current AMSAT Operations Net Schedule For AO-13

AMSAT Operations Nets are planned for the following times. Mode-B Nets are conducted on AO-13 on a downlink frequency of 145.950 MHz. If, at the start of the OPS Net, the frequency of 145.950 MHz is being used for a QSO, OPS Net enthusiasts are asked to move to the alternate frequency of 145.955 MHz.

Date UTC Mode Phs NCS Alt NCS

26-Mar-94 2130 B 084 WA5ZIB W5IU

Any stations with information on current events would be most welcomed. Also, those interested in discussing technical issues or who have questions about any particular aspect of OSCAR statellite operations, are encouraged to join the OPS Nets. If neither of the Net Control Stations show up, any participant is invited to act as the NCS.

AO-13 ZRO Tests For March 1994

The following schedule of Mode "B" tests were chosen for convenient operating times and favorable squint angles. The tests can be heard on 145.840 MHz. Andy McAlister (WA5ZIB) will conduct all the tests. Mode "JL" tests will no longer occur due to the failure of AO-13's 70CM trans-mitter.

Day Date (UTC) Time Areas covered

Saturday Mar. 26, 1994 2315 UTC NA, SA

Note that the dates and days are shown in "UTC". Any changes will be announced as soon as possible via the AMSAT HF and AO-13 Operations

Nets.

All listener reports with date of test and numbers copied should be sent to Andy McAllister (WA5ZIB), AMSAT V.P. User Operations, 14714 Knights Way Drive, Houston, TX 77083-5640. A report will be returned verifying the level of accurate reception. An S.A.S.E. is appreciated but not required.

SSTV ON OSCAR 13

Slow scanners are invited to join the SSTV sessions on AO-13. The frequency is 145.955 MHz. The net meets at 45 minutes before Mode S, and on Mode B following Mode S on Saturdays and Sundays. Join those sessions or convey your wishes for other skeds to wb6llo@amsat.org, and he will coordinate your efforts.

/EX
SB SAT @ AMSAT $ANS-078.04
SAREX STS-59 CORRECTION

HR AMSAT NEWS SERVICE BULLETIN 078.04 FROM AMSAT HQ
SILVER SPRING, MD MARCH 19, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-078.04

Correction To NASA Landline BBS Phone Number

Last week's AMSAT News Service (ANS) ANS-071.02 bulletin referred to the NASA Info Board BBS at Johnson Space Center as a source of information for Keplerian elements and SAREX bulletins. This bulletin board system was operated and maintained by the Public Affairs Office of the Johnson Space Center and is now no longer operational.

Johnson Space Center Amateur Radio Club is currently seeking a way to get a small BBS up and running prior to the flight. As soon as a system is established, an announcement will be issued to promulgate and distribute the telephone number.

73,
Dale Martin, KG5U @ KA5KTH.#setx.tx.usa.na
Sec'y, Johnson Space Center ARC
Houston, Texas

/EX
SB SAT @ AMSAT $ANS-078.05
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 078.05 FROM AMSAT HQ
SILVER SPRING, MD MARCH 19, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-078.05

Weekly OSCAR Status Reports: 19-MAR-94

AO-13: Current Transponder Operating Schedule:
M QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Mar 19-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 122 |<- S beacon only
Mode-S : MA 122 to MA 145 |<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Alon/Alat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 235/0, Apr 04 240/0, Apr 04
[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current schedule for transponder operations:
ANALOG MODE:

23-MAR-94 7:52 -TO- 30-MAR-94 8:15 UTC

DIGITAL MODE: Unless otherwise noted above.
[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

AO-16: Operating normally. [WH6I]

LO-19: Operating normally. [WH6I]

IO-26: Operating normally. [WH6I]

KO-23: Operating normally. [WH6I]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly OSCAR status reports. If you have a favorite OSCAR which you work on a regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

3104. Reciprocal Licenses

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 17:40:10 UTC
From: rgordon@connectinc.COM
Message-ID: <9403201740.AA01020@sword.connectinc.com>
Source record: 269575

Does anyone out there know how to go about getting a reciprocal
license for England? I expect to visit there in a couple of months and
would like to try transmitting from there.

Thanks

KB7SJO/AG
RGORDON@CONNECTINC.COM

Sent: March 20, 1994 9:26 am PT

3105. Reset CPU of Icom 24AT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 17:53:11 UTC
From: david@stat.com
Message-ID: <cJZHJc2w165w@stat.com>
Source record: 269547

I need to do a hard rest on the CPU of my ICOM 24AT. Anyone know how to
do this?

david wb7tpy

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

3106. WANTED: List of Cellular Freqs, Channels, etc.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 18:24:26 UTC
From: mikey@slic.cts.com
Message-ID: <FZ1HJc2w165w@slic.cts.com>
Source record: 269548
Cross-posted to: rec.radio.amateur.misc,misc.wanted

I am in need of the list of Cellular channel assignments with the freqs, and the control, status, data, etc. for each. Anyone able to point me in the correct direction?

And then as I live in Sandy Eggo, I'd like to get a list of the currect cell sites and the channels active at each site. Ya I know, I'm not asking for much. I do have a comma delimitted files for San Diego from Oct. 93 if anyone is interested.

Follow-up pointed to me...Thanks...

-- Mike Shirley San Diego, CA USA HAM:WB6WUI
mikey@slic.cts.com guaranteed: mikey@crash.cts.com
Robomail: mikey-pkey@slic.cts.com pgp-info@slic.cts.com

3107. Long directories

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 18:38:09 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403201334591.gilbaronw0mn.DLITE@delphi.com>
Source record: 269550

wy1z@netcom.com
Scott
Has again posted the LONG ftp directory. Is there no one else that is offended by the severe breach of netiquette. The way this should be done is to post a pointer and tell me how to get it. This is a severe waste of time and MONEY for many sites and many folks. Please tell him to stop. I think he should lose posting privileges for a week if he continues to do this. It happens frequently and is getting longer.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

3108. DX reflector?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 19:47:13 UTC
From: cchris@charlie.usd.edu
Message-ID: <CMzAyp.9zn@sunfish.usd.edu>
Source record: 269552

I just read in 'THE DX BULLETIN" about subscribing to something called the DX reflector. The administrator's address was given as dx-REQUEST@unbc.edu but this does not appear to work. Does anyone know anything about this or how to get a message to the administrator? If so, I would appreciate some info via E-mail. Thanks.
Chris, AC0M
cchris@charlie.usd.edu

3109. Daily Summary of Solar Geophysical Activity for 19 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 19:52:55 UTC
From: oler@rho.uleth.ca
Message-ID: <9403201953.AA15610@rho.uleth.ca>
Source record: 269553
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

19 MARCH, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 19 MARCH, 1994

NOTE: Minor stratospheric warming exists over eastern Siberia, Alaska,
Canada, the Canadian Arctic, Greenland, and southern Europe. The
temperature gradient is reversed between 60N and the pole at 10 HPA
and above.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 078, 03/19/94
10.7 FLUX=089.1 90-AVG=106 SSN=011 BKI=3434 1113 BAI=013
BGND-XRAY=A6.1 FLU1=1.2E+06 FLU10=1.7E+04 PKI=4434 3223 PAI=015
BOU-DEV=034,042,023,042,006,008,006,021 DEV-AVG=022 NT SWF=00:000
XRAY-MAX= B1.3 @ 0730UT XRAY-MIN= A4.9 @ 0108UT XRAY-AVG= A8.9
NEUTN-MAX= +003% @ 1130UT NEUTN-MIN= -002% @ 0835UT NEUTN-AVG= +0.3%
PCA-MAX= +0.2DB @ 0025UT PCA-MIN= -0.2DB @ 2335UT PCA-AVG= +0.0DB
BOUTF-MAX=55344NT @ 0339UT BOUTF-MIN=55312NT @ 1813UT BOUTF-AVG=55331NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+066,+000,+000
GOES6-MAX=P:+120NT@ 1941UT GOES6-MIN=N:-122NT@ 0704UT G6-AVG=+086,+025,-050
FLUXFCST=STD:090,090,095;SESC:090,090,095 BAI/PAI-FCST=010,015,020/015,025,030
KFCST=2334 3222 2334 4334 27DAY-AP=013,060 27DAY-KP=4333 3222 2237 7756
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 18 MAR 94 was 28.0.
The Full Kp Indices for 18 MAR 94 are: 4o 4+ 4+ 2+ 3o 2+ 2o 3+
The 3-Hr Ap Indices for 18 MAR 94 are: 30 32 31 9 15 9 7 20
Greater than 2 MeV Electron Fluence for 19 MAR is: 4.0E+08

SYNOPSIS OF ACTIVITY

Solar activity was very low. Just one simple spot group,
7692 (N19E19), remains. The northernmost 8 degrees of the large
diagonally-oriented filament in the western hemisphere
disappeared during the first part of the day. A prominence

located near N21E90 was seen to erupt at 0633Z.

Solar activity forecast: solar activity is expected to
persist at very low levels.

The geomagnetic field has been at quiet to active levels
for the past 24 hours. Nighttime substorms have weakened. The
greater than 2 MeV electron event is declining, with peak
values of near 1.0E+04 observed during the day.

Geophysical activity forecast: the geomagnetic field is
expected to be predominantly unsettled the first half of the
forecast period. A favorably positioned coronal hole should
send high speed solar wind this way the latter part of the
interval. Active to minor storm conditions are anticipated
then.

Event probabilities 20 mar-22 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 20 mar-22 mar

A. Middle Latitudes
Active 25/25/45
Minor Storm 15/15/25
Major-Severe Storm 05/05/10

B. High Latitudes
Active 25/25/40
Minor Storm 15/15/30
Major-Severe Storm 05/05/15

HF propagation conditions were near-normal over all
regions. Similar conditions are expected over the next 24 to
48 hours. However, another well-placed coronal hole could
give degraded propagation again on 22 March.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 19/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7692 N18E19 161 0060 HSX 02 001 ALPHA
7688 N19W49 229 PLAGE
7691 N07W57 237 PLAGE
REGIONS DUE TO RETURN 20 MARCH TO 22 MARCH
NMBR LAT LO
7679 N02 084
7682 S19 069

LISTING OF SOLAR ENERGETIC EVENTS FOR 19 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 19 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
19/B0633 0813 N21E90 EPL

INFERRED CORONAL HOLES. LOCATIONS VALID AT 19/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
18 Mar: 0235 0320 0539 C2.7

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)

Uncorrellated: 1 0 0 0 0 0 0 0 001 (100.0)

Total Events: 001 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,

Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3110. WARNING: Potential Satellite Anomaly Warning Update - 20 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 20:13:11 UTC
From: oler@rho.uleth.ca
Message-ID: <9403202013.AA17232@rho.uleth.ca>
Source record: 269555
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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POTENTIAL SATELLITE ANOMALY WARNING

ENDED: 05:00 UT, 20 MARCH

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ATTENTION:

Energetic electrons at greater than 2 MeV are finally abating back
toward quieter levels. This disturbance lasted 11 days and is expected to
recur around 04 or 05 April when the coronal hole associated with this
activity returns to a geoeffective position.

** End of Warning **

3111. Desqview Aware CW learning Prog

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 20:59:06 UTC
From: dreamer@lhaven.UUmh.Ab.Ca
Message-ID: <Gu1wu*IDR@lhaven.UUmh.Ab.Ca>
Source record: 269558

I'm still trying to learn CW....I still want to try to upgrade before the 1 year mark.

Can somebody suggest a good learning program that will run under Desqview?

My IBM runs Desqview and is the full service Packet BBS (FBB) for the area....it also runs BPQ and JNOS

I tried SuperMorse...it runs, but due to timing...the dits and dahs sound the same.

--
"Just a Crazy Engineer with an Amiga and an HP48sx" - The Dreamer
Email: dreamer@lhaven.uumh.ab.ca or "Lawrence Chen" @ 1:134/3002
PHONE: +1 403 526 6019 FAX: +1 403 529 5102 CIS: 74200,2431
Praxis Society K12 BBS: +1 403 529 1610 Lunatic Haven: +1 403 526 6957
CYSNET Packet BBS: +1 403 526 4304 LHaven Dialup: +1 403 526 5035
Packet: VE6LKC @ VE6PAQ.AB.CAN.NA

3112. Re: DX reflector?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 21:25:45 UTC
From: slay@netcom.com
Message-ID: <slayCMzFIx.Fno@netcom.com>
Source record: 269559

cchris@charlie.usd.edu wrote:
: I just read in 'THE DX BULLETIN" about subscribing to something called the DX reflector. The administrator's address was given as dx-REQUEST@unbc.edu but this does not appear to work. Does anyone know anything about this or how to get a message to the administrator? If so, I would appreciate some info via E-mail. Thanks.
: Chris, AC0M
: cchris@charlie.usd.edu

That is the right info Chris. You send your email to:

dx-request@unbc.edu

Then in the first line of the text/message field, you simply enter:

SUBSCRIBE

That's all there is to it.
73 de Sandy WA6BXH/7J1ABV slay@netcom.com

3113. Ohio/Penn DX Bulletin #152

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 21:47:36 UTC
From: kb8nw@barf80.nshore.org
Message-ID: <$opdx.152.1994@ampr.org>
Source record: 269560
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ALLBBS $OPDX.152
Ohio/Penn DX Bulletin No. 152

The Ohio/Penn Dx PacketCluster
DX Bulletin No. 152
BID: $OPDX.152
March 21, 1994
Editor Tedd Mirgliotta, KB8NW
Provided by BARF-80 BBS Cleveland, Ohio
Online at 216-237-8208 14400/9600/2400/1200/300 8/N/1

Thanks to the Northern Ohio Amateur Radio Society, Northern Ohio DX Association, Ohio/Penn PacketCluster Network, DL7VEE & DXNL, DF4RD, DL8AAM, VP2ML & The DX Bulletin, K4CEF & Southeastern Cluster Group, WB4IUX, KH6GMP, WB8LFO and N8BJQ for the following DX information.

1A0KM, SOV. MIL ORDER OF MALTA. "The DX Bulletin" reports that the 1A0KM operation has been postponed indefinitely due to restrictions imposed by the enclave's managers. This is more bad news for this DXCC country which is ranked 20th on the "OPDX/NODXA Most Wanted List".

4U1UN CARDS. Jerry, WB8LFO, reports the large backlog of QSL cards is beginning to get much smaller. Cards sent for contacts that are in the hand written logs should be answered up to March 1993. Cards sent for contacts that are in the computer logs, as of November 1993, should have a quick turn around. PLEASE DO NOT RE-SUBMIT QSLs for contacts made after March 1993. QSL via W8CZN.

A6, UNITED ARAB EMIRATES. Don, WB2DND, will be active as A61AD, from March 23-26. He will be active mostly on 160-40 meters. QSL to Don Greenbaum, WB2DND, 250 Standish St., Duxbury, MA 02332.

BV9P, PRATAS ISLAND. The following information are excerpts from a FAX sent to Ron, K6OZL, from Martti, OH2BH/VR2BH in Hong Kong: As a result of very intensive talks in Taipei during the past week, another brief operation from Pratas will take place from Monday 21 March to Friday 25 March. BV2VA, BV4AS, BV4OB & BV4TC will make touch-down at 12 noon BV-time (+16 hrs Calif. time) Monday. No foreign operators will accompany this trip. Callsign BV9P will again be activated using normal DX frequencies. This operation will be mostly SSB but some CW can be expected as well. Two transceivers will be used (Yaesu FT-1000 and FT-990) with FL7700 amplifiers into a create tribander and wire antennas. QSL via BV2TA.
All the operators are on their first DXpedition with their overall experience in amateur radio less than three years each. This operation

will provide the ultimate challenge to the DX community to behave and cooperate with the operators in such a manner so as to allow the maximum number of QSO's to be made. The operators were provided DXpedition guidelines by N7NG & OH2BH which have been translated into Chinese.

FK, NEW CALEDONIA. Rudi, DK7PE, is now active as FK8/DK7PE, but his length of stay is unknown. He plans to be active on 160 meters and has been heard so far on 1825 kHz at 1125z. Start checking the very low end of 40 meters for him around 1100z and again around 0620z. On 20 meters, check the lower end starting around 0530z. FK8CP also continues to be active on 160 meters every day on 1838 kHz around 1115z. Henri, FK1TK, was heard on AO-13, check around 145.904 kHz at 0600z.

IB0C, ITALY (This one is for the prefix hunters!). GianFederico, IK0AZG, informs OPDX that he will air this special callsign during the following contests: CQ WW WPX SSB (Mar. 26-27), ARI International DX (May 7-8), IARU (July 9-10) and CQ WW SSB (Oct. 29-30). QSL via IK0AZG.

KH3, JOHNSTON ATOLL. Richard, AH6IO, and Pat, NH6UY, are planning to be active from KH3-land from May 4 until May 9. Pat will operate as NH6UY/KH3 and will make satellite contacts only on Oscar 13. QSLs for Pat will be via her callbook address. Richard will operate as AH6IO/KH3 on the HF bands using the following frequenies: 1830, 3795, 7080, 7175, 14195, 14226, 18130, 21305, 24950, 28495 and 50110 kHz. He will operate some CW at times on the low end of the U.S. General Class band. He will try to be active during the night time hours on the lower bands if conditions allow. QSL direct only to AH6IO callbook address.

PA, AMELAND ISLAND (EU-038). Thomas, DL9OBQ, will be active from this Dutch island located in the North Sea Coast (North group). Activity will be from March 27th thru April 6th. He plans to be active CW and SSB. Look for him on the usual IOTA frequencies (.260's) and also on 30/40/80 meters. The callsign is unknown at this time, but a special QSL card will be printed for this operation.

TY, BENIN. Ken, WA4OBO, hopes to be active as TY8OBO again before the end of March, but a report indicates that it may not happen until sometime in April. During his 4 to 5 day operation, Ken will be using a Kenwood TS-50 and Heath SB200 amplifier. He will try to spend more on 80 and 40 meters during this trip. He states 40 meters is a mess there because of all the interference.

VS6, HONG KONG. Tim, KJ4VH, will be returning to VS6WO's QTH for a Multi/Multi effort in the upcoming WPX SSB contest. The contest team will consist of the following operators: VS6WO, VR2GO, 9V1YC, JE1CKA, DL5XX, K3WUW, etc. Their plans are to break the all-time Asian Multi/Multi record and they would appreciate your help! Please look for them in the contest. QSL VS6WO to K9EC. Also, Tim states he will be moderately active as VS6/KJ4VH, and that he may be on from HL and BV over the next couple weeks. Activity will be mostly CW. All his QSOs will be automatically confirmed via the bureau.

YI, IRAQ. YI9CW has been active on 12 and 17 meters this past weekend. He was heard on 18075 kHz between 1400 and 1600z; and also on 24900 kHz at 1344z. QSL to SP5AUC, Tom Rogowski, P.O. Box 11, Warsaw 93, Poland.

DX DINNER BANQUET (UPDATE). Just a reminder! The Southwest Ohio DX Association will be hosting the Ninth Annual DX Dinner which will be held on Friday, April 29th, 1994, at the Stouffer Center Plaza Hotel, Dayton, Ohio. There will be a cash bar at 6:30 with dinner at 7:15. Tickets must be purchased in advance, and are available from Scott Lehman, N9AG, PO Box 803, Greenville OH 45331. Tickets will be $27.00. Please make your check payable to SWODXA, and send an SASE for ticket return. Seating will be limited, so please order early. If you wish to sit as a group, it would be appreciated if you order as a group. All seats will be reserved. Ralph Fedor, K0IR, will be the keynote speaker. Ralph was the organizer of the 3Y0PI expedition and will show slides of the highly successful Peter I Island DXpedition. For further information contact Scott Lehman, N9AG, at (513) 548-6230 or Steve Bolia, N8BJQ, at (513) 429-9954 voice/fax.

SPECIAL NOTE FROM EDITOR: There will probably be no bulletin next week (March 28). I have some family obligations to attend. Please keep sending your DX information. (You never know, I may put one together if I receive enough information before the weekend.)

FAX YOUR DX INFORMATION NOW! Faxing is available Monday/Wednesday/Friday from 0430 to 2330z only. The number is 216-237-8208 and the FAX card is sharing the same phone line as BARF-80 BBS using a data/fax/phone switch.

Excerpts and distribution of The OPDX Bulletin are granted as long as OPDX/BARF80 receive credit. To contribute DX info, call BARF-80 BBS online at 216-237-8208 14400/9600/2400/1200/300 and leave a message with the Sysop or send InterNet Mail to: aq474@cleveland.freenet.edu or send BitNet Mail to: aq474%cleveland.freenet@cunyvm or send PRODIGY Mail to: DFJH48A or send a message via packet to KB8NW @ WA8BXN.OH.USA.NA

/EX

Tedd Mirgliotta KB8NW
InterNet: kb8nw@barf80.nshore.org
Basic Amateur Radio Frequency BBS (BARF-80) +1 216/237-8208
"Totally devoted to Amateur Radio" - 24 Hrs a day 8/N/1 14.4k-300 baud

3114. HAM word origin!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 22:21:06 UTC
From: ve2cnd@CAM.ORG
Message-ID: <2mii8i$iek@altitude.HIP.CAM.ORG>
Source record: 269561

Hello everybody....

The origin of the word 'HAM' come from the first letters of the
first three guys to experiment radio. They were from the Harvard Radio
Club... Their names are Hyman, Almy and Murray.

Originally, they named their telegraph station
"HYMAN-ALMY-MURRAY" but it was too long, so they reduce it to "HY-AL-MU",
but there was a problem : a mexican boat was named "HYALMO", so there was
a little confusion... So, they finally named their station "HAM"...

Oh yeah... That was in 1908....

73's de Alex, ve2cnd@CAM.ORG

3115. IPS Daily Report - 20 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-20 23:19:50 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar20.231950.29351@ips.oz.au>
Source record: 269485
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 20/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 20 MARCH AND FORECAST UP TO 23 MARCH

IPS Warning 09 was issued on 18 MAR and is still current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 089/033

1B. SOLAR FORECAST
21 March 22 March 23 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth : unsettled to active

Estimated Indices : A K Observed A Index 19 March
Learmonth 17 3234 3334
Fredericksburg 08 14
Planetary 10 15

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
21 Mar 25 Unsettled to active.
22 Mar 30 Active.
23 Mar 25 Mostly unsettled.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
20 Mar normal normal normal

PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
21 Mar normal normal normal
22 Mar normal normal-fair normal-fair
23 Mar normal normal-fair normal-fair
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were near predicted monthly values.

Observed T index for 20 March: 47

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
21 Mar 45 Near predicted monthly values.
22 Mar 10 15 to 20% below predicted monthly values.
23 Mar 20 About 15% below predicted monthly values.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331 |PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329 |West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330 |AUSTRALIA

3116. BAYCOM <-> NOS, YES!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 00:08:54 UTC
From: acornwal@fox.nstn.ns.CA
Message-ID: <72543.acornwal@fox.nstn.ns.ca>
Source record: 269563

About 2 weeks ago I launched the following inquiry on Info-Hams Digest:

>Hello. If you have been able to use a Baycom (Baypac) type
>modem with KA9Q/NOS (for example NOS 1.10x15) I would like
>to know how it is done...

I received several responses and am pleased to report that I have succeeded in getting NOS to work with the Baycom modem. What I needed was an ax25 driver program (ax256drv.zip of January 3, 1993 downloaded from grivel.une.edu.au / 129.180.4.7) written by Pawel Jalocha, SP9VRC. The only glitch encountered was resolved by a simple change of driver software interrupt from the default of 60 to 63 to work with my i386SX laptop.

After more than a week's experience, I am finding that the Baycom (with ax25 driver) works as well as my MFJ 1278 and PacComm TNCs for 1200 bps. It is connected to a Yaesu FT-470 handheld through a 25 watt amplifier to a simple j-pole antenna. (For regular packet operation I have had no difficulty using the Baycom with the laptop running the Eskay SP and MUBAY software, but I am not able to make the modem work with the Baypac program that was bundled with it.)

The reports from other hams were generally very positive regarding use of the Baycom modem with NOS, although there was an instance of heavy packet loss noted in conjunction with an HTX-202 HT. Another ham expressed particular satisfaction with the Yaesu FT-470, which duplicates my experience.

I am grateful for the work of Pawel Jalocha in writing the ax25 driver, and, of course, the work of KA9Q, WG7J and other contributors for producing the NOS program.

--- Andy / VE1COR
Andrew Cornwall
Nova Scotia Department of Education
Nova Scotia, Canada

3117. Internet<->Packet and Part 97

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 00:39:10 UTC
From: jrimmer@netcom.com
Message-ID: <jrimmer.5.001BDFBE@netcom.com>
Source record: 269565

My intention here is to set up a internet<->packet gateway. The catch is I want it to be automatic. Once I made that decision I have to deal with Part 97's rules about third-party traffic. That's where the issue greys... What are my troubles? I know vulgarities are a problem, but anything else? If it's just vulgarities, I can just write something to screen those out. What other issues need to be dealt with. Or has that already been done?

Jason Rimmer
Eclectic Technologies
jrimmer@netcom.com

Object technology for the masses...

3118. Re: Internet<->Packet and Part 97

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 01:35:37 UTC
From: edleslie@apogee.ccs.yorku.ca
Message-ID: <CMzr3E.Go4@newshub.ccs.yorku.ca>
Source record: 269566

Jason Rimmer (jrimmer@netcom.com) wrote:
: My intention here is to set up a internet<->packet gateway. The catch is I
: want it to be automatic. Once I made that decision I have to deal with
: Part 97's rules about third-party traffic. That's where the issue greys...
: What are my troubles? I know vulgarities are a problem, but anything else?
: If it's just vulgarities, I can just write something to screen those out.
: What other issues need to be dealt with. Or has that already been done?

I think (and I may be speaking way out of turn here) that the general way people around here have approached this issue is to ensure that email text hits the air (i.e. over packet) *ONLY* at the behest of an amateur, so that then the amateur is the one controlling the transmission (and I guess that means the one liable for any infraction, whether they could know that it would happen or not in advance). So, any email transversing the gateway can only be delivered to a land-based bbs, and must be read from there at the request of an amateur operator. With fine tuning, I believe they can tell that if I originated the message over the airwaves, then it can be delivered over the airwaves to it's destination.

73 de Ed / VE3ZVZ

: ---
: Jason Rimmer
: Eclectic Technologies
: jrimmer@netcom.com

: Object technology for the masses...

3119. Ramsey Radio FAQs and info

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 02:09:42 UTC
From: ei938@cleveland.Freenet.Edu
Message-ID: <2mivl6$rje@usenet.INS.CWRU.Edu>
Source record: 269490

Ham Radio Folks,
This is my first try on this newsgroup. As the proud new owner of a Ramsey Radio FX-146 (2m) that just finally got working, I'd like to get more info on what can be done with the radio. It seems to work OK, but I'd sure like to add a few modifications. If there an FTP site available or a FAQ on all the neat modifications and upgrades for Ramsey Radios?

I understand from the radio club that there are a couple of bugs in the design that folks have developed fixes for

Please post info on Ramsey Radio, particularly the FX-146, or better yet, send email to me directly and I'll post a compilation of responses. Thanks In Advance for your help.

Andrew Lynch

ac408@dayton.wright.edu

Is there any where else I can find info on this topic? TIA!

al

3120. Re: Internet<->Packet and Part 97

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 02:15:39 UTC
From: jrimmer@netcom.com
Message-ID: <jrimmer.6.003CC212@netcom.com>
Source record: 269492

In article <CMzr3E.Go4@newshub.ccs.yorku.ca> edleslie@apogee.ccs.yorku.ca (Ed Leslie) writes:
>From: edleslie@apogee.ccs.yorku.ca (Ed Leslie)
>Subject: Re: Internet<->Packet and Part 97
>Date: Mon, 21 Mar 1994 01:35:37 GMT

>Jason Rimmer (jrimmer@netcom.com) wrote:
>: My intention here is to set up a internet<->packet gateway. The catch is I
>: want it to be automatic. Once I made that decision I have to deal with
>: Part 97's rules about third-party traffic. That's where the issue greys...
>: What are my troubles? I know vulgarities are a problem, but anything else?
>: If it's just vulgarities, I can just write something to screen those out.
>: What other issues need to be dealt with. Or has that already been done?

>I think (and I may be speaking way out of turn here) that the general way
>people around here have approached this issue is to ensure that email text
>hits the air (i.e. over packet) *ONLY* at the behest of an amateur, so that
>then the amateur is the one controlling the transmission (and I guess that
>means the one liable for any infraction, whether they could know that it
>would happen or not in advance). So, any email transversing the gateway can
>only be delivered to a land-based bbs, and must be read from there at the
>request of an amateur operator. With fine tuning, I believe they can tell
>that if I originated the message over the airwaves, then it can be delivered
>over the airwaves to it's destination.

>73 de Ed / VE3ZVZ

>: ---
>: Jason Rimmer
>: Eclectic Technologies
>: jrimmer@netcom.com

>: Object technology for the masses...

That's true, but if I "know" what's not allowed to be transmitted over the air, then I can figure out a way to filter that out. i.e. A message comes from Internet and the destination is over packet. Once the message is received, a program jumps in, scans the message for obscenities (and whatever else needs to be caught), and either replaces the offending text, or deletes the message entirely. If the message is not deleted, then it forwards it over packet, otherwise it sends the message over packet to the addressee of the message stating that it was not able to be sent, due to obscenities, etc. Does that sound plausible?

Jason Rimmer

Eclectic Technologies
jrimmer@netcom.com

Object technology for the masses...

3121. QSLing packet messages?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 02:18:40 UTC
From: cmoore@mothra.rose.hp.com
Message-ID: <2mj060$9bg@hpchase.rose.hp.com>
Source record: 269496

Hi,

I've recently received several messages via packet asking me to exchange QSL cards. How does one respond to these? Since there was no actual QSO, I can't see filling out QSO information. So what (if anything) does one put on a QSL card in response to a packet message? I'm also a little curios why someone would want a card from a station they didn't actually work.

73,
Chris Moore
N6IYS
cmoore@mothra.rose.hp.com

3122. help

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 02:19:09 UTC
From: UMFISCHER@MSUVX1.MEMST.EDU
Message-ID: <01HA7HOQM1M690N2SV@MSUVX1.MEMST.EDU>
Source record: 269567

```
help
```

3123. Re: Converting CB to 10 meters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 04:56:16 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <Cn00Ds.Dzt@news.Hawaii.Edu>
Source record: 269569
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <CMtBvy.ID3@csn.org> erik@csn.org (Erik Mugele) writes:
>I have had several QSOs with people on 10 meters who were using converted
>CBs. I have a CB sitting in my junk box and was wondering if it could be put
>to use in the 10 meter band. Is there some service center I can send it
>to have it done? Is it something I can do myself? (The CB in question is
>a Cobra Model 19 Plus, manufactured in 1988.) In general, how hard is it
>to do this (ie maybe easier on older model CBs)?

Eric: Check the ads in any QST magazine - there's a company that sells
11 to 10 meter conversion kits. Also, send an email to info@arrl.org
and only write:
HELP
INDEX
QUIT
- when you get the index (via email) look for a file titled something
like CB-10M - order it according to the instruction in the `HELP' file
you receive.

Jeff NH6IL

3124. Re: HAM Origin?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 04:57:02 UTC
From: adrandy@aol.com
Message-ID: <2mj9eu$4p4@search01.news.aol.com>
Source record: 269504

The source for "HAM" radio is a magazine called Home Amateur Mechanics popular in the US very early in the century. They popularized home radio, as well as home avionics, and home inventions. The magazine had "HAM aviation" and "HAM invention" columns too. Their column "HAM radio" was probably the first of its kind. No doubt young inventors like Hiram Maxim and others read the book. -- Randy Padawer, WA4FJF

3125. query about paging systems]

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 04:58:24 UTC
From: weisen@alw.nih.gov
Message-ID: <1994Mar21.045824.3633@alw.nih.gov>
Source record: 269501

Sorry for the off-topic question, but lacking a place to post, I figured that this was as good a place as any.

I'm taking a Communications Engineering course for which I need to do a short term paper. I was thinking about doing one on the technical challenges that were faced when implementing the radio-pager systems that are in place today. Can anyone suggest where I could obtain such information. Does such technical information only exist within the confines of Motorola? I'm an image processing person, so I'm not up on the communications journals.

Any help would be appreciated.

Regards and 73,
Neil

--
Neil Weisenfeld, Computer Engineer Internet: weisen@alw.nih.gov
Nat'l Insts. of Health, 12A/2033 Voice: 301/402-4030
Bethesda, MD 20892 Fax: 301/402-2867

3126. Re: Looking for Long. and Lat. information

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 07:16:07 UTC
From: erwinn@ecs.comm.mot.com
Message-ID: <1994Mar21.071607.7480@lmpsbbs.comm.mot.com>
Source record: 269570

In an article T. F. Higginbotham, Ph. D. wrote:

> I am looking for an anonymous ftp site from which I can get the
> longitude and latitude of a fair number of places. It doesn't have
> to be a complete listing. I am mostly interested in places outside
> of the United States, especially Australia.

Try SimTel, e.g. OAK.Oakland.Edu, pub/msdos/graphics

geocity1.zip B 4115 910424 GEOCLOCK - List of World Cities with Lat/Long
geocity2.zip B 19063 910424 GEOCLOCK - MANY more cities with lat/long
geocitys.zip B 10620 910425 GEOCLOCK - more cities with lat/long
geoclk51.zip B 311044 931031 World map w/day-night terminator,times,EGA/VGA

The accuracy of these data is not very high, but it is sufficient for
most astronomical PC programs or satellite monitoring PC programs.

Befor you use the ..city.. files, try geoclk51.zip.

Erwin Nikl,
Motorola, Taunusstein near Wiesbaden, West-Germany
internet address: erwinn@taueng.comm.mot.com
or: erwinn@zwg01dns0.comm.mot.com

3127. Jeff Herman wins the Net Nazi award.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 07:16:23 UTC
From: jangus@skyld.grendel.com
Message-ID: <764234183snx@skyld.grendel.com>
Source record: 269571

Jeff Herman attempting to intimidate me writes:

> Ha ha ha - what a sore loser! Keep it up buddy - I'm collecting quite
> a file on your posts about me. Someone on the net has taught me that
> owners of .com accounts don't like to see their users make pests of
> themselves - sort of gives the owner a bad name.
>
> I should send you this file - you'd see who the buffoon is!
>
> 73 pal,
> Jeff#1

And follows up with this (in case I missed his first remark):

> Oh boy! Another of your articles to put in the file titled:
> ``postmaster@skyld.grendel.com''
>
> Hee hee,
> Jeff#1

Attempting to get my network access pulled because I've disagreed with you and have ridiculed your more rabid postings? Congratulations fool, you have just gotten yourself the usenet net.nazi award.

You've gone beyond your basketweave wannabe cop fantasies. Now you're running around with your armband showing. What's next? Shall we round up the alledged no-coders, give them a pink triangle for identification and then have them shot?

It is time for a CFV for rec.radio.pendantic. This will give all the anal retentive control freaks a place to rant and feel sorry for themselves. Once the news group is created, they can set Distribution: to dev/null so on each site it is carried, only the posters own postings are shown. That way it not only keeps them from having to see any others comments but it will save a considerable amount of bandwidth.

You're really pathetic. Why don't you go back to your classroom and stay off the network if it offends you so deeply.

After you've finished adding this to your collection, and can get one of your hands free from your lap/nose/whatever, send the following command: "whois grendel.com" (To save you the bother I've included the results, but try it yourself in the event you think I've forged this.)

| Grendel's Lair (GRENDEL-DOM)
| PO Box 4425
| Carson, CA 90749-4425

```
|
| Domain Name: GRENDEL.COM
|
| Administrative Contact, Technical Contact, Zone Contact:
| Angus, Jeffrey (JA56) jangus@SKYLD.GRENDEL.COM
| (310) 324-6080
|
| Record last updated on 09-Feb-94.
|
| Domain servers in listed order:
|
| NETCOMSV.NETCOM.COM192.100.81.101
| NS.NETCOM.COM192.100.81.105
|
|
| The InterNIC Registration Services Host ONLY contains Internet Information
| (Networks, ASN's, Domains, and POC's).
| Please use the whois server at nic.ddn.mil for MILNET Information.
```

Note: Who wishes to be the first to point out that quoting private e-mail
is "in bad form"? If you don't wish to be quoted, don't post or send mail.

73 es a Top-O-The-Morning to one and all (with the exception Jeff Herman.)

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3128. ANARTS RTTY NEWS801 20/03/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 07:36:53 UTC
From: dave@eram.esi.com.au
Message-ID: <2mjiql$t5j@eram.esi.com.au>
Source record: 269572
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS NEWS801 20/03/94

ANARTS NEWS BULLETIN 801 20/03/94 PAGE 1/5.

SUNDAY BROADCAST TRANSMISSION SCHEDULES
3.545 MHz 0930 UTC This relay is in
recess until April.
7.045 MHz -3 0030 UTC VK2CTD (Col)
14.070 MHz (amtor/fec) 0030 UTC VK2DPM (Alan)
14.091 MHz 0030 UTC VK2BQS (JIM)
146.675 MHz 0030/0930 UTC VK2JPA (PAT)
144.850 MHz (ax25 bbs) VK2JPA @ VK2RWI
146.675 MHz (rtty mmbbs/repeater) VK2RTY

Views expressed in this news bulletin are not necessarily
those of the Broadcast Officer, the Relay Officers, or of the
Society.

Coastal Patrol

For those interested in the Volunteer Coastal Patrol, and for
those who work with small ships and have blind and/or
dyslectic persons operating with small ships, please note that
the Royal Blind Society of N.S.W. have available tapes
containing all pertinent information regarding frequencies and
all matters referring to small ship safety and traffic
handling.

These tapes may be obtained from the Royal Blind Society of
New South Wales for a small charge. Their address is 4
Mitchell Street Enfield, phone 334 3333, Fax 747 5993.

These tapes are available to anyone in the Australian area, or
who work small ships in that area.

submitted by VK2SG

RTTY gains another contest

Another RTTY contest will commence from this year. The total
is growing testifying to the popularity and usability of this
mode at any time of the sun-cycle.

This contest will be run by the Polish RTTY Society and will take place on the last full weekend in April in every second year. Mode will be Baudot only.

It is good to see new contests coming in, there have been several started in the last two or three years, and particularly good to have one established in what was a country restricted by previous governmental practices.

Perhaps more countries from that region will become interested in running contests in the HF digital modes, we hope so.

The rules will be published in April so keep watching and please support this new contest -- give them a good start.

Information and rules supplied by VK2SG.

ANARTS April meeting

Please note that, because of Easter, the meeting will be put back a week until Friday 8th April. This is normal practice when the meeting clashes with a public holiday, and the 1st April is Good Friday.

Hope to see some of you there. Time is 7.30 pm and takes place at the QTH of Keith VK2ZZO. For further information contact Col VK2CTD, Jim VK2BQS, or Pat VK2JPA (work 230 3722). Supper supplied.

IPS weekly report

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11 MARCH - 17 MARCH 1994

Issue No 11
Date of issue: 18 March, 1994

INDICES:
Date 11 12 13 14 15 16 17
10cm 088 093 090 087 087 086 085
A 29 27 21 24 31 19 (22 estimated)
T 25 06 -02 45 23 09 08

SUMMARY OF ACTIVITY

Solar activity was very low 11th, and 13th-17th March, and low on 12th.

The geomagnetic field at Learmonth (WA) was active to minor storm on 11th, then unsettled to active until 15th when the field returned to active to minor storm levels. The field was at unsettled to active levels 16th-17th.

Ionospheric F2 critical frequencies at Sydney were depressed by up to 40 per cent for most of the week during local daylight, returning to near normal during local night, except for 14th-15th when frequencies were near normal all day. Spread F conditions were present during local night on 16th-17th March.

FORECAST FOR THE NEXT WEEK (18 -24 MARCH)

SOLAR: very low

GEOMAGNETIC: active to minor storm levels expected 20-22 March, due to a coronal hole.

IONOSPHERIC MUFs are expected to be 15-30 per cent depressed on 18 March, 21-23 March.

Courtesy of IPS Radio and Space Services

VK2SG RTTY DX NOTES 11 MAR 94

VK2SG RTTY DXNOTES FOR WEEKENDING MARCH 11, 1994(BID RTDX0311)

Our thanks this week go to: ZS5S, W2JGR, WB2CJL, BV5AG, 4X6SL, 9X5LJ, J28JJ, I5ICY, I5IGQ and IK5PWJ Packet Cluster, DJ3IW and the Central Europe Dx Cluster node DB0SPC, the NJ0M node of the Twin Cities.

BANDPASS:
FRIDAY 4
0606-12091 UU9JWB rev 1221-21085 A45ZW
1239-21078 A71CW 1240-21088 UN7GY
1602-14087 DU1AUJ 1702-14092 9M2MW
1707-21084 FH/DJ2BW 1733-21078 TL8NG
1953-14084 FH/DJ2BW 2011-14084 SU1ER
2045-14092 LZ1OM 2144-14084 TZ6FIC
SATURDAY 5
0538-14080 4Z85TA 0731-21083 ZD7DP
0916-14086 3A2LZ 0953-21088 TZ6FIC
1027-28084 FH/DJ2BW 1136-21085 UN5PR
1137-21083 FH/DF9PG 1337-21085 ES4MM
1351-21085 FH/DJ2BW 1442-21085 4X/OK1FGC
1450-14087 SV5AZP 1450-14087 ES7FQ
1518-21087 9J2BO 1520-21084 V5JC Qsl DJ6JC
1533-21083 ZS9A 1542-21083 V51C
1547-21083 S57U 1556-14072 A41KB Pactor
1655-14090 ES4MM 1707-14083 9K2IC
1722-21083 KP4VP 1815-14082 YL3FW
1819-14085 UX0QON 2145-14085 HK0DPA
2325-14084 EA8ATE

SUNDAY 6
0823-14085 BV7WB 0839-14086 T30CC
0919-21087 HL9DG 1201-21083 FH/DJ2BW

1220-21085 HJ4SAN 1231-14081 HK0DPA
1257-21089 KP2BH 1438-14089 UN5PR
1552-21076 V51GB Pactor 1611-21087 TZ6FIC
1644-14085 YL2GD 1711-21083 FM5GN
1739-14082 9K2IC 1742-21081 TL8NG
1950-14071 J28BM Pactor 1951-14087 7P8SR
2024-21086 HP1XVI 2026-14087 4X6UO

MONDAY 7
0650-14082 WL7EF 0657-14087 SV5BB
0658-14087 UR5MW 1355-14081 UN5PR
1516-14087 UR3UW 1519-14088 LX1WH
1656-14089 ES4MM 1658-14087 UT7FP

TUESDAY 8
0910-14088 UR5MW 0912-14085 US8IWA
1732-14091 9N1AA 2241--7036 SV2BBJ

WEDNESDAY 9
NO REPORT

THURSDAY 10
0930-14084 RX0LWC 1420-14083 UR7VF
1422-14083 ER1PE 1430-14083 9K2USA

NOTES OF INTEREST:
PRATAS ISLAND, BV9P. Received a note from BV5AG the xyl of Bolon, BV5AF were she said the trip is rescheduled for April, stay tuned.

REP. OF YEMEN, 7O. Jacques, J28JJ write me that will be there from 20 to 29 March for professional purpose. He has not any license up to now but we are doing the best to try this opportunity.

MAYOTTE, FH. Our tnx to DJ2BW, DK2BI and DF9PG for the operation from this rare one and for the effort on rtty. When you read this notes they are flying back home as ended the activity on March 9. Qsl card goes to home calls.

NEPAL, 9N1. Satis, 9N1AA and Surish, 9N1HA are now active with the support of Henry DJ6JC and Baldur, DJ6SI who left equipments. Qsl is via direct to BOX, 4292 Kathmandu, specify the name of the operator.

Send your bandpass and notes for next week to Bob, WB2CJL at W5KSI.#NOLA.LA.USA.NA or ZS5S.ZAF.AF or to 9X5LJ.#KGL.RWA.AF

GL de (DX2) Luciano, I5FLN AT ZS5S.ZAF.AF
[via HF AMTOR]

Coming events
1994

March 19th-20th BARTG WW RTTY
Contest

April 8th ANARTS meeting

16th-17th SARTG WW AMTOR
Contest

Paper for Teleprinters

Please, PLEASE, does anyone want some teleprinter paper, I have boxes of it. It is triplex paper (three sheets of paper, two sheets of carbon paper), you can have it for the cost of freight (you pay the freight). This paper will work in any pressure machine, or even typewriters, no good for tractor machines. When you unroll it you finish up with three rolls of paper and two rolls of carbon paper. The paper you can use, the carbon -- well you can give it to the children to mess up the house. Don't worry about the amount you want, I have enough.

Contact Syd VK2SG, phone 02-631 2576 or ok in the call book.

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President (Col) VK2CTD, or the Secretary (Pat) VK2JPA @VK2RWI.

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or by packet to VK2JPA @ VK2RWI.

Email address for the Broadcast Officer is :

patl@conmusic.pitt.su.oz.au

The Society welcomes news items on any digital subjects from anywhere in the broadcast footprint. We know we reach ZL and many South Pacific islands. We are looking forward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer

That concludes ANARTS NEWS801, 20/03/94.

INSERTED BY VK2BQS, Jim. Vice-President ANARTS.

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2AAB.NSW.AUS.OC PGP 2.3

dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

3129. Re: any Hams at NASA/AMES RC?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 07:40:32 UTC
From: mlazaroff@delphi.com
Message-ID: <hA0PIxo.mlazaroff@delphi.com>
Source record: 269573

There are quite a few hams at NASA/Ames. They do have an active club with a pretty decent antenna farm. I just recently moved out here and don't have a point of contact right here, but will email you one in a few days.

3130. Difference between cordless phone and cellular phone?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 08:18:28 UTC
From: mslee@archi.snu.ac.kr
Message-ID: <1994Mar21.081828.20432@news.snu.ac.kr>
Source record: 269522
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,alt.radio.scanner

I think cellular phone is something like the repeater-aided communication
in amateur radio.
so, what is the uplink/downlink frequency (or what the magic is that)?

and one more question:
In cellular phone, I can hear his or her voice as well as mine,
What makes it possible?

Minsuk Lee (HL1ITJ)
mslee@archi.snu.ac.kr

3131. Re: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 09:14:50 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <Cn0CCr.Frv@hpqmoea.sqf.hp.com>
Source record: 269521
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Uri Blumenthal (uri@watson.ibm.com) wrote:
: In article <19MAR94.18754189.0121@UNBVM1.CSD.UNB.CA>, NADO000 <NADO@UNB.CA> writes:
: > >>didn't give me a single problem, nor to anybody of my
: > >>friends, who seeing my 990 chose to buy similar rig
: > ^^^^^^^
: > I don't think one should pick a radio just on looks.

: Come on, don't you really understand, that "seeing" in the
: context meant they tested it in all the modes they wanted?

: If it was a joke - I apologize.

: (:-).

Hmm this takes me back a couple of years, the first TS850 I saw was on a stand at a rally. There was a large crowd around it, fighting to spin its knobs and poke its buttons. It seemed rather futile, really, as none of the stands had any electrical power, and the set was consequently unpowered. They must have really liked the feel of those knobs because some people were offering to buy it there and then, untried. One individual in my hearing offered the stall holder a premium over the list price just to get that one, said to be the first in the area. To fully understand the meaning of this, readers in the US must note that in the UK, list price is strictly selling price, although you might get them to throw in an accessory worth a few percent of the deal. UK list price is about double the US prices seen in QST.

I was somewhat stunned by this, and have watched for the effect recurring, which it did at another rally when the TS50 showed up.

I have witnessed people buying radios by appearance !

I just can't decide whether it is a joke or not, although P T Barnum would have found it funny....

Cheers
David GM4ZNX

3132. Re: Looking for Long. and Lat. information

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 10:48:07 UTC
From: julian@bongo.tele.com
Message-ID: <1994Mar21.104807.4984@bongo.tele.com>
Source record: 269576

In article <1994Mar20.221747.6622@altair.selu.edu> fcs$1224@altair.selu.edu writes:
>
>I am looking for an anonymous ftp site from which I can get the
>longitude and latitude of a fair number of places. It doesn't have
>to be a complete listing. I am mostly interested in places outside
>of the United States, especially Australia.

There are several places that have this information. They are
called libraries and bookstores. Ask for atlas's and gazeteers. A good
gazateer has every four pub town in the country mentioned with lat,
long, pop etc.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

3133. What is (and how do I make) a diplexer?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 11:48:23 UTC
From: dtock@nyx.cs.du.edu
Message-ID: <1994Mar21.114823.19200@mnemosyne.cs.du.edu>
Source record: 269577

I know I could go and buy a diplexer (to drive a VHF and a UHF antenna from the single output of my dual bander) but they seem very expensive for what should only be a couple of coils and a couple of capacitors (OK a few of each).

I have checked all my antenna and radio books, and all those I can find in the library, but none of them even mentions diplexers.

Can someone please point me towards or provide design details, or a circuit description, or ANYTHING. Maybe even a different (i.e.correct) name so I can find them in the index. I don't believe there is nothing written about them.

Incidentally, I am UK based, so UK magazines (i.e. RadCom or PW) would do...

Thanks

David (GM0SYA)

3134. Re: Mobile Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 12:21:05 UTC
From: al434@FreeNet.Carleton.CA
Message-ID: <Cn0Kz5.7C1@freenet.carleton.ca>
Source record: 269478

In a previous article, jestevez@pro-janin.cts.com (Joseph Estevez) says:

> Remote Server Commands
> ======================
>Server commands are specified in the Subject line of regular mail messages
>addressed to server@pro-janin.cts.com (where amateur mobile operators request
>information). The request commands are:
>
>HELP Send server help file
>INDEX [dir] Send server index for the given [dir] hierarchy
>SEND [dir/]file Send file (or one in the named subdirectory)
>DIR [dir] Send server directory for the given [dir] hierarchy
>
I've tried mailing and each time have it is returned "Host Unknown". Our
systems administrator tells me that pro-janin.cts.com is "Not a Known
Internet Host".

Would appreciate help. 73

--
****
David George.....Internet: al434@freenet.carleton.ca
VE3UOL.....QTH: Dunrobin, Ontario, Canada.
****

3135. Amateur Radio Newsline #866 18 Mar 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 12:33:48 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <iGPZjGG8yTAL057yn@dorsai.dorsai.org>
Source record: 269479
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text version is edited from the original scripts and transcribed from the audio reports by Dale Cary, WD0AKO, and is first published in The Radio & Electronics Round Table on the Genie Online System.

If you have any comment, suggestion, or news item you would like to submit, send them via E-Mail to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. You can contact Newsline at +1 805-296-7180. It is a combination answering and FAX machine, if you have a FAX to send, wait for the voice prompt and press your fax-send button.

All other information and disclaimers are in the text header below.

Back Issues: An archive of previous Newsline transcriptions is available for Genie members in the Radio & Electronics software library. They are archived as NEWSLINE.ccc, (ccc being the CBBS edition number assigned by Dale). We are in the process of setting up an FTP location for Internet users to access previous editions as well. We are currently placing them, (slowly and in reverse order), on the /pub/hamradio directory at the oak.oakland.edu library. They are archived as newsline.nnn, (nnn is the on the air edition number). Special thanks go to Scott Ehrlich, WY1Z, the library's administrator, for making the facility available. Previously published editions can also be extracted from the rec.radio.info newsgroup archive files at FTP.funet.fi library in Finland.

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NEWSLINE RADIO - CBBS EDITION #116 - POSTED 03/19/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newsline is posted on this CBBS twice monthly. For current information updates, please call

Los Angeles..... (213) 462-0008
Los Angeles (Instant Update Line)..... (805) 296-2407
Seattle..... (206) 368-3969
Seattle..... (206) 281-8455
Tacoma..... (206) 927-7373
Louisville..... (502) 894-8559
Dayton..... (513) 275-9991
Chicago..... (708) 289-0423
New York City..... (718) 353-2801
Melbourne, FL..... (407) 259-4479

For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

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For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

****

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[866]

* * * C L O S E D C I R C U I T A D V I S O R A R Y * * *
* *
* The following is a closed circuit advisory and is not *
* for air over amateur radio. Repeat, not for broadcast. *
* This is just a reminder that the address for the Newsline *

* Support Fund is Newsline, in care of Dr. Norm Chalfin, *
* K6PGX, Post Office Box 463, Pasadena, CA 91102. Again, and *
* as always, we thank you. That ends the closed circuit with *
* Newsline report number 866 for release on Friday 03/18/94. *
* *
* *

The following is a QST

Los Angeles hams are praised for their work following the January 14th earthquake, Dayton announces this years award winners and the FCC extends an important reply comment deadline. These stories and more on Newsline report number 866.

*****
FIRE COMMISSIONER PRAISES HAMS IN QUAKE COMMUNICATIONS

Ham radio has been praised by the City of Los Angeles for jumping in when hospital communications failed after the January 14th Northridge earthquake. According to Fire Department Chief Alan Cowan, the hams were called on to take the place of the regular hospital dispatch services when the hospital to fire department interconnect failed following the quake.
According to Chief Cowan, communications breakdowns following the quake left ambulance drivers confused about where to take the injured. Speaking a recent Seismic Safety Conference in Burbank, California, Cowan noted that the breakdown was so severe that fire captains had to be dispatched to area hospitals to assess their status and determine where ambulance drivers could take victims. Cowan said the fire department finally reestablished communications when ham radio stations were set up at each hospital. But he added that he felt the existing hospital radio dispatch systems were inadequate for communications between field paramedics and base hospitals.
A hospital association spokesman acknowledged that 12 hospitals declared internal disasters requiring paramedic ambulances to pass them by. The spokesman declined comment on the charges of inadequate communications following the 6.8 tremor. But Seismic Safety Commission members said they were gravely concerned by the performance of hospitals in the hard-hit San Fernando Valley. They say that they were glad that radio amateurs were available to step in when needed.

*****
NEW COMMENTARY DEADLINE ON EMI EXPOSURE

The FCC has extended the reply comment deadline in its proposal to adopt new standards for exposure to RF radiation. The Notice of Proposed Rule Making, in ET Docket 93-62 will adopt strict standards already observed by the American National Standards Institute and the Institute of Electrical and Electronic Engineers in 1992. It is opposed by the ARRL.

The League already has told the FCC that the proceeding should be terminated and has cited a number of reasons for its stand. Key among them is the ARRL view that this is not really an NPRM since it doesn't actually propose to change anything. As such, it should not even apply to the average amateur radio station installation. The League notes that those amateurs even remotely to be affected by new standards are those who are forced to use indoor antennas because of restrictions against outside installations.
The FCC notes that it is extending the deadline in response to the petition of an industry group. The Telecommunications Industry Association says that more than 1200 pages of comments had been filed with the Commission and that not enough time had been allowed for evaluation of that much material.
The FCC now says that it recognizes the complexity of the issues raised by its proposal. As a result the reply comment deadline has been extended to April 25th. A full story on the League's comments in this matter will appear in April issue of QST magazine.

*****
LATEST NUMBERS

The FCC has tallied some numbers on the VE system since its 1984 debut and from their perspective things are looking real good. According to the commission through late 1993 the total number of VE testing sessions held 56,485. The number of people attending these test sessions was 640,453 and volunteer examiners administered 1,052,269 test elements to these applicants. There were no numbers given for the amount of exam cheating taking place but its believed very small in comparison to the overall success of the all volunteer testing system. The latest testing scandal involving at least thirty California volunteer examiners is still under investigation by federal authorities.

*****
FCC DUMPS CHICAGO FINE

In a deal that will permit it to issue new guidelines dealing with indecency on the public airwaves, the FCC is dropping a Notice of Apparent Liability to Monetary Forfeiture in the amount of $39,750 that it issued against a Chicago radio station. When the proceeding first started the station ran under the call WLUP AM but has since changed call to WMVP. The fines were for broadcasts in 1989, 1991 and 1992.
In return, the stations owner Evergreen Media Corporation says that it is dismissing a counterclaim challenging the constitutionality of FCC enforcement of indecency standards, and paying $10,000 to the government without admitting wrongdoing.
The agreement clears the way for the Federal Communications Commission to issue new guidelines explaining the ban on

indecency in all radio and television broadcasts. These new procedures are expected to be released within the next few weeks and could impact on the users of all radio services including Amateur Radio.

*****
DAYTON WINNERS

The Dayton Amateur Radio Association has announced the winners of this years Radio Amateur of the Year, Specific Achievement and Technical Achievement award winners. There are some major surprises this year.
This year's award recognizes a man known for pushing. Pushing for the rights of amateur radio operators. Perry Williams, W1UED, the longtime Washington liaison for the American Radio Relay League.
How does Williams feel to be selected? "Pretty surprised!" commented Perry Williams, W1UED.
In fact, Williams admits he's flabbergasted!
"It's quite a honor. It's coming from the grass roots so to speak cause it seems like a very important honor." Perry Williams, W1UED.
Williams has represented amateur radio on Capitol Hill since 1980. In his 14 years as Washington liaison, Williams has fought many battles on behalf of the amateur service. He has helped oversee creation of the Volunteer Examiner Program. He worked for legislation recognizing amateur radio's need for spectrum. He has helped exempt amateur radio operators from being charged government administration fees. Being named Radio Amateur of The Year is an honor Williams won't forget anytime soon.
"How often does anybody call you up and tell you've won a national honor. Hasn't happened to me before." Perry Williams, W1UED, Radio Amateur of the Year.
The Awards Committee names Russ Kroeker, N7HGE, of Kent, Washington as winner of its Special Achievement Award. Kroeker helped design the Evergreen Intertie. That's a repeater system linking the northwest US with Canada. The Committee's Technical Achievement Award goes to Dick Newell, AK1A, of Bolton, Massachusetts. Newell is recognized for his work in designing packet radio clusters, which are popular in contesting and DXing. All three winners will be honored in Dayton April 30th.
That's just one day after Perry Williams retires from his post with the ARRL. Williams had not been planning on going to Dayton this year. But, he says: "Now I am!" Perry Williams, W1UED.

*****
DAYTON CONTEST GATHERING

Contest operators once again will have the chance to swap lies about their QSO rates at the 2nd Annual Dayton Contest Dinner.

It's slated for Saturday evening, April 30th at 6:30 PM at the Stouffer Center Plaza Hotel. The reservation deadline is April 10th. For more information please send a self addressed stamped envelope to the North Coast Contesters Dayton Dinner, POB 59, New Bedford, PA 16140. This contest dinner is one of many unofficial functions being held in conjunction with Hamvention '94.

*****
CHINESE HAMS ARRESTED?

The Ohio-Penn DX Bulletin reports that rumors are circulating saying all mainland Chinese hams have been arrested for listening to unauthorized frequencies. OPDX says that the story is supposed to have originated on Voice of America.
But the information is now being disputed by Fred Laun, K3ZO. Fred recently returned from Thailand where he operated as HS0ZAR. Fred says that he has doubts about the Voice of America report that claimed all BY hams have been rounded up and sent to labor camps. Fred says that he heard and worked plenty of BAs, BYs and BZs while in Thailand.

*****
UoSAT ANNIVERSARY

Now a ham radio space anniversary. At 17:59 UTC on March 1st 1984 the second satellite designed and built by the University of Surrey called UoSAT-2 was launched on a Delta rocket from the Western Test Range at Vandenberg Air Force Base, California. Among its many experiments, UoSAT-2 carried the Digital Communications Experiment, which was one of the first non-military use of store-and-forward techniques with Low Earth Orbiting Satellites. UoSAT-2 was the test-bed for the packet radio satellites as we know them today. To all those who wonder how long these satellites last, it should be noted that UoSAT-2 is still operational, ten years after launch.

*****
FISHER OBIT

The electronics industry pioneer and philanthropist for whom a New York City concert hall was named has died at the age of 87. Avery Fisher was an influential figure in New York music circles, sitting on the boards of the New York Philharmonic, the Chamber Music Society of Lincoln Center and the Marlboro Festival. Fisher was an amateur violinist whose love of music prompted him to build his own radios and phonographs in the 1930s. From those beginnings, his electronics business was born. Lincoln Center's Philharmonic Hall was renamed Avery Fisher Hall in 1973 after Fisher donated more than ten million dollars to its support foundation. Electronics pioneer Avery Fisher dead at age 87.

*****
OLDEST U.S. HAM DIES

Amateur Radio has lost a very long time member of its fraternity. Reports on packet radio say that Ernest Wheatley, W1UHI of Richmond, Vermont has died. Ernie as friends called him was known as the oldest Amateur Radio operator in the United States. He was active on 2 meter repeaters right up to his death giving cheerful greetings to all. Wheatley was a retired civil engineer. He was only 7 years old when Gugliarmo Marconi invented the wireless telegraph. Amateur Radio operator Ernest Wheatley, W1UHI was 106 years old!

*****
YOUNG HAM of the YEAR

A reminder that the Westlink Report ham radio newsletter that the nominating period for its annual Young Ham of the Year Award closes on Saturday April the 30th. The Westlink Report Young Ham of the Year award was conceived to honor the younger members of the Amateur Radio Community. Hams aged 18 and younger who have used Amateur Radio to significantly contribute to the benefit of the service, to their community or the nation are eligible. With corporate underwriting from Yaesu USA Corporation, the 1994 winner will receive a trip to the Sea Pac convention, a piece of ham radio equipment and a special plaque denoting his or her accomplishments.
All nominations must be submitted on an official application available for a self addressed stamped envelope to the Westlink Report Young Ham of the Year, 28197 Robin Avenue, Saugus, CA 91350. The winner will be announced in early May.

*****
NAB HAM RADIO GATHERING

If you will be attending this weeks National Association of Broadcasters convention in Las Vegas, Nevada, be advised that the annual NAB Ham Radio Reception is on! According to convention planners, this years ham radio gathering will take place on Wednesday, March the 23rd in Ballroom C of the Las Vegas Hilton Hotel. The party will begin at 6 PM and run until at least 8 PM. About 65,000 people attend the NAB show every year. Of these, almost two thousand are licensed radio amateurs. Most make their living in the broadcasting, teleproduction and telecommunications industries and also show up at the ham radio get together. Newsline will also be represented at this gathering. We hope to see you there as well.

*****

For this week, that's all from the Amateur Radio Newsline.
You can write to us at Post Office Box 463, Pasadena, CA 91102.

* * * Newsline Copyright 1994 all rights are reserved. * * *

- -

3136. Re: Packet, Internet & the FCC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 12:45:42 UTC
From: david@stat.com
Message-ID: <VyFJJc9w165w@stat.com>
Source record: 269480

jrimmer@netcom.com writes:

> According to a year old FAQ, it is as long as you "hand" forward the
> messages. I really don't want to do that... Furthermore, the FAQ specifies
> that the FCC sees Internet mail as third-party traffic, therefore must be
> screened by the control-op.
> Do these rules still apply? Or has Internet Mail forwarding been given
> a blessing by the FCC? What's up?

The rules have not changed. I run a internet-packet gateway, and still
look as the mail as being third party traffic from the internet ->
packet direction.

david

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-1165
Bitnet : ATW1H@ASUACAD

3137. Re: Packet, Internet & the FCC

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 12:57:37 UTC
From: gorski@vms.huji.ac.il
Message-ID: <1994Mar21.125737.3394@vms.huji.ac.il>
Source record: 269381

In article <netnewsCMvvLn.964@netcom.com>, jrimmer@netcom.com writes:
>
> I've been seeing snippets of messages here and there about the Amateur
> rules and Packet, but've been unable to gleen a straight answer. What are the
> current rules for message forwarding? i.e. I want to set my computer up to
> recieve Internet mail, and then forward it over packet, is this kosher?
> According to a year old FAQ, it is as long as you "hand" forward the
> messages. I really don't want to do that... Furthermore, the FAQ specifies
> that the FCC sees Internet mail as third-party traffic, therefore must be
> screened by the control-op.
> Do these rules still apply? Or has Internet Mail forwarding been given
> a blessing by the FCC? What's up?
>
> Jason Rimmer
> Eclectic Technologies
> jrimmer@netcom.com
> Where technology and your desk meet (most of the time)

Now let us not forget third-party treaties and business traffic rules.

When In doubt I find that a good course is to follow the more restrictive of
the rulings that apply.

The may not really be an "on point answer" but it is my 2 cents/2 agarot worth.

Shalom and 73's from Jerusalem,
Azriel 4X1PI/W7SI

3138. QSL info

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 12:58:53 UTC
From: etjfonte@ci.ua.pt
Message-ID: <Cn0Mq6.8Jn@news.ci.ua.pt>
Source record: 269481

```
TNX for reading.
Could anyone give adresses for this amateurs:
5Z4DV CE2ST
W3HCW W3HNK
KB0JBX K2SB
WA4JTK WN5K
9Y4NW UA2FM
K1SE J52AK
N6QLQ V26B
4X6LM PT2GTI
F6FNU DL7UUO
JH3RRA D44BS
K8PYD
I2ZZU

TNX IN ADVANCE...Good DXing...Best 73's de CT1ENQ
J.Miguel

--
|-------------------------------------------------------------------------|
| Jose' Miguel M.B.Fonte | Universidade de Aveiro - PORTUGAL |
| | Departamento de Electronica e Telecom. |
| E-mail : etjfonte@ci.ua.pt |----------------------------------------|
| | Ham callsign : CT1ENQ "always QRV" |
|-------------------------------------------------------------------------|
```

3139. Daily Summary of Solar Geophysical Activity for 20 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 14:36:11 UTC
From: oler@rho.uleth.ca
Message-ID: <9403211436.AA20616@rho.uleth.ca>
Source record: 269482
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

20 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 20 MARCH, 1994

NOTE: Minor stratospheric warming exists over southeastern Europe and western
Siberia, and over eastern Siberia, Alaska, and Canada with the adjacent
Arctic. The temperature gradient is reversed between 60N and the pole
above 10 HPA.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 079, 03/20/94
10.7 FLUX=088.6 90-AVG=106 SSN=011 BKI=3331 0222 BAI=008
BGND-XRAY=A4.9 FLU1=1.8E+06 FLU10=1.7E+04 PKI=3333 2233 PAI=011
BOU-DEV=021,021,023,008,003,012,012,019 DEV-AVG=014 NT SWF=00:000
XRAY-MAX= B1.3 @ 1139UT XRAY-MIN= A3.4 @ 1945UT XRAY-AVG= A6.6
NEUTN-MAX= +003% @ 2235UT NEUTN-MIN= -002% @ 1005UT NEUTN-AVG= +0.7%
PCA-MAX= +0.2DB @ 0015UT PCA-MIN= -0.4DB @ 0825UT PCA-AVG= +0.0DB
BOUTF-MAX=55340NT @ 1457UT BOUTF-MIN=55305NT @ 1939UT BOUTF-AVG=55329NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+082,+000,+000
GOES6-MAX=P:+144NT@ 1921UT GOES6-MIN=N:-086NT@ 0403UT G6-AVG=+099,+021,-040
FLUXFCST=STD:090,090,095;SESC:090,090,095 BAI/PAI-FCST=015,020,015/020,030,025
KFCST=2334 4334 3445 5333 27DAY-AP=060,046 27DAY-KP=2237 7756 7645 4333
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 19 MAR 94 was 28.2.
The Full Kp Indices for 19 MAR 94 are: 4- 4- 3+ 4- 3o 2o 2+ 3-
The 3-Hr Ap Indices for 19 MAR 94 are: 24 24 17 21 16 7 9 13
Greater than 2 MeV Electron Fluence for 20 MAR is: 8.6E+08

SYNOPSIS OF ACTIVITY

Solar activity was very low. Region 7692 (N18E06)
is the only region visible. No activity of any type was
reported.

Solar activity forecast: solar activity is expected to be
very low.

The geomagnetic field was quiet to unsettled. The greater than
2 MeV electron fluxes continue to hover near 1.0E+04.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled to mildly active over the next 24
hours. High speed solar wind from a well-located coronal
hole is due early on 22 March. This disturbance should slowly
weaken by the end of the interval.

Event probabilities 21 mar-23 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 21 mar-23 mar

A. Middle Latitudes
Active 25/45/40
Minor Storm 15/25/20
Major-Severe Storm 05/10/10

B. High Latitudes
Active 25/40/35
Minor Storm 15/30/25
Major-Severe Storm 05/15/15

HF propagation conditions were normal over all regions.
Similar conditions are expected over the next 72 hours. Minor
signal degradation is expected at times for high and polar
latitude night-sector paths.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 20/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7692 N18E06 160 0040 HSX 02 001 ALPHA
7688 N19W62 228 PLAGE
7691 N07W70 236 PLAGE
REGIONS DUE TO RETURN 21 MARCH TO 23 MARCH
NMBR LAT LO
7682 S19 071
7686 N08 037

LISTING OF SOLAR ENERGETIC EVENTS FOR 20 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 20 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
20/ 1039 1138 1315 LDE B1.3 156

INFERRED CORONAL HOLES. LOCATIONS VALID AT 20/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
NO EVENTS OBSERVED.

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 000 (0.0)

Total Events: 000 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3140. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 14:59:01 UTC
From: dstock@hpqmoca.sqf.hp.com
Message-ID: <Cn0sAE.KnJ@hpqmoea.sqf.hp.com>
Source record: 269483
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

Mike Willis (M.Willis@ee.surrey.ac.uk) wrote:
: In article <CMIACE.D9C@hpqmoea.sqf.hp.com>, dstock@hpqmoca.sqf.hp.com (David Stockton) writes:
: |>
: |> I'm happy with my choice, a Diesel powered Range-Rover derivative
: |> called a "Discovery"
: |>
: |> Give serious thought to Diesels, no ignition, no computers
: |>
: |> David GM4ZNX
: Yes, but at a mere 18,000 pounds not many can afford such a car. Practically, I
: found the Cavallier reasonable RF quiet. Fiat Uno, too noisy. Diesels are
: definately better, they have a bigger battery too.

: Mike

18,000 ho ho, you've been reading the brochures ! Just decide on a
few creature comforts, a radio other than the one that comes standard
(unbelievably nasty) and you are talking a lot more dosh still. I managed
to resist the temptation of the central heating boiler and freezer, but
occasionally wonder about adding a winch. The headlamps are a bit
lacking (remember Spike Milligan's landladies' light-bulb jokes?) so a
pair of decent lamps is essential, and the lamp bracket needed is #200+
bull-bar shaped... these things are not much diffeerent to range-rover
prices when you get to decent levels of equipment...

With a heavy trailer behind and a pair of large horses, it's true
class shows.

The local RIS man has been given a Discovery with a pneumatic mast
through the roof. He's as happy as the proverbial dog with 2 tails.
they've bolted a 240v generator where the airconditioner pump would go.

Note for US readers, see lower photo on Feb QST cover to see one of
these vehicles out for a little fun....

Cheers
David

3141. Alinco DJ-180...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 15:16:44 UTC
From: asandor@kaiwan.com
Message-ID: <2mkdos$hkg@kaiwan.kaiwan.com>
Source record: 269484

Hi, I am kinda new at this. I just picked up an Alinco DJ-180 TH and was wondering if there was some reference book that was out that talked about it's features. The documentation that comes with it isn't very good.

Thanks,
Alex

3142. Re: Jeff Herman wins the Net Nazi award.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 15:25:26 UTC
From: flanagan@niagara.Tymnet.COM
Message-ID: <2mke96$3m3@tymix.Tymnet.COM>
Source record: 269486

Yet another entry for the old KILL file, courtesy of these two.
--
Dick Flanagan, W6OLD dick@libelle.com
Libelle Productions, Minden, NV, USA MCI Mail: 412-2140
Voice: +1 702 782 0806 GEnie: FLANAGAN

3143. Re: Long directories

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 15:27:46 UTC
From: n1ist@netcom.com
Message-ID: <n1istCn0tMA.n2w@netcom.com>
Source record: 269487

In article <9403201334591.gilbaronw0mn.DLITE@delphi.com> gilbaronw0mn@delphi.com (Gilbert Baron) writes:
-Scott Has again posted the LONG ftp directory. Is there no one else that is
-offended by the severe breach of netiquette.

a) It is not a frequent posting - I have only seen it twice
b) It was identified in the subject line, so you can just skip it
c) Most news readers have a way of either showing only the header or
pausing after each screen full -
d) Just either skip it or stop after the first screen

/mike

--
\|/ Michael L. Ardai N1IST Teradyne ATG Boston
-*- ---
/|\ ardai@maven.dnet.teradyne.com n1ist@netcom.com

3144. Re: Looking for Long. and Lat. information

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 15:31:30 UTC
From: jayk@fc.hp.com
Message-ID: <Cn0tsI.K2I@fc.hp.com>
Source record: 269488

fcs$1224@altair.selu.edu wrote:
: I am looking for an anonymous ftp site from which I can get the
: longitude and latitude of a fair number of places. It doesn't have
: to be a complete listing. I am mostly interested in places outside
: of the United States, especially Australia.
: Thanks,
: Tom N5EVM

telnet martini.eecs.umich.edu 3000

It has lots of US data and some foreign data. Just telnet to the system
and enter the name of the town (also has some mountain peaks, etc).

73, Jay K0GU jayk@fc.hp.com

3145. Participant Classification rb318

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 15:48:07 UTC
From: enge@almaden.ibm.COM
Message-ID: <199403211550.HAA03270@ucsd.edu>
Source record: 269489

Bid: $RACESBUL.318

TO: ALL EMERGENCY MANAGEMENT AGENCIES VIA AMATEUR RADIO
INFO: ALL COMMUNICATIONS VOLUNTEERS IN GOVERNMENT SERVICE
INFO: ALL AMATEURS U.S (@USA: INFORMATION); CAP; MARS
FROM: CA GOVERNORS OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 Meadowview Rd., Sacramento, CA 95832
Landline BBS Open to All: 916-262-1657
RACESBUL.318 RELEASE DATE: March 21, 1994

Subject: MGT - Participant classification

Question: How are participants in a communications reserve program, such as RACES, classified; and if so, why?

Response: In its communications reserve program plan, such as the RACES plan, a jurisdiction identifies the program participants based on their level of activity and screening required.

Typically a Level 1 participant is one that is screened by a local law enforcement agency before acceptance into the program (i.e., there is a record check as a minimum).

Level 1 participants are active, trained and involved, typically putting in from 2-20 hours a week in service. Level 2 is a person who is not screened and is NOT a regular participant, but signed on for a particular incident. They are normally not screened as their access to facilities is usually very limited. As temporary responders, level 2, if utilized at all, are listed on a incident roster, rather than the normal roster. To put it differently, the Level 1 is that which can be relied upon, while Level 2 is for a possible, or past use. Sometimes people start out on one level and find it appropriate to change to the other one as their time, experience and interests vary.

eom

3146. Re: ARLB026 Phone interference survey

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 15:52:47 UTC
From: jfw@ksr.com
Message-ID: <2mkfsf$j04@hopscotch.ksr.com>
Source record: 269384

w1aw-list-approval@WORLD.STD.COM (ARRL) writes:
C>The FCC has released the results of a telephone interference survey
Q>just completed. 35 FCC field offices each picked three random cases
>of telephone interference on record and then visited the scene. The
D>transmitting stations included 47 Citizens Band; 27 Amateur; 23 AM
X>broadcast; 10 FM broadcast; and one international broadcast station.
^^

Wow. They should just re-market that phone as a shortwave set ;-).

3147. ARLP011 Propagation de KT7H

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 16:09:38 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlp011.1994@ampr.org>
Source record: 269491
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB PROP @ ARL $ARLP011
ARLP011 Propagation de KT7H

ZCZC AP25
QST de W1AW
Propagation Forecast Bulletin 11 ARLP011
From Tad Cook, KT7H
Seattle, WA March 18, 1994
To all radio amateurs

SB PROP ARL ARLP011
ARLP011 Propagation de KT7H
Solar flux was down this past week, but geomagnetic disturbances
remained frequent. The average daily Boulder A index was over 25
throughout the week. This made HF communication spotty, but it
enhanced north-south propagation on the higher frequencies.

Look for solar flux to rise to about 110 around the end of the
month. After April 4 the geomagnetic field is likely to become
quite disturbed again if the same active solar regions from four
weeks earlier again rotate into view.

Sunspot Numbers from March 10 through 16 were 56, 66, 78, 60, 35, 41
and 31, with a mean of 52.4. 10.7 cm flux was 88, 88.1, 92.8, 90.1,
87.2, 87.4 and 86.2, with a mean of 88.5.

The path projection for this week is from Springfield, Illinois to
Japan.

80 meters should be open from 0930z to 1200z, and 40 meters from
0800z to 1300z. Check 30 meters around 0730z and again from 1230z
to 1430z. On some days 20 meters should be open from 1400z to
1530z. Check it again from 2100z to 0030z. 17 meters looks good
from 2130z to 0030z. 15 meters may be open some days from 2200z to
2330z. 12 and 10 meters do not look good over this path at this
time, unless the solar flux takes a sudden jump of 40 points or
more.
NNNN
/EX

3148. TEST -> Don't read!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 16:33:57 UTC
From: mcduffie@unlinfo.unl.edu
Message-ID: <2mki9l$1ll@crcnis1.unl.edu>
Source record: 269382

Posted 9403211637z . . test of delivery time

3149. Packet address help

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 16:53:36 UTC
From: cravitma@cps.msu.edu
Message-ID: <2mkjeg$q7r@msuinfo.cl.msu.edu>
Source record: 269385

Hi! I am trying to send mail to a friend of mine in Toronto by packet.
I have a partial address (up to the @bbs part) and need the rest of
the address. If anyone can help me, I would appreciate it.

The part I have is

va3pi@va3bbs

I don't have the .#xx.xx.xx.xx part of the address.

Please reply via email.

73,
/Matthew

--
Matthew Cravit, N9VWG | All opinions expressed here are
Michigan State University | my own. I don't speak for MSU
E-Mail: cravitma@cps.msu.ed | and they don't speak for me.
GO/CS -d+@ -p+ c++ !l u+(++) e+(*) s/+ n+(---) h+ f+ !g w+(+++) t++@ r(+) y?

3150. Re: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 17:17:08 UTC
From: kchen@apple.com
Message-ID: <2mkkqk$5dl@apple.com>
Source record: 269493
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

NADO000 <NADO@UNB.CA> writes:

>In article <2mfkd6$8p4@apple.com> kchen@apple.com (Kok Chen) writes:
>>>didn't give me a single problem, nor to anybody of my
>>>friends, who seeing my 990 chose to buy similar rig
> ^^^^^^^^^^

>I don't think one should pick a radio just on looks.

QRZ, QRZ. That ain't me who said that!

I also own a Ten-Tec rig. Have you ever seen a Ten-Tec rig that
looks good? :-) :-). Moreover, I drive a Saab and I get taunted
all the time for uglifying the parking lot.

Vote for best looking rig: the National HRO-500.

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

3151. Info on converting commercial gear

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 17:18:49 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1994Mar21.171849.6081@rsg1.er.usgs.gov>
Source record: 269494
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

I just invested $8 at a swap meet for two mobile VHF tranceivers. They are set for the 150-151 Mhz range, and I would like to see if I can get them set up for repeater/packet use. The manufacturer is 'General Aviation Electronics' and the model is 'Genave Mobiline I'. The seller (of course) claims they work and put out about 20W. I can probably get crystals from Jan, but I would appreciate any info I can get on converting these. Thanks...

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

3152. Re: WWV Voice announcments??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 17:24:42 UTC
From: etjfonte@ci.ua.pt
Message-ID: <Cn0z19.Asu@news.ci.ua.pt>
Source record: 269495

Stan Olson (solso@prairienet.org) wrote:

: Does any one have a schedule of when WWV announces the solar flux
: and stuff?? If you could mail me the times/freqs, that would be
: great!! Thanks

WWV broadcast every hour at minute 18 (e.g. 20:18 , 21:18...)
and the freq. are 5Mhz,10Mhz,15Mhz,20Mhz (I think the last one its better)
good luck with Dxing ...

best 73's de CT1ENQ
--
|---|
Jose' Miguel M.B.Fonte	Universidade de Aveiro - PORTUGAL
	Departamento de Electronica e Telecom.
E-mail : etjfonte@ci.ua.pt	--
	Ham callsign : CT1ENQ "always QRV"

3153. Re: Why no 10 meter activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 17:50:35 UTC
From: kchen@apple.com
Message-ID: <2mkmpb$aab@apple.com>
Source record: 269497

brunob@hpldsla.sid.hp.com (Bruno Bienenfeld) writes:

>We are approaching Sunspot minima and MUF during this period of time is
>at his low. Now is a time of real DX hunting with endles time spining
>the dial of RX to be rewarded with unexcpected new country.

Indeed. I bagged ZK1AT (N. Cook Island) on 10m phone just yesterday
afternoon (solar flux in the high 80s or low 90s, I believe).
40 watts into a 13 foot vertical with a 6 foot counterpoise from
a third floor apartment. Nothing fancy.

>With beam you may have better chances especialy in south to north direc.
>however be pationed and perssistent - in another 2 to 3 years 10 will be
>back in all his glory.

Beam antenna? That is a luxury, Bruno. HI.

>Follow the sunspot # on WWV or beter observ by
>yourself with appropriate equipment - sun filters - since you can get
>blind without them.

Even better, project the sun onto a piece of cardboard using a long
focal length lens, or use "eyepiece-projection" with a telescope.
That way, you never have to look directly at the sun.

I still think the WWV method is superior. It is perfectly safe and
it works even when it is cloudy. Your tax dollars paid for it
already, anyway :-).

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

3154. Re: 2x0 callsigns? (was: 1x1 Callsigns?)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 17:54:04 UTC
From: kchen@apple.com
Message-ID: <2mkmvs$ami@apple.com>
Source record: 269498

jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:

>In article <2lpa6o$gkd@ccnet.ccnet.com> rwilkins@ccnet.com (Bob Wilkins n6fri) writes:

>I guess Hawaii hams will be vying for 2x0 callsigns since we have to
>have the mandatory `H6' in the prefix. Not much of a choice:
>AH6, KH6, NH6, WH6. Phooey. [Hey, now there's a neat call: PH0OEY.]

>Jeff NH6 IL
^^

QSB really bad into California, Jeff.

:-) :-)

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

3155. Re: HAM word origin!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 18:19:00 UTC
From: pschleck@cwis.unomaha.edu
Message-ID: <pschleck.764273940@cwis>
Source record: 269499

In <2mii8i$iek@altitude.HIP.CAM.ORG> ve2cnd@CAM.ORG (Alexandre Bourgeois) writes:

> Hello everybody....

> The origin of the word 'HAM' come from the first letters of the
>first three guys to experiment radio. They were from the Harvard Radio
>Club... Their names are Hyman, Almy and Murray.

> Originally, they named their telegraph station
>"HYMAN-ALMY-MURRAY" but it was too long, so they reduce it to "HY-AL-MU",
>but there was a problem : a mexican boat was named "HYALMO", so there was
>a little confusion... So, they finally named their station "HAM"...

> Oh yeah... That was in 1908....

> 73's de Alex, ve2cnd@CAM.ORG

Amusing, but ultimately a highly-speculative urban legend (along with
many of the other semi-plausible explanations offered). I tend to
believe the land-line telegraphy story (with their "hammy" operators)
offered by "200 Meters and Down," among other historical references.

I'm currently working on a researched entry for the FAQ to summarize all
of these, hopefully with some historical documentation. Watch for
results soon.

73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

3156. Re: 1994 Contest calendar enclosed

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 18:23:38 UTC
From: sas@eng.xyplex.com
Message-ID: <2mkona$asn@xap.xyplex.com>
Source record: 269500

dbushong@wang.com (Dave Bushong)
>
>Here is the 1994 contest calendar from CQ.
[lots deleted]
>ARRL June VHF Contest 2/Jun 33

Looks like either CQ misprinted this or someone somewhere made an assumption that the ARRL June VHF QSO Party is on its traditional second weekend of June date. As it stands now, the ARRL June VHF QSO Party is on the FIRST weekend of June in 1994.

I've already written letters to several ARRL people to complain about the date change. Dave Sumner at ARRL HQ replied to tell me he is passing it off to the ARRL Membership Services Department. I don't think there's much chance of the date being moved back to its traditional second weekend of June.

73,
Scott WO1G
sasminkey@eng.xyplex.com

3157. Ramsey P-IBM Packet Modem Help

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 19:11:20 UTC
From: prg@theborg.ssd.ray.com
Message-ID: <1994Mar21.191120.3519@theborg.ssd.ray.com>
Source record: 269502

HELP????

Well, maybe it's not so urgent, but...

I recently completed my Ramsey FX146, which seems to be working
just fine, so I figured I'd tackle the P-IBM Packet Modem.

Well, it only took a couple of hours to get put together, BUT
I can't seem to get anything out of it.

After looking through the schematic, and also looking at the serial
port signals, I've got a feeling something's wrong here.

The schematic (and artwork) show that the Packet RXD signal (from
the modem) is wired to pin 8 of the DB-9 computer serial port
connector, BUT, as far as I can recall (and the table on page 15
confirms), pin 2 is supposed to be RD for the computer. TXD is
wired to pin 4, but the table says it should be 3. RTS is wired
to the PTT signal (which seems ok, I guess). In fact, the packet
modem has pin 2 not connected to anything...

I quit the Baycom software and brought up a term program, which
showed no data when connected as instructed... but I DID get "activity"
on the display when I jumpered pin 8 (modem) to 2(computer) through
a break-out box... (Even with this jumper connection, the Baycom
software just sits there...).

I called Ramsey and was told to just simply connect the modem 9-pin to
the computer 9-pin 1-for-1.... but I just don't get it...

Has anyone else gotten this thing to work with a PC/AT style 9-pin
(or otherwise) connector as instructed, or in any way at all..??

Has anyone used the BayCom software with this unit, and am I
missing something big here??

The kit design is several years old.... I'd like to think that SOMEONE
has messed with this before....

Thanks in advance, and 73's all around...

Paul Gosselin (N1RHS)
prg@borg.ssd.ray.com
or
gosselip@ccmail.ssd.ray.com
1-401-842-4398 days

3158. Re: Macintosh Amateur Radio Software - January 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 19:27:02 UTC
From: tstader@aol.com
Message-ID: <2mkse6$o2u@search01.news.aol.com>
Source record: 269503

In article <2m4g40INNhgv@sweetpea.genrad.com>, dls@genrad.com (Diana L. Carlson) writes:

And I have noted this in the latest version to be relased in amonth or so.

Thanks Diana... sorry you lost your Mac! I know that many people enjoyed using your Hyoercard stacks to prep for their tests!

Has anyone else picked up the role of keeping the stacks up-to-date? Is there a volunteer out there on the net?

73 for now.... c u on the shortwaves
Terry Stader - KA8SCP
America Online Ham Radio Club Host
Ham Radio Software for the Macintosh List Maintainer

3159. Re: Info Req. OMEGA SYSTEM

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 19:30:07 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <Cn14u7.MBD@cscsun.rmc.edu>
Source record: 269505

Bruno Mabboux (mabboux@vcnam.cnam.fr) wrote:

: Hi!

: I need regular information on the OMEGA SYSTEM ,
: (10 kHz world wild interferometric radio localization network).

: Where can I obtain information, as like on/off station/channel activity
: or power modification .

: Thanks for advance .

: Bruno Mabboux .

I think the NIST has an anonymous ftp site (or perhaps a gopher server) with
stuff like that on it.

--
David Tiller | Network Administrator | Voice: (804) 752-3710 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
"Drunk, [Beowulf] slew | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
no hearth companions." | Ashland, Va 23005 | 77d 31' 32.19" W |

3160. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 19:48:54 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <Cn15pI.L7H@news.Hawaii.Edu>
Source record: 269392

In article <2m8ktm$21a@apple.com> kchen@apple.com (Kok Chen) writes:
>wjturner@iastate.edu (William J Turner) writes:
>
>>In article <2m09j7$4i@apple.com> kchen@apple.com (Kok Chen) writes:
>>> .....
>>>Geez, perhaps I can move to the UAE and use A6TY :-).
>
>>That call wouldn't be leagal there, as A6 is the *prefix*, and the prefix does
>>*not* include the mandatory number. Thus for my call, N0RDV, the prefix is N,
>>not N0. Therefore, calls in UAE could be A6#XX, but not A6XX.
>
>
>Since V7 is the *prefix* for Marshall Is., the V7A and V7X stations
>I recently worked must have been a figment of my imagination. Prefix,
>no "mandatory number," one letter suffix.
> .....
>
>I would be really interested to know where Will's "mandatory number"
>for these station callsigns are. I sure can't spot them.
>

Kok & Will: A number is appended following the prefix if and only if
the country in question has divided itself into districts. Thus, because
the Marshall Islands are so small in land area (lots of islands, though)
the Marshallese government has chosen not to partition the islands
into different radio districts.

Jeff NH6IL

3161. Re: Phonetic Alphabets

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 19:52:11 UTC
From: wjturner@iastate.edu
Message-ID: <2mkttb$r5l@news.iastate.edu>
Source record: 269506

In article <CMvsHE.A1A@brunel.ac.uk> cs90nrs@brunel.ac.uk writes:
> The NATO alphabet is identical. It should be Golf, not Gold. Notice
> that Quebec should not be pronounced correctly (kwe-bec instead of
> ke-bec)!

Here in the US, us in AFROTC, at least, are *also* taught to pronounce Quebec
as KAY-BEC.

--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

3162. Using a cell phone transmitter ??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 19:53:15 UTC
From: edward@cs.ualberta.ca
Message-ID: <2mktvb$9e9@scapa.cs.ualberta.ca>
Source record: 269507

Has anybody here experimented with using the transmitter section
of a cell phone. Can the xmitter section be effectively isolated
from the rest of the phone or is the typical cell unit highly
integrated. I've never opened one up (yet :) so I'm interested
in any comments, speculations, experiences etc.

Thanks

edward@cs.ualberta.ca

3163. Info on Dayton Hamvention Please

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 19:59:34 UTC
From: mcraek@mailserv.nbnet.nb.ca
Message-ID: <mcraek.31.0013FEC6@mailserv.nbnet.nb.ca>
Source record: 269526

A co-worker and his dad are driving to Dayton to take in this event, and asked me to post requesting any information available. They are most interested in an agenda or schedule of events, local attractions, accomodations, and so on. This may be his dad's last hurrah due to cancer, and his son (both life-long amateurs) hopes to make it a good trip for both. They also recently lost their mother/wife to cancer as well.

Any input appreciated. Email to mcraek@nbnet.nb.ca. Thank you.

3164. Re: Best cars for mobile HF/VHF??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 20:17:13 UTC
From: serafin@metronet.com
Message-ID: <Cn170q.BzH@metronet.com>
Source record: 269393
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,alt.test

Hey what about a HUMMER!!

3165. 2m HT recomendations ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 20:39:33 UTC
From: harland@sabre.mech.ubc.ca
Message-ID: <2ml0m5$3b4@nntp.ucs.ubc.ca>
Source record: 269508

I am thinking about buying a 2m HT. I have read the glossy ads,
in CQ and 73 but I can not come to any conclusions.

Which do you use ? What are its good / bad points ?

Is power important or is battery life more critical ?

What features are important DTMF, CTCSS, pageing, ...

I am looking at models from Kenwood, Yeasu, and I-COM. I am
leaning toward the Kenwood TH-28A. I am also looking at the
Yeasu F-11R and 411 as well as a few models from I-COM.

I would appreciated any recomendations or info on these or
other 2m HTs before I take the plunge and buy one.

I do plan on carring it with me once and a while but moslty I
will use it in my car or at home.

Thanks,
Harland

--

Harland MacKenzie "Once you have eliminated
Department of Mechanical Engineering the impossible, what ever
University of Brithish Columbia remains, no matter how
Vancouver, B.C. Canada improbable, must be the
truth",
Internet: harland@mech.ubc.ca Sir Arthur Conan Doyle
CompuServe: 72162,2245

3166. QSL Route

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 21:20:35 UTC
From: GEITGEY%UKANVM.BITNET@vm42.CSo.uiuc.EDU
Message-ID: <199403212130.NAA14585@ucsd.edu>
Source record: 269509

Hi Gang,

Does anybody out there in Cyberspace, know the QSL route for VP2MKY or
the where abouts of KY5R?

Thanks in advance

Lynn Geitgey KB0LRB

3167. Re: 2 meter use in London, England?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 21:55:03 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <764286903snz@g8sjp.demon.co.uk>
Source record: 269510

In article <Cn0zAH.5tu@brunel.ac.uk> cs90nrs@brunel.ac.uk writes:

> London is allocated D but there aren't any repeaters in the London
> area that have CTCSS yet (I'm sure someone will correct me if I'm wrong)

S'right. The first is likely to be the replacement West London machine, which
is likely to be installed about an hour after I remove it from the bench
where it's being soak-tested (since October ...)

I am hard put to recall more than two 2M repeaters ('PI and 'KN) in the Home
Counties area which currently use CTCSS. 70CMs is a different story ...

--
Iain Philipps

3168. ICOM 24AT Information wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 21:55:07 UTC
From: augusj@rembrandt.its.rpi.edu
Message-ID: <2ml53r$o54@usenet.rpi.edu>
Source record: 269511

Hi, I have an ICOM 24AT that I want to modify to transmit
out of band. And I have a text file I ftped off of
I think oakland.oak.edu which says how to do it, but it
mentions diodes by number and not physical location.
If anyone has the ICOM 24AT service manual I would appreciate it
if you would email me. . .
I need to know the physical location of:
D13
D7
D8
D14
If you could scan the page and uuencode it and email it I would
even more appreciative. . .

In any case any info or help is greatly appreciated. . .

-Jon
augusj@rpi.edu

3169. Re: 1994 Contest calendar enclosed

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 22:06:55 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <764287615snz@g8sjp.demon.co.uk>
Source record: 269512

In article <2mkona$asn@xap.xyplex.com>
sas@eng.xyplex.com "Scott Sminkey - Sustaining Eng Group" writes:

> dbushong@wang.com (Dave Bushong)
> >
> >Here is the 1994 contest calendar from CQ.
> [lots deleted]
> >ARRL June VHF Contest 2/Jun 33
>
> Looks like either CQ misprinted this or someone somewhere made an
> assumption that the ARRL June VHF QSO Party is on its traditional
> second weekend of June date. As it stands now, the ARRL June VHF
> QSO Party is on the FIRST weekend of June in 1994.

While you may think this is a bit of a bummer, it *does* coincide with the IARU Region 1 50MHz event (run for the first time in 1994).

Last year, the RSGB 50MHz Trophy contest was run on the same weekend as the ARRL June VHF QSO Party. Although our contest was 8 hours only on the Sunday, I was set up and ready by 1600z on the Saturday. With nothing better to do during the evening, I sat back from my (relatively elevated) position in grid IO82jj listening to the Es QSOs from central / southern Europe rolling past. For a few minutes, the band opened to W4-land, and there were a few surprised ops saying things like 'GW0RDI/P what was that grid again???'

This year, the contest will be 24 hours (1400z-1400z) and you can expect all of the European big guns (this is a relative term - current UK licence restricts *ERP* on 50MHz to 100W) to be active. You may just pick up a few extra grids on 6M this way. It's worth looking ...

I have what most Europeans would describe as a 'good' station on 50MHz - 2 x 7el Create long Yagis plus 1 x 8el Create long Yagi, both fed from a single TX, and feeding separate ICOM 726 xcvrs for receive. If / when the UK authorities see sense, I have a Henry 6N2 .....

What hours (GMT) does your contest run?

--
Iain Philipps

3170. Re: What is (and how do I make) a diplexer?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 22:48:32 UTC
From: ck146@cleveland.Freenet.Edu
Message-ID: <2ml880$9dt@usenet.INS.CWRU.Edu>
Source record: 269513

I looked in to this about a year ago. There is an excellent article in the October 1991 issue of QST. The sticking point for me was finding the three ait dielectric trim caps. By the time I have paid for those at about US$8.00 each (small lot cost) I have paid for half of one already built and tested. I bought one for my car and have been happy with it. If you are still interested in building your own, send me your snail-mail address and I'll send you a copy of the article.

73

de Bill, KD6MCI
E-Mail WAKIRSAN@ANANOV.REMNET.AB.COM

3171. Sonobuoys

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 23:14:50 UTC
From: Kenneth.E.Harker@Dartmouth.Edu
Message-ID: <2ml9pa$el4@dartvax.dartmouth.edu>
Source record: 269514
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner

(Warning: This is somewhat random...)

Last night, three of my fraternity brothers and I were playing poker on the first floor of the house when another brother came back from a weekend at home, and promptly unloaded, among other things, three old sonobuoys. It seems that his brother is an oceanographer, and they were just laying around the basement. Apparently they were used for mapping ocean currents (rather than ASW for example.) His dad wanted to throw them out as they wer etaking up space, but said brother decided maybe someone at school would be interested in them, so he threw them in the trunk and hauled them up here.

So, today we got them out and examined them. Two of them have been opened before. One is small with a propellor-like assembly that evidently flips out and acts to slow down the buoy on its descent into the water. The other one (and the third one, which looks just like it) has a plastic parachute in it. We didn't take either one of them apart completely, but I think I have a basic idea of where the radio units must be in them.

I imagine that the two buoys that have been opened are probably "dead" as there is probably no way to turn them off once the two "buttons" on the bottom of the thing have been triggered. I am curious though - if we were to somehow activate the third, sealed buoy, and it's battery still functioned, what sort of signal does it put out, and is there any way we could monitor it? Alternatively, does anyone know what sort of radios these things have in them? Are they useful for anything other than sonobuoys? What would they be worth?

Also, are there things I haven't considered about these (like safety issues, illegal transmission issues, etc...) that we should be considering while we play around with these? We're over 225km from the ocean here, but we have a large pond nearby, and there's always the Connecticut River :-). If anybody knows anything about these, I can probably find all sorts of numbers and marking to help identify the things.

Thanks in advance and 73's,

==
Kenneth E. Harker N1PVB Dartmouth College Amateur Packet Radio
kenneth.e.harker@dartmouth.edu Hinman Box 1262 n1pvb@w1et.nh.usa.na
(603) 643-6549 Hanover, NH 03755 or n1pvb-5 on 144.99
==
(PGP Public Key now available on request)

3172. Re: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 23:15:13 UTC
From: scott@lvld.hp.com
Message-ID: <2ml9q1$25h@hplvec.lvld.hp.com>
Source record: 269515
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

NADO000 (NADO@UNB.CA) wrote:

Referring to the choice between a Yaesu FT990 and a Kenwood TS850:

: A friend has both the Yeasu 757 and a Kenwood 440AT and he confirms
: the same findings. The Yeasu is more pleasant to listen to and most
: of us do a lot more listening than talking. My next rig is likely to
: be a Yeasu.

This seems to be a popular pair of radios. There've been several postings over the last months asking for comparisons between these rigs. I've also narrowed my choices down to these two if (when?) I ever replace my Drake rigs. One thing that almost never seems to get mentioned however...

How do these rigs sound on the air! At the risk of starting a flame war, I'll venture the opinion that, in general, I find Kenwoods putting out among the best sounding signals on the air. I've got to admit that I enjoy hearing the reports of superior audio quality that my Drakes seem to get on sideband, and I'd hate to give that up. I like putting out a good pleasing signal! If it weren't for that factor, I'd probably lean towards the Yaesu. As it is, I'm not sure.

Any thoughts or comments on the transmitting audio qualities of the major brands on sideband, particularly these two radios?

Scott Turner N0VRF scott@hpisla.LVLD.HP.COM

3173. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 23:23:09 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <764292189snz@g8sjp.demon.co.uk>
Source record: 269516

In article <Cn15pI.L7H@news.Hawaii.Edu>
jherman@uhunix3.uhcc.Hawaii.Edu "Jeffrey Herman" writes:

> Kok & Will: A number is appended following the prefix if and only if
> the country in question has divided itself into districts. Thus, because
> the Marshall Islands are so small in land area (lots of islands, though)
> the Marshallese government has chosen not to partition the islands
> into different radio districts.

BZZZZZZZZZTTTTT !!!!

Potentially wrong answer :-)

Lotsa countries use the number(s) for other things. F'rinstance, in the UK
it denotes a licence *class*. The 'regional' identifier is a letter. Of
course, it can be said that the UK is a collection of countries, and therefore
the additional letter not a regional identifier at all.

Regardless of all that, your statement doesn't square in countries which have
numbers in their calls which are not regionally related.

If *either* of the things I've said above are true, you'll need to rethink
your views on the matter :-)

--
Iain Philipps

3174. VHF/UHF this weekend

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-21 23:48:17 UTC
From: adams@chuck.dallas.sgi.com
Message-ID: <Cn1GsI.Hu@odin.corp.sgi.com>
Source record: 269517

Saturday nite, March 19th, I was at a St. Patricks
Day party for tall people. Stayed until after midnight -
I was not drinking alcholic beverages, thank you. :-)

I got home to the ranch about 1:30am and decided to
check the TV for possible late news. I don't have
cable, but do have a small yagi for TV/FM in the
attic and it's pointed to the south. I was able
to pick up signals on most channels up to 56, i.e. there was
a signal of pretty good quality on most.

I was getting stations from Houston, Baytown (near
Houston), and other places to the south. Did
anyone happen to be on VHF? Had similar, but not
as good, reception last night. I'm located 35
miles north of Dallas on I-35. Denton County -
are rare one on CW. :-)

Just checking to see if you guys/girls were up
late. Only the OFs, huh? :-)

dit dit

p.s. the only VHF/UHF rig I have is the TV. :-)

--
Chuck Adams K5FO CP-60
adams@sgi.com

3175. Re: Canadian Reciprocal Info Please

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 00:06:19 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403211900591.gilbaronw0mn.DLITE@delphi.com>
Source record: 269518

>
>I will be in Edmonton in late June/early July and want to be able to use a

In Canada the reciprocity is automatic. Just bring your radio, eveidence of
its US origin, US Citizenship, and enjoy operating.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

3176. Re: 2 meter use in London, England?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 00:29:26 UTC
From: cs90nrs@brunel.ac.uk
Message-ID: <Cn0zAH.5tu@brunel.ac.uk>
Source record: 269519

In article <2m7i4r$34v@acorn.acorn.co.uk>, <agodwin@acorn.co.uk> writes:

[Text deleted]

> The tone in use is announced by a single letter
> tacked onto the end of the repeater's CWID - sorry, I forget the
> encoding scheme.

Since I just happen to have my rig handy...

A 67.0 B 71.9 C 77.0
D 82.5 E 88.5 F 94.8
G 103.5 H 110.9 J 118.8

London is allocated D but there aren't any repeaters in the London
area that have CTCSS yet (I'm sure someone will correct me if I'm wrong)

Nick

3177. Re: Canadian Reciprocal Info Please

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 00:31:15 UTC
From: Kenneth.E.Harker@Dartmouth.Edu
Message-ID: <2mle8j$jmf@dartvax.dartmouth.edu>
Source record: 269520

In article <9403211900591.gilbaronw0mn.DLITE@delphi.com>
gilbaronw0mn@delphi.com (Gilbert Baron) writes:

> >I will be in Edmonton in late June/early July and want to be able to use a
>
> In Canada the reciprocity is automatic. Just bring your radio, eveidence of
> its US origin, US Citizenship, and enjoy operating.

The inquiring party is British, not U.S.

==
Kenneth E. Harker N1PVB Dartmouth College Amateur Packet Radio
kenneth.e.harker@dartmouth.edu Hinman Box 1262 n1pvb@w1et.nh.usa.na
(603) 643-6549 Hanover, NH 03755 or n1pvb-5 on 144.99
==
(PGP Public Key now available on request)

3178. Re: Converting CB to 10 meters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 02:47:38 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <Cn1p3E.4Ap@news.Hawaii.Edu>
Source record: 269523
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <WAF.94Mar21163356@sunfish.zk3.dec.com> waf@sunfish.zk3.dec.com (William Freeman USG) writes:
> Note that it's probably not worth converting a CB to 10m
>*unless* the CB is an SSB model.

Not True! Keying the driver stage and adding an simple BFO to the receiver would give you a neat CW xcvr.

Jeff NH6IL

3179. Re: Why no 10 meter activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 02:52:55 UTC
From: as779@yfn.ysu.edu
Message-ID: <2mlmi7$3vc@news.ysu.edu>
Source record: 269524

Regarding Solar Activity information, don't forget to check out
the daily reports posted in rec.radio.info. Also notices of solar
flare and geomagnetic storm and auroral activity.

An elmer of mine in the early '60's said to me: "ALWAYS check
ten meters first, no matter how dead the bands seem. You'll be
surprised more often than you'd expect." He was right.

Chuck Reti Detroit ,MI WV8A
as779@yfn.ysu.edu
aa010@detroit.freenet.org
wv8a@wb8zpn.#semi.mi.usa.na

3180. CD-ROM QRZ! vs Buckmaster

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 03:10:32 UTC
From: jwh@kaiwan.com
Message-ID: <2mlnj8$q3v@kaiwan.kaiwan.com>
Source record: 269525

For the CD-ROM users out there, I was wondering if someone could give me the pro and/or cons of these two CDs. I'm trying to find the best one (obviously). I've seen QRZ! cd for $29.95 and the HamCall for $50. Anyplaces I might be able to get them cheaper?

--

John W. Herndon - jwh@kaiwan.com

3181. Daily Summary of Solar Geophysical Activity for 21 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 04:25:59 UTC
From: oler@rho.uleth.ca
Message-ID: <9403220426.AA25105@rho.uleth.ca>
Source record: 269527
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

21 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 21 MARCH, 1994

NOTE: Stratospheric warming over Alaska and northeastern Siberia has
weakened today, but the main warm region from southern Europe
across southwestern Siberia to Mongolia continues.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 080, 03/21/94
10.7 FLUX=090.7 90-AVG=106 SSN=026 BKI=2544 3432 BAI=021
BGND-XRAY=A5.4 FLU1=2.0E+06 FLU10=1.7E+04 PKI=3644 4443 PAI=027
BOU-DEV=019,092,044,044,029,054,024,015 DEV-AVG=040 NT SWF=00:000
XRAY-MAX= B8.2 @ 1626UT XRAY-MIN= A3.1 @ 0702UT XRAY-AVG= B1.2
NEUTN-MAX= +004% @ 0310UT NEUTN-MIN= -001% @ 2340UT NEUTN-AVG= +1.0%
PCA-MAX= +0.1DB @ 2350UT PCA-MIN= -0.3DB @ 0855UT PCA-AVG= +0.0DB
BOUTF-MAX=55357NT @ 0507UT BOUTF-MIN=55305NT @ 1917UT BOUTF-AVG=55329NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+078,+000,+000
GOES6-MAX=P:+144NT@ 1753UT GOES6-MIN=N:-156NT@ 0451UT G6-AVG=+098,+021,-047
FLUXFCST=STD:095,095,095;SESC:095,095,095 BAI/PAI-FCST=020,015,015/035,025,020
KFCST=4345 5444 2103 4011 27DAY-AP=046,011 27DAY-KP=7645 4333 2333 2232
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 20 MAR 94 was 27.5.
The Full Kp Indices for 20 MAR 94 are: 3- 3o 3- 3- 2o 2- 3- 3-
The 3-Hr Ap Indices for 20 MAR 94 are: 13 15 13 13 7 7 12 11
Greater than 2 MeV Electron Fluence for 21 MAR is: 7.5E+07

SYNOPSIS OF ACTIVITY

Solar activity was very low. The majority of today's
occasional subflare-level activity came from a newly emerging
active Region 7693 (N09W43). This group showed steady growth
and development throughout the day.

Solar activity forecast: solar activity is expected to be
very low to low.

The geomagnetic field ranged from quiet to minor storm
levels, with some brief major storm periods at high latitudes.
An initially quiet to unsettled field became disturbed after
0300Z and continued at mostly active to minor storm levels for
the remainder of the day. The source is not certain but could
be the result of a coronal hole which should be in a favorable
position at this time.

Geophysical activity forecast: the geomagnetic field is
expected to be at active to minor storm levels for the next
24 hours as coronal hole effects continue. Activity is expect-
ed to gradually decrease over the second and third days.

Event probabilities 22 mar-24 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 22 mar-24 mar

A. Middle Latitudes
Active 35/30/30
Minor Storm 30/15/20
Major-Severe Storm 10/05/05

B. High Latitudes
Active 35/30/35
Minor Storm 35/20/20
Major-Severe Storm 15/05/05

HF propagation conditions were near-normal over the low
and middle latitudes. Periods of active to minor geomagnetic
storming resulted in periods of poor propagation over the high
and polar latitude paths, particularly on transauroral
night-sector circuits. Similar conditions are expected over
the next 24 to 48 hours before settling back to more stable
levels on 24 March.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 21/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7692 N18W07 160 0050 HSX 02 002 ALPHA
7693 N09W43 196 0030 CRO 03 004 BETA
7688 N19W75 228 PLAGE
7691 N07W83 236 PLAGE
REGIONS DUE TO RETURN 22 MARCH TO 24 MARCH

NMBR LAT LO
7686 N08 037

LISTING OF SOLAR ENERGETIC EVENTS FOR 21 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 21 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
21/ 1548 1625 1703 N21W68 LDE B8.2 75

INFERRED CORONAL HOLES. LOCATIONS VALID AT 21/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
20 Mar: 1039 1138 1315 B1.3

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 001 (100.0)

Total Events: 001 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep

IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3182. subscribe info-hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 05:38:03 UTC
From: JPdunn@eworld.COM
Message-ID: <9403212138.tn13329@eworld.com>
Source record: 269378

```
subscribe info-hams JPdunn
```

3183. Repeater listings required!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 07:38:28 UTC
From: zennon@skyblu.usask.ca
Message-ID: <2mm79k$ae5@tribune.usask.ca>
Source record: 269379

Greetings all...I will be travelling from Saskatoon, Saskatchewan to
Victoria, BC via North Dakota, Montanna, Idaho, Washington. I would like
to use my 2m Handheld along the way.

If anyone has 2m repeater listings for these states, I would appreciate
hearing from you.

thanks a bunch and 73's,
Zennon Slowski (VE5 ZCS)

~~~~~~
Zennon Slowski
Computer Operations Internet/CA*net: zennon@sask.usask.ca
Department of Computing Services voice (work): 306-966-7811
University of Saskatchewan fax (work): 306-966-4938
Saskatoon, Saskatchewan voice (home): 306-343-9661
Canada S7N 0W0 RF(146.640): VE5 ZCS
~~~~~~

3184. Re: 1X1 callsigns

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 09:38:35 UTC
From: poa01@keele.ac.uk
Message-ID: <2mmear$1h9@gabriel.keele.ac.uk>
Source record: 269380

Devotees of this thread will surely want to look out for D3C who will be operating from 25 March to 31 March, including the WPX context. If you can get a word in edgeways you might ask him how he managed to get it!

GL

Martin G3USF.

3185. Re: HAM Origin?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 12:36:59 UTC
From: rohvm1.mah48d@rohmhaas.com
Message-ID: <rohvm1.mah48d-220394072901@136.141.220.39>
Source record: 269383

In article <2mj9eu$4p4@search01.news.aol.com>, adrandy@aol.com (Ad Randy)
wrote:

> The source for "HAM" radio is a magazine called Home Amateur Mechanics popular
> in the US very early in the century. They popularized home radio, as well as
> home avionics, and home inventions. The magazine had "HAM aviation" and "HAM
> invention" columns too. Their column "HAM radio" was probably the first of its
> kind. No doubt young inventors like Hiram Maxim and others read the book. --
> Randy Padawer, WA4FJF

This is one of a host of "authoritative" versions of the origin of the
word. If it were as clear-cut as you suggest, then all the different
origins wouldn't float around in the mythology. Much of the language of
the early hams was adopted from land-line telegraphy, which had been around
since 'way back in the mid-19th century, and tracking down real origins of
words at that remove is virtually impossible. No objection to your posting
your version, but I'm concerned that it's _not_ labelled as mythology.
This is a very powerful medium, and some researcher a century from now may
find a record of your posting and cry, "Eureka!"

--
John Taylor (W3ZID) | "The opinions expressed are those of the
rohvm1.mah48d@rohmhaas.com | writer and not of Rohm and Haas Company."

3186. Re: What is (and how do I make) a diplexer?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 14:33:07 UTC
From: galen@picea.CFNR.ColoState.EDU
Message-ID: <1994Mar22.143307.53867@yuma>
Source record: 269386

In article <2ml880$9dt@usenet.INS.CWRU.Edu> ck146@cleveland.Freenet.Edu (Bill Kirsanoff) writes:
>
>I looked in to this about a year ago. There is an excellent
>article in the October 1991 issue of QST. The sticking point for
>me was finding the three ait dielectric trim caps. By the time I
>have paid for those at about US$8.00 each (small lot cost) I have
>paid for half of one already built and tested.

I opened up a commercially available diplexer, and they don't use the caps mentioned in the article, they use two to four ceramic disc caps in parallel and air wound inductors. I duplicated what was in the article with cer disc substitutions, and it works BETTER than the commercial version. My layout was a lot tighter than the comm one, since they used a circuit board that could be machine stuffed.
The commercial version has about 1dB loss, mine has about 0.5dB and at least five fewer inches of conductor length, and I used tails for in/out.
73, Galen, KF0YJ

3187. Re: 1994 Contest calendar enclosed

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 14:44:47 UTC
From: cbetz@radioman.cray.com
Message-ID: <1994Mar22.084447.21602@ned.cray.com>
Source record: 269387

In article <2mkona$asn@xap.xyplex.com>, sas@eng.xyplex.com (Scott Sminkey - Sustaining Eng Group) writes:
> dbushong@wang.com (Dave Bushong)
> >
> >Here is the 1994 contest calendar from CQ.
> [lots deleted]
> >ARRL June VHF Contest 2/Jun 33
>
> Looks like either CQ misprinted this or someone somewhere made an
> assumption that the ARRL June VHF QSO Party is on its traditional
> second weekend of June date. As it stands now, the ARRL June VHF
> QSO Party is on the FIRST weekend of June in 1994.
>
> I've already written letters to several ARRL people to complain
> about the date change. Dave Sumner at ARRL HQ replied to tell me
> he is passing it off to the ARRL Membership Services Department.
> I don't think there's much chance of the date being moved back to
> its traditional second weekend of June.
>
>

In addition to that, I noticed that all of the VHF/UHF spring sprint dates are wrong. They've all been moved out by a week. This move IS for the better. Now the 2m sprint doesn't coincide with the NCAA basketball championship game and the 432 sprint isn't the Wednesday evening preceeding the Dayton hamfest, etc..

Charlie Betz N0AKC

3188. Re: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 14:49:14 UTC
From: jayk@fc.hp.com
Message-ID: <Cn2MI3.I8A@fc.hp.com>
Source record: 269388
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Scott Turner (scott@lvld.hp.com) wrote:
: How do these rigs sound on the air! At the risk of starting a flame
: war, I'll venture the opinion that, in general, I find Kenwoods putting
: out among the best sounding signals on the air.
: Scott Turner N0VRF scott@hpisla.LVLD.HP.COM

As I remember from the 850 review in QST sometime back they didn't like
the 850 at near full output on SSB. They claimed it got a bit dirty (wide)
I think. Maybe someone with the article handy can give the exact quote.

73, Jay K0GU jayk@fc.hp.com

3189. RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 15:28:45 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2mn2rd$ol0@vixen.cso.uiuc.edu>
Source record: 269389
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

It seems that the SSB quality depends on 3 factors:
1. Passband characteristics of the AF chain (including the microphone),
2. IMD of the PA,
3. Type of processing, audio or RF?

I am wondering why the QST reviews do not mention the type of processing,
which has a large effect on signal quality. Signals with audio processing
have higher content of AF harmonics, and are subsequently less efficient
(3db?) and more difficult to tune. All cheaper rigs such as IC 725-737,
FT 747-757, TS 430-450 use AF processing. IC 751-, FT990-, TS 830-
use RF processing. I am not sure about the rest.

Ignacy Misztal, NO9E, SP8FWB
University of Illinois
ignacy@uiuc.edu

3190. Re: HAM word origin!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 15:50:03 UTC
From: teacherjh@aol.com
Message-ID: <2mn43b$ik9@search01.news.aol.com>
Source record: 269390

> The origin of the word 'HAM' come from the first letters of the
>first three guys to experiment radio. They were from the Harvard Radio
>Club... Their names are Hyman, Almy and Murray.

This story is (or so I've heard) reported in the Congressional Record... these three were instrumental in retaining spectrum for amateur operators. According to the story, people began referring to their H.A.M. station... and thus the word became popularized... if this is true, there should be some print documentation in the newspapers and media of the day.

I'd be interested in what you come up with. :)

Jose

3191. ARLB027 Haller to head task force

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 17:44:53 UTC
From: w1aw-list-approval@world.std.com
Message-ID: <$arlb027.1994@ampr.org>
Source record: 269391
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB QST @ ARL $ARLB027
ARLB027 Haller to head task force

ZCZC AG91
QST de W1AW
ARRL Bulletin 27 ARLB027
From ARRL Headquarters
Newington CT March 22, 1994
To all radio amateurs

SB QST ARL ARLB027
ARLB027 Haller to head task force

FCC Private Radio Bureau Chief Ralph Haller has been named to head a Commission task force on personal communications services (PCS).

The Commission said that the task force would provide ''a focal point for all of the PCS issues currently before'' it. The task force would work with all of the FCC's bureaus and offices that are involved in PCS issues, and would be responsible ''for assuring consistency between policies and rules for narrow-band and wide-band PCS.''

FCC Chairman Reed Hundt said that ''I am confident that under the leadership of Ralph Haller, the PCS task force will lead the Commission in the timely development of a comprehensive regulatory framework for PCS.''

Other members of the task force include Tom Stanley, Chief Engineer; Robert Pepper, Chief, Office of Plans and Policy; Donald Gips, Deputy Chief, Office of Plans and Policy; and Michael Katz, Chief Economist.
NNNN
/EX

3192. QSL Route

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 19:58:06 UTC
From: pekkav@krksun.krk.fi
Message-ID: <1994Mar22.195806.24165@krk.fi>
Source record: 269394

Hello,

Have worked several times station VQ9AC and sent to USA ads 2 times
QSL-rq. Sending letter it came 2 times return with info address unknown.
Anybody knowing Jim's precise address ?. Please answer e-mail.

73 Pekka

e-mail : pekkav@krk.fi

3193. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 22:02:40 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2mnpu0$9ff@vixen.cso.uiuc.edu>
Source record: 269395
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

cowart@convex.com (Michael Cowart) writes:

>ignacy@ux2.cso.uiuc.edu (Ignacy Misztal) writes:

>>It seems that the SSB quality depends on 3 factors:
>>1. Passband characteristics of the AF chain (including the microphone),
>>2. IMD of the PA,
>>3. Type of processing, audio or RF?

>You are forgetting probably the most important factor, the voice characteristics
>of the operator. I recently sold a radio to a friend of mine. During the
>five years I had it, I consistantly got unsolicited comments on how GOOD
>my audio sounded. My friend is always getting complaints on his.
>I have heard him on a TS520, TS430, and now the Yaesu FT980 (not 990)
>His voice sounds like, well like it is being compressed.
>I have a resonating, full "FM" sounding voice. He doesn't.
>Voices are like faces, everyone would rather look at a pretty face
>than an ugly one (unfortunately, his face is prettier than mine hi hi),
>and when you hear a good-sounding voice, you ususally will compliment it.

>I know the purist (real ones and those who think they are) will take exception
>to this, but most commercially available radios have similar TX charactersitics.
>Yes, RF processors are superior than most AF ones, but in the 32 years I have
>been hamming, I have found that voice characteristics determine who gets
>unsolicited compliments.

>my $.02 worth

>Mike WA5CMI

>Extra Class since 1973
>5-band WAS, WAZ, DXCC (303 cfmd)
>Ragchewer
>Electrical Engineer, CONVEX Computer Corp.
>The opinions are mine alone, not my employer's

I agree but the reply is not quite on the topic. Surely a good driver
with Geo Metro may be faster than a poor driver with Ferrari, but it does
not mean that the GEO is better.
Ignacy, NO9E

3194. ARRL directory on oak.oakland.edu

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 23:09:19 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCn39nK.3Ez@netcom.com>
Source record: 269396
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,alt.radio.scanner

I have changed the location of the ARRL Information Server on
oak.oakland.edu

FROM /pub/hamradio/arrl/Server-files/info

TO /pub/hamradio/arrl/infoserver

73,
Scott

--
```
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
================================================================================
```

3195. DTMF generator for Sound Blaster/repeater controller in development

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 23:35:42 UTC
From: wkinning@nyx10.cs.du.edu
Message-ID: <1994Mar22.233542.8566@mnemosyne.cs.du.edu>
Source record: 269397

```
Here is a DTMF Tone Generator for the Sound Blaster written in Pascal.
Jim is working on a repeater controller based around a PC/XT system with
advanced features like voice mail and macro programming via 1200 baud ASCII.

Please reply to : jjacobse@siucvmb.siu.edu
-------------------------------------------------------------

(*
To All hams interested.

I said a long time ago that I would release this source code. Well, here
it is! It does work rather well, and in fact, better than the phone!
I am currently developing a ** FREE ** repeater controller package
around this idea, along with voice mail and the like, but, I am in
need of some more assistance. Is anyone interested in helping me out with
some ideas? I just need a jump start, and I would prefer to have some
source assembler code for another repeater controller.

Not too long ago, I saw such a program, but lost it (and the BBS is down!)
Please, if you can help me out, drop me a line via the internet address
given below (It is hard for me to read this newsgroup; just send me a note).

Thanks,
Jim (N9IEO)
internet: jjacobse@siucvmb.siu.edu

-------------------------------------------------------------------------------

DTMF Touch Tone Generator
Written by: Jim Jacobsen (N9IEO) (jjacobse@siucvmb.siu.edu)
This program uses the Sound Blaster FM chips to generate Touch Tones

*)

Unit SBlaster;
Interface
Uses Dos;

Procedure Generate_tone(c1,c2: word);
Procedure Release_tone;
Procedure touchtone(c: char);
implementation

Const
tns: array[1..8] of word = (920,1019,1586,1640,1824,1905,2004,2590);

Var
r1,r2: word;
```

```
(* This is an internal function to write a tone to the adlib/sound
blaster card *)

Procedure Writeport(reg,val: word);
var i,c: word;
Begin
port[$388]:=reg;
for i:=1 to 12 do c:=port[$388];
port[$389]:=val;
for i:=1 to 30 do c:=port[$388];
end;

Procedure Generate_tone(c1,c2: word);
Begin

writeport($b3,$2f); writeport($b4,$2f);
writeport($e0,0); { Set Wave for voice 1 }
writeport($e1,0); { Voice 2 }
writeport($c0,1); { Use Additive Synthesis }
writeport($c1,1);
writeport($20,1); { Multiple - 1 }
writeport($21,1);
writeport($40,$1); { Level - 0 Highest }
writeport($41,$1);
writeport($60,$f0); { Attack / Decay }
writeport($61,$f0);
writeport($80,$Ff); { Sustain / Release }
writeport($81,$Ff);
writeport($a0,c1 and $ff); { Note # }
writeport($a1,c2 and $ff);
writeport($b0,$30 or (c1 shr 8)); { Note on, Octave }
writeport($b1,$30 or (c2 shr 8));
r1:=c1 shr 8; r2:=c2 shr 8;
end;

(* This procedure silences the tones *)

procedure release_tone;
Begin
writeport($b0,r1);
writeport($b1,r2);
end;

(* This procedure is used to generate DTMF tones, use the valid DTMF
digits *)

procedure touchtone(c: char);
var
w1,w2: word;

Begin
c:=upcase(c);
if c in ['0'..'9','A'..'D','#','*'] then
begin
```

```
case c of
'1','4','7','*': w1:=tns[5];
'2','5','8','0': w1:=tns[6];
'3','6','9','#': w1:=tns[7];
'A'..'D': w1:=tns[8];
end;
case c of
'1','2','3','A': w2:=tns[1];
'4','5','6','B': w2:=tns[2];
'7','8','9','C': w2:=tns[3];
'*','0','#','D': w2:=tns[4];
end;
generate_tone(w2,w1);
end;
end;

end.
```

3196. FT5200 Questions

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 23:37:00 UTC
From: steve.allen@brent.uucp
Message-ID: <22653.553.uupcb@brent.uucp>
Source record: 269398

randyh@gvgadg.gvg.tek.com (Randy Hall) writes

>1. Without the separation kit for the front panel, does the panel just pop
>off for security concerns, or do you need a screwdriver to remove it from
>the front of the radio?
>2. With the separation kit, panel remoted, does the front panel just pop
>off from bracket?
The front panel pops off the radio and the remote bracket without
any tools. The cord for the remote bracket screws onto the front of
the radio. Screwdriver is required for that operation only.

>3. What does the bracket that holds the front panel consist of? How
>much freedom of mounting and angle adjustments are there?
The bracket is hinged, and allows the panel to rotate up and down.

>4. Where does the external speaker plug into to, the radio or remoted panel?
There are 2 speaker jacks on the back of the radio. One for the
primary band, one for the secondary band.

-Steve N2WSA <73277.620@compuserve.com>

. QMPro 1.51 . This information for entertainment purposes only

---
The Brentwood BBS! 12 Nodes (914)-381-1600

3197. IPS Daily Report - 22 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-22 23:42:53 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar22.234253.996@ips.oz.au>
Source record: 269399
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 22/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 22 MARCH AND FORECAST UP TO 25 MARCH

No warning is current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none

Observed 10.7 cm flux/Equivalent Sunspot Number : 091/036

1B. SOLAR FORECAST
23 March 24 March 25 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 090/034

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth: unsettled to active, with brief
minor storm period 12-15UT.

Estimated Indices : A K Observed A Index 21 March
Learmonth 21 4333 5423
Fredericksburg 17 22
Planetary 20 27

Observed Kp for 21 March: 3644 4443

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
23 Mar 20 Unsettled, with possible active periods.
24 Mar 15 Quiet to unsettled.
25 Mar 15 Quiet to unsettled.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
22 Mar normal fair-normal fair-normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
23 Mar normal normal normal
24 Mar normal normal normal
25 Mar normal normal normal
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were 15-20% depressed until 10UT, near normal
thereafter.

Observed T index for 22 March: 18

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
23 Mar 40 Near predicted monthly values.
24 Mar 40 Near predicted monthly values.
25 Mar 40 Near predicted monthly values.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331 |PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329 |West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330 |AUSTRALIA

3198. Telecom and Meteors

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 00:01:01 UTC
From: cdfore@rs6000.cmp.ilstu.edu
Message-ID: <1994Mar23.000101.38868@rs6000.cmp.ilstu.edu>
Source record: 269400

Help!! I'm Looking for info on using meteors to bounce signals for telecommunication. I saw a show in January on it. I have to write a paper on something in telecommunication and as you can see my writing sucks. But I think if I can get some info about something my prof has not hear of it will help. So is there anyone out there with info or know how I can get some.

E-mail cdfore@rs600.cmp.ilstu.edu

Curt Fore lost Student and new i-net user :->

3199. Re: Sonobuoys

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 00:21:32 UTC
From: donrm@sr.hp.com
Message-ID: <Cn3Czx.7qy@srgenprp.sr.hp.com>
Source record: 269401
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner

Kenneth E. Harker (Kenneth.E.Harker@Dartmouth.Edu) wrote:

> we were to somehow activate the third, sealed buoy, and it's battery
> still functioned, what sort of signal does it put out, and is there any
> way we could monitor it? Alternatively, does anyone know what sort of
> radios these things have in them? Are they useful for anything other
> than sonobuoys? What would they be worth?

These things used to be popular in the beginning days of 2 Meter FM;
there was an article published somewhere called the "sonobaby" that
showed how to convert one to the 2 M FM ham band.

The one I had had a saltwater activated battery that put out something
like 15 VDC and transmitted somewhere around 150 Mhz FM. There was no
effort made by the designer to miniaturize the circuitry, and it ran
something like 1 watt. There was also a timer circuit that melted a
fuseplug that sent the thing to the bottom after X hours of transmitting.
The body of the sonobuoy had about 100 feet of what looked like miniature
twinlead connecting the hydrophone to the FM transmitter.

I doubt seriously if the sonobuoy is worth anything other than a cur-
iosity point.

> issues, illegal transmission issues, etc...) that we should be

You can always take it apart, put in a ham band crystal and retune it.

Don Montgomery, K6LTS
donrm@sr.hp.com

3200. Daily Summary of Solar Geophysical Activity for 22 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 04:09:29 UTC
From: oler@rho.uleth.ca
Message-ID: <9403230409.AA00197@rho.uleth.ca>
Source record: 269402
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

22 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 22 MARCH, 1994

NOTE: A large region of stratospheric warming exists from southern to eastern
Europe and southwestern Siberia, and is strengthening. Warm air is
spreading north and northeastwards.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 081, 03/22/94
10.7 FLUX=091.1 90-AVG=106 SSN=035 BKI=4222 4322 BAI=013
BGND-XRAY=A7.7 FLU1=7.1E+06 FLU10=1.8E+04 PKI=4323 5333 PAI=018
BOU-DEV=067,017,011,018,066,028,017,016 DEV-AVG=030 NT SWF=00:000
XRAY-MAX= B3.0 @ 0644UT XRAY-MIN= A6.8 @ 0935UT XRAY-AVG= B1.0
NEUTN-MAX= +003% @ 0005UT NEUTN-MIN= -002% @ 1350UT NEUTN-AVG= +0.2%
PCA-MAX= +0.1DB @ 2350UT PCA-MIN= -0.2DB @ 2315UT PCA-AVG= -NANDB
BOUTF-MAX=55344NT @ 0126UT BOUTF-MIN=55306NT @ 1803UT BOUTF-AVG=55330NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+072,+000,+000
GOES6-MAX=P:+126NT@ 1735UT GOES6-MIN=N:-088NT@ 0449UT G6-AVG=+091,+021,-042
FLUXFCST=STD:090,090,085;SESC:090,090,085 BAI/PAI-FCST=015,010,010/020,015,015
KFCST=3223 2111 3223 4111 27DAY-AP=011,005 27DAY-KP=2333 2232 1112 2121
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 21 MAR 94 is not available.
The Full Kp Indices for 21 MAR 94 are: 3o 6- 4o 4o 4- 4o 4- 3-
The 3-Hr Ap Indices for 21 MAR 94 are: 15 65 26 30 21 28 21 13
Greater than 2 MeV Electron Fluence for 22 MAR is: 1.6E+08

SYNOPSIS OF ACTIVITY

Solar activity was very low. Region 7693 (N08W56) showed
some growth early in the period but was quiet and stable. A
hedge-row prominence was visible on east limb throughout the
day.

Solar activity forecast: solar activity is expected to be
very low to low.

The geomagnetic field ranged from quiet to minor storm levels.
The more disturbed periods were 0000-0300Z and 0900-1800Z, and
the other times were typically quiet to unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to be unsettled to active for the next 24 hours. Con-
ditions should be predominantly unsettled for the second and
third days although there may be occasional brief periods of
active levels.

Event probabilities 23 mar-25 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 23 mar-25 mar

A. Middle Latitudes
Active 25/25/10
Minor Storm 25/10/05
Major-Severe Storm 10/05/01

B. High Latitudes
Active 25/25/10
Minor Storm 30/10/05
Major-Severe Storm 10/05/01

HF propagation conditions were slightly below normal over
the high and polar latitude regions for the first half of the
UTC day, but improved to near normal by the end of the day.
Near-normal propagation conditions are expected over all
regions during the next 72 hours through 25 March inclusive
although a few periods of night-sector high-latitude minor
signal degradation will remain possible.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 22/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7692 N18W19 159 0030 CSO 04 003 BETA
7693 N08W56 196 0070 CSO 06 012 BETA
7688 N19W88 228 PLAGE
REGIONS DUE TO RETURN 23 MARCH TO 25 MARCH
NMBR LAT LO
7686 N08 037

LISTING OF SOLAR ENERGETIC EVENTS FOR 22 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 22 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 22/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
70 N40W12 S26W34 S04W62 N48W14 175 ISO POS 023 10830A
71 S14E38 S20E28 S10E26 S10E26 106 ISO POS 002 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
21 Mar: 1056 1114 1126 SF 7693 N07W36
1130 1130 1134 SF 7693 N07W36
1548 1625 1703 B8.2 SF 7688 N21W68
1755 1758 1803 B3.1 SF 7693 N10W39
1906 1913 1926 B3.6 SF 7693 N08W40
2138 2150 2204 B3.2

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7688: 0 0 0 1 0 0 0 0 001 (16.7)
Region 7693: 0 0 0 4 0 0 0 0 004 (66.7)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (16.7)

Total Events: 006 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3201. Need Dayton room

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 04:09:44 UTC
From: penneys@brahms.udel.edu
Message-ID: <2mofe8$h5h@brahms.udel.edu>
Source record: 269403
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc,rec.radio.amateur.antenna

Please forgive the cross posting if you will.

I need a room for two for Thursday, Friday and Saturday night at Dayton.
We have one room at the Hampton House with the FRC, and want one more
closeby if possible.

CU at contest forum and dinner, FRC suite, hamfest etc.

Tnx Bob

--
Bob Penneys, WN3K Frankford Radio Club Internet: penneys@pecan.cns.udel.edu
Work: Ham Radio Outlet (Delaware) (800) 644-4476; fax (302) 322-8808
Mail at home: 12 East Mill Station Drive Newark, DE 19711 USA

3202. Best cars for mobile HF/VHF

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 10:24:25 UTC
From: P.Lucas@mail.nerc-swindon.ac.UK
Message-ID: <9403231024.AA13379@swmis>
Source record: 269404

Probably best to go for 'low-tech' solutions if you are after a radio-quiet environment; the fewer microprocessors etc. you have, the less likely you are to get hit by clock oscillator harmonics etc. Count the number of microprocessors in use; the more there are, the greater the risk of problems!

Many auto companies produce 'special pack' models for use by the Police etc; these often come fitted with radio-desirable options [like a bigger alternator, larger battery, proper interference-filtering and pre-installed power take-off terminals] as well as uprated brakes and suspension; you may find a lower level of trim finish, and fewer 'gizmos' though. I used to have an ex-Police Range Rover [the 'Fleetline' model] which had a 120-amp alternator, twin batteries etc. but only rubber mats on the floor.

Even Diesels have their problems; apart from being pitifully slow, they may have electronics to control turbos, injection timing, transmission shift, anti-lock brakes etc etc.

Peter J.M. Lucas NERC Computer Services Swindon England
pjml@swmis.nsw.ac.uk or pjml@uk.ac.nsw.swmis or g6wbj@gb7sdn.gbr.eu
"I do not care if you drive at 120MPH, as long as you pull over to let me pass"

3203. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 14:57:54 UTC
From: wrt@eskimo.com
Message-ID: <Cn4HL2.L3A@eskimo.com>
Source record: 269405
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

<2ml9q1$25h@hplvec.lvld.hp.com> <2mn2rd$ol0@vixen.cso.uiuc.edu>
<cowart.764364068@neptune>
Organization: Eskimo North (206) For-Ever

In article <cowart.764364068@neptune>,
Michael Cowart <cowart@convex.com> wrote:
>ignacy@ux2.cso.uiuc.edu (Ignacy Misztal) writes:
>
>>It seems that the SSB quality depends on 3 factors:
>>1. Passband characteristics of the AF chain (including the
microphone),
>>2. IMD of the PA,
>>3. Type of processing, audio or RF?
>
>You are forgetting probably the most important factor, the voice
characteristics
>of the operator. I recently sold a radio to a friend of mine. During
the
>five years I had it, I consistantly got unsolicited comments on how
GOOD
>my audio sounded. My friend is always getting complaints on his.
>I have heard him on a TS520, TS430, and now the Yaesu FT980 (not 990)
>His voice sounds like, well like it is being compressed.
>I have a resonating, full "FM" sounding voice. He doesn't.
>Voices are like faces, everyone would rather look at a pretty face
>than an ugly one (unfortunately, his face is prettier than mine hi hi),
>and when you hear a good-sounding voice, you ususally will compliment
it.
>
>I know the purist (real ones and those who think they are) will take
exception
>to this, but most commercially available radios have similar TX
charactersitics.
>Yes, RF processors are superior than most AF ones, but in the 32 years
I have
>been hamming, I have found that voice characteristics determine who
gets
>unsolicited compliments.
>
>my $.02 worth
>
>Mike WA5CMI
>

>Extra Class since 1973
>5-band WAS, WAZ, DXCC (303 cfmd)
>Ragchewer
>Electrical Engineer, CONVEX Computer Corp.
>The opinions are mine alone, not my employer's
>

Certainly true about the voice characteristics, but when a rig
changes locations and starts getting poor audio complaints,
one might want to be sure there is no "RF in the mike" syndrome
present. Major RF levels will be obvious, but low levels
might not. SSB is especially sneaky since the distortion
only occurs on voice peaks, not the whole signal.

73 es gl
Bill Turner, W7LZP
wrt@eskimo.com

3204. Lightning--thanks Gary

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 15:53:33 UTC
From: mikemr@microsoft.COM
Message-ID: <9403231557.AA13938@netmail2.microsoft.com>
Source record: 269406

```
================================================================
the power delivered to the rod in a stroke is I^2*R or 3.68E9 watts.
Converting that to energy, we have 3.68E9*20/4000=18.4E6 watt-seconds,
or 5.11 kW-hr. That's 18.396 Megajoules.
================================================================
Thanks for pointing out my mistake. These numbers sound more like it!

73 Mike N6MZ mikemr@microsoft.com
```

3205. Re: Sonobuoys

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 15:54:53 UTC
From: leber@panther.warm.inmet.com
Message-ID: <Cn4K7I.ICo@inmet.camb.inmet.com>
Source record: 269407
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner

Kenneth E. Harker (Kenneth.E.Harker@Dartmouth.Edu) wrote:

> we were to somehow activate the third, sealed buoy, and it's battery
> still functioned, what sort of signal does it put out, and is there any
> way we could monitor it? Alternatively, does anyone know what sort of
> radios these things have in them? Are they useful for anything other
> than sonobuoys? What would they be worth?

If it is anything like a standard Navy buoy, it broadcasts VHF-FM on one
of 99 channels, ranging in frequency from 136.00 - 173.5 MHz.

If you can supply the channel number (it might be printed on the buoy, or
selectable by a little switch on it), I can give you the frequency.

Hope this helps,
Tom Leber
N3QKV
--

Tom Leber N3QKV <leber@panther.warm.inmet.com> Intermetrics, Inc. Warminster PA
"Smother technology and it rebels." - Max Headroom

3206. your mailing list and pro-sat.cts.com

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 16:24:37 UTC
From: dcgreen@pro-harold.cts.COM
Message-ID: <cn30282@pro-harold.cts.com>
Source record: 269408

I have been trying to get mail from you to this site to stop passing
through my site for several weeks now.

PLEASE STOP SENDING TO PRO-SAT.CTS.COM. THEY HAVE LEFT THE STATE AND CAN NO
LONGER BE REACHED VIA PRO-HAROLD.CTS.COM.

Thank you.

dcg

David Green ... dcgreen@pro-harold.cts.com
SysOp of Pro-Harold BBS .. San Diego, CA

3207. Re: Telecom and Meteors

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 17:42:58 UTC
From: zlau@arrl.org
Message-ID: <1994Mar23.174258.8681@arrl.org>
Source record: 269409

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <1994Mar23.000101.38868@rs6000.cmp.ilstu.edu> cdfore@rs6000.cmp.ilstu.edu
(Curt Fore) writes:
: >
: > Help!! I'm Looking for info on using meteors to bounce signals for
: >telecommunication. I saw a show in January on it. I have to write a
: >paper on something in telecommunication and as you can see my writing sucks.
: >But I think if I can get some info about something my prof has not hear
: >of it will help. So is there anyone out there with info or know how I can get
: >some.

: We're talking about the constant rain of micrometeoroids here, not the
: big visible ones. Individual "pings" are short, but there's a constant
: source of them. Hams who work meteor scatter tend to wait for the big
: meteor storms and use the longer, and rarer, pings off the larger trails,
: but that's not necessary. Only if you use analog voice or hand keyed
: Morse are the longer pings needed. If you use digital burst communications,

Long bursts are also needed for AX.25 packet. I don't believe amateurs
have actually developed an optimized data system to take advantage of
meteor scatter. I'd estimate that there are approximately 0 data
links in the amateur service that rely on meteor scatter right now.
I suspect that amateurs are still busy working on other options that
seem offer more capability.

: and good FEC, you can take advantage of the constant supply of short pings
: available from micrometeoriods.

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

3208. Re: HAM word origin!...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 18:19:09 UTC
From: hill@uncc.edu
Message-ID: <Cn4qvx.IAu@unccsun.uncc.edu>
Source record: 269410

```
CIn article <763065386snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus)
writes:
C>
C>In article <CM25Hs.L3I@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:
C>
C> >
C> > COMPTON (Reuters) - Police psychologists today were extremely puzzled
C> > as to why a Compton man, identified as Jeffrey Angus, had stopped
C> > northbound traffic on the Santa Ana freeway by running along side
C> > ..............................
C> > Story compiled by Jeff NH6IL
C>
C> If you're going to engage yourself in this nonsense, at least take the
C> time to come up with something original.
C
CHa ha - I see you deleted what you wrote about me (something about a
C`deranged professor blowing up a restroom' - so who started this
C`nonsense', Angus? When are you going to learn that if you post
Csomething about me I'll post back?
C
CI've got to go find what you originally posted that prompted me to write
Cabove. What's that old expression? `You can dish it out but you can't
Ctake it'? When you finish, so will I.
C
C> But thanks for playing. Even lame-flamers need some encouragement from
C> time to time.
C
CYeah, your `body parts' newspaper article was rather lame.
C
C> Nice try with the 435 inuendo. I even sent you e-mail about that. Do you
C> think I would lie to you about where I operate? Ask Dana.
C
CBut you've got the .435 personality! Speaking of inuendos, do you actually
Cbelieve that I'd blow up a restroom with plastic explosives? You've been
Cbreathing too much of that Compton smog (oxygen starvation).
C
CMy offer still stands: Let's take this to email so the rest of the good folks
Con .misc don't get pissed. This has REALLY gotten boring and childish.
C
C73 Jeff#2 (The SLOW Learner),
CJeff#1 NH6IL
```

3209. Re: Grounding and lightning protection--KE4ZV

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 18:51:39 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseCn4sE4.KxM@netcom.com>
Source record: 269411

In article <Cn41oy.L6@hpqmoea.sqf.hp.com> dstock@hpqmoca.sqf.hp.com (David Stockton) writes:
>: or 5.11 kW-hr. That's 18.396 Megajoules.
>
>: Gary
>
> That sounds much more like the kind of numbers I wouldn't want to be
>anywhere near !
>
> The ground rod itself will be a small fraction of the resistance and
>so get a small fraction of the energy, it will be the ground around the
>rod that takes the brunt. Instant steam explosion?
>
About 30 years ago, lightning hit a tree in my parent's house's backyard. Boom! Wooden schrapnel all over the backyard! Good thing we were all inside the house. Probably a steam explosion in the tree.

A day without netnews is like a day without sunshine!

3210. Latest FCC issued call signs

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 19:25:17 UTC
From: gswanson@arrl.org
Message-ID: <1994Mar23.192517.9804@arrl.org>
Source record: 269412

List of the last call sign issued AS OF MARCH 1, 1994
Per the FCC:

Note: "-----" = out of calls in that group, default to next Group
to the right. Example: In Radio District 0, they are out of
Group C calls, so they are issuing from Group D for Tech/Gen.

Radio District Group A Group B Group C Group D
(Extra) (Advanced) (Tech/Gen) (Novice)

0 AA0QI KG0LO ----- KB0LYV
1 AA1IV KD1TZ N1RMF KB1BGS
2 AA2RH KF2UA N2YBR KB2QXD
3 AA3HG KE3MC N3RPA KB3BBC
4 AD4QG KR4NY ----- KE4KAL
5 AB5TB KJ5VI ----- KC5FON
6 AC6AP KN6YT ----- KE6FTE
7 AB7BL KI7WH ----- KC7BDO
8 AA8OI KG8HH ----- KB8RSM
9 AA9KI KF9UM N9WHC KB9IXF
Hawaii ----- AH6NF WH6SV WH6CRD
Alaska ----- AL7PO WL7QW WL7CHL
Puerto Rico ----- KP4WM ----- WP4MNW
Guam WH2D AH2CU KH2JB WH2ANK
Virgin Islands WP2G KP2CC NP2HG WP2AHU
Amer. Samoa AH8I AH8AG KH8BB WH8ABB

For more information about call sign assignment in the Amateur Radio
Service see Section 97.17(f) of the FCC Rules.

73, Glenn KB1GW (ARRL/VEC)

3211. Re: Examination Opportunities Scheduled 3/18/9

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 20:17:27 UTC
From: hill@uncc.edu
Message-ID: <Cn4wD3.922@unccsun.uncc.edu>
Source record: 269413

```
CAMATEUR RADIO EXAMINATION OPPORTUNITIES
C
C
C
C*****************************************************************
C
CSpecial Note: Amateur Radio licenses usually arrive between 8 and
C 10 weeks after the test session. The FCC considers their
C processing time to be 90 days--from the date they receive the
C application. The FCC usually receives the application one
C to two weeks after the test session (once the VE Team and the
C coordinating VEC have completed their processing).
C
C
CNote: Codeless Technician to Technician w/HF upgraders (who pass a
C Morse code test) will not receive a new license from the FCC.
C The existing Technician license plus the CSCE conveying the Morse
C code test credit is the only documentation issued for use of
C the additional HF privileges.
C
C*****************************************************************
C
CThe following test session information is provided by the
CARRL/VEC for the upcoming six to eight week period. For
Cfurther information, please contact the test session CONTACT
CPERSON at the telephone number provided. If necessary, you
Cmay contact the ARRL/VEC at 203-666-1541 x282 for additional
Cinformation. Electronic mail may be forwarded to the ARRL/VEC
Cvia USENET at "bjahnke@arrl.org" or via MCI Mail to
CMCI ID: 653-2312 or 215-5052.
C
CAlthough the test session information presented here does
Cnot indicate whether walk-ins are accepted or not, most test
Csessions do allow walk-ins. We encourage you, however, to
Calways contact the CONTACT PERSON at the telephone number
Cprovided so that the VE Team is aware that you be attending
Cthe test session.
C
C
CSTILL NEED TO PREPARE FOR YOUR EXAM?
C
CIf you would like information on how to become licensed; or
Chow to locate Amateur Radio clubs, instructors, licensing
Cclasses and/or Novice examiners in your area; please contact
```

Cthe ARRL Educational Activities Department (EAD) at 203-666-
C1541 x219. The EAD can also provide information on
Crecommended study materials. Electronic mail may be forwarded
Cto the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to
CMCI ID: 215-5052.
C
C
CAFTER THE EXAM - HOW LONG WILL IT BE BEFORE MY LICENSE ARRIVES?
C
CIf you've recently passed your initial examination for an
CAmateur Radio license, or if you've just upgraded, please
Caccept our warmest congratulations! Now that you've
Cpassed the test, receiving your license in the mail is the
Cnext step.
C The FCCs current license processing time is at
C90 days. In addition, there will be extra time required
Cwithin the volunteer examiner system of two weeks
Cor so allowing your VE Team and VEC (if for Technician class
Cor higher) time to process your application, your license
Cmight not arrive for up to 12 to 14 weeks.
C To keep your wait for that new license or upgrade as
Cshort as possible, we are taking the following steps to give
Cyou the fastest possible service.
C We have begun providing our VE Teams with express OVERNIGHT
Cmailers for the return of applications from ARRL/VEC exam
Csessions to us at the VEC--and we at the VEC have begun
Csending our daily packages to the FCCs Licensing Facility
Cvia an express OVERNIGHT service.
C We are also encouraging our VEs, and imposing
Cthe same emphasis upon ourselves, to process examination
Cpackages as quickly as possible to expedite your license.
C Having implemented the above procedures, the ARRL/VEC
Cwants your wait for your new license to be as short as
Cpossible.
C If you have any other suggestions about the program, or
Cservices we provide, please feel free to contact us.
C You can help keep the processing time as short as possible
Cby ALWAYS bringing all ORIGINAL CSCEs (plus copies of them) and
Cyour ORIGINAL FCC license (and a copy), plus your identification
Cdocuments (photo-ID emphasized), to every test session you attend.
C
C
CTHINGS TO BRING TO THE EXAMINATION
C
CBe prepared to bring the following items with you to VEC
Cexaminations: Your original current FCC-issued Amateur
CRadio license (and a copy of it)--if you are licensed; Any
Coriginal Written or Code Element credit documents (CSCEs)
Cwhich are currently valid; Two forms of identification
C(e.g., a photo-ID or drivers license and another item

```
Cindicating your current name and address); A calculator (if
Cnecessary); A pen and two pencils; and, the applicable
Cexamination test fee ($5.75 for 1994 test sessions).
C
C
CTECHNICIAN CLASS GRANDFATHER CREDIT
C
CIf you hold a Technician class license which was issued
Cprior to 3/21/87, you are not required to take the Element
C3B (General class written) examination if you can provide a
Ccopy of your FCC-license dated before that date. If your
Clicensed has since been renewed, and if you don't have a
Ccopy of the pre-3/21/87 license, you must seek a
Cverification letter from the FCC.
C
CTo do so, write to FCC, 1270 Fairfield Rd, Gettysburg PA
C17325-7245 and request a letter of "Verification of Technician
CLicense Held Prior to 3/21/87"--verifying that you were licensed
Cas a Technician class licensee before that date (the date the
CTechnician Question Pool was split off from the General class
CQuestion Pool -- March 21, 1987). After you receive that letter
Cfrom the FCC, bring it to the test session with you in order
Cto claim your deserved credit.
C
C
CLOST LICENSES
C
CIf you have lost your license, be aware that VECs are not
Cpermitted to submit any upgrades to the FCC without a copy of your
Ccurrent license attached to the 610 form. In order to
Cexpedite your upgrade, you must write the FCC and request a
Creplacement license. Since that can take several weeks to
Carrive, we recommend that you also request a Form 1010-B
Cverification letter from the FCC which will arrive in a
Ccouple of weeks--and is legally binding license document.
CYou may use that form as a license until your Form-660
Clicense arrives. The original and a copy of Form 1010-B
Cmust be brought to the test session verifying that you are
Ccurrently licensed--the copy of which will be attached to
Cyour upgrade application (in lieu of an actual Form-660
Clicense copy). To request the Form 1010-B Verification
CLetter, write to: FCC, 1270 Fairfield Rd, Gettysburg PA
C17325-7245; indicating that you lost your license and that
Cyou are requesting that a replacement license be issued to
Cyou--also be sure to request that they send you a Form 1010-
CB Verification Letter verifying that you are licensed.
C
C
CACCOMMODATIONS FOR THE HANDICAPPED OR DISABLED
C
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CThe FCC requires that the administering VEs must accommodate
Can examinee whose physical disabilities require a special
Cexamination procedure. To do so, the administering VEs may
Crequire a physician's statement indicating the nature of the
Cdisability before determining which, if any, special
Caccommodative procedures must be used.
C
CThe VEs may accommodate handicapped/disabled examinees by
Cadministering the examination at a place convenient and
Ccomfortable for the examinee--even at bedside; for the
Chearing impaired the Morse code may be sent using flashing
Clights or a vibrating surface; for the visually impaired,
CVEs may read or write for the examinee; where warranted, the
CVEs may pause the Morse code message after each
Csentence/phrase, or each word, or even after each character
Cto allow the examinee additional time to absorb and
Cinterpret what was sent--also the VEs may substitute a
Csending test for a receiving test where the examinee's
Chandicap warrants.
C
CVE Teams may need advanced notice in order to provide the
Cnecessary accommodations to examinees who require them. If
Cyou will require accommodations, please contact the VE Team in
Cadvance to advise them of your needs.
C
C
CEXEMPTION OF THE 13/20 WPM MORSE CODE REQUIREMENTS
C
CIf you are a severely handicapped or disabled individual and
Chave already passed at least a 5 WPM Morse code examination
C(or hold a license which meets that requirement), you may be
Celigible for exemption from the 13/20 WPM Morse code
Cexamination requirements. For information and applicable
Cforms, send a SASE to the ARRL/VEC, 225 Main St, Newington
CCT 06111, and request our Handicapped Information Package.
C
C
C
CEXAM LISTINGS - DEFINITION OF FIELDS
C
CSTATE
CTest Date,VEC,City,,Contact Phone,Contact Person
C
CThe SECOND field in the following listing specifies the VEC
Cwhich is coordinating this examination. This single-character
Cdesignator denotes the VEC as defined below. An "A" (for example)
Cindicates that this examination is coordinated by the ARRL/VEC.
C
CFor further information on any examinations listed, or if you do not
Cfind any examinations listed for your area, you may contact
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Cany of the coordinating VECs below.
C
C
CA = ARRL/VEC, 225 Main St, Newington, CT 06111; (d) 203-666-1541
C The 1994 test fee is $5.75.
C
CX = Anchorage ARC, 2628 Turnagain Parkway, Anchorage, AK 99517;
C (d) 907-786-8121, (n) 907-243-2221 (or) 907-276-5121
C (or) 907-274-5546
C
CC = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
C 205-536-3904
C
CN = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
C 704-596-2168
C
CD = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
C 708-486-8019
C
CE = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.
C
CG = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
C 818-892-2068, 805-822-1473.
C
CJ = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368;
C 504-737-2315. Test fee for 1994 is $5.00.
C
CK = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
C 808-235-4132
C
CL = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
C (d) 301-572-5124, 301-317-7819, (n) 301-588-3924
C
CM = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
C 414-774-6999. Test fee for 1994 is $5.00.
C
CH = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
C 301-724-0674
C
CP = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313
C
CR = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926
C
CS = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
C 408-255-9000
C
CT = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
C 919-841-7576
C
CW = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
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C Knoxville, TN 37912-2500; 615-688-7771.
C The 1994 test fee is $5.75.
C
C5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
C The 1994 test fee is $5.75.
C
C
CEXAMINATION OPPORTUNITIES IN YOUR AREA:
C
CALASKA
C04/06/94,X,Anchorage,,907-243-2221,Roger Hansen
C04/20/94,X,Eagle River,,907-243-2221,Roger Hansen
C05/04/94,X,Anchorage,,907-243-2221,Roger Hansen
C05/18/94,X,Eagle River,,907-243-2221,Roger Hansen
C06/01/94,X,Anchorage,,907-243-2221,Roger Hansen
C06/15/94,X,Eagle River,,907-243-2221,Roger Hansen
C
CALABAMA
C03/26/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
C04/07/94,A,Pell City,,205-594-5687,Ernie Cone
C04/09/94,A,Fort Payne,,205-657-5204,Albert Bible
C04/30/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
C05/05/94,A,Pell City,,205-594-5687,Ernie Cone
C05/14/94,A,Fort Payne,,205-657-5204,Albert Bible
C05/14/94,A,Talladega,,205-362-2377,Larry E Byrd
C05/19/94,A,Decatur,,205-353-8266,Richard W Navarre
C05/28/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
C06/02/94,A,Pell City,,205-594-5687,Ernie Cone
C06/11/94,A,Fort Payne,,205-657-5204,Albert Bible
C
CARKANSAS
C03/19/94,A,Gasseville,,501-430-5123,Gerald Gaige
C03/19/94,A,N Little Rock,,501-888-7517,Chuck Jamison
C03/21/94,A,Hot Springs,,501-337-9640,Charles L Brown
C03/24/94,A,Ft Smith,,501-474-2309,Gary Yates
C04/05/94,A,Crossett,,318-281-2900,Eugene S Winfree
C04/05/94,W,Trumann,,501-483-6530,Al Fisher
C04/07/94,A,Bella Vista,,501-855-6384,Raymond Traynor
C04/09/94,A,Conway,,5013291451,Glenn A King
C04/09/94,A,Little Rock,,501-666-6337,William L James
C04/09/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
C04/12/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
C04/16/94,A,Gasseville,,501-430-5123,Gerald Gaige
C04/23/94,A,N Little Rock,,501-888-7517,Chuck Jamison
C05/10/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
C05/14/94,A,Little Rock,,501-753-2207,Dora Anna Graziani
C05/14/94,A,Russellville,,501-641-2022,Ben Hillis
C05/14/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
C05/17/94,A,Conway,,5013291451,Glenn A King
C05/21/94,A,Gasseville,,501-430-5123,Gerald Gaige
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C05/21/94,A,N Little Rock,,501-888-7517,Chuck Jamison
C06/04/94,A,Conway,,5013291451,Glenn A King
C06/11/94,A,Little Rock,,501-666-6337,William L James
C06/11/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
C06/14/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
C06/18/94,A,Gasseville,,501-430-5123,Gerald Gaige
C06/18/94,A,N Little Rock,,501-888-7517,Chuck Jamison
C
CARIZONA
C03/19/94,A,Apache Junction,,602-986-2298,Larry Kuck
C03/24/94,A,Mesa,,602-986-2298,Larry M Kuck, WB7CRK
C04/01/94,A,Sun City,,602-972-8733,Ray Summer
C04/02/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R
C04/06/94,A,Tempe,,602-838-1215,Roger Hightower
C04/09/94,A,Safford,,602-428-6754,Philip Madsen
C04/16/94,A,Flagstaff,,602-774-8308,Bill Sinton
C05/07/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R
C05/21/94,A,Tempe,,602-838-1215,Roger Hightower
C06/04/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R
C
CCALIFORNIA
C03/19/94,A,Corona,,909-735-0284,John Miller, NF6Y
C03/19/94,A,Culver City,,310-459-0337,Scott V Swanson
C03/19/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
C03/19/94,A,Hercules,,415-467-2467,William C Eugenio
C03/19/94,A,Monterey,,408-663-0710,Michael C Marchini
C03/19/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
C03/20/94,A,Culver City,,310-459-0337,Scott V Swanson
C03/20/94,A,Eureka,,707-826-0767,Irma D Ruegg
C03/20/94,A,Oakland,,510-658-3652,Steve Dorst N6VMK
C03/23/94,A,Culver City,,310-459-0337,Scott V Swanson
C03/23/94,A,Palm Springs,,619-321-2775,Delmont Ziegler, KC6JPH
C03/26/94,A,Elmira,,707-446-8376,Irene McClure KK6XB
C03/26/94,A,Fairfield,,916-662-0801,Gerald D Newton
C03/26/94,A,Felton,,408-335-2892,Janea Drummond
C03/26/94,A,Petaluma,,707-762-9414,Dale Westerterp WB6TMS
C03/26/94,A,Ridgecrest,,619-375-7245,Lloyd Brubaker
C03/27/94,A,Rialto,,909-883-4082,Bruce Scholes
C04/01/94,A,Bakersfield,,805-328-5055,Glenn Ricketson
C04/02/94,A,Apple Valley,,619-240-4546,Raymond Key
C04/02/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
C04/02/94,A,Los Angeles,,213-778-6226,Ali Hassan
C04/02/94,A,Ontario,,909-391-4254,Bob Malaby
C04/04/94,A,Lancaster,,805-948-1865,Adrienne J Sherwood
C04/09/94,A,Camarillo,,805-388-2488,George Kreider
C04/09/94,A,Fontana,,909-823-6818,Louis Johnson
C04/09/94,A,Santa Rosa,,707-527-0981,Dave New
C04/09/94,A,Sonora,,209-962-7146,Carl H Croci
C04/09/94,A,Torrance,,310-328-0817,Joe Lanphen, WB6MYD
C04/10/94,A,Clearlake,,707-994-9620,Chris Lutman

C04/16/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
C04/16/94,A,Downey,,213-923-5598,Wesley Printz
C04/16/94,A,Long Beach,,310-431-8998,Ken Newkirk
C04/16/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
C04/17/94,A,Oakland,,510-317-0125,Joel C Bautista
C04/23/94,A,Pasadena,,818-244-2763,Alfred R Fernandez
C04/23/94,A,Weed,,916-926-2535,Irv Astmann
C04/30/94,A,Culver City,,310-459-0337,Scott V Swanson
C04/30/94,A,Fairfield,,916-662-0801,Gerald D Newton
C05/07/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
C05/07/94,A,Ontario,,909-391-4254,Bob Malaby
C05/07/94,A,Yuba City,,916-673-0868,Homer Oliver
C05/14/94,A,Atascadero,,805-238-2950,Laverne S Moore
C05/14/94,A,Eureka,,707-826-0767,Irma D Ruegg
C05/14/94,A,Fontana,,909-823-6818,Louis Johnson, K6UMX
C05/14/94,A,Petaluma,,707-762-9414,Dale Westerterp WB6TMS
C05/14/94,A,Redding,,916-243-6339,Kenna Pine
C05/14/94,A,Turlock,,209-883-2968,Chet Jensen
C05/15/94,A,Oakland,,510-658-3652,Steve Dorst N6VMK
C05/15/94,A,Thousand Oaks,,805-375-1385,Marco Treganza, KC6WQR
C05/21/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
C05/21/94,A,Hercules,,415-467-2467,William C Eugenio
C05/21/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
C05/28/94,A,Fairfield,,916-662-0801,Gerald D Newton
C06/04/94,A,Apple Valley,,619-240-4546,Raymond Key
C06/04/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
C06/04/94,A,Lancaster,,805-948-1865,Adrienne J Sherwood
C06/04/94,A,Novato,,415-883-9789,Logan Z Edwards
C06/04/94,A,Ontario,,909-391-4254,Bob Malaby
C06/04/94,A,Ridgecrest,,619-375-7245,Lloyd Brubaker
C06/07/94,A,Culver City,,213-292-6423,C Lutz
C06/08/94,A,Lake Isabella,,619-379-2947,Thomas Corso
C06/11/94,A,Clearlake,,707-994-9620,Chris Lutman
C06/11/94,A,Fontana,,909-823-6818,Louis Johnson
C06/11/94,A,Merced,,209-383-2166,Mike Siegel
C06/18/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
C06/18/94,A,Long Beach,,310-431-8998,Ken Newkirk
C06/18/94,A,Moccasin,,209-962-7146,Carl Croci
C06/18/94,A,Oakhurst,,209-683-8772,Robert Tauxe, W6JTA
C06/18/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
C
CCOLORADO
C03/26/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
C03/31/94,A,Lakewood,,303-366-9689,Glenn Schultz
C04/02/94,A,Boulder,,303-530-2903,Barbara McClune
C04/09/94,A,Denver,,303-360-7293,Glenn Schultz
C04/09/94,A,Durango,,303-247-5043,Darrell Brown
C04/09/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
C04/09/94,A,Greeley,,303-353-3577,Richard S Hubbard
C04/11/94,A,Windsor,,303-484-3989,Don St John

C04/23/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
C05/07/94,A,Grand Junction,,303-245-2973,E.D. Percifield
C05/09/94,A,Boulder,,303-530-2903,Barbara McClune
C05/11/94,A,Windsor,,303-484-3989,Don St John
C05/14/94,A,Denver,,303-360-7293,Glenn Schultz
C05/14/94,A,Fort Collins,,303-484-8315,J Trenton Hays
C05/14/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
C05/28/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
C06/11/94,A,Denver,,303-360-7293,Glenn Schultz
C06/11/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
C06/13/94,A,Boulder,,303-530-2903,Barbara McClune
C
CCONNECTICUT
C03/23/94,A,Shelton,,203-735-9476,Leroy Thomas
C03/26/94,A,Bloomfield,,203-243-1611,Don Wilson
C03/26/94,A,Winsted,,,Lawrence S Polowy
C04/09/94,A,Fairfield,,203-261-3915,Joe A Cassidy
C04/10/94,A,Milford,,203-933-5125,Gary Burlock, N1BM
C04/10/94,A,Southington,,203-621-6191,Steve B Moss N1GCV
C04/12/94,A,Portland,,203-635-5289,Wayne K Irwin
C04/12/94,A,Thomaston,,203-283-1044,Steven Dziadik
C04/14/94,A,Farmington,,203-621-3222,John McLaughlin
C04/16/94,A,Coventry,,203-742-5422,Mark Ireland
C04/21/94,A,West Hartford,,203-529-3743,Paul Lombardo
C04/27/94,A,Shelton,,203-735-9476,Leroy Thomas
C05/01/94,A,Milford,,203-933-5125,Gary Burlock, N1BM
C05/10/94,A,Thomaston,,203-283-1044,Steven Dziadik
C05/12/94,A,Farmington,,203-621-3222,John McLaughlin
C05/14/94,A,Brookfield,,203-790-7987,Ann Ross Elton
C05/14/94,A,Coventry,,203-742-5422,Mark Ireland
C05/14/94,A,Portland,,203-635-5289,Wayne K Irwin
C05/19/94,A,West Hartford,,203-529-3743,Paul Lombardo
C05/21/94,A,Gales Ferry,,203-376-2216,Rick George
C05/25/94,A,Shelton,,203-735-9476,Leroy Thomas
C06/04/94,A,Brookfield,,203-438-0218,Frank Sileo
C06/11/94,A,Coventry,,203-742-5422,Mark Ireland
C06/14/94,A,Portland,,203-635-5289,Wayne K Irwin
C06/14/94,A,Thomaston,,203-283-1044,Steven Dziadik
C
CWASHINGTON DC
C03/25/94,A,Washington,,703-239-1255,Mark Wagner
C
CDELAWARE
C03/19/94,A,Wilmington,,302-478-2757,Gisele Walls, K3WAJ
C04/10/94,A,Wilmington,,302-695-3344,Chet Thayer
C05/14/94,A,Dover,,302-697-6178,Robert W Baker
C05/14/94,A,Wilmington,,302-478-2757,Gisele Walls, K3WAJ
C06/11/94,A,Dover,,302-697-6178,Robert W Baker
C06/18/94,A,Wilmington,,302-478-2757,Gisele Walls, K3WAJ
C

CFLORIDA
C03/19/94,A,Bradenton,,813-756-2823,Franklin F Morton
C03/19/94,A,Englewood,,813-697-7946,John Fogle
C03/19/94,A,Lake Worth,,407-582-7617,T Graf Buckenmaier
C03/19/94,A,Lecanto,,904-489-6465,Larry Weaver
C03/19/94,A,Melbourne,,407-724-6183,William Newkirk
C03/21/94,A,Cape Coral,,813-574-3467,Phyllisian West
C03/24/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
C03/26/94,A,Fort Pierce,,407-466-5648,Bill Shisler
C04/05/94,A,New Port Richey,,813-849-1224,Fred Marchman
C04/05/94,A,Tallahassee,,904-875-2588,Jennifer Erdman
C04/08/94,A,Homestead,,305-255-1057,Joe Chwick AC4TV
C04/09/94,A,Miami,,305-665-5812,Paul C Hunt
C04/09/94,A,Port Charlotte,,813-625-3915,Jim Hope
C04/12/94,A,Plantation,,305-753-8713,Stephen W Strong Kc4VTF
C04/13/94,A,Casselberry,,407-645-2026,John P Lenkerd W4DNU
C04/13/94,A,Ft Myers,,813-693-2956,Paul McCreery
C04/13/94,A,Hollywood,,305-920-6960,Russel Sweeten
C04/13/94,A,West Palm Beach,,407-746-3928,James G Dover
C04/16/94,A,Englewood,,813-697-7946,John Fogle
C04/16/94,A,Lake Worth,,407-582-7617,T Graf Buckenmaier
C04/16/94,A,Melbourne,,407-724-6183,William Newkirk
C04/16/94,A,Palm Coast,,904-446-5769,Thomas E Holley, Sr
C04/16/94,A,Panama City,,904-785-3547,James McQuagge
C04/19/94,A,Dade City,,904-583-2856,Edward Franklin, Jr
C04/21/94,A,Vero Beach,,407-567-3979,Roger K Snyder
C04/23/94,A,Fort Pierce,,407-466-5648,Bill Shisler
C04/25/94,A,Cocoa Bch,,407-632-0527,David D Pedigo
C04/28/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
C05/03/94,A,New Port Richey,,813-849-1224,Fred Marchman
C05/03/94,A,Tallahassee,,904-875-2588,Jennifer Erdman
C05/11/94,A,Hollywood,,305-920-6960,Russel Sweeten
C05/13/94,A,Homestead,,305-255-1057,Joe Chwick AC4TV
C05/14/94,A,Bradenton,,813-756-2823,Franklin F Morton
C05/14/94,A,De Land,,904-734-2021,Bill Creighton, N4IPM
C05/14/94,A,Miami,,305-665-5812,Paul C Hunt
C05/14/94,A,Port Charlotte,,813-625-3915,Jim Hope
C05/14/94,A,Springhill,,904-597-1399,Gerard Macari
C05/14/94,A,Valparaiso,,904-243-9720,Bill Hord
C05/17/94,A,Dade City,,904-583-2856,Edward Franklin, Jr
C05/19/94,A,Vero Beach,,407-567-3979,Roger K Snyder
C05/21/94,A,Englewood,,813-697-7946,John Fogle
C05/21/94,A,Lake Worth,,407-582-7617,T Graf Buckenmaier
C05/21/94,A,Melbourne,,407-724-6183,William Newkirk
C05/26/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
C05/28/94,A,Fort Pierce,,407-466-5648,Bill Shisler
C06/04/94,A,Bradenton,,813-756-2823,Franklin F Morton
C06/07/94,A,New Port Richey,,813-849-1224,Fred Marchman
C06/07/94,A,Tallahassee,,904-875-2588,Jennifer Erdman
C06/08/94,A,Hollywood,,305-920-6960,Russel Sweeten

C06/10/94,A,Homestead,,305-255-1057,Joe Chwick AC4TV
C06/11/94,A,Miami,,305-665-5812,Paul C Hunt
C06/11/94,A,Port Charlotte,,813-625-3915,Jim Hope
C06/16/94,A,Vero Beach,,407-567-3979,Roger K Snyder
C06/18/94,A,Englewood,,813-697-7946,John Fogle
C06/18/94,A,Lake Worth,,407-582-7617,T Graf Buckenmaier
C06/18/94,A,Melbourne,,407-724-6183,William Newkirk
C
CGEORGIA
C03/24/94,A,Savannah,,912-925-1243,Spence Harrison
C04/03/94,A,Lavonia,,706-356-1748,Barney M Barningham Sr, KD4MNO
C04/04/94,A,Athens,,706-548-6540,Wilder P Scott
C04/04/94,A,Marietta,,404-993-9758,Delaine L McCarthy
C04/09/94,A,Fort Gordon,,706-798-5060,Carroll Norton
C04/10/94,A,Cartersville,,404-975-1309,Mark Swicord
C04/26/94,A,Dahlonega,,706-865-2141,J Allen Seabolt
C04/30/94,W,Dalton,,706-259-5625,Bert Coker
C05/02/94,A,Marietta,,404-993-9758,Delaine L McCarthy
C05/02/94,W,Rock Springs,,706-866-1200,Alan Painter
C05/08/94,A,Cartersville,,404-975-1309,Mark Swicord
C05/14/94,W,Augusta,,404-798-1918,Ed Butorajac
C06/05/94,A,Lavonia,,706-356-1748,Barney M Barningham Sr, KD4MNO
C06/06/94,A,Marietta,,404-993-9758,Delaine L McCarthy
C06/11/94,A,Fort Gordon,,706-798-5060,Carroll Norton
C06/12/94,A,Cartersville,,404-975-1309,Mark Swicord
C
CHAWAII
C03/26/94,A,Wailuku,,808-572-1440,William Heyde
C05/10/94,A,Kailua Kona,,808-325-5475,Bill Schreiber
C06/04/94,A,Wailuku,,808-572-1440,William Heyde
C
CIOWA
C03/18/94,A,Sioux City,,402-494-6070,Michael Nickolaus NF0N
C03/27/94,A,Davenport,,319-355-5517,Roger Franke
C04/16/94,A,Ames,,515-292-4504,FS Hird
C04/16/94,A,Cedar Rapids,,319-373-9628,Robert A Brus
C04/29/94,A,Sioux City,,402-494-6070,Michael Nickolaus NF0N
C04/30/94,A,Council Bluffs,,712-322-1454,Lorraine Bogle
C05/28/94,A,Dubuque,,319-557-9149,Carl E Clark
C06/10/94,A,Sioux City,,402-494-6070,Michael Nickolaus NF0N
C06/11/94,A,Clinton,,319-242-9486,Roger Gorzney
C06/18/94,A,Council Bluffs,,712-322-1454,Lorraine Bogle
C
CIDAHO
C03/25/94,A,Kimberly,,208-733-7304,Dean W Etherington KI7CC
C03/30/94,A,Bonners Ferry,,208-267-3734,Brian Schatzel
C04/06/94,A,Athol,,208-683-2094,Robert Swain
C04/09/94,A,Boise,,208-343-9153,Lem Allen
C04/23/94,A,Pocatello,,208-237-4910,James Luderman
C05/04/94,A,Athol,,208-683-2094,Robert Swain

C06/01/94,A,Athol,,208-683-2094,Robert Swain
C
CILLINOIS
C03/19/94,A,Qunicy,,217-224-8526,Michael L Nowack
C03/24/94,A,Effingham,,217-342-3054,Russ Thomas
C03/25/94,A,Crystal Lake,,815-678-4276,Jack Hudson
C03/26/94,A,Chicago,,312-233-0605,Harold Pritchard Jr
C04/02/94,A,Belleville,,618-588-4477,Kenneth R Davis, KF9IA
C04/06/94,A,La Grange Park,,708-354-5481,Karl Weisshappel
C04/09/94,A,Mt Vernon,,618-244-7987,L C McDuffle
C04/09/94,A,Oak Forest,,708-448-0580,David Brasil, NF9N
C04/11/94,A,Hanover Park,,708-483-8523,William Rudd
C04/13/94,A,Chicago,,312-465-0981,Michael Leibovitz
C04/13/94,A,Galesburg,,309-342-9143,Brent Zhorne
C04/14/94,A,Antioch,,708-395-0999,Anthony Viverito
C04/14/94,A,Beardstown,,217-245-2061,Tim Childers
C04/17/94,A,Danville,,317-793-3573,Betty Collins
C04/17/94,A,Sullivan,,217-873-5287,Ralph Zancha
C04/19/94,A,Burr Ridge,,708-325-3840,Roger Adams
C04/21/94,A,Athens,,217-544-5374,Gary Britz KF9OI
C04/23/94,A,Chicago,,312-233-0605,Harold Pritchard Jr
C05/01/94,A,Paris,,217-463-2213,Robert Nelson
C05/07/94,A,Belleville,,618-588-4477,Kenneth R Davis, KF9IA
C05/11/94,A,Chicago,,312-465-0981,Michael Leibovitz
C05/12/94,A,Antioch,,708-395-0999,Anthony Viverito
C05/12/94,A,Beardstown,,217-245-2061,Tim Childers
C05/14/94,A,Dixon,,815-284-6380,Charles W Randall
C05/14/94,A,Galesburg,,309-342-9143,Brent Zhorne
C05/14/94,A,Oak Forest,,708-448-0580,David Brasil, NF9N
C05/14/94,A,Sandoval,,618-532-6606,Alva L King, Jr
C05/19/94,A,Athens,,217-544-5374,Gary Britz KF9OI
C05/26/94,A,Zion,,708-265-0710,Michael T McGue
C05/28/94,A,Chicago,,312-233-0605,Harold Pritchard Jr
C06/04/94,A,Belleville,,618-588-4477,Kenneth R Davis, KF9IA
C06/08/94,A,Chicago,,312-465-0981,Michael Leibovitz
C06/08/94,A,Galesburg,,309-342-9143,Brent Zhorne
C06/09/94,A,Antioch,,708-395-0999,Anthony Viverito
C06/09/94,A,Beardstown,,217-245-2061,Tim Childers
C06/11/94,A,Mt Vernon,,618-244-7987,L C McDuffle
C06/11/94,A,Oak Forest,,708-448-0580,David Brasil, NF9N
C06/19/94,A,Athens,,217-544-5374,Gary Britz KF9OI
C
CINDIANA
C03/18/94,A,Highland,,219-923-8308,Charles Sufana
C03/19/94,A,Franklin,,317-736-6320,Eugene McMarty
C03/20/94,A,Auburn,,219-665-6777,Sandra K Parker
C03/26/94,A,Michigan City,,219-874-3386,Robert Lyles
C04/02/94,A,Muncie,,317-288-0481,Peggy Coulter
C04/09/94,A,Chesterton,,219-762-2887,William Peterson
C04/10/94,A,Terre Haute,,812-466-2122,Fred Mahalek

C04/12/94,A,Ft Wayne,,219-724-4721,Willis Bolin
C04/13/94,A,Indianapolis,,317-259-7610,Peter J Zinkan
C04/16/94,A,Fishers,,317-846-2979,John Deegan
C04/16/94,A,Franklin,,317-736-6320,Eugene McMarty
C04/16/94,A,Highland,,219-923-8308,Charles Sufana
C04/16/94,W,New Albany,,812-246-6377,Dick Truax
C04/23/94,A,Indianapolis,,317-291-3569,Joseph A Cirillo
C04/29/94,A,Chesterton,,219-762-2887,William Peterson
C05/07/94,A,New Castle,,317-288-0481,Peggy Coulter
C05/14/94,A,Chesterton,,219-762-2887,William Peterson
C05/14/94,A,Huntington,,219-468-2624,Heath A Pressler
C05/14/94,A,Mishawaka,,219-259-9445,Dan Caesar
C05/20/94,A,Highland,,219-923-8308,Charles Sufana
C05/21/94,A,Anderson,,317-754-7167,Everett Riley
C05/21/94,A,Franklin,,317-736-6320,Eugene McMarty
C06/04/94,A,Muncie,,317-288-0481,Peggy Coulter
C06/05/94,A,Terre Haute,,812-466-2122,Fred Mahalek
C06/11/94,A,Chesterton,,219-762-2887,William Peterson
C06/18/94,A,Franklin,,317-736-6320,Eugene McMarty
C06/18/94,W,New Albany,,812-246-6377,Dick Truax
C06/19/94,A,Auburn,,219-665-6777,Sandra K Parker
C06/19/94,A,Crown Point,,312-294-2793,Charles Sufana
C
CKANSAS
C03/31/94,A,Winfield,,316-775-0300,Leanna R Gordon
C04/09/94,A,Topeka,,913-267-6455,Milo McNall
C04/19/94,A,Andover,,316-775-0300,Leanna R Gordon
C04/20/94,A,Andover,,316-775-0300,Leanna R Gordon
C05/18/94,A,Andover,,316-775-0300,Leanna R Gordon
C06/11/94,A,Topeka,,913-267-6455,Milo McNall
C06/15/94,A,Andover,,316-775-0300,Leanna R Gordon
C
CKENTUCKY
C03/26/94,A,Elizabethtown,,502-351-2559,Willie M Lee, Jr
C03/28/94,A,Maysville,,606-564-9838,Bob Drake N4VGI
C04/09/94,W,Middlesboro,,606-248-0046,Andrew A Pitt
C05/03/94,A,Glasgow,,502-651-8543,
C05/08/94,A,Maysville,,606-564-8540,Mr Shirley K Fulton
C05/14/94,W,Middlesboro,,606-248-0046,Andrew A Pitt
C06/11/94,W,Middlesboro,,606-248-0046,Andrew A Pitt
C
CLOUISIANA
C04/09/94,A,Lafayette,,318-367-3901,Lionel A Oubre
C04/17/94,A,Lacombe,,504-674-2563,Eulon T Passman, Jr
C05/01/94,5,New Orleans,,,Angelo Glorioso
C05/07/94,A,Lafayette,,318-367-3901,Lionel A Oubre
C05/14/94,A,West Monroe,,318-396-3507,Donald C Frantom, Sr
C06/04/94,A,Lafayette,,318-367-3901,Lionel A Oubre
C
CMASSACHUSETTS

C03/19/94,A,New Braintree,,413-477-6288,Kevin Lynch KQ1N
C03/20/94,A,Westborough,,401-333-2129,Robert Beaudet W1YRC
C03/23/94,5,Cambridge,,617-253-3776,Nick Alterndburnd
C03/25/94,A,Holyoke,,413-245-3228,Jim Mullen
C03/29/94,A,Lexington,,617-862-4880,William R Weiss
C03/30/94,A,Hinsdale,,413-443-0725,Len Bean
C04/05/94,A,Lexington,,617-862-4880,William R Weiss
C04/09/94,A,Marlboro,,508-485-7006,Robert Levine
C04/10/94,A,Framingham,,508-877-0563,Richard Marshall
C04/10/94,A,Gloucester,,508-922-3307,Albert Hamilton
C04/13/94,A,Billerica,,508-851-2886,Bruce Anderson
C04/16/94,A,Marion,,508-991-4291,David W Dextradeur
C04/17/94,A,Southwick,,413-566-3010,Yorke Phillips
C04/20/94,5,Cambridge,,617-253-3776,Nick Alterndburnd
C04/22/94,A,Holyoke,,413-245-3228,Jim Mullen
C04/23/94,A,Taunton,,508-821-3047,Robert Bowen
C04/27/94,A,Lunenburg,,508-534-9377,Tom Duffy
C05/08/94,A,Gloucester,,508-922-3307,Albert Hamilton
C05/11/94,A,Billerica,,508-851-2886,Bruce Anderson
C05/14/94,A,Marlboro,,508-485-7006,Robert Levine
C05/18/94,5,Cambridge,,617-253-3776,Nick Alterndburnd
C05/18/94,A,Lunenburg,,508-534-9377,Tom Duffy
C05/27/94,A,Holyoke,,413-245-3228,Jim Mullen
C06/08/94,A,Billerica,,508-851-2886,Bruce Anderson
C06/11/94,A,Marlboro,,508-485-7006,Robert Levine
C06/12/94,A,Gloucester,,508-922-3307,Albert Hamilton
C06/15/94,A,Lunenburg,,508-534-9377,Tom Duffy
C
CMARYLAND
C03/19/94,L,Laurel,,301-572-5124,John Creel, WB3GXW
C03/26/94,A,Port Deposit,,410-378-2771,Louis Busby
C03/26/94,A,Timonium,,410-426-3378,Bob Kennick - 410-426-3378
C04/03/94,5,Landover,,301-773-2898,Freddie Battle
C04/09/94,L,Davidsonville,,301-761-7115,Nancy Alley, NT3Z
C04/16/94,L,Laurel,,301-572-5124,John Creel, WB3GXW
C04/21/94,A,Towson,,410-426-8255,Robert C Kennick
C04/24/94,A,Hagerstown,,301-714-0688,W. Page Pyne, WA3EOP
C04/25/94,A,Hagarstown,,301-714-0688,W Page Pyne, WA3EOP
C05/01/94,5,Landover,,301-773-2898,Freddie Battle
C05/01/94,A,Palmer Park,,301-773-2898,Freddie Battle
C05/14/94,L,Davidsonville,,301-761-7115,Nancy Alley, NT3Z
C05/21/94,L,Laurel,,301-572-5124,John Creel, WB3GXW
C05/28/94,A,Port Deposit,,410-378-2771,Louis Busby
C06/05/94,5,Landover,,301-773-2898,Freddie Battle
C06/11/94,L,Davidsonville,,301-761-7115,Nancy Alley, NT3Z
C06/18/94,L,Laurel,,301-572-5124,John Creel, WB3GXW
C
CMAINE
C03/26/94,A,Machias,,207-255-3931,Paul Thompson
C03/30/94,A,Brunswick,,207-725-5155,Stephen A Hanks

C04/19/94,A,Presque Isle,,207-455-8333,Wilburn A Scott
C04/29/94,A,Alfred,,207-985-4825,John V DiLiddo
C
CMICHIGAN
C03/19/94,A,Bay City,,517-893-3475,Donald La Brenz II
C03/19/94,A,Flint,,810-634-6077,Bill Coale
C03/19/94,A,Howell,,313-437-2277,Kenneth W Meier
C03/19/94,A,Lansing,,517-484-4855,Peter Lycos, KM8K
C03/21/94,A,Charlotte,,517-645-2378,Mark Korroch
C03/24/94,A,Oak Park,,810-544-4114,Mark Sherman
C03/26/94,A,Corunna,,517-288-6844,Aubrey M Clarke
C04/02/94,A,Saginaw,,517-624-9094,Ed King
C04/08/94,A,Grand Rapids,,616-458-6000,John W Wittmann
C04/09/94,A,Ann Arbor,,313-662-6663,Claybourne Mitchell
C04/09/94,A,Charlotte,,517-645-2378,Mark Korroch
C04/09/94,A,Flint,,810-743-3980,Tom Sanders N8DYN
C04/09/94,A,Houghton,,906-337-2542,George R Thurner
C04/10/94,A,Grosse Pte Woods,,313-294-1567,Donald Olszewski
C04/16/94,A,Flint,,810-634-6077,Bill Coale
C04/16/94,A,Howell,,313-437-2277,Kenneth W Meier
C04/16/94,A,Manistee,,616-723-2119,Elmer Stamp
C04/23/94,A,Allegan,,616-673-5340,Bryan Lane
C04/23/94,A,Corunna,,517-288-6844,Aubrey M Clarke
C04/24/94,A,Stevensville,,616-471-5869,Ken Simpson, KU8Y
C04/27/94,A,Trenton,,313-676-6248,Motor City Radio Club
C05/14/94,A,Dearborn,,313-676-6248,Motor City Radio Club
C05/14/94,A,Lansing,,517-484-4855,Peter Lycos, KM8K
C05/15/94,A,Stevensville,,616-471-5869,Ken Simpson, KU8Y
C05/21/94,A,Flint,,810-634-6077,Bill Coale
C05/21/94,A,Howell,,313-437-2277,Kenneth W Meier
C05/21/94,A,Kalamazoo,,616-327-2529,Wray I Marshall
C05/28/94,A,Corunna,,517-288-6844,Aubrey M Clarke
C06/04/94,A,Harvey,,906-249-3837,Richard Schwenke
C06/18/94,A,Allegan,,616-673-5340,Bryan Lane
C06/18/94,A,Flint,,810-634-6077,Bill Coale
C06/18/94,A,Howell,,313-437-2277,Kenneth W Meier
C
CMINNESOTA
C03/19/94,A,Cottage Grove,,612-459-8678,David Harrell
C03/26/94,A,Grand Rapids,,218-326-2268,Robert Grussendorf
C04/02/94,A,St Paul,,612-222-7253,John Bellows
C04/02/94,A,Willmar,,612-243-4326,Allen A Hertzberg
C04/06/94,A,Crosslake,,,Jay Andolshek KA0DYN
C04/07/94,A,Rochester,,507-288-6121,Richard J Baker
C04/08/94,A,Rochester,,507-288-6121,Richard J Baker
C04/09/94,A,Fergus Falls,,218-736-4448,William Morgan
C04/09/94,A,N Branch,,612-444-9814,Bradley Fern
C04/16/94,A,Cottage Grove,,612-459-8678,David Harrell
C05/07/94,A,St Paul,,612-222-7253,John Bellows
C05/21/94,A,Cottage Grove,,612-459-8678,David Harrell

C06/04/94,A,St Paul,,612-222-7253,John Bellows
C06/11/94,A,N Branch,,612-444-9814,Bradley Fern
C06/18/94,A,Cottage Grove,,612-459-8678,David Harrell
C
CMISSOURI
C03/19/94,A,Cape Girardeau,,314-264-2791,John E Clark
C03/19/94,A,Springfield,,417-866-8576,William L Forrest
C03/25/94,A,Lebanon,,417-532-5008,Bill Wheeler
C03/25/94,A,Thayer,,417-264-7948,Joseph P Frommel
C03/26/94,A,St Louis,,314-647-3223,Ronald Lemons
C04/04/94,A,Jackson,,314-866-2622,Gerald Grasso
C04/07/94,A,Jefferson City,,314-635-3362,Alan Braun
C04/07/94,A,St Charles,,314-946-0948,Eric Koch
C04/12/94,A,Columbia,,918-423-5716,Dewey Bennett
C04/16/94,A,Cape Girardeau,,314-264-2791,John E Clark
C04/23/94,A,St Louis,,314-647-3223,Ronald Lemons
C05/05/94,A,Jefferson City,,314-635-3362,Alan Braun
C05/07/94,A,Kennett,,314-738-2752,David Wilkins
C05/10/94,A,Columbia,,918-423-5716,Dewey Bennett
C05/21/94,A,Cape Girardeau,,314-264-2791,John E Clark
C05/28/94,A,Columbia,,918-423-5716,Dewey Bennett
C05/28/94,A,St Louis,,314-647-3223,Ronald Lemons
C06/02/94,A,Jefferson City,,314-635-3362,Alan Braun
C06/06/94,A,Jackson,,314-866-2622,Gerald Grasso
C06/14/94,A,Columbia,,918-423-5716,Dewey Bennett
C06/18/94,A,Cape Girardeau,,314-264-2791,John E Clark
C06/18/94,A,Springfield,,417-866-8576,William L Forrest
C06/18/94,A,St Louis,,314-647-3223,Ronald Lemons
C
CMISSISSIPPI
C03/19/94,A,Tupelo,,601-862-7476,Jeff Clingan
C04/10/94,A,Magee,,601-847-3960,John Statham
C04/10/94,A,Mississippi St,,601-323-8389,Jimmy Akers, W5VZF
C04/14/94,A,Ocean Springs,,601-875-0222,Stan Hecker
C05/12/94,A,Ocean Springs,,601-875-0222,Stan Hecker
C06/09/94,A,Ocean Springs,,601-875-0222,Stan Hecker
C06/12/94,A,Laurel,,601-764-2708,John Vanderslice
C
CMONTANA
C03/19/94,A,Billings,,406-656-6987,Donald Whitcomb
C04/05/94,A,Great Falls,,406-452-7289,George Forsyth
C05/03/94,A,Great Falls,,406-452-7289,George Forsyth
C05/21/94,A,Billings,,406-656-6987,Donald Whitcomb
C06/07/94,A,Great Falls,,406-452-7289,George Forsyth
C
CNORTH CAROLINA
C03/19/94,A,Fayetteville,,910-497-6589,Frederick New
C03/19/94,W,Leicester,,704-683-1400,Larry E York
C03/19/94,A,Morehead City,,919-247-6240,Cecil Pennington
C03/19/94,A,Smithfield,,919-554-2154,David Hockaday

C03/25/94,A,Fayetteville,,910-497-6589,Frederick B New
C03/26/94,A,Elizabeth City,,919-330-4826,David King
C03/26/94,A,Morganton,,704-433-6205,Thomas D Taylor Sr
C03/26/94,A,Rocky Mount,,919-442-6131,Bill Thomas
C03/29/94,A,Durham,,919-544-5729,Terrence J. Murphy
C03/31/94,A,Plymouth,,919-792-6357,Brian Steven Allen
C04/09/94,W,Marion,,704-724-4007,Cecil D Potter
C04/09/94,A,Raleigh,,919-846-1848,Paul Sobon
C04/09/94,A,Wilmington,,919-791-0484,Sam Franklin
C04/16/94,A,Greenville,,919-752-3901,B. Simon Jaworski
C04/16/94,A,Smithfield,,919-554-2154,David Hockaday
C04/16/94,W,Spindale,,704-245-6334,AB Brackett
C04/23/94,W,Asheville,,704-684-1543,Lewis Linn
C05/14/94,A,Carrboro,,919-489-0909,David Snyder, N2MLU
C05/14/94,A,Durham,,919-544-5729,Terrence J Murphy
C05/14/94,A,Fayetteville,,910-497-6589,Frederick New
C05/15/94,W,Asheville,,704-684-1543,Lewis Linn
C05/21/94,A,Morehead City,,919-247-6240,Cecil Pennington
C05/21/94,A,Smithfield,,919-554-2154,David Hockaday
C05/28/94,A,Durham,,9195445729,Terrence J Murphy
C05/28/94,A,Morganton,,704-433-6205,Thomas D Taylor Sr
C05/28/94,A,Rocky Mount,,919-442-6131,Bill Thomas
C06/04/94,A,Wilmington,,919-791-0484,Sam Franklin
C06/11/94,W,Leicester,,704-683-1400,Larry E York
C06/18/94,A,Greenville,,919-752-3901,B. Simon Jaworski
C06/18/94,A,Smithfield,,919-554-2154,David Hockaday
C
CNORTH DAKOTA
C04/19/94,A,Minot,,701-839-6635,Gerald Cushing
C05/17/94,A,Minot,,701-839-6635,Gerald Cushing
C
CNEBRASKA
C03/18/94,A,Norfolk,,402-379-1961,John L Wilson
C03/19/94,A,Norfolk,,402-379-1961,John L Wilson
C03/20/94,A,Scottsbluff,,308-436-3234,Timothy Burkhart
C03/24/94,A,Lincoln,,402-486-1400,John Hauner
C03/29/94,A,Omaha,,402-553-2610,Brian Zdan
C03/31/94,A,Lincoln,,402-486-1400,John Hauner
C04/11/94,A,Sidney,,308-254-2959,Roger Jorgensen
C04/24/94,A,Lincoln,,402-486-1400,John Hauner
C
CNEW HAMPSHIRE
C03/26/94,A,Newport,,603-543-1389,Conrad Ekstrom
C03/30/94,A,Rochester,,603-430-2483,Alfred W. LaVallee
C04/05/94,A,New Ipswich,,603-924-9901,Chet Bowles
C04/09/94,A,Meredith,,603-524-6567,Dick Christopher
C04/19/94,A,Pembroke,,603-485-9170,Paul Paradis N1IZZet
C04/21/94,A,Salem,,603-434-4490,Denise Cabana
C06/04/94,A,Newport,,603-543-1389,Conrad Ekstrom
C06/11/94,A,Rochester,,603-742-0130,William Dodge

C06/18/94,A,Nashua,,603-673-7395,James Heedles
C
CNEW JERSEY
C03/19/94,A,Bayonne,,201-435-5953,Robert Tarantula
C03/19/94,A,Pennington,,609-737-1723,Don Wright
C03/19/94,A,Ramsey,,201-445-5924,Andrew G Birmingham
C03/22/94,A,Bloomfield,,201-338-8357,Carl Nyman
C03/25/94,A,Fair Lawn,,201-797-0151,Peter Adely, Sr K2MHP
C04/02/94,A,Plainfield,,,Julian Clarke
C04/04/94,A,Sayreville,,908-442-9215,George Miller
C04/07/94,A,Flemington,,908-788-2644,Marty GrozinskiQ
C04/09/94,A,Cranford,,201-263-2837,Ed Guida
C04/09/94,A,Cranford,,201-228-2895,Arnold J Knadle
C04/10/94,A,Ewing Township,,609-737-1723,Don Wright
C04/13/94,A,Fort Monmouth,,908-532-5354,Gerald Silverman
C04/16/94,A,Bayonne,,201-435-5953,Robert Tarantula
C04/16/94,A,Jackson,,908-849-9153,Dave McCauley
C04/23/94,A,Rio Grande,,609-522-6819,John O'Neil
C04/26/94,A,Bloomfield,,201-338-8357,Carl Nyman
C05/07/94,A,Plainfield,,,Julian Clarke
C05/11/94,A,Fort Monmouth,,908-532-5354,Gerald Silverman
C05/14/94,A,Cranford,,201-263-2837,Ed Guida
C05/14/94,A,Pennington,,609-737-1723,Don Wright
C05/14/94,A,Rio Grande,,609-522-6819,John O'Neil
C05/21/94,A,Bayonne,,201-435-5953,Robert Tarantula
C05/21/94,A,Belvidiere,,908-806-6944,Marty Grozinski
C05/24/94,A,Bloomfield,,201-338-8357,Carl Nyman
C05/28/94,A,Raritan,,908-231-0009,Roger Schroeder N2LAQ
C06/04/94,A,Plainfield,,,Julian Clarke
C06/08/94,A,Fort Monmouth,,908-532-5354,Gerald Silverman
C06/11/94,A,Cranford,,201-263-2837,Ed Guida
C
CNEW MEXICO
C03/31/94,A,Socorro,,505-835-5225,Dr Kalman Oravecz
C04/02/94,A,Clovis,,505-762-0522,Harold Landsperg
C04/16/94,A,Silver City,,505-536-2279,Pat Kelsey, AB5RB
C04/17/94,A,Silver City,,505-536-2279,Pat Kelsey, AB5RB
C05/14/94,A,Alamogordo,,505-437-5896,Ole Jorgensen
C05/17/94,A,Los Alamos,,505-662-9155,Bonnie Griffiths
C
CNEVADA
C03/31/94,A,Reno,,702-826-0329,Jesse Bond
C04/02/94,A,Henderson,,702-565-0242,Janet Welsh
C04/16/94,A,Reno,,702-826-0329,Jesse Bond
C05/07/94,A,Henderson,,702-565-0242,Janet Welsh
C06/04/94,A,Henderson,,702-565-0242,Janet Welsh
C06/18/94,A,Reno,,702-826-0329,Jesse Bond
C
CNEW YORK
C03/19/94,A,Kingston,,914-679-6958,Bruce Goldstein

C03/20/94,A,New York,,212-853-6847,Harry Y Xu
C03/20/94,A,St Albans,,718-981-8876,Gwen (Vikki) Neal
C03/20/94,A,Staten Island,,718-351-5764,Richard Dyrack
C03/20/94,A,Yonkers,,914-834-2322,Richard A Sandell
C03/21/94,A,New York,,212-456-5224,Jerry Cudmore
C03/26/94,A,Blue Point,,516-581-4595,Leonard Buonaiuto
C03/26/94,A,Green Island,,518-237-8473,Bob Daigneault WB2ZCM
C03/26/94,A,Newark,,315-524-2875,Mike Fayette
C03/26/94,A,Upton,,516-282-5467,Nick Franco
C03/27/94,A,N Lindenhurst,,516-888-5576,Thomas Tiniski
C03/29/94,A,Brooklyn,,718-259-1771,Edward E Genoino, WA2NDA
C04/01/94,A,Oriskany,,315-853-5700,William L Effland
C04/02/94,A,Islip,,516-234-0589,Addison Levi
C04/04/94,A,Schenectady,,518-399-1793,Charles Haynes, KA2VNP
C04/09/94,A,Bath,,607-569-2353,James White, KV2W
C04/09/94,A,Jamestown,,716-488-1524,Jack Nord
C04/09/94,A,Lake Huntington,,914-932-8544,Frank Szabo
C04/09/94,A,N Tonawanda,,716-634-5276,Vern Siegel
C04/09/94,A,Plattsburgh,,518-873-2189,Les Schmarder
C04/12/94,A,Pomona,,914-357-0712,Steve Koeper
C04/14/94,A,Batavia,,716-468-3429,William A O'Donnell
C04/16/94,A,Troy,,518-283-2337,Harry Hovey, WF2B
C04/20/94,A,Lancaster,,716-937-3592,Charles Koester
C04/21/94,A,Mt Vernon,,914-285-3029,Sandy Fried
C04/22/94,A,Southhold,,516-323-3646,Ralph Williams
C04/23/94,A,Blue Point,,516-581-4595,Leonard Buonaiuto
C04/24/94,A,N Lindenhurst,,516-888-5576,Thomas Tiniski
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C04/30/94,A,Lockport,,716-751-9223,Judith Cianchetti
C05/01/94,A,Yonkers,,914-963-0689,Harold J Parks
C05/01/94,A,Yonkers,,914-969-1053,Otto Supliski
C05/02/94,A,Schenectady,,518-399-1793,Charles Haynes, KA2VNP
C05/03/94,A,N Lindenhurst,,516-888-5576,Thomas Tiniski
C05/04/94,A,Poughkeepsie,,914-297-4238,Bob Harris
C05/06/94,A,Cooperstown,,607-965-8008,Keith Blissn
C05/07/94,A,Islip,,516-234-0589,Addison Levi
C05/07/94,A,N Tonawanda,,716-634-5276,Vern Siegel
C05/07/94,A,Queensbury,,518-792-6994,Rick Critcher
C05/10/94,A,Pomona,,914-357-0712,Steve Koeper
C05/14/94,A,Horseheads,,607-962-1134,Bill Dorman
C05/14/94,A,Lake Huntington,,914-932-8544,Frank Szabo
C05/14/94,A,Modena,,914-566-0936,Dan Conna
C05/14/94,A,Troy,,518-283-2337,Harry Hovey, WF2B
C05/14/94,A,White Plains,,914-834-2322,Dr Richard A Sandell
C05/18/94,A,Lancaster,,716-937-3592,Charles Koester
C05/22/94,A,Massapequa,,516-735-9657,James T Worsley
C05/22/94,A,Staten Island,,718-351-5764,Richard Dyrack
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C06/05/94,A,Yonkers,,914-963-0689,Harold J Parks
C06/06/94,A,New York,,212-456-5224,Jerry Cudmore
C06/07/94,A,Pomona,,914-357-0712,Steve Koeper
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C06/12/94,A,N Lindenhurst,,516-888-5576,Thomas Tiniski
C06/15/94,A,Lancaster,,716-937-3592,Charles Koester
C06/16/94,A,Mt Vernon,,914-285-3029,Sandy Fried
C06/18/94,A,Kingston,,914-679-6958,Bruce Goldstein
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C03/19/94,A,Greenville,,513-548-3010,Leon Harshbarger N8QAL
C03/19/94,A,Jackson,,614-286-3239,Edgar Dempsey
C03/19/94,A,Lebanon,,513-746-2092,Sherman E Winkle
C03/19/94,A,Springfield,,513-322-5020,Terry Mefford
C03/20/94,A,Eaton,,513-456-6777,Curtis Scholl
C03/20/94,A,Elyria,,216-647-5116,Ola Sloane
C03/22/94,A,Salem,,216-337-6544,Bob Tullis
C03/26/94,A,Akron,,216-882-6883,Herbert Wanzie
C03/27/94,A,Coshocton,,614-622-3470,Robert Manson
C03/27/94,A,Madison,,216-266-2113,R Scott Farnham
C04/02/94,A,Cincinnati,,513-891-7556,Herbert C Blasberg
C04/02/94,A,Columbus,,614-866-5531,James Kerr
C04/02/94,A,Sandusky,,419-433-3441,Gary Howell
C04/03/94,A,LaGrange,,216-647-5116,Ola Slone
C04/05/94,A,Canfield,,216-755-1000,Rich Marsteller
C04/08/94,A,Delta,,419-822-5449,Elmer Zieroff
C04/09/94,A,Hamilton,,513-868-7012,Theodore Wilson
C04/09/94,A,Maumee,,419-693-3023,Ross H Mergenthaler
C04/09/94,A,Miamisburg,,513-866-6720,Rick Gore AA8GV
C04/09/94,A,Mount Vernon,,614-625-5504,Michael W White
C04/09/94,A,Warren,,216-898-5579,Tom Finta aa8kz
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C04/15/94,A,East Liverpool,,216-386-5020,Marcus Morlan
C04/16/94,A,Lebanon,,513-746-2092,Sherman E Winkle
C04/16/94,A,Mansfield,,419-522-2593,Dwayne Meadows
C04/16/94,A,Wooster,,216-669-3698,Jack A Bly
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C04/18/94,A,Chillicothe,,614-775-8505,Dave Hawkins
C04/30/94,A,Dayton,,513-426-8717,Charles Gauder
C04/30/94,A,Wellston,,614-286-2470,Ron Erb
C05/01/94,A,LaGrange,,216-647-5116,Ola Slone
C05/03/94,A,Canfield,,216-755-1000,Rich Marsteller
C05/03/94,A,Clyde,,419-684-7822,John W Faggionato
C05/07/94,A,Cincinnati,,513-891-7556,Herbert C Blasberg
C05/07/94,A,Westerville,,614-861-6916,William Tabor
C05/08/94,A,Marion,,614-499-3565,Stephen Eckard
C05/14/94,A,Akron,,216-972-7677,Kenneth R Teleis
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C05/14/94,A,Maumee,,419-693-3023,Ross H Mergenthaler
C05/14/94,A,Van Wert,,419-795-5763,Robert E High
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C05/19/94,A,Youngstown,,216-534-1394,James Viele
C05/21/94,A,Lebanon,,513-746-2092,Sherman E Winkle
C05/28/94,A,Canton,,216-453-5896,Richard Stellarini
C06/04/94,A,Cincinnati,,513-891-7556,Herbert C Blasberg
C06/04/94,A,Mentor,,216-266-2113,R Scott Farnham
C06/05/94,A,LaGrange,,216-647-5116,Ola Slone
C06/07/94,A,Canfield,,216-755-1000,Rich Marsteller
C06/11/94,A,Columbus,,614-861-6916,William T. Tabor
C06/11/94,A,Hamilton,,513-868-7012,Theodore Wilson
C06/11/94,A,Maumee,,419-693-3023,Ross H Mergenthaler
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C06/12/94,A,Cleveland Hts,,216-321-5567,Fred Taub
C06/14/94,A,Tiffin,,419-447-9515,Gregg Fletchner
C06/19/94,A,Coshocton,,614-622-3470,Robert Manson
C06/19/94,A,Elyria,,216-647-5116,Ola Sloane
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C03/19/94,A,Altus,,405-477-0921,Loren C Simms
C03/26/94,A,Altus,,405-477-3357,G James Clark
C03/26/94,A,Vinita,,918-256-2716,Jimmie Willits
C04/09/94,A,Norman,,405-329-1681,John Copeland
C04/09/94,A,Ponca City,,405-762-1966,Mark E Byard
C04/19/94,A,Miami,,918-542-7142,Gary Sherard
C05/14/94,A,Miami,,918-542-7142,Gary Sherard
C05/14/94,A,Norman,,405-329-1681,John Copeland
C05/21/94,A,Durant,,405-924-7868,R J Kuhlmeier
C05/21/94,A,Tulsa,,918-272-3081,Georgia McReynolds, KA5VIL
C06/04/94,A,Ponca City,,405-762-1966,Mark E Byard
C06/11/94,A,Norman,,405-329-1681,John Copeland
C06/12/94,A,Miami,,918-542-7142,Gary Sherard
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COREGON
C03/19/94,A,Astoria,,503-325-3902,Alene Linehan
C03/19/94,A,Gresham,,503-257-4822,Ed Clulow
C03/19/94,A,Newport,,503-563-3866,Philip Smith
C04/02/94,A,Lincoln City,,503-994-3113,Carl E Schmauder
C04/10/94,A,Portland,,503-642-5803,Edith Litvin
C04/16/94,A,Newport,,503-563-3866,Philip Smith
C04/19/94,A,Newberg,,503-538-4301,Colin Lamb
C04/20/94,A,Salem,,503-588-7685,Bill Berry
C04/28/94,A,Coos Bay,,503-756-5693,Chuck Sawyer
C05/07/94,A,Lincoln City,,503-994-3113,Carl E Schmauder
C05/11/94,A,Roseburg,,503-672-7564,Anne Wolfe
C05/14/94,A,Albany,,503-838-4865,Alesa Nason KA7UGQ
C05/18/94,A,Newport,,503-563-3866,Philip Smith
C05/21/94,A,Newport,,503-563-3866,Philip Smith

C06/04/94,A,Lincoln City,,503-994-3113,Carl E Schmauder
C06/18/94,A,White City,,503-773-4687,Bill Lorton
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CPENNSYLVANIA
C03/19/94,A,Beaver Falls,,412-843-6560,Thomas Peluso
C03/19/94,A,Cranberry,,814-676-8307,Thomas Rea
C03/19/94,A,Elco,,412-938-8125,Lou Furlong
C03/21/94,A,Telford,,215-679-5764,Warren Erdman
C03/21/94,A,Williamsport,,717-323-7311,H Vincent Beardsley
C03/22/94,A,Shickshinny,,717-864-3745,Victor Long
C03/24/94,A,Levittown,,215-552-6499,Cully Phillips
C03/25/94,A,Allentown,,215-740-0666,Victor Tropiano
C03/26/94,A,Custer City,,814-642-2211,Bruce A Manning
C03/26/94,A,Philadelphia,,215-898-8538,Matthew Gomez
C03/30/94,A,Warminster,,215-343-3494,Tom Michaud
C04/02/94,A,Erie,,814-665-9124,Norma Vanderhoff
C04/02/94,A,Northumberland,,717-966-1782,David Swaney
C04/02/94,A,Pittsburgh,,412-563-2379,Jim Cottrill
C04/08/94,A,Nazareth,,610-767-4778,John Greenage
C04/09/94,A,New Kensington,,412-782-5130,Donald McDaniel, KJ3Q
C04/09/94,A,Shrewsbury,,717-235-0273,Carol Kirschman
C04/11/94,A,Jim Thorpe,,717-386-2797,Anne M Keiser
C04/12/94,A,Pittsburgh,,412-931-2651,John Rosenwald
C04/13/94,L,Scranton,,717-342-8591,Art Sposto
C04/14/94,A,Indiana,,412-463-3738,Richard Christensen
C04/15/94,A,Tamaqua,,717-668-3098,Allen R Breiner
C04/16/94,A,Elco,,412-938-8125,Lou Furlong
C04/16/94,A,Hermitage,,412-347-1183,John May
C04/16/94,A,Meadville,,814-724-1413,James Cihon
C04/16/94,A,Pittsburgh,,412-795-2775,Bernard Freiland
C04/18/94,A,Greenville,,412-588-3539,David W Stuyvesant
C04/18/94,A,Telford,,215-679-5764,Warren Erdman
C04/18/94,A,Williamsport,,717-323-7311,H Vincent Beardsley
C04/21/94,A,East Stroudsburg,,717-424-0945,Dave Haney
C04/21/94,A,Lancaster,,717-898-0611,Carl Denlinger, WQ3P
C04/23/94,A,Coudersport,,814-274-8161,Martin Weiss AA3CM
C04/23/94,A,Honesdale,,717-253-5201,Vincent J Banville
C04/24/94,A,Indiana,,412-463-3738,Richard Christensen
C04/28/94,A,Levittown,,215-552-6499,Cully Phillips
C04/29/94,A,Allentown,,215-740-0666,Victor Tropiano
C04/30/94,A,Reading,,215-678-8976,Harry Hoffman
C05/06/94,A,Nazareth,,610-767-4778,John Greenage
C05/07/94,A,Erie,,814-665-9124,Norma Vanderhoff
C05/07/94,A,Mt Pleasant,,,David J Rath
C05/07/94,A,Pittsburgh,,412-931-2651,John Rosenwald
C05/11/94,5,Scanton,,717-342-8591,Art Sposto
C05/14/94,A,Butler,,412-282-6777,Gerald Wetzel
C05/14/94,A,Linwood,,215-497-5795,Barb Levine
C05/14/94,A,York,,717-292-3529,Ray Shaub
C05/15/94,A,Uniontown,,412-246-2870,John Cermak

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C05/19/94,A,East Stroudsburg,,717-424-0945,Dave Haney
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C05/23/94,A,York,,717-292-3529,Ray Shaub
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C06/04/94,A,Honesdale,,717-253-5201,Vincent J Banville
C06/05/94,A,Tamaqua,,717-668-3098,Allen Breiner
C06/08/94,A,Dunmore,,717-689-9688,Raymond A Collins
C06/11/94,A,Shrewsbury,,717-235-0273,Carol Kirschman
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C06/18/94,A,Elco,,412-938-8125,Lou Furlong
C06/18/94,A,Hermitage,,412-347-1183,John May
C06/20/94,A,Telford,,215-679-5764,Warren Erdman
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CRHODE ISLAND
C04/02/94,A,Middletown,,401-683-2250,Jack P Garforth
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C05/21/94,A,Charleston,,803-871-4368,Cyrus E. Frank
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C06/18/94,A,Charleston,,803-871-4368,Cyrus E. Frank
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CSOUTH DAKOTA
C03/26/94,A,Pierre,,605-224-9845,Larry E. Hofmeister
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C04/11/94,A,Brookings,,,Richard Roduner
C04/16/94,A,Clear Lake,,605-432-6917,James J Thomas

C04/30/94,A,Pierre,,605-224-8836,Larry E Hofmeister
C06/11/94,A,Rapid City,,605-348-6564,Neal @ DAY 605-394-1298
C
CTENNESSEE
C03/18/94,A,Shelbyville,,615-684-4104,Donna Parker
C03/19/94,A,Columbia,,615-381-6814,Charles Miller
C03/19/94,W,Knoxville,,615-688-7771,Ray Adams
C03/19/94,W,Memphis,,901-795-5923,Stan Moore
C03/22/94,A,LaFollette,,615-562-3308,Larry W Parks
C03/26/94,W,Greeneville,,615-638-7056,Jack Creed
C03/26/94,W,Memphis,,901-795-5923,Stan Moore
C03/27/94,A,Sparta,,615-761-5007,Charles A Nielsen Sr
C03/31/94,W,Memphis,,901-795-5923,John Hall
C04/02/94,W,Paris,,901-247-5489,Mackie Gallimore
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C04/09/94,A,Murfreesboro,,615-459-6296,Don Moore
C04/09/94,W,Rockwood,,615-354-4281,Richard Spillee
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C04/16/94,W,Johnson City,,615-743-5144,Charles Hensley
C04/16/94,W,Knoxville,,615-688-7771,Ray Adams
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C04/23/94,W,Memphis,,901-795-5923,Stan Moore
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C04/28/94,W,Memphis,,901-795-5923,John Hall
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C05/14/94,W,Paris,,901-247-5489,Mackie Gallimore
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C05/21/94,W,Greeneville,,615-638-7056,Jack Creed
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C05/26/94,W,Memphis,,901-795-5923,John Hall
C05/28/94,W,Memphis,,901-795-5923,Stan Moore
C05/29/94,A,Sparta,,615-761-5007,Charles A Nielsen Sr
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C06/08/94,W,Maryville,,615-982-5839,Carroll Peabody
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C03/26/94,5,Dallas,,214-480-1903,Bill Warner

C03/26/94,A,Tomball,,713-351-8930,Paul Frantz
C04/02/94,A,El Paso,,915-544-5863,Gorden L Howard
C04/02/94,A,Orange,,409-886-7159,Paul Clark
C04/03/94,A,McKinney,,903-455-2746,Charles Borneman
C04/09/94,A,Houston,,713-488-4426,James Heil
C04/09/94,A,Manchaca,,512-327-6184,Jim Greenwood
C04/09/94,A,Midland,,915-694-9450,Bill Anderson
C04/12/94,A,Houston,,713-682-6897,Cass Germany
C04/16/94,5,Austin,,512-327-6184,Jim Greenwood
C04/16/94,A,Houston,,713-544-4829,Darrel Glueck KB5UCH
C04/20/94,A,Katy,,713-391-4124,Philip E Burrow
C04/21/94,A,San Antonio,,210-673-8852,Leslie Dale
C04/23/94,A,Abilene,,915-672-8889,Peggy Richard
C04/23/94,5,Dallas,,214-480-1903,Bill Warner
C04/23/94,A,Tomball,,713-351-8930,Paul Frantz
C04/30/94,A,Waco,,817-859-5374,Alma P Lang
C05/07/94,A,Austin,,512-345-7281,Larry C Gunter
C05/07/94,A,McGregor,,817-859-5374,James M Lang
C05/10/94,A,Houston,,713-682-6897,Cass Germany
C05/14/94,A,Grangerland,,713-592-2257,Sam Neal
C05/14/94,A,Houston,,713-488-4426,James Heil
C05/14/94,A,McGregor,,817-859-5374,James M Lang
C05/14/94,A,Midland,,915-694-9450,Bill Anderson
C05/19/94,A,San Antonio,,210-673-8852,Leslie Dale
C05/28/94,5,Dallas,,214-480-1903,Bill Warner
C05/28/94,A,Tomball,,713-351-8930,Paul Frantz
C06/04/94,A,El Paso,,915-544-5863,Gorden L Howard
C06/04/94,A,Orange,,409-886-7159,Paul Clark
C06/11/94,A,Houston,,713-488-4426,James Heil
C06/11/94,A,Midland,,915-694-9450,Bill Anderson
C06/14/94,A,Houston,,713-682-6897,Cass Germany
C06/16/94,A,San Antonio,,210-673-8852,Leslie Dale
C
CUTAH
C03/19/94,A,Logan,,801-753-4843,Paul Hansen
C04/02/94,A,Salt Lake City,,801-582-2438,Gordon R Smith
C05/28/94,A,St George,,801-628-9074,Clark Braten
C06/04/94,A,Salt Lake City,,801-582-2438,Gordon R Smith
C
CVIRGINIA
C03/26/94,5,Gloucester,,804-484-2857,Fran Sterling
C03/30/94,A,Lynchburg,,804-386-4653,William L Dail
C04/09/94,L,Alexandria,,703-455-1510,Frank Mackey
C04/09/94,A,Harrisonburg,,703-856-8012,Marshall Cooper
C04/09/94,A,Richmond,,804-798-5048,Rick Cook
C04/10/94,5,Virginia Beach,,804-424-4764,Bill Verebely
C04/27/94,A,Lynchburg,,804-386-4653,William L Dail
C04/30/94,A,Williamsburg,,804-253-2811,Andrew Swanson
C05/07/94,A,Sterling,,703-450-2304,Michael Weber
C05/14/94,L,Alexandria,,703-455-1510,Frank Mackey

C05/14/94,A,Charlottesville,,804-973-1094,John D Gray
C05/14/94,A,Culpeper,,703-547-3089,Bill Brown
C05/14/94,A,Herndon,,703-450-2304,Michael E Weber
C05/21/94,W,Roanoke,,703-366-6266,Fred L Horton
C05/28/94,5,Gloucester,,804-484-2857,Fran Sterling
C06/04/94,A,Virginia Beach,,804-468-9166,Judy Rogers
C06/11/94,L,Alexandria,,703-455-1510,Frank Mackey
C06/11/94,A,Harrisonburg,,703-856-8012,Marshall Cooper
C06/11/94,A,Richmond,,804-798-5048,Rick Cook
C06/18/94,A,Fredricksburg,,703-373-7076,Carolyn Cavanagh, AC4SK
C
CVERMONT
C03/19/94,A,Rutland,,802-773-0775,Walt Deinzer
C04/09/94,A,Burlington,,802-878-6454,Ralph T Stetson III
C05/13/94,A,Burlington,,802-878-6454,Ralph T Stetson III
C05/21/94,A,Montpelier,,802-433-6172,Bob McCorkle
C06/10/94,A,Burlington,,802-878-6454,Ralph T Stetson III
C
CWASHINGTON
C03/19/94,A,Sultan,,206-793-0319,Ernie Allsop
C03/21/94,A,Langley,,206-331-5367,Terry Permenter
C03/23/94,A,Belfair,,206-895-4121,Jim Pitman
C03/23/94,A,Everett,,206-542-0285,Dwayne E Broderson
C03/23/94,A,Marysville,,206-335-5158,Loren Hole
C03/26/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
C03/26/94,A,Orting,,206-847-8888,Tess Sutton
C03/26/94,A,Tacoma,,206-845-7652,Jerry Seligman
C03/28/94,A,Hoquiam,,206-532-7589,Bill Maki
C04/02/94,A,Ephrata,,509-754-3847,W J Edwards
C04/02/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr
C04/02/94,A,Vancouver,,206-892-7291,Wayne Schuler
C04/10/94,A,Tukwila,,206-523-9117,Harry Lewis
C04/12/94,A,Everett,,206-355-7759,L R Luchi
C04/16/94,A,Spokane,,509-536-7576,Mary Moore
C04/16/94,A,Sultan,,206-793-0319,Ernie Allsop
C04/17/94,A,College Place,,509-525-7003,Mable Babbitt
C04/23/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
C04/23/94,A,Marysville,,206-335-5158,Loren Hole
C04/27/94,A,Everett,,206-542-0285,Dwayne E Broderson
C05/07/94,A,Ephrata,,509-754-3847,W J Edwards
C05/07/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr
C05/08/94,A,Tukwila,,206-523-9117,Harry Lewis
C05/10/94,A,Everett,,206-355-7759,L R Luchi
C05/21/94,A,Aberdeen,,206-249-6373,Nick Bender
C05/21/94,A,Sultan,,206-793-0319,Ernie Allsop
C05/25/94,A,Everett,,206-542-0285,Dwayne E Broderson
C05/28/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
C05/28/94,A,Marysville,,206-335-5158,Loren Hole
C06/04/94,A,Ephrata,,509-754-3847,W J Edwards
C06/04/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr

C06/12/94,A,Tukwila,,206-523-9117,Harry Lewis
C06/14/94,A,Everett,,206-355-7759,L R Luchi
C06/18/94,A,Sultan,,206-793-0319,Ernie Allsop
C06/18/94,A,Tacoma,,206-845-7652,Jerry Seligman
C06/19/94,A,College Place,,509-525-7003,Mable Babbitt
C
CWISCONSIN
C03/19/94,A,Appleton,,414-788-3823,Larry Siebers
C03/20/94,A,Jefferson,,414-461-5995,Robert Fetterly
C03/26/94,A,Menomonie,,715-235-3998,James P Ley
C03/27/94,A,Platteville,,608-342-3508,Randy Kruszuka
C03/31/94,A,Onalaska,,608-783-8028,Rick Williams
C04/02/94,A,Racine,,414-658-8390,William Firchow
C04/09/94,A,Ashland,,715-682-2162,Robert F Clark
C04/09/94,A,Madison,,608-832-6631,Mark Jenks
C04/09/94,A,Wisconsin Rapids,,715-422-3595,Gene Santoski
C04/12/94,A,Marinette,,715-732-2496,Terry Dobrzenski
C05/07/94,A,Manitowoc,,414-788-3823,Larry Siebers
C05/14/94,A,Madison,,608-832-6631,Mark Jenks
C06/11/94,A,Appleton,,414-788-3823,Larry Siebers
C06/11/94,A,Madison,,608-832-6631,Mark Jenks
C
CWEST VIRGINIA
C03/21/94,A,Morgantown,,304-366-0132,Robert Robinson
C03/27/94,A,Charleston,,304-744-8613,Calvin Basham
C04/10/94,A,Clarksburg,,304-624-5186,Joseph R Chiado
C04/16/94,A,Martinsburg,,301-834-8831,Lester M. Reynolds
C05/10/94,A,Fairmont,,304-366-0132,Robert Robinson
C05/14/94,A,Charleston,,304-744-8613,Calvin Basham
C
CWYOMING
C04/09/94,A,Laramie,,307-742-2077,Fred Crowell
C04/30/94,A,Cheyenne,,307-637-8634,Wilson Sellner
C05/28/94,A,Cody,,307-568-2349,Jerry Pyle
C
C
CEXAMINATION OPPORTUNITIES OUTSIDE THE UNITED STATES:
C
CGUAM
C03/20/94,A,Adelup,,627-646-7611,Harry Y Taguchi
C06/19/94,A,Adelup,,627-646-7611,Harry Y Taguchi
C
CUS VIRGIN ISLANDS
C04/09/94,A,St Croix,,809-778-3156,Frank Jaeger
C05/14/94,A,ST Thomas,,809-774-4740,Ronald A Hall Sr
C
COTHER:
C03/19/94,A,Australia,,089-531-305,Maury Hatfield
C04/03/94,A,England,,144-423-870,Mike Parker N6SVL
C03/19/94,A,Germany,,06561-18202,George L Hoke

```
C03/26/94,A,Japan,,243-6092,Paul W Jackson USN
C03/26/94,A,Japan,,098-633-1728,Alice Kottmyer
C03/26/94,A,Papua New Guinea,,FAX-77-3504,Randall Pearson
C04/17/94,A,Saipan,,670-234-6323,David Hardt
C
C*EOF
```

3212. Cellular Phone

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 20:30:52 UTC
From: CARDOSO <CARD@UNB.CA>
Message-ID: <23MAR94.17835701.0195@UNBVM1.CSD.UNB.CA>
Source record: 269414

WANTED used cellular Motorola Flip-Phone.
e-mail: cardoso@unb.ca

	John P. Cardoso UNIVERSITY of NEW BRUNSWICK	
	email: cardoso@unb.ca PSYCHOLOGY DEPARTMENT	
	phone: (506) 453-4707 Bag Service #45444	
	fax: (506) 453-4599 Fredericton, NB, Canada, E3B 6E4	

3213. Re: Grid Squares & Lat/Long

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 20:33:52 UTC
From: jholly@cup.hp.com
Message-ID: <Cn4x4G.J41@cup.hp.com>
Source record: 269415

Jay Sissom (JAY@medicine.dmed.iupui.edu) wrote:
: Hello!

: I recently borrowed a GPS device to calculate my Latitude & Longitude. I
: found a couple of basic programs on Compuserve to calculate my grid square
: from this info. Either something is wrong with the program, or something is
: wrong with the ARRL map in one of their books. Here is my lat/long:

: Lattitude: 39' 39.303 N
: Longatude: 89' 10.550 W

: When I feed these numbers into the programs, I get EM59JP. When I look on the
: map, EM59 is in Illinois and I live in Indianapolis, IN. Is the map wrong, or
: is the basic program wrong?

No, Inidiana was recently purchased by Illinois for future expansion. Your
program correctly shows the recent changes.

Jim, WA6SDM

3214. Re: Sonobuoys

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 21:28:56 UTC
From: rovero@oc.nps.navy.mil
Message-ID: <Cn4zo9.9KI@taurus.cs.nps.navy.mil>
Source record: 269416
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner

>Kenneth E. Harker (Kenneth.E.Harker@Dartmouth.Edu) wrote:
>
>> we were to somehow activate the third, sealed buoy, and it's battery
>> still functioned, what sort of signal does it put out, and is there any
>> way we could monitor it? Alternatively, does anyone know what sort of
>> radios these things have in them? Are they useful for anything other
>> than sonobuoys? What would they be worth?
>

Please be *extremely careful* with this device. The main battery is
seawater activated, and there is a inflatable collar float that inflates
and an antenna that is extended when it enters the water (actually, when
two pins on the body of the sonobuoy are shorted). You don't want to
be holding the device when this happens!

The signal is 1W, VHF-FM, transmit only. Old ones had a single channel,
newer ones can select one of 99 channels (synthesized).

Be careful! And don't transmit out of band for whatever services you
are licensed for.....

P.J. Rovero Internet: rovero@oc.nps.navy.mil
Code OC/Rv Packet: kk1d@k6ly
Naval Postgraduate School
Monterey, CA 93943

3215. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 21:39:49 UTC
From: ka3rnn@plf.UUCP
Message-ID: <31TNJc1w165w@plf.uucp>
Source record: 269417

subscribe

Sam Rennie Member HAM RADIO
ka3rnn@plf.uucp Olympia Radio Amateur Club the
Philadelphia, PA (WA3BAT) Wireless Internet

3216. Re: Grid Squares & Lat/Long

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 22:46:04 UTC
From: drt@world.std.com
Message-ID: <Cn538t.Ht3@world.std.com>
Source record: 269418

Jay Sissom (JAY@medicine.dmed.iupui.edu) wrote:
: Hello!

: I recently borrowed a GPS device to calculate my Latitude & Longitude. I
: found a couple of basic programs on Compuserve to calculate my grid square
: from this info. Either something is wrong with the program, or something is
: wrong with the ARRL map in one of their books. Here is my lat/long:

: Lattitude: 39' 39.303 N
: Longatude: 89' 10.550 W

: When I feed these numbers into the programs, I get EM59JP. When I look on the
: map, EM59 is in Illinois and I live in Indianapolis, IN. Is the map wrong, or
: is the basic program wrong?

: Thanks
: Jay
: KA9OKT

Well, the World Almanac says the coordinates for Indianapolis are

39.7678 N
86.1628 W

So I'd say that, gadget or no gadget, your Lat/Long figures are wrong.

-drt

|David R. Tucker KG2S drt@world.std.com|

3217. Who Brian is

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-23 23:17:03 UTC
From: alan_v._cook@smtpgty.anatcp.rockwell.COM
Message-ID: <9402237644.AA764464623@smtpgty.anatcp.rockwell.com>
Source record: 269419

Date: Wed, 23 Mar 94 06:32:55 GMT
From: netcomsv!netcomsv!skyld!jangus@decwrl.dec.com
Subject: Jeff Herman wins the Net Nazi award.
To: info-hams@ucsd.edu

In article <2mnc9q$aht@network.ucsd.edu> brian@nothing.ucsd.edu writes:

>
> Ironic that *I* should be saying this.
> - Brian

Then jangus@skyld.grendel.com writes

>Take a valium and chill out Brian. Ironic indeed. Why not do us all a
>favor and cancel all the pissing, moaning and baseless whining over on
>rec.radio.amateur.policy while you're at it.

>Besides, who appointed you the moderator for the news group?

Now I say:

Perhaps someone should explain to Jeff who Brian is, what Brian stands
for, and why, if Brian decides it should be so, almost no one will be
able to hear him. I'd do it, but it might be more fun to watch Jeff
squirm a little...

Alan Cook, N7CEU
Alan_V._Cook@ccmail.anatcp.rockwell.com

3218. Voice mail on a repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 05:48:54 UTC
From: bote@access.digex.net
Message-ID: <bote.764487800@access3>
Source record: 269420

wkinning@nyx10.cs.du.edu (Warren Kinninger) writes:
>Here is a DTMF Tone Generator for the Sound Blaster written in Pascal.
>Jim is working on a repeater controller based around a PC/XT system with
>advanced features like voice mail and macro programming via 1200 baud ASCII.

I have only heard voice mailboxes on the ACC garbage.
I know that other repeater controllers have voice mailboxes.

How does voice mail on a ham repeater perform? I am curious
about actual users' experiences.

If each member has an assigned voice mailbox, then that
might be useful, but it would definitely drive up the volume
of traffic on the repeater as people check in
for messages. Even if the repeater announces that
messages are waiting, that increase in noise itself
could become annoying after a while.

On the other hand, I have begged for certain stations
to reach their destinations or change frequencies
while they incessantly called over and over and
over again for someone to no avail.

Is voice mail something that many hams want on their
favorite repeater?

Comments welcome.

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 10 days until Opening Day! How 'bout them Os!!

3219. Daily Summary of Solar Geophysical Activity for 23 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 06:38:58 UTC
From: oler@rho.uleth.ca
Message-ID: <9403240639.AA04914@rho.uleth.ca>
Source record: 269421
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

23 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 23 MARCH, 1994

NOTE: A large area of strengthening stratospheric warming exists from
southern to eastern Europe and southwestern Siberia.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 082, 03/23/94
10.7 FLUX=091.8 90-AVG=105 SSN=032 BKI=3432 3321 BAI=013
BGND-XRAY=B1.1 FLU1=2.4E+06 FLU10=1.7E+04 PKI=3533 4322 PAI=017
BOU-DEV=020,060,029,019,025,025,013,008 DEV-AVG=024 NT SWF=00:000
XRAY-MAX= B3.9 @ 2038UT XRAY-MIN= A8.6 @ 1111UT XRAY-AVG= B1.4
NEUTN-MAX= +002% @ 1325UT NEUTN-MIN= -002% @ 2010UT NEUTN-AVG= +0.0%
PCA-MAX= +0.1DB @ 0220UT PCA-MIN= -0.4DB @ 0805UT PCA-AVG= -0.0DB
BOUTF-MAX=55340NT @ 0520UT BOUTF-MIN=55310NT @ 1908UT BOUTF-AVG=55328NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+069,+000,+000
GOES6-MAX=P:+125NT@ 1941UT GOES6-MIN=N:-101NT@ 0505UT G6-AVG=+089,+024,-045
FLUXFCST=STD:095,095,095;SESC:095,095,095 BAI/PAI-FCST=010,010,010/015,015,010
KFCST=3223 4111 1112 3111 27DAY-AP=005,014 27DAY-KP=1112 2121 1254 2232
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 22 MAR 94 was 32.6.
The Full Kp Indices for 22 MAR 94 are: 4+ 3- 2- 3- 5o 3- 3- 3-
The 3-Hr Ap Indices for 22 MAR 94 are: 34 12 7 12 46 12 12 12
Greater than 2 MeV Electron Fluence for 23 MAR is: 2.7E+08

SYNOPSIS OF ACTIVITY

Solar activity was very low. Only a few small flares were
observed during the day. Region 7692 (N18W32) showed some
development and Region 7693 (N08W70) was decaying. There were
indications of some small erupting flux regions near day's end
at N08E62 and at S10E45.

Solar activity forecast: solar activity is expected to be
very low to low.

The geomagnetic field ranged from quiet to active levels
with some brief minor storm periods at high latitudes.
The higher levels of activity were limited to the 0300-
1500Z time window.

Geophysical activity forecast: the geomagnetic field is
expected to be predominantly unsettled for the next three days.

Event probabilities 24 mar-26 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 24 mar-26 mar

A. Middle Latitudes
Active 25/10/10
Minor Storm 10/05/05
Major-Severe Storm 05/01/01

B. High Latitudes
Active 25/10/10
Minor Storm 10/05/05
Major-Severe Storm 05/01/01

Near-normal HF propagation conditions dominated over most
regions today. High latitude regions (transauroral paths)
experienced some minor signal degradation during the night, but
were otherwise near-normal. Similar conditions are expected
over the next 72 hours. Near-normal propagation should
dominate.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 23/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7692 N18W32 159 0030 CSO 04 004 BETA
7693 N08W70 197 0060 CRO 07 008 BETA
REGIONS DUE TO RETURN 24 MARCH TO 26 MARCH
NMBR LAT LO
7686 N08 037
7684 S08 007

LISTING OF SOLAR ENERGETIC EVENTS FOR 23 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 23 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
23/ 1952 2038 2119 LDE B3.9 87

INFERRED CORONAL HOLES. LOCATIONS VALID AT 23/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
22 Mar: 0620 0643 0700 B3.0
1617 1624 1634 B1.7
1658 1709 1721 B2.2

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 003 (100.0)

Total Events: 003 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3220. Need info on Icom (delta)1A HT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 07:31:12 UTC
From: jdwhite@iastate.edu
Message-ID: <2mrfk0$o76@news.iastate.edu>
Source record: 269422
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc

I am considering purchasing this tri-band HT and was wondering what kind of experiences people have had with it. I'm very curious as to how far out of band it will receive on the three bands and also in any mods there are for it.

Thanks, in advance, for any information you can provide.

-Jason

--
Jason D. White Durham Center Operations Staff
jdwhite@iastate.edu Repeater Chairman, Cyclone Amateur Radio Club
Iowa State University Packet: n0rwu @ ki0q.#cia.ia.usa.na
Ames, Iowa

3221. FT-5200: Deaf in Aircraft Band (118-136MHz)?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 07:53:57 UTC
From: jdwhite@iastate.edu
Message-ID: <2mrgul$pca@news.iastate.edu>
Source record: 269423
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

I was wondering if other 5200 owners could receive Air band transmissions.
I'm not even sure if the radio will switch to an AM receive mode in those
bands. I have performed the extended TX mod.

--
Jason D. White Durham Center Operations Staff
jdwhite@iastate.edu Repeater Chairman, Cyclone Amateur Radio Club
Iowa State University Packet: n0rwu @ ki0q.#cia.ia.usa.na
Ames, Iowa

3222. FT-5200: Interesting changes after mod

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 07:56:38 UTC
From: jdwhite@iastate.edu
Message-ID: <2mrh3m$pcd@news.iastate.edu>
Source record: 269424
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

After I modified my 5200 for extended TX, I noticed that I could no longer
do the automatic repeater offset function. Has anyone else had this problem?

--
Jason D. White Durham Center Operations Staff
jdwhite@iastate.edu Repeater Chairman, Cyclone Amateur Radio Club
Iowa State University Packet: n0rwu @ ki0q.#cia.ia.usa.na
Ames, Iowa

3223. Re: RF and AF speech processors.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 14:23:01 UTC
From: P.Lucas@mail.nerc-swindon.ac.UK
Message-ID: <9403241423.AA30532@swmis>
Source record: 269425

Ignacy Misztal (ignacy@ux2.cso.uiuc.edu) wrote:
>
>: I am wondering why the QST reviews do not mention the type of processing,
>: which has a large effect on signal quality. Signals with audio processing
>: have higher content of AF harmonics, and are subsequently less efficient
>
>I don't understand why audio processing has to result in more audio
>harmonics. Aren't there digital signal processing algorithms that
>could prevent this effect? Even before DSP, didn't people use split
>band audio processing to reduce the content of harmonics?

You can use DSP; it is not that hard to write the appropriate
software that will perform a passable attempt at processing,
but the really tricky thing [read: needs lots of instructions and
a well-specified DSP system] is to get a consistent group-delay
characteristic across the audio passband.
Without consistent group delay, the phase relationship between the
input and output of the filter is frequency-dependent, which sounds
horrible [like someone talking in a tunnel?] and will also cause some
strange effects when used for data-modes that depend on consistent group
delay characteristics.

Its also necessary to maintain consistent amplitude response
across the audio spectrum; if you fail to do this, then for a given
level of processed signal at the output, some input frequencies will
have been more heavily processed than others. Ideally, you need
some form of frequency equalisation before the processor, which
has to be tailored to suit the particular users voice, and the
response characteristics of the microphone in use.

Peter J.M. Lucas NERC Computer Services Swindon England
pjml@swmis.nsw.ac.uk or pjml@uk.ac.nsw.swmis or g6wbj@gb7sdn.gbr.eu
"Licensed for highway operation at speeds not in excess of 130MPH"

3224. When Pitcairn Isl. spedition ??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 14:50:47 UTC
From: mapelp@c700-2.sm.dsi.unimi.it
Message-ID: <2ms9c7$lf8@c700-2.sm.dsi.unimi.it>
Source record: 269426

Hi. I've heard from a spanish ham that a dx-spedition
from Pitcairn Island will be this year.
But I've lost when it'll be. Can anybody tell me this
info ?? Thanx in advance.
Paolo (mapelp@ghost.dsi.unimi.it)
also IK2WSC on the air ..._._

3225. Yaesu FT-2200

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 14:53:04 UTC
From: kevin.donoghue@arbbs.simivalley.ca.us
Message-ID: <9403241407072168@arbbs.simivalley.ca.us>
Source record: 269427

I am looking for modifications to the Yaesu FT-2200 two meter mobile rig. I would like to be able to transmit in the 150-174 Mhz range. Currently it appears locked out. Any information would be appreciated.

Kevin Donoghue
kevin.donoghue@tomcat.com

3226. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 15:18:00 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <2msav8$8f9@vixen.cso.uiuc.edu>
Source record: 269428
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

>I don't understand why audio processing has to result in more audio
>harmonics. Aren't there digital signal processing algorithms that
>could prevent this effect? Even before DSP, didn't people use split
>band audio processing to reduce the content of harmonics?
>>--
>Zack Lau KH6CP/1 2 way QRP WAS
> 8 States on 10 GHz
>Internet: zlau@arrl.org 10 grids on 2304 MHz

Cheap AF processors use AF clippers. DSP-based processors are not only
novelties now, but they are more xepnsive to built than RF processors.
Why AF clippers are worse than RF (IF) clippers? Consider a 500Hz
tone test. With AF processor you will get extra 1000,1500,2000,2500
Hz tones. With RF (SSB and DSB) processor 500Hz will be the only
output. Please note that some older rigs have "implicit" RF
processors. For instance, SWAN 500 has 7360, a beam deflection tube,
as a DSB modulator. By clipping peaks, it acts with the following XTAL
filter as a DSP processor.

Ignacy Misztal Ham radio: NO9E, SP8FWB
Internet: ignacy@uiuc.edu Bitnet: ignacy@uiucvmd.bitnet
University Of Illinois 1207 W. Gregory Dr., Urbana, IL 61801, USA

3227. ATTN: ARRL Newington Staff

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 15:21:12 UTC
From: andy@clark.net
Message-ID: <2msb58$o43@clarknet.clark.net>
Source record: 269429

Hi Folks...

I will be in Newington on business during the last few days of this month, and I'm wondering about how far it might be from my hotel on Columbus Boulevard in New Britain to your HQ?

Also, I would appreciate knowing if there any professional videography services that you could recommend in the Newington/New Britain area. Maybe in the past at HQ you may have retained a video production service that you could recommend to me?

Many thanks for your help! andy/k4adl andy@clark.net

3228. Anyone gotten Dayton spaces yet?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 15:33:11 UTC
From: turini@gdls.com
Message-ID: <2msbrn$491@gdls.com>
Source record: 269430

I've been patiently waiting, but have not heard from the Dayton folks about sale spaces. Nor have I heard on the local repeaters about anyone getting a reply. Has anyone out there gotten a space or any comments from the Dayton folks?

Thanks

Bill

3229. Re: Kenwood (TS-850) Computer Interface Info Wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 15:59:47 UTC
From: wrb@ccsitn.cb.att.com
Message-ID: <Cn6F3o.ExB@nntpa.cb.att.com>
Source record: 269431
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <hawley.764522745@aries>,
Chuck Hawley <hawley@aries.scs.uiuc.edu> wrote:
>adam@panix.com (Adam Epstein) writes:
>
>
>> A friend is interested in getting details about the computer
>>interface "box" used with the Kenwood TS-850. Has anybody built one
>>for themselves (rather than buying Kenwood's)? Does anybody have
>>schematics? I'm sure that recommendations of commercially available
>>software and other hints and kinks would be appreciated as well.
>>Email to me (adam@panix.com) and I'll forward your replies.
>
>> -Thanx
>> -Adam (N2DHH)
>The box is just opto isolators on the signal lines driven by and driving
>ttl to line driver level converters (5v to +/-10v). Look thru QST for an
>article.....it'll probably cost about the same if you do it right.
>Chuck Hawley KE9UW.
>

Check out my article in Feb. 93 QST "Everything You Always Wanted To Know About Computer-Controlling Modern Radios" (I didn't pick the title :). It has plans for a Kenwood interface that is opto-isolated and implements the handshaking lines as well as the data for complete compatibility.

I also still offer the parts kits listed at the end of the article. Prices are the same, ($47 for Kenwood kit, $44 for Icom/Yaesu/Ten-Tec) but the address is now:

CW Technology
7328 Timbercreek Court
Reynoldsburg, OH 43068-1181

COD Orders Only (add $5) at 800-547-7479

The kits include PCB and all board mounted parts. You provide case and 8-15V supply.

NOTE: ARRL has the PCB layouts and the parts are readily available - you do not have to buy anything from me.

E-mail if you need more info

--
Wally Blackburn Clinton-Gore - Socialist Leadership
wrb@ccsitn.cb.att.com for the 90s!

Amateur Radio Station AA8DX I'm the NRA.
More people have died in Ted Kennedy's car than from my gun!

3230. Re: Voice mail on a repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 16:45:34 UTC
From: dbushong@wang.com
Message-ID: <Cn6H7z.v2@wang.com>
Source record: 269432

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>In article <bote.764487800@access3> bote@access.digex.net (John Boteler) writes:
>>
>>Is voice mail something that many hams want on their
>>favorite repeater?

>I don't. I don't even want a phonepatch on the repeater. Make that I
>*especially* don't want a phonepatch on a repeater. I want a repeater
>to be as unobtrusive as possible, simply a bent pipe to extend my
>radio range. It's a gathering spot for conversation, not a paging
>service, an answering machine, or a substitute for a cellular phone.

Bravo, Gary!

There are two extremes: typical of one is the 146.85 machine in Derry, NH, which says "Good morning. The time is xx:xx" every ten minutes or so, has a cute beep when someone lets up, *mutes* the ham talking if he dares to talk while the CW ID is in progress (it IDs about every three minutes), announces "control operator changeover", "net tonite at 7 o clock", and does a bunch of other hi-tech crap, including speed dial of everything in the world on its phone patch. It has an incredible location, and because of all the funny stuff it does, is a prime candidate for unlicensed or future unlicensed people jamming and trying out random TT sequences.

The other extreme is in Nashua, NH, on 147.045. This repeater retransmits what I do. If I happen to be talking when it needs to ID, at about 9.5 minute cycles, the tone is muted 10 db or so, so that while it complies with part 97, it doesn't interfere with the human who is using it. It also seems to have a speech compressor so that everyone is about the same loudness on the output.

I think the latter is properly called a "repeater"; the former might be better described as a "game boy" or something like that.

Dave
--
Dave Bushong, Wang Laboratories, Inc.

3231. Re: Who Brian is

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 17:56:25 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <Cn6KI1.Bwq@news.Hawaii.Edu>
Source record: 269433

In article <9402237644.AA764464623@smtpgty.anatcp.rockwell.com>
alan_v._cook@smtpgty.anatcp.rockwell.COM (alan v. cook) writes:
>
>
>
>
>Date: Wed, 23 Mar 94 06:32:55 GMT
>From: netcomsv!netcomsv!skyld!jangus@decwrl.dec.com
>Subject: Jeff Herman wins the Net Nazi award.
>To: info-hams@ucsd.edu
>
>In article <2mnc9q$aht@network.ucsd.edu> brian@nothing.ucsd.edu writes:
>
>
> >
> > Ironic that *I* should be saying this.
> > - Brian
>
>Then jangus@skyld.grendel.com writes
>
> >Take a valium and chill out Brian. Ironic indeed. Why not do us all a
> >favor and cancel all the pissing, moaning and baseless whining over on
> >rec.radio.amateur.policy while you're at it.
>
> >Besides, who appointed you the moderator for the news group?
>
>Now I say:
>
> Perhaps someone should explain to Jeff who Brian is, what Brian stands
> for, and why, if Brian decides it should be so, almost no one will be
> able to hear him. I'd do it, but it might be more fun to watch Jeff
> squirm a little...
>
>
> ---
> Alan Cook, N7CEU
> Alan_V._Cook@ccmail.anatcp.rockwell.com
> ---
>

I want to publicly apologize to everyone on .misc for Jeff Angus' behavior;
if I knew that my initial responses to his attacks would have fueled him
for 2 months I would have ignored his baiting. I've invited him to QSY to
email but have gotten no response.

73,
Jeff (the other one) NH6IL

3232. Re: Kenwood (TS-850) Computer Interface Info Wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 18:32:28 UTC
From: wrb@ccsitn.cb.att.com
Message-ID: <Cn6M65.HxA@nntpa.cb.att.com>
Source record: 269434

In article <940324100422_6@ccm.hf.intel.com>,
Cecil A Moore <Cecil_A_Moore@ccm.hf.INTel.COM> wrote:
>
>Text item: Text_1
>
>>A friend is interested in getting details about the computer interface
>>"box" used with the Kenwood TS-850. Has anybody built one...?
>> -Thanx -Adam (N2DHH)
>
>Hi Adam and anybody else...
>
>I have an ICOM-725 which has a single-line bi-directional TTL-level
>wired-OR serial asynchronous interface for external control. Is the
>Kenwood TS-850 the same hardware interface characteristic as the
>ICOM-725?
>
>thanks and 73, Cecil, KG7BK (I do not speak for Intel on Internet)

No. Take a peek at my reply to the last post for a pointer to my article in 2/93 QST. As you hint, the Icom CI-V system is a single wire bus run against ground. A number of computers and radios can sit on this CSMA/CD bus. I won't bore everyone with the details. The article goes into it.

The interface I described for Icom (as well as Ten-Tec's Omni-VI and Argosy II) is pretty simple. It is not optoisolated, but does use a 7407/7417 buffer for some protection.

--
Wally Blackburn Clinton-Gore - Socialist Leadership
wrb@ccsitn.cb.att.com for the 90s!
Amateur Radio Station AA8DX I'm the NRA.
More people have died in Ted Kennedy's car than from my gun!

3233. Re: software-general exam

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 19:40:34 UTC
From: rholobau@cs.umr.edu
Message-ID: <1994Mar24.194034.6904@umr.edu>
Source record: 269435

In article <9403230610124506@pubcon.fort-worth.tx.us> joe.coles@pubcon.fort-worth.tx.us (JOE COLES) writes:
>IF anyone knows of the existance of a shareware/freeware program that
>presents random questions from the current General exam (a practive exam
>program), please let me know where I might download a copy.

Could someone also post ones for the techincal exam also...
Thanks in Advance, Randy

****
** Randall W. Holobaugh ** But Jesus beheld them, and said unto them, **
** rholobau@cs.umr.edu ** With men this is impossible, but with God **
** University of ** all things are possible. **
** Missouri-Rolla ** Matthew 20:26 **
****

3234. Re: CD-ROM QRZ! vs Buckmaster

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 19:43:36 UTC
From: ken@boxhill.com
Message-ID: <2msqh8$s8i@boxhill.com>
Source record: 269436

>> For the CD-ROM users out there, I was wondering if someone could give me
>> the pro and/or cons of these two CDs. I'm trying to find the best one
>> (obviously). I've seen QRZ! cd for $29.95 and the HamCall for $50.
>> Anyplaces I might be able to get them cheaper?
>> John W. Herndon - jwh@kaiwan.com
>
>I have QRZ? and HAMCALL. If it is amateur radio QTHs you need, then
>my HAMCALL is more comprehensive than my QRZ?. My QRZ only has US and
>Canadian QTHs but HAMCALL has many other countries. I keep saying *my*
>version as there may be updated versions by now.
>Russell Lee G6GL george@golflima.demon.co.uk

I have the QRZ! CDROM, and bought it specifically because the callsign
databases inside were not encrypted in any way.
The callsign databases are simply comma-separated one-line-per-call
text records.

I liked this because I'm using the call database on a UNIX (Sun)
system, and can easily write database massaging code in Perl.

Oh, and yes, QRZ! was significantly cheaper. I got mine mailorder
for $15 + shipping.
$50? I guess the Buck$master name is appropriate.

Can anyone comment regarding pros/cons of the HamCall product?

73 de Ken N2TIA

Perhaps this may sway your decision one way or another.

3235. Motorola GPS engine group purchase update

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 21:58:41 UTC
From: bonomo@specxn.enet.dec.com
Message-ID: <1994Mar24.215841.28632@nntpd2.cxo.dec.com>
Source record: 269437

Status on the Motorola GPS engine group purchase:

Greetings, all!

This is a quick note to let all of you who have responded to me that I am actively pursuing this venture. Two weeks ago, I telephoned Motorola and spoke with a woman who indicated she would send out information. Said information has not yet arrived.

This morning, I spoke with the Sales Manager for the GPS core product, Oncore. She is sending me a price quote for the 100+ unit order, along with specs. As soon as it arrives, I will post to these newsgroups. I will also be obtaining price quotes for the software which accompanies these units, which is to be used for DGPS and other things.

As of the writing of this memo, there are "orders" for 67 units, with "possibles" for ten others. I have several requests from overseas, which is not expected to be a problem. The sales manager is sending me information as to which areas have export restrictions, which I will also include along with the specifications. She also said some recent military evaluations indicated that this engine is the only one they found acceptable, and is sending that report information, as well.

For those of you who are reading about this for the first time, I am coordinating a group purchase of Motorola GPS core engines, collecting names for those who would like to participate in said activity. The rumor going around was that these $450 (single quantity) engines could be had for $150 in 100-unit lots. I have no idea as to the actual price, but it is "in the Mail", according to Motorola.

If you are interested, send mail with the quantity in which you are interested. When "critical mass" has been reached, I will inform all parties which have submitted their names of this fact, as well as post it to the newsgroups. At this time, monies will be deposited in an account, which will be used to pay for the purchase. When all monies have been deposited, the order will then be placed.

Again, I'll post any information on this when it becomes available.

Regards,

Tommy

tom.bonomo@cxo.mts.dec.com
719.592.5105 Office
719.593.9883 Home

3236. IPS Daily Report - 24 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 23:18:45 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar24.231845.17353@ips.oz.au>
Source record: 269438
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 24/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 24 MARCH AND FORECAST UP TO 27 MARCH

No warning is current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 093/038

1B. SOLAR FORECAST
25 March 26 March 27 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 095/041

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth: quiet to unsettled, apart from active
levels 09-18UT.

Estimated Indices : A K Observed A Index 23 March
Learmonth 17 3334 4422
Fredericksburg 17 15
Planetary 17 17

Observed Kp for 23 March: 3533 4322

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
25 Mar 07 Quiet to unsettled.
26 Mar 07 Quiet.
27 Mar 07 Quiet.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
24 Mar normal normal fair-normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
25 Mar normal normal normal
26 Mar normal normal normal
27 Mar normal normal normal
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were mostly near predicted monthly values, apart from
enhancements of 15-30% from 04-06UT and 11-16UT.

Observed T index for 24 March: 60

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
25 Mar 60 Mostly near predicted monthly values, with occasional
enhancements of 15-30%.
26 Mar 50 Near predicted monthly values.
27 Mar 50 Near predicted monthly values.

4C. AUSTRALIAN REGION COMMENT
Sporadic E layer was present during the local day yesterday. Further
sporadic E layer is expected over the next 24 hours.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331 |PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329 |West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330 |AUSTRALIA

3237. Re: Grid Squares & Lat/Long

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-24 23:26:58 UTC
From: drt@world.std.com
Message-ID: <Cn6zsz.DKJ@world.std.com>
Source record: 269439

Scott Statton (n1gak@netcom.com) wrote:
X-Newsreader: TIN [version 1.2 PL2]

: Jay Sissom wrote:
: >: Hello!
: >
: >: Lattitude: 39' 39.303 N
: >: Longatude: 89' 10.550 W

: >: When I feed these numbers into the programs, I get EM59JP. When I
: >: look on the map, EM59 is in Illinois and I live in Indianapolis, IN.
: >: Is the map wrong, or is the basic program wrong?

: And Dave Tucker Replies:
: >
: >Well, the World Almanac says the coordinates for Indianapolis are
: >
: >39.7678 N
: >86.1628 W
: >
: >So I'd say that, gadget or no gadget, your Lat/Long figures are wrong.

: Well -- seeing as 39.65505N x 86.1758 is just a few miles from the
: figure in the World Almanac, I'd guess that the original article has a
: typo.

Right, it sure could be a flipped "6". More likely than a typo is a
transcription error from the GPS device, since the coordinates given in
the original article really are in Illinois.

-drt

|David R. Tucker KG2S drt@world.std.com|

3238. Info-Hams Digest V94 #325

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 00:07:19 UTC
From: SSW: <>;
Message-ID: <01HACU2XS08Y8ZE01J@BIIVAX.DP.BECKMAN.COM>
Source record: 269440

From: POSTMSTR @SSW
To: HCHOAGLAND @MRGATE
IN%"Info-Hams @UCSD.EDU" @MRGATE @BV8500

Author: IN%"Info-Hams@UCSD.EDU"
Sender: IN%"INFO-HAMS @UCSD.EDU"@MRGATE@BV8500
Subject: Info-Hams Digest V94 #325
Message Class:

Recipients:

Profile Recipient(s):

CCMAIL -RL636614 *RLMEYERING @CCMAIL @BIIVAX

The MAILbridge Server/DEC was unable to deliver mail
from Sender IN%"INFO-HAMS@UCSD.EDU"@MRGATE@BV8500.
Please contact your Soft-Switch E-Mail Administrator to register this user
in the Name Translate Directory.

3239. Hamfest Listing

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 01:35:26 UTC
From: cps@access.digex.net
Message-ID: <2mtf4u$2iv@access3.digex.net>
Source record: 269441

I've been searching around for a listing of upcoming hamfests, and have been unable to find one. So, I've decided to do the next best thing - create my own.

My goal is to periodically post a comprehensive listing of upcoming hamfests, for the entire US (if the list gets too large, it could be broken up into regions).

This is where you all come in - I need for people to email me with details of upcoming hamfests that they are aware of. The information I need is:

The name of the hamfest, the location, the date/times, And anything else pertinent (cost, name of contact, etc).

Please send the information to me at: cps@access.digex.net

Thanks,

Chris

3240. Regency Radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 01:37:24 UTC
From: tyton@crl.com
Message-ID: <2mtf8k$go9@crl2.crl.com>
Source record: 269442

I couldn't find a netnews group for commercial radio questions so... I'm looking for someone with a schematic on a Regency(Realm) H256B 16 Channel Scan VHF Transvr. I have a transistor Q105 in the control panel bad, it is marked Motorola but the number must be for Realm only...

Thanx for the help ....reach me e-mail

Mike Davis
Atlanta, Ga.

tyton@crl.com

3241. Re: QSLing packet messages?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 01:51:22 UTC
From: Gerry_Jurrens@walnut.prs.k12.nj.us
Message-ID: <1994Mar24.215122.813379@walnut.prs.k12.nj.us>
Source record: 269443

I agree that it seems a little silly to exchange QSL cards for an exchange of packet messages, yet the PBBS is full of solicitations (CQs, etc.) imploring certain states to come forth with replies! I guess if you're an apartment dweller with a no-code tech and a rubber duckie a block from the nearest packet board, it's a way of getting your jollies!

One thing is sure: in ham radio, there's something for everyone!

73,

Gerry N2GJ

-----Princeton Regional Schools takes no responsibility for the accuracy or content of the above message.

3242. Re: Desperately looking for logging program for Mac

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 03:31:48 UTC
From: slay@netcom.com
Message-ID: <slayCn7B51.M76@netcom.com>
Source record: 269444

: What I am looking for is a logging program
: for the Macintosh which can help me printing QSL-labels,
: help me count how many different DXCC countries I have,
: and do other "smart" things.

: I think it is very boring writing QSL cards, but it has
: to be done. hi.

Congratulations on your operation.
First of all, I personally have used only TWO logging programs written for the Macintosh - neither of which will totally satisfy you.

The first is QLOG - a general purpose logging program which was written using Fox-Base and is painfully slow and I do not know if it is even being supported. Last I heard, it was still be offered by:

ZCo. Corporation
P.O. Box 3720
Nashua, NH 03061-3720 USA

Please be aware that I have repeatedly tried to contact these people and even sent an SASE - but without response. However, recently another ham in that area called them and was told that they still sell QLOG, but are not actively marketing it.

My personal favorite is the Marathon contest logging program for the Macintosh written by Kevin Krueger N0IOS. If he would put a "DXpedition" mode in it and possibly a utility to print QSL labels, we would be in "fat city". ;-)

For more information on Marathon (and I am a very staunch supporter of this s/w - but have no financial interest), contact:

Kevin Krueger N0IOS
1780 Ruth Street
Sain Paul, MN 55109 USA

I suggest that you also send along your e-mail address since he "may" be able to respond quicker.

Good luck & 73
de Sandy WA6BXH/7J1ABV
slay@netcom.com

3243. Swap Meet

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 04:43:33 UTC
From: jangus@skyld.grendel.com
Message-ID: <764570613snx@skyld.grendel.com>
Source record: 269445

In article <2msk2u$6vr@gopher.cs.uofs.edu> bill@triangle.cs.uofs.edu writes:

> |> Show up at TRW this coming weekend. North West corner of Marine and
> |> Aviation. A couple miles west of the 405 freeway and south of Rosecrans.
> |>
> |> Time roughly 8:00 am to 11:00 am the LAST Saturday of every month.
> |>
>
> Too bad I didn't know about this when I worked for them. I spent many a
> weekend down in Torrance and used to be just hitting the sack about that
> time. Would have made a nice stop after breakfast on the way back to the
> hotel.

Well, if by no longer employed by them you mean unemployed, then you have
plenty of time to hop on a plane and get here in time for this weekend.
It won't be as if you have someplace to be.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3244. Noise figure/transistors

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 06:37:16 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Mar25.143716.1@ntuvax.ntu.ac.sg>
Source record: 269446
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,

Here's a design question. I am looking at the front-end RF amp
which uses a 2N3904 and asking myself if I were to replace this with a
transistor with a lower noise figure, say a 2N5179 or BF689, will I see
any improvement? Is this mod worth pursuing? How much improvement can I
expect to see here?

Tks.

Daniel

3245. Re: Huge Splattering *CB* Linear WANTED $$$$

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 06:46:02 UTC
From: pschleck@cwis.unomaha.edu
Message-ID: <pschleck.764577962@cwis>
Source record: 269447
Cross-posted to: rec.radio.amateur.misc,rec.radio.cb

In <Cn5Gu5.8L0@srgenprp.sr.hp.com> pazar@sr.hp.com (Steve Pazar) on
rec.radio.swap writes:

>Well put Joe! Maybe it time to come-up with a mini-FAQ about the legalities
>involved with (1) broadcast transmitters, and (2) CB restrictions as
>applied to power limits. References to the FCC sources, and phone numbers
>might be helpful as well.

>A plug for "ham" radio couldn't hurt!

Sounds like what's already covered in:

Guide to the Personal Radio Newsgroups
A Guide to Buying and Selling on Usenet
rec.radio.cb Frequently Asked Questions
rec.radio.amateur.misc Frequently Asked Questions

as all of them discuss net etiquette and the pitfalls of discussing
illegal activity, particularly illegal CB, in forums populated by a
significant number of radio amateurs.

Any other suggestions regarding improving the contents and visibility
of the above FAQ articles are quite welcome and may be directed to the
rec.radio.amateur Working Group mailing list at rra-wg@amdahl.com.

73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

3246. Re: Why no 10 meter activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 12:26:09 UTC
From: "Simon Browne"
Message-ID: <2mul91$6vo@hawk.eng.warwick.ac.uk>
Source record: 269448

There's certainly a lot to be said for plenty of CQ calls and
monitoring of 10m beacons, even at what would be considered
unusual times of day. There are several 'unusual' propagation
modes, affecting high-, middle- and low-latitudes, which
are game for exploitation, especially TEP (Transequatorial
Propagation) and sporadic-E. TEP uses the large F-region
densities at about 15 degrees dip angle north and south of the
magnetic equator, allowing a 2F mode without an intermediate
ground reflection in a 'tilt' like fashion, giving propagation
at higher frequencies than usually expected over distances s
of 4000 miles or so on north-south low-latitude paths crossing
the equator.
Sporadic-E exists at most latitudes for an amount of time
depending on time of of year. At low latitudes, it may exist
for most of the daylight hours throughout the year, so
lots of 10m possibilities as the MUFs tend to be high
on medium-long range paths. At middle latitudes it's mainly a
summer activity, and again during daytime, with a peak of
activity around local mid-late morning. June last year saw
mid-latitude Es on at least half the days of the month
in europe, and no doubt the US too.
At high-latitudes Es is more of a night time phenomenon. The
highest MUFs occur late evening, with frequencies up to, and
possibly above, 100 MHz being supported. This doesn't seem to be a
seasonal effect, and certainly gives high-latitude stations
possibilities for 10 and even 6m activity on a regular basis.

So, at low and high latitudes there's no excuse for avoiding
10m. At mid-latitudes it's worth bearing in mind that such modes
do exist, although with low solar activity little may be seen
except summer Es. There ar possibilities for summer Es combinig
with TEP for a bit of DX, as has been seen on 6m on occasions
when EU stations have worked southern Africa.
It's also worth bearing in mind that there's still a lot to
be understood in this field, and amateur observations do play
an extremely important role, at the same time doing no harm to
the amateur cause.

Simon G0GWA.

3247. ARLB028 FCC call sign update

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 12:44:26 UTC
From: owner-w1aw-list@NETCOM.COM
Message-ID: <$arlb028.1994@ampr.org>
Source record: 269449
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
SB QST @ ARL $ARLB028
ARLB028 FCC call sign update

ZCZC AG92
QST de W1AW
ARRL Bulletin 28 ARLB028
From ARRL Headquarters
Newington CT March 24, 1994
To all radio amateurs

SB QST ARL ARLB028
ARLB028 FCC call sign update

The following is a list of the FCC's most recently issued call signs
as of March 1.

District Group A Group B Group C Group D
Extra Advanced Tech/Gen Novice

0 AA0QI KG0LO ++ KB0LYV
1 AA1IV KD1TZ N1RMF KB1BGS
2 AA2RH KF2UA N2YBR KB2QXD
3 AA3HG KE3MC N3RPA KB3BBC
4 AD4QG KR4NY ++ KE4KAL
5 AB5TB KJ5VI ++ KC5FON
6 AC6AP KN6YT ++ KE6FTE
7 AB7BL KI7WH ++ KC7BDO
8 AA8OI KG8HH ++ KB8RSM
9 AA9KI KF9UM N9WHC KB9IXF
Hawaii ++ AH6NF WH6SV WH6CRD
Alaska ++ AL7PO WL7QW WL7CHL
Virgin Is. WP2G KP2CC NP2HG WP2AHU
Puerto Rico ++ KP4WM ++ WP4MNW

++All call signs in this group have been issued in this area.
NNNN
/EX
```

3248. Re: Voice mail on a repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 13:42:16 UTC
From: vbreault@rinhp750.gmr.com
Message-ID: <VBREAULT.94Mar25134216@rinhp750.gmr.com>
Source record: 269464

In article <bote.764487800@access3> bote@access.digex.net (John Boteler) writes:

I have only heard voice mailboxes on the ACC garbage.
I know that other repeater controllers have voice mailboxes.

How does voice mail on a ham repeater perform? I am curious
about actual users' experiences.

The USECA repeater serves the metropolitan Detroit area with two to three (don't ask) satellite receivers and a central transmitter. It is a very busy repeater and the communual watering hole for a lot of very sociable people. It is equipped with a voice mailbox but the users do not have private mail boxes. When recording a message, the user is prompted "Who is your message for?" and then "Please leave your message". Periodically, or on command, the repeater will announce "There are messages for" and then play back the message that was left after the first prompt. A user can play back a specific message by it's order in the list. Ie: The first, second, third ... message. All users have create, list, play and delete privileges. Although the repeater is heavily used, the voice mail box is seldom used. It *NEVER* gets in the way and often is quite a useful communicatios tool.

An example:

(U=user, R=Repeater)

U: "N8ABC for the mailbox" <-- Let control ops know who and what
(enters access code)

R: "Who is your message for?"

U: "N8BCD" <-- Message identification

R: "Please leave your message"

U: "Jim, I'll be out of town for a few days but my wife
can give you the radio. Please call her and make
arrangements to pick it up."
(enters code to end recording)

R: "Your message has been stored."

U: "N8ABC Clear of the mailbox" <-- Let other ops know rptr available

------time passes------

R: "There are messages for" <-- Announced ~3 times per hour
"RACES and ARES members" when idle.
"N8BCD"

"Fox hunt rescheduled"

U: "KB8ABC for the mailbox" <-- Alert the control ops again
(enters access code for message 3)

R: "Fox hunt rescheduled" <-- Recite message id and message
"Saturday's fox hunt has been postponed
until next Saturday at the same time."

U: "KB8ABC clear of the mailbox" <-- Repeater available again

I've used it for person-to-person stuff a few times myself, but
would rather use the telephone. It can't be beat though for the
general information kind of messages (Eg: "Fox hunt rescheduled").
We have had one or two inappropriate messages over the past few
years but with universal message delete authority they don't stay
on the air very long.

--
Val Breault - N8OEF - vbreault@gmr.com \ /|
Instrumentation dept GM NAO R&D Center \ / |
My opinions are not necessarily those of \ /__|
GMR nor of the General Motors Corporation \/ |___

3249. ORBS$084.WEATH.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 13:54:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.9336.99.0C38A5C3@drig.com>
Source record: 269450

```
SB KEPS @ AMSAT $ORBS-084.W
Orbital Elements 084.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX March 25, 1994
BID: $ORBS-084.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94081.96146229
Element set: 759
Inclination: 99.0648 deg
RA of node: 131.4010 deg
Eccentricity: 0.0015937
Arg of perigee: 101.6666 deg
Mean anomaly: 258.6297 deg
Mean motion: 14.13600524 rev/day
Decay rate: 1.21e-06 rev/day^2
Epoch rev: 47816
Checksum: 312

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94082.90887763
Element set: 658
Inclination: 98.5123 deg
RA of node: 94.5094 deg
Eccentricity: 0.0012333
Arg of perigee: 216.3165 deg
Mean anomaly: 143.7179 deg
Mean motion: 14.24874536 rev/day
Decay rate: 6.4e-07 rev/day^2
Epoch rev: 39046
Checksum: 336

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94080.22884509
Element set: 273
Inclination: 82.5454 deg
RA of node: 338.5623 deg
Eccentricity: 0.0018465
Arg of perigee: 67.8592 deg
Mean anomaly: 292.4524 deg
```

Mean motion: 13.84711844 rev/day
Decay rate: 9.4e-07 rev/day^2
Epoch rev: 31018
Checksum: 325

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94081.32685617
Element set: 270
Inclination: 82.5427 deg
RA of node: 25.1440 deg
Eccentricity: 0.0017958
Arg of perigee: 116.8969 deg
Mean anomaly: 243.3993 deg
Mean motion: 13.16965967 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 27182
Checksum: 333

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94083.23885812
Element set: 572
Inclination: 99.1670 deg
RA of node: 70.0925 deg
Eccentricity: 0.0012545
Arg of perigee: 15.7107 deg
Mean anomaly: 344.4450 deg
Mean motion: 14.12969487 rev/day
Decay rate: 6.2e-07 rev/day^2
Epoch rev: 28322
Checksum: 300

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94080.40680956
Element set: 272
Inclination: 82.5191 deg
RA of node: 213.8899 deg
Eccentricity: 0.0015509
Arg of perigee: 110.5826 deg
Mean anomaly: 249.6996 deg
Mean motion: 13.84358994 rev/day
Decay rate: 3.4e-07 rev/day^2
Epoch rev: 25554
Checksum: 352

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94082.55451529
Element set: 6

Inclination: 82.5548 deg
RA of node: 329.1930 deg
Eccentricity: 0.0006520
Arg of perigee: 134.5372 deg
Mean anomaly: 225.6269 deg
Mean motion: 13.04425118 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 21173
Checksum: 272

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94080.04388230
Element set: 774
Inclination: 82.5426 deg
RA of node: 278.4813 deg
Eccentricity: 0.0017557
Arg of perigee: 35.8879 deg
Mean anomaly: 324.3453 deg
Mean motion: 13.84190186 rev/day
Decay rate: 2.4e-07 rev/day^2
Epoch rev: 18842
Checksum: 324

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94082.50755940
Element set: 924
Inclination: 98.8351 deg
RA of node: 105.3769 deg
Eccentricity: 0.0013462
Arg of perigee: 244.9487 deg
Mean anomaly: 115.0282 deg
Mean motion: 14.01311177 rev/day
Decay rate: -1.52e-06 rev/day^2
Epoch rev: 18170
Checksum: 301

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94081.16757303
Element set: 783
Inclination: 82.5237 deg
RA of node: 215.2023 deg
Eccentricity: 0.0012267
Arg of perigee: 296.1467 deg
Mean anomaly: 63.8429 deg
Mean motion: 13.83574940 rev/day
Decay rate: 4.6e-07 rev/day^2
Epoch rev: 17572
Checksum: 308

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94080.99666993
Element set: 681
Inclination: 82.5384 deg
RA of node: 231.2188 deg
Eccentricity: 0.0014561
Arg of perigee: 45.1711 deg
Mean anomaly: 315.0592 deg
Mean motion: 13.16460562 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 13988
Checksum: 306

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94074.00396538
Element set: 964
Inclination: 98.6278 deg
RA of node: 103.8182 deg
Eccentricity: 0.0013418
Arg of perigee: 145.8585 deg
Mean anomaly: 214.3456 deg
Mean motion: 14.22379795 rev/day
Decay rate: 1.80e-06 rev/day^2
Epoch rev: 14714
Checksum: 320

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94080.22430161
Element set: 688
Inclination: 82.5573 deg
RA of node: 178.8593 deg
Eccentricity: 0.0014769
Arg of perigee: 59.6601 deg
Mean anomaly: 300.6003 deg
Mean motion: 13.16828445 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 12488
Checksum: 308

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94080.53840969
Element set: 283
Inclination: 82.5471 deg
RA of node: 275.8954 deg
Eccentricity: 0.0023357
Arg of perigee: 108.2430 deg
Mean anomaly: 252.1263 deg
Mean motion: 13.83002864 rev/day

```
Decay rate: 2.6e-07 rev/day^2
Epoch rev: 2797
Checksum: 309

/EX
```

3250. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 13:58:51 UTC
From: zlau@arrl.org
Message-ID: <1994Mar25.135851.5580@arrl.org>
Source record: 269451
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Ignacy Misztal (ignacy@ux2.cso.uiuc.edu) wrote:
:
: Cheap AF processors use AF clippers. DSP-based processors are not only
: novelties now, but they are more xepnsive to built than RF processors.
: Why AF clippers are worse than RF (IF) clippers? Consider a 500Hz
: tone test. With AF processor you will get extra 1000,1500,2000,2500
: Hz tones. With RF (SSB and DSB) processor 500Hz will be the only
: output. Please note that some older rigs have "implicit" RF
: processors. For instance, SWAN 500 has 7360, a beam deflection tube,
: as a DSB modulator. By clipping peaks, it acts with the following XTAL
: filter as a DSP processor.
:
If you clip an ideal DSB waveform (1 kHz modulation), aren't there
two tones spaced 1 kHz apart that could generate IMD products at
1.5 kHz and 1.5 kHz (receiver output)? What if you had a significant
amount of carrier leakthrough that was cleaned up by the crystal
filter? Couldn't this give you extra tones at 1, 1.5, 2, and 2.5
kHz (at the receiver)?
--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

3251. ORBS$084.2L.AMSAT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 13:59:00 UTC
From: ray.hoad@drig.COM
Message-ID: <56.9338.99.0C38A5C5@drig.com>
Source record: 269452

```
SB KEPS @ AMSAT $ORBS-084.N
2Line Orbital Elements 084.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX March 25, 1994
BID: $ORBS-084.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:
1 AAAAAU 00 0 0 BBBBB.BBBBBBBB .CCCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

AO-10
1 14129U 83058B 94078.88849305 -.00000143 00000-0 10000-3 0 2710
2 14129 27.1881 336.3846 6021341 163.5017 230.9609 2.05878514 80949
UO-11
1 14781U 84021B 94080.50956311 .00000321 00000-0 62308-4 0 6757
2 14781 97.7914 99.3260 0011137 186.0140 174.0935 14.69174575537432
RS-10/11
1 18129U 87054A 94079.84948217 .00000032 00000-0 18660-4 0 8839
2 18129 82.9229 34.1304 0010237 273.8387 86.1598 13.72333391337792
AO-13
1 19216U 88051B 94079.56167208 -.00000427 00000-0 10000-4 0 8960
2 19216 57.8735 262.2374 7209738 337.3974 2.4979 2.09727288 44154
FO-20
1 20480U 90013C 94080.89109631 -.00000016 00000-0 34911-4 0 6701
2 20480 99.0243 249.2547 0540894 177.1640 183.2749 12.83224747192930
AO-21
1 21087U 91006A 94080.39087956 .00000093 00000-0 82657-4 0 4463
2 21087 82.9379 207.6619 0035401 331.2194 28.7007 13.74536127157528
RS-12/13
1 21089U 91007A 94079.90823919 .00000032 00000-0 18216-4 0 6733
2 21089 82.9180 76.9195 0029938 357.6064 2.4956 13.74037183156521
ARSENE
1 22654U 93031B 94064.50000000 -.00000119 00000-0 00000 0 0 2469
2 22654 1.6510 105.2680 2927552 173.8780 198.1380 1.42201225 2991
UO-14
1 20437U 90005B 94081.17271111 .00000085 00000-0 50080-4 0 9757
2 20437 98.5928 167.1239 0011938 85.5805 274.6738 14.29832075217155
AO-16
1 20439U 90005D 94080.46187457 .00000059 00000-0 39719-4 0 7754
2 20439 98.5999 167.5628 0012341 89.1267 271.1308 14.29886627217069
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DO-17
1 20440U 90005E 94080.42475274 .00000076 00000-0 46272-4 0 7749
2 20440 98.5973 167.8190 0012406 88.5722 271.6879 14.30025717217077
WO-18
1 20441U 90005F 94081.23816758 .00000086 00000-0 50302-4 0 7768
2 20441 98.6015 168.6325 0013015 86.3234 273.9433 14.30001255217191
LO-19
1 20442U 90005G 94080.24263321 .00000078 00000-0 46967-4 0 7742
2 20442 98.6015 167.8834 0013223 87.9281 272.3415 14.30095566217065
UO-22
1 21575U 91050B 94079.70081566 .00000111 00000-0 52198-4 0 4769
2 21575 98.4399 155.9592 0007223 188.8493 171.2552 14.36900838140375
KO-23
1 22077U 92052B 94080.53661719 -.00000037 00000-0 10000-3 0 3714
2 22077 66.0814 103.5014 0011679 308.7258 51.2714 12.86285587 75516
AO-27
1 22825U 93061C 94081.11877430 .00000025 00000-0 28178-4 0 2722
2 22825 98.6600 157.7790 0009554 101.5696 258.6548 14.27613987 25268
IO-26
1 22826U 93061D 94081.10608673 .00000042 00000-0 34690-4 0 2728
2 22826 98.6605 157.7921 0009917 100.6730 259.5579 14.27717009 25266
KO-25
1 22830U 93061H 94080.22548462 .00000089 00000-0 53029-4 0 2755
2 22830 98.5601 155.1027 0012635 74.3234 285.9328 14.28041738 25144
NOAA-9
1 15427U 84123A 94081.96146229 .00000121 00000-0 88127-4 0 7596
2 15427 99.0648 131.4010 0015937 101.6666 258.6297 14.13600524478169
NOAA-10
1 16969U 86073A 94082.90887763 .00000064 00000-0 45657-4 0 6589
2 16969 98.5123 94.5094 0012333 216.3165 143.7179 14.24874536390466
MET-2/17
1 18820U 88005A 94080.22884509 .00000094 00000-0 70460-4 0 2738
2 18820 82.5454 338.5623 0018465 67.8592 292.4524 13.84711844310182
MET-3/2
1 19336U 88064A 94081.32685617 .00000051 00000-0 10000-3 0 2700
2 19336 82.5427 25.1440 0017958 116.8969 243.3993 13.16965967271824
NOAA-11
1 19531U 88089A 94083.23885812 .00000062 00000-0 58133-4 0 5722
2 19531 99.1670 70.0925 0012545 15.7107 344.4450 14.12969487283226
MET-2/18
1 19851U 89018A 94080.40680956 .00000034 00000-0 17134-4 0 2720
2 19851 82.5191 213.8899 0015509 110.5826 249.6996 13.84358994255545
MET-3/3
1 20305U 89086A 94082.55451529 .00000044 00000-0 10000-3 0 61
2 20305 82.5548 329.1930 0006520 134.5372 225.6269 13.04425118211734
MET-2/19
1 20670U 90057A 94080.04388230 .00000024 00000-0 79036-5 0 7742
2 20670 82.5426 278.4813 0017557 35.8879 324.3453 13.84190186188420
FY-1/2
1 20788U 90081A 94082.50755940 -.00000152 00000-0 -72818-4 0 9249
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2 20788 98.8351 105.3769 0013462 244.9487 115.0282 14.01311177181708
MET-2/20
1 20826U 90086A 94081.16757303 .00000046 00000-0 28563-4 0 7834
2 20826 82.5237 215.2023 0012267 296.1467 63.8429 13.83574940175723
MET-3/4
1 21232U 91030A 94080.99666993 .00000051 00000-0 10000-3 0 6819
2 21232 82.5384 231.2188 0014561 45.1711 315.0592 13.16460562139881
NOAA-12
1 21263U 91032A 94074.00396538 .00000180 00000-0 10013-3 0 9646
2 21263 98.6278 103.8182 0013418 145.8585 214.3456 14.22379795147143
MET-3/5
1 21655U 91056A 94080.22430161 .00000051 00000-0 10000-3 0 6885
2 21655 82.5573 178.8593 0014769 59.6601 300.6003 13.16828445124883
MET-2/21
1 22782U 93055A 94080.53840969 .00000026 00000-0 10250-4 0 2834
2 22782 82.5471 275.8954 0023357 108.2430 252.1263 13.83002864 27979
POSAT
1 22829U 93061G 94081.13993678 .00000098 00000-0 57325-4 0 2659
2 22829 98.6563 157.8404 0011057 89.9512 270.2938 14.28013136 25275
MIR
1 16609U 86017A 94083.32520032 .00009346 00000-0 12671-3 0 5375
2 16609 51.6456 251.6581 0015343 67.8161 292.4504 15.58331750462819
HUBBLE
1 20580U 90037B 94080.23738730 .00000835 00000-0 68306-4 0 4592
2 20580 28.4697 80.9010 0005913 249.5279 110.4672 14.90534070 16255
GRO
1 21225U 91027B 94079.53676843 .00004336 00000-0 97694-4 0 752
2 21225 28.4636 127.3366 0003390 287.6252 72.3973 15.40420925 43255
UARS
1 21701U 91063B 94082.87298435 -.00003323 00000-0 -26935-3 0 4962
2 21701 56.9828 140.9350 0004265 92.4899 267.6620 14.96488088138165
/EX
```

3252. ARLD017 DX news

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 14:33:04 UTC
From: owner-w1aw-list@NETCOM.COM
Message-ID: <$arld017.1994@ampr.org>
Source record: 269453
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB DX @ ARL $ARLD017
ARLD017 DX news

ZCZC AE15
QST de W1AW
DX Bulletin 17 ARLD017
From ARRL Headquarters
Newington CT March 24, 1994
To all radio amateurs

SB DX ARL ARLD017
ARLD017 DX news

The items in this week's bulletin are courtesy of Joe, NJ1Q; the Ohio/Penn DX Bulletin; and the Yankee Clipper Contest Club PacketCluster network. Thanks.

PRATAS ISLAND. BV9P is active on 40, 20, 15 and 10 meters. The operation was worked from Illinois on 7024 kHz at 1445z today. Check 7060, 14195 and 21295 kHz too. They will go QRT about 0700z on March 25.

SPRATLY ISLANDS. 9M0A will be an all-band multi-op starting April 2 and run for 5 days.

SOUTHERN SUDAN. PA3CXC/ST0 has been worked on 18070 kHz between 1700 and 1800z.

IRAQ. YI9CW was busy on 17 and 12 meters last weekend. Check 18075 kHz between 1400 and 1600z. Also try 24900 kHz at 1344z. QSL to SP5AUC, Tom Rogowski, PO Box 11, Warsaw 93, Poland.

HONG KONG. VS6WO will host a multi/multi effort in the WPX SSB contest. The team consists of VS6WO, VR2GO, 9V1YC, JE1CKA, DL5XX, K3WUW, and KJ4VH. Their goal is to break the all-time Asian multi/multi record. QSL VS6WO via K9EC. Outside of contest hours, Tim, KJ4VH, will also be on as VS6/KJ4VH with mostly CW. He hopes to be active from HL and BV over the next couple weeks.

UNITED ARAB EMIRATES, UAE. Don, WB2DND, should be active as A61AD through the weekend, concentrating on 160, 80 and 40 meters. QSL via Don Greenbaum, WB2DND, 250 Standish St., Duxbury, MA 02332.

BENIN. Ken, WA4OBO, hopes to sign TY8OBO before the end of March, but this may not occur until April. He will try to spend more time on 80 and 40 meters on this trip, though 40 meters is difficult due

to interference.

TRINDADE ISLAND. PY0TUP is expected to start a four month operation starting early in May.

JOHNSTON ISLAND. Richard, AH6IO, and Pat, NH6UY, plan a five day operation to start on May 4. Pat will operate as NH6UY/KH3 and will make satellite contacts on Oscar 13. QSL via NH6UY CBA. Richard will operate as AH6IO/KH3 on HF around 1830, 3795, 7080, 7175, 14195, 14226, 18130, 21305, 24950, 28495 and 50110 kHz. He will also operate some CW on the low end of the General Class band. Some low band nighttime operation is planned. QSL direct only via AH6IO CBA.

WALLIS ISLAND. Rudi, DK7PE, is on as FW/DK7PE, though his length of stay is unknown.

SAINT MARTIN ISLAND. FS5PL has been quite active on the lower end of 40 meter CW at around 0400z. QSL via FG5BG.

QSL CLARIFICATION. W Leslie Clarke, GI0KAN/EI5HC, continues to receive cards for EI7M. The correct QSL Manager is EI5FT.

THIS WEEKEND ON THE RADIO. The phone portion of the annual CQ World Wide WPX Contest starts at 0000z March 26 and runs through 2400z March 27. Exchange signal report and progressive serial number starting with 001. Details appear on page 112 of February QST.
NNNN
/EX

3253. ARLD016 Pratas Question on Hold

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 14:33:12 UTC
From: owner-w1aw-list@NETCOM.COM
Message-ID: <$arld016.1994@ampr.org>
Source record: 269454
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
SB DX @ ARL $ARLD016
ARLD016 Pratas Question on Hold

ZCZC AE14
QST de W1AW
DX Bulletin 16 ARLD016
From ARRL Headquarters
Newington CT March 24, 1994
To all radio amateurs

SB DX ARL ARLD016
ARLD016 Pratas Question on Hold

ARRL DX Advisory Committee Chairman Robert Beatty, W4VQ, has
announced that the question of new country status for Pratas Island,
BV9, has been removed from the DXAC agenda pending receipt of
further information from the petitioner. A vote had never been
scheduled on the petition.

Upon receipt of the requested information, the matter will be placed
on the agenda, and a vote scheduled.
NNNN
/EX
```

3254. Weekly Solar Terrestrial Forecast & Review for 25 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 16:27:35 UTC
From: oler@rho.uleth.ca
Message-ID: <9403251627.AA10864@rho.uleth.ca>
Source record: 269455
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---
March 25 to April 03, 1994

Report Released by Solar Terrestrial Dispatch
P.O. Box 357, Stirling, Alberta, Canada
T0K 2E0
Accessible BBS System: (403) 756-3008

SKYCOM Version 1.0
Ionospheric Signal Analyst

** THIS IS THE LAST WEEK OF THE SPECIAL OFFER **

Can your propagation software do this? See previous weekly reports for additional features:

- Generate Broadcast Coverage Maps showing regions of high or low ionospheric focusing or defocusing.
- Produce contoured global maps of the maximum height of the F2 layer, ionospheric M-factors, or even critical frequencies of the E and F2 layers, for any date, time, or level of geomagnetic activity.
- Produce global monthly median maps of ionospheric quantities (MUFs, foF2, hmF2, etc) in complete agreement with the International Reference Ionosphere, for any date, time of day, or sunspot/solar flux number.
- Display cross-sections of the ionosphere between any two geographical points, showing you the internal structure of the ionospheric layers, ionospheric layer tilts, effects of the Equatorial Anomaly, etc.
- Show fully contoured maps of magnetic latitude and longitude, magnetic inclination angles, and even the total magnetic field strength.
- Include effects of polar cap absorption (PCA) and solar flares in signal quality computations.
- Determine propagation conditions during any time of day, while including effects from sporadic-E, PCA, solar flares, and geomagnetic and auroral storming.
- Rigorously compute maximum usable frequencies (MUFs) and optimum working frequencies (FOT) between any two geographical locations using ray-tracing results, for any date, time, or level of geomagnetic activity.

MUCH MUCH MORE . . . Bar none, one of the most elaborate propagation packages available for amateurs and professionals.

ALL ORDERS TAKING ADVANTAGE OF THE SPECIAL OFFER MUST BE *POST-MARKED* NO LATER THAN 31 MARCH 1994.

For more information, contact "Oler@Rho.Uleth.CA", or
"COler@Solar.Stanford.Edu". Pricing information can be obtained from the
e-mail address above, by writing to us through postal mail, or by calling
the recorded message at: 403-756-2386 (approx. 3 min). A special offer
applies until 31 March 1994.

SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE

|10.7 cm|HF Propagation +/- CON|SID AU.BKSR DX| Mag| Aurora |
|SolrFlx|LO MI HI PO SWF %MUF %|ENH LO MI HI LO MI HI %|K Ap|LO MI HI|
--|-------|----------------------|-------------------------|----|--------|
25| 095 |VG G F F 05 +05 70| 05 NA NA NA 00 05 10 35|3 15|NV NV LO|
26| 095 |VG G F F 05 +05 70| 05 NA NA NA 00 05 10 35|2 12|NV NV LO|
27| 100 |VG G F F 10 +10 70| 10 NA NA NA 00 05 10 40|2 12|NV NV LO|
28| 100 |VG G F F 10 +10 70| 10 NA NA NA 01 05 10 40|2 10|NV NV LO|
29| 100 |VG G F F 10 +10 70| 10 NA NA NA 01 05 10 40|2 10|NV NV LO|
30| 100 |VG G F F 10 +10 70| 10 NA NA NA 01 05 10 40|2 10|NV NV LO|
31| 095 |VG G F F 10 +10 70| 10 NA NA NA 01 05 10 40|2 10|NV NV LO|
01| 095 |VG G F F 10 +10 65| 10 NA NA NA 01 10 15 40|2 10|NV NV LO|
02| 095 |VG G F F 10 +05 65| 10 NA NA NA 01 10 20 40|3 12|NV NV MO|
03| 090 |VG G P P 10 00 65| 10 NA NA NA 02 15 30 35|4 15|NV LO MO|

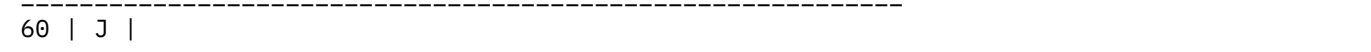
PEAK PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (25 MAR - 03 APR)

EXTREMELY SEVERE									HIGH
VERY SEVERE STORM									HIGH
SEVERE STORM									MODERATE
MAJOR STORM									LOW - MOD.
MINOR STORM									LOW
VERY ACTIVE								*	NONE
ACTIVE	*							* |***| NONE
UNSETTLED	***	***	***	***	***	***	***	***	***	***	NONE
QUIET	***	***	***	***	***	***	***	***	***	***	NONE
VERY QUIET	***	***	***	***	***	***	***	***	***	***	NONE
Geomagnetic Field	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Anomaly
Conditions	Given in 8-hour UT intervals	Intensity
_____

CONFIDENCE LEVEL: 70%

NOTES:
Predicted geomagnetic activity is based heavily on recurrent
phenomena. Transient energetic solar events cannot be predicted reliably over
periods in excess of several days. Hence, there may be some deviations from
the predictions due to the unpredictable transient solar component.

60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACTIVITY



```
57 | J JJ |
54 | JJJ JJ |
51 | JJJ JJ J |
48 | JJJ JJ J |
45 | JJJ JJ M J |
42 | JJJ JJ M J M |
39 | JJJ M JJ MMJ M |
36 | JJJ MM JJ MMJ MM M |
33 | JJJM MM JJ MMJMMM M |
30 | JJJMMMM JJ MMJMMM M M |
27 | JJJMMMMAA JJ A MMJMMM AM M A |
24 | AJJJMMMMAA JJ A MMJMMM AM M A |
21 | AJJJMMMMAA JJ A MMJMMMAAM M A |
18 | AA AJJJMMMMAAA JJ A MMJMMMAAMAMA AA |
15 | AAA U AJJJMMMMAAAU A JJ A MMJMMMAAMAMAU AAAA|
12 | AAA U AJJJMMMMAAAU AUJJ U UA MMJMMMAAMAMAU AAAA|
9 | AAA U UU AJJJMMMMAAAU AUJJU U UUA UMMJMMMAAMAMAUUAAAA|
6 | AAAUUUQUUUAJJJMMMMAAAUUUAUJJU U UUUUA UMMJMMMAAMAMAUUAAAA|
3 |QQAAAUUUQUUUAJJJMMMMAAAUUUAUJJUQUQUUUUAQQUMMJMMMAAMAMAUUAAAA|
0 |QQAAAUUUQUUUAJJJMMMMAAAUUUAUJJUQUQUUUUAQQUMMJMMMAAMAMAUUAAAA|
------------------------------------------------------------
Chart Start Date: Day #024
```

NOTES:
This graph is determined by plotting the greater of either the planetary A-index or the Boulder A-index. Graph lines are labelled according to the severity of the activity which occurred on each day. The left-hand column represents the associated A-Index for that day.
Q = Quiet, U = Unsettled, A = Active, M = Minor Storm,
J = Major Storm, and S = Severe Storm.

CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

```
------------------------------------------------------------

------------------------------------------------------------
134 | |
132 | * |
130 | * |
128 |*** |
126 |*** |
124 |*** |
122 |*** |
120 |**** |
118 |***** |
116 |***** |
114 |***** |
112 |***** |
110 |***** |
108 |***** ** |
106 |***** **** ** |
104 |***** ********** |
```

```
102 |****** ********** |
100 |****** * *********** * |
098 |******** * * ************* *** |
096 |******** ** * * ************** ***** |
094 |************ ***** ***************** ****** |
092 |****************************************** * **|
090 |********************************************** ** ****|
088 |************************************************** ******|
086 |******************************************************** *******|
084 |************************************************************|
------------------------------------------------------------
Chart Start: Day #024
```

GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX

```
------------------------------------------
```

```
------------------------------------------------------------
108 | |
107 | ******* |
106 | ********************************************************* |
105 | ************************************************************|
104 |************************************************************|
103 |************************************************************|
------------------------------------------------------------
Chart Start: Day #024
```

NOTES:
The 10.7 cm solar radio flux is plotted from data reported by the Penticton Radio Observatory (formerly the ARO from Ottawa). High solar flux levels denote higher levels of activity and a greater number of sunspot groups on the Sun. The 90-day mean solar flux graph is charted from the 90-day mean of the 10.7 cm solar radio flux.

CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS

```
------------------------------------------
```

```
------------------------------------------------------------
128 | |
122 | * |
116 | * * |
110 | * * |
104 |** * |
098 |** * * |
092 |** * * |
086 |*** * * ** |
080 |*** *** * ****** |
074 |*** *** ** * * ******* * |
068 |*** *** ***** * * * * * ******** * |
062 |**** *** ******* * *** * *** ******** ** |
056 |******** ******* ****** * * ***************** |
050 |****************** ******** * ****************** |
```

```
044 |************************** ******************** *|
038 |************************** ******************** * *|
032 |************************** ********************** ***|
026 |************************** ********************** ****|
020 |************************** ********************** ****|
014 |************************************************** ****|
008 |************************************************************|
------------------------------------------------------------
Chart Start: Day #024
```

NOTES:
The graphical chart of sunspot numbers is created from the
daily sunspot number counts as reported by the SESC.

HF RADIO SIGNAL PROPAGATION PREDICTIONS (25 MAR - 03 APR)

High Latitude Paths

```
_____________________________________________________
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD | | | | | | | | | |
LEVEL | FAIR |***|***|***|***|***|***|***|***| **| * |
------- | POOR | | | | | | | |* |* *|
70% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------
```

Middle Latitude Paths

```
_____________________________________________________
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | | | | | | | | | |
CONFIDENCE | GOOD |***|***|***|***|***|***|***|***| **| **|
LEVEL | FAIR | | | | | | | |* |* |
------- | POOR | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------
```

Low Latitude Paths

```
_____________________________________________________
| EXTREMELY GOOD | | | | | | | | | |
| VERY GOOD | * | * | * | * | * | * | * | * | * | * |
CONFIDENCE | GOOD |* *|* *|* *|* *|* *|* *|* *|* *|* *|* *|* *|
LEVEL | FAIR | | | | | | | | | |
------- | POOR | | | | | | | | | |
70% | VERY POOR | | | | | | | | | |
```

```
| EXTREMELY POOR | | | | | | | | | |
|----------------|---|---|---|---|---|---|---|---|---|
| PROPAGATION |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| QUALITY | Given in 8 Local-Hour Intervals |
-----------------------------------------------------
NOTES:
NORTHERN HEMISPHERE SOUTHERN HEMISPHERE
High latitudes >= 55 deg. N. | High latitudes >= 55 deg. S.
Middle latitudes >= 40 < 55 deg. N. | Middle latitudes >= 30 < 55 deg. S.
Low latitudes < 40 deg. N. | Low latitudes < 30 deg. S.

POTENTIAL VHF DX PROPAGATION PREDICTIONS (25 MAR - 03 APR)
INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

HIGH LATITUDES

_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | | | |
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% | * | * | * | * | * | * | * | * | * | * | 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | | | | | | | | | | 60%| | | | | | | | | |
| 40% | * | * | * | * | * | * | * | * | * | **| 40%| | | | | | | | |*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | |*|*|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|

MIDDLE LATITUDES

_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% |***|***|***|***|***|***|***|***|***|***| 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
```

```
| 60% | | | | | | | | | | 60%| | | | | | | | | |
| 40% | **| **| **| **| **| **| **| **| **| **| 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | | |*|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

LOW LATITUDES

```
_____________________________________________ ___________________
| FORECAST | Given in 8 hour local time intervals | |SWF/SID ENHANCEMENT|
|CONFIDENCE|Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
|__________|___|___|___|___|___|___|___|___|___|___| |-|-|-|-|-|-|-|-|-|-|
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
| 20% |***|***|***|***|***|***|***|***|***|***| 20%|*|*|*|*|*|*|*|*|*|*|
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 60% |***|***|***|***|***|***|***|***|***|***| 60%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 100% | | | | | | | | | |100%| | | | | | | | | |
|==========|===|===|===|===|===|===|===|===|===|===| |-------------------|
| 100% | | | | | | | | | |100%| | | | | | | | | |
| 80% | | | | | | | | | | 80%| | | | | | | | | |
| 60% | * | * | * | * | * | * | * | * | * | * | 60%| | | | | | | | | |
| 40% |***|***|***|***|***|***|***|***|***|***| 40%| | | | | | | | | |
| 20% |***|***|***|***|***|***|***|***|***|***| 20%| | | | | | | | | |
| 0% |***|***|***|***|***|***|***|***|***|***| 0%|*|*|*|*|*|*|*|*|*|*|
|----------|---|---|---|---|---|---|---|---|---|---| |-|-|-|-|-|-|-|-|-|-|
|CHANCE OF |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun| |F|S|S|M|T|W|T|F|S|S|
| VHF DX | Given in 8 hour local time intervals | |AURORAL BACKSCATTER|
|__________|_____________________________________| |___________________|
```

NOTES:
These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

AURORAL ACTIVITY PREDICTIONS (25 MAR - 03 APR)

High Latitude Locations

```
_____________________________________________________
| EXTREMELY HIGH | | | | | | | | | |
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | * | * |
70% | LOW |***|***|***|***|***|***|***|***|***|***|
| NOT VISIBLE |***|***|***|***|***|***|***|***|***|***|
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
```

```
| INTENSITY | Eve.Twilight/Midnight/Morn.Twilight |
-------------------------------------------------------

Middle Latitude Locations

_______________________________________________________
| EXTREMELY HIGH | | | | | | | | | |
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | * |
70% | LOW | | | | | | | | * |***|
| NOT VISIBLE |***|***|***|***|***|***|***|***|***|***|
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INTENSITY | Eve.Twilight/Midnight/Morn.Twilight |
-------------------------------------------------------

Low Latitude Locations

_______________________________________________________
| EXTREMELY HIGH | | | | | | | | | |
CONFIDENCE | VERY HIGH | | | | | | | | | |
LEVEL | HIGH | | | | | | | | | |
------- | MODERATE | | | | | | | | | |
90% | LOW | | | | | | | | | |
| NOT VISIBLE |***|***|***|***|***|***|***|***|***|***|
|----------------|---|---|---|---|---|---|---|---|---|---|
| AURORAL |Fri|Sat|Sun|Mon|Tue|Wed|Thu|Fri|Sat|Sun|
| INTENSITY | Eve.Twilight/Midnight/Morn.Twilight |
-------------------------------------------------------

NOTE:
Version 2.00b of our Professional Dynamic Auroral Oval Simulation
Software Package is now available. This professional software is
particularly valuable to radio communicators, aurora photographers,
educators, and astronomers. For more information regarding this software,
contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the
document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca"
or to: "COler@Solar.Stanford.Edu". This document, as well as others and
related data/forecasts exist on the STD BBS at: (403) 756-3008.

** End of Report **
```

3255. EM Spectrum Allocations

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 16:50:02 UTC
From: danois@montrouge.sinet.slb.com
Message-ID: <danois-250394114207@smr201.montrouge.smr.slb.com>
Source record: 269456

Could anyone point me to a file which would have latest frequency
allocations,
for the complete spectrum, by countries? (Not only amateur frequencies,
such
as ftp-able from arrl.org)?

-- E. Danois --

3256. ATV transmitter components

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 16:59:54 UTC
From: hersman@iri.tudelft.nl
Message-ID: <1994Mar25.165954.1@iri.tudelft.nl>
Source record: 269457

Hello ,

Recently in Holland a magazine published an ATV transmitter, designed
by G4WIM .
The problem is that some components are'nt available in holland,
the
MC145151P2 (Motorola) and
M67715 (Mutsubishi).

Maybe someone knows how to get these components ?
Please email and thanks in advance.

Addy Hersman
hersman@iri.tudelft.nl

3257. ARLP012 Propagation de KT7H

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 17:39:50 UTC
From: owner-w1aw-list@NETCOM.COM
Message-ID: <$arlp012.1994@ampr.org>
Source record: 269458
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB PROP @ ARL $ARLP012
ARLP012 Propagation de KT7H

ZCZC AP26
QST de W1AW
Propagation Forecast Bulletin 12 ARLP012
From Tad Cook, KT7H
Seattle, WA March 25, 1994
To all radio amateurs

SB PROP ARL ARLP012
ARLP012 Propagation de KT7H

Solar activity remained very low last week. Geomagnetic conditions ranged from unsettled to active, with a few quiet periods. The most disturbed days were March 17 and 21 when the A index was above 20. March 20 was the most stable day, with the A index at 8 and the K index dropping all the way to zero during one period.

For the SSB WPX contest this weekend look for a slightly rising solar flux, possibly reaching 100, with fairly stable geomagnetic conditions. 20 meters should be the best all around band for worldwide DX during the daylight hours and into the early evening.

Unfortunately, the short term rise in solar flux should reach a maximum of only about 100 early in the week, and then drop back to around 90 by April 5, when a recurring coronal hole is expected to raise some havoc. April 4 through 7 could be very disturbed, if conditions from the last solar rotation four weeks earlier are any guide. After the drop in solar flux it should increase again to around 105 by the middle of April.

Sunspot Numbers from March 17 through 23 were 30, 24, 11, 11, 26, 35 and 32, with a mean of 24.1. 10.7 cm flux was 85.1, 87, 89.1, 88.6, 90.7, 91.1 and 91.8, with a mean of 89.1.

The path projection for this week is from Sweetwater, Tennessee, which is between Chattanooga and Knoxville, and United Arab Emirates.

80 meters should be open from 0030 to 0230z, and 40 meters from 2330 to 0300. 30 meters looks good from 2300 to 0330, and 20 meters from 2000 to 0030, with the best time from 2230 to 2330. 17 meters should be open from 1430 to 1930. 15 meters does not look very promising, but check from 1700 to 1830. 12 and 10 meters do not look good at this time, but there is a very slight chance of a 12

meter opening from 1600 to 1900, and on 10 meters around 1800 to
1830.
NNNN
/EX

3258. Re: QSLing packet messages?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 18:05:30 UTC
From: JAY@medicine.dmed.iupui.edu
Message-ID: <JAY.15.2D9327EA@medicine.dmed.iupui.edu>
Source record: 269459

A QSO is "A conversation between two radio amateurs". A QSL card is "A postcard that serves as a confirmation of communication between two hams."

(These are quoted from "Now You're Talking" Copyright 1993 by ARRL.

When you look at these definitions, QSL cards for exchange of packet messages makes sense. Email messages are conversation between two radio amateurs, so that makes it a QSO. If email messages are a QSO, then a QSL card would be approriate. Using these definitions, a QSL card would be acceptable as a confirmation of a phone call or a person to person conversation.

I'm not "an apartment dweller with a no-code tech and a rubber duckie a block from the nearest packet board" but I don't see any reason why a person that meets this description would be treated any different from other hams.

I'll have to look in my copy of Part 97 to see if an apartment dweller with a no-code tech and a rubber duckie a block from the nearest packet board has less rights to enjoy ham radio.

Jay
KA9OKT

>I agree that it seems a little silly to exchange QSL cards for an exchange of packet messages, yet the PBBS is full of solicitations (CQs, etc.) >imploring certain states to come forth with replies! I guess if you're an >apartment dweller with a no-code tech and a rubber duckie a block from the >nearest packet board, it's a way of getting your jollies!

>One thing is sure: in ham radio, there's something for everyone!

>73,

>Gerry N2GJ

>-----Princeton Regional Schools takes no responsibility for the
> accuracy or content of the above message.

3259. QRP Quarterly?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 19:13:20 UTC
From: wiseman@atvl6.panasonic.com
Message-ID: <1994Mar25.191320.22527@MITL.Research.Panasonic.COM>
Source record: 269460

I saw a publication entitled "QRP Quarterly" referenced in 73 last month.
Does anybody know who publishes this, and where I could get a copy to
check out?

John
KA5WTO

3260. Re: FT-530 and FT-41R

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 19:51:56 UTC
From: paulc@fc.hp.com
Message-ID: <Cn8KIK.HI1@fc.hp.com>
Source record: 269461

On FT530 voltmeter error:

I have a different problem. Mine reads about .5 volt low at about 7 volts, progressing to 1 volt low at 13 volts. Don't know if this can be tweaked up or not. It's still a useful thing to have.

-Paul C.

3261. 2N2222 vs 2N2222A (was HAMS and hams)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 21:32:09 UTC
From: William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM
Message-ID: <9402257646.AA764631129@smtpgty.anatcp.rockwell.com>
Source record: 269462

In article <2mfo8e$c69@geraldo.cc.utexas.edu> oo7@astro.as.utexas.edu (Derek Will s) writes:

[stuff about the capitalization of ham deleted]
>
> Perhaps someone who used to think it is capitalized and now knows > better can tell me why they used to think this. It would clear up > a problem and make several people who have nothing better to worry > about much happier.

I say: I suppose it depends on which legend re: the origin of the term "ham" as it applies to amateur radio comes from. Several of the legends indicate the term is from either initials or an acronym, and both would be properly capitalized.

Jeff NH6IL writes:

Here's more to worry about: why capitalize

MF, HF, VHF, UHF, CW, AM, FM, SSB, D-layer, E-layer, F1-layer, F2-layer (and why no A- B- or C-layers?), ...

I say: In the above examples, the capitalized letters are initials

Any difference in specs between a 2N2222 and a 2N2222A xsistor? (And why did I capitalize the N and A?) An xmtr I'm building calls for 2N2222A's but all I have are dozens of 2N2222's (from dumpster diving behind the Engineering Department's building - amazing what they throw out).

I imagine the `A' version is the new and improved model.

I say (now on the real subject): The "A" devices have a different gain characteristic, (hFE @ 10v 10ma 50-325 for the 2222, 75-325 for the "A"), higher minimum breakdown voltages, lower VCE sat voltage. In most cases, it won't matter which you use. The chips are the same and the manufacturer screens for part type selection. Since the 2N2222 minimums are lower than those for the 2N2222A, A 2N2222A can always sub for a 2N2222, a 2N2222 may not always work for a 2N2222A. Both devices were registered at the same time, so it is not a matter of "new and improved". Check a Motorola small signal spec book or MIL-S-19500/255 if you really need to know the finer points.

73

Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI

(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com
---
Who are you? * I am number 2. * Who is number 1? * You are number 6.

3262. Re: Converting CB to 10 meters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 21:40:01 UTC
From: jfw@ksr.com
Message-ID: <2mvlnh$8mu@hopscotch.ksr.com>
Source record: 269463
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>In article <WAF.94Mar21163356@sunfish.zk3.dec.com> waf@sunfish.zk3.dec.com (William Freeman USG) writes:
>> Note that it's probably not worth converting a CB to 10m
>>*unless* the CB is an SSB model.

>Not True! Keying the driver stage and adding an simple BFO to the receiver
>would give you a neat CW xcvr.

A mighty poor one, though. First, an AM detector usually makes a lousy
product detector (hey even if it's just beeps, it should sound good); second,
you have a 6Kc bandpass instead of 3Kc, for twice the noise.

3263. Re: Voice mail on a repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-25 23:13:06 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <Cn8ttu.AHI@news.Hawaii.Edu>
Source record: 269465

Are there any repeaters left in this country that just repeat, including no musical tones or beeps when you drop your carrier? I miss the old days when all one heard was a nice solid kurchunk of the repeater receiver's squelch tail quickly followed by a second squelch tail from my receiver (the repeater carrier would drop off after 1-2 seconds). This seemed to be the way most of the public safety repeaters were also set up (particulary the California Division of Forestry repeaters back when I was a fireman in the early 70s).

Gary: I'll be disappointed if your repeater beeps.

Jeff NH6IL

3264. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-26 01:53:47 UTC
From: alanb@sr.hp.com
Message-ID: <Cn919o.E57@srgenprp.sr.hp.com>
Source record: 269466
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Zack Lau (KH6CP) (zlau@arrl.org) wrote:
: Ignacy Misztal (ignacy@ux2.cso.uiuc.edu) wrote:
: :
: : .... Please note that some older rigs have "implicit" RF
: : processors. For instance, SWAN 500 has 7360, a beam deflection tube,
: : as a DSB modulator. By clipping peaks, it acts with the following XTAL
: : filter as a DSP processor.

: If you clip an ideal DSB waveform (1 kHz modulation), aren't there
: two tones spaced 1 kHz apart that could generate IMD products at
: 1.5 kHz and 1.5 kHz (receiver output)? ...

Clipping a full-carrier DSB (AM) signal is equivalent to clipping the positive peaks of the baseband audio. I believe that symmetrical clipping of a suppressed-carrier DSB signal is equivalent to clipping both + and - peaks of the baseband audio. If you want to get the full benefits of RF speech clipping, you have to do it on the SSB signal.

AL N1AL

3265. Re: ***FOR SALE, TNC, Computer, Modem***

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-26 03:01:34 UTC
From: Sue <sue16@delphi.com>
Message-ID: <pW-PJ8e.sue16@delphi.com>
Source record: 269467

Hi, A friend is interested in the PK-64 Modem and TNC. How much?

3266. Re: Noise figure/transistors

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-26 03:54:32 UTC
From: wrt@eskimo.com
Message-ID: <Cn96v6.8pD@eskimo.com>
Source record: 269468
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <1994Mar25.143716.1@ntuvax.ntu.ac.sg>,
<asirene@ntuvax.ntu.ac.sg> wrote:
>Hi,
>
> Here's a design question. I am looking at the front-end RF amp
>which uses a 2N3904 and asking myself if I were to replace this with a
>transistor with a lower noise figure, say a 2N5179 or BF689, will I see
>any improvement? Is this mod worth pursuing? How much improvement can I
>expect to see here?
>
> Tks.
>
>Daniel
>

In general, low noise transistors have the most beneficial effect at higher frequencies. If your RF amp is working at about 10 MHz or less, you probably won't notice much improvement. Above that, a simple test is to listen to the noise with the antenna connected, but no signal present. Disconnect the antenna and see if the noise drops. If it does, then the limiting factor is the noise from the antenna, and not the noise generated in the front end transistor. If it DOESN'T drop, then a lower-noise transistor is called for.

You can get real fancy with noise figure measurements if you want, but for ordinary ham purposes, this test will tell you what you want to know.

3267. Info-Hams Digest V94 #329

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-26 03:58:58 UTC
From: SSW: <>;
Message-ID: <01HAEGGICTC28ZE766@BIIVAX.DP.BECKMAN.COM>
Source record: 269469

From: POSTMSTR @SSW
To: HCHOAGLAND @MRGATE
IN%"Info-Hams @UCSD.EDU" @MRGATE @BV8500

Author: IN%"Info-Hams@UCSD.EDU"
Sender: IN%"INFO-HAMS @UCSD.EDU"@MRGATE@BV8500
Subject: Info-Hams Digest V94 #329
Message Class:

Recipients:

Profile Recipient(s):

CCMAIL -RL636614 *RLMEYERING @CCMAIL @BIIVAX

The MAILbridge Server/DEC was unable to deliver mail
from Sender IN%"INFO-HAMS@UCSD.EDU"@MRGATE@BV8500.
Please contact your Soft-Switch E-Mail Administrator to register this user
in the Name Translate Directory.

3268. Re: $1000 reward: Project YA-BOY-BUDDY

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-26 04:04:16 UTC
From: wrt@eskimo.com
Message-ID: <Cn97BL.8v9@eskimo.com>
Source record: 269470

The marines have direction finders and guns. What do they need with a notice posted on a bulletin board? :-)

W7LZP

3269. Re: Latest callsigns assigned list?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-26 04:11:27 UTC
From: mahjmac@netcom.com
Message-ID: <mahjmacCn97n5.5Fp@netcom.com>
Source record: 269471

In <ab5smCn8n7u.CJv@netcom.com> ab5sm@netcom.com (Lee Laird) writes:

>it took right at 6 weeks for me to get my 2x2 .. i submitted my 610 on
>dec 15 .. they issued the call jan 15, and then it two weeks for them to
>mail it. i received it the first week of february

How were you able to find when your callsign was issued? I'm anxiously
awaiting my very first Novice + HF callsign, and would love to know
what it is before it arrives. I know I can't XMIT without the paper, but
I could get a jump on my personalized license plate! ;-)

Michael
--

| Michael A. Hotz J.M. Allen Creations mahjmac@netcom.com |
| Of course my opinions represent those of my company... I own it!! |

3270. ICOM IC-2410H

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-26 04:37:31 UTC
From: hallock@matt.ksu.ksu.edu
Message-ID: <2n0e6b$eto@matt.ksu.ksu.edu>
Source record: 269472

Hello there everyone,

Well this is my first post to the wonderful world of Internet so if I have done something wrong please let me know.

I am looking for an extended transmit mods for the IC-2410H from Icom. I have already cut D8/D9/D10 diodes. I have a mod for the extended VHF TX but will that also work for the UHF? If not does someone have the correct procedure?

Any help would be appericated. Please mail responses to:

hallock@matt.ksu.ksu.edu

Thanks for your help,
Chris N0SGL

3271. Info-Hams Digest V94 #330

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-26 04:59:16 UTC
From: SSW: <>;
Message-ID: <01HAEIK92KJM8ZE7FN@BIIVAX.DP.BECKMAN.COM>
Source record: 269473

From: POSTMSTR @SSW
To: HCHOAGLAND @MRGATE
IN%"Info-Hams @UCSD.EDU" @MRGATE @BV8500

Author: IN%"Info-Hams@UCSD.EDU"
Sender: IN%"INFO-HAMS @UCSD.EDU"@MRGATE@BV8500
Subject: Info-Hams Digest V94 #330
Message Class:

Recipients:

Profile Recipient(s):

CCMAIL -RL636614 *RLMEYERING @CCMAIL @BIIVAX

The MAILbridge Server/DEC was unable to deliver mail
from Sender IN%"INFO-HAMS@UCSD.EDU"@MRGATE@BV8500.
Please contact your Soft-Switch E-Mail Administrator to register this user
in the Name Translate Directory.

3272. ham radio

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-27 14:52:43 UTC
From: zabrodsk@med.ucalgary.CA
Message-ID: <Pine.3.89.9403270741.A22822-0100000@ume>
Source record: 269474

```
subscribe Dr. Rick Zabrodski VE6GK
```

3273. Re: Ham-related mailing lists

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-27 18:05:18 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CnC4wu.A2r@news.Hawaii.Edu>
Source record: 269475

In article <1994Mar26.222229.1@ntuvax.ntu.ac.sg> asirene@ntuvax.ntu.ac.sg writes:
>Hi,
>
> Can someone post a list of all HAM-related mailing lists that
>we can subscribe to? Tks.

QRP (qrp-request@think.com)
boatanchors (dedicated to tube radio equipment)
(boatanchors-request@gnu.ai.mit.edu)
DX (see the privious article)
vintage solid state (don't know the sub address)
contests (sub address unknown)

There's one devoted to commercial radio equipement - can't recall the name.
Someone on `boats' posted the entire list - there's at least a dozen more.

Jeff NH6IL

3274. uk.radio.amateur FAQ

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-27 18:07:52 UTC
From: paul@topsy.demon.co.uk
Message-ID: <847@topsy.demon.co.uk>
Source record: 269476
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

```
Archive-name: uk-radio-amateur-faq
Last Modified: 27-March-1994

uk.radio.amateur Frequently Asked Questions
===========================================

This will be a periodic posting to uk.radio.amateur and rec.radio.info of
UK-specific questions and answers on amateur radio. It is not intended to
be exhaustive, but to point you towards sources of further information
where necessary. I would welcome any constructive views on this FAQ to
ukfaq@topsy.demon.co.uk .

For ease of distribution, the edition of this FAQ posted to Usenet has been
cut into 2 parts.

The latest version of this FAQ is available for anonymous FTP from
ftp.demon.co.uk

Part 1 of 2
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Questions
---------

Obtaining a licence:

1. Is a licence necessary ?
2. How do I get a licence ?
3. What are the types of licence ?
4. What is the Radio Amateur's Exam ?
5. What is the Novice Course and Exam ?
6. Where can I take these exams ?
7. What if I fail ?
8. I passed the exams, now what ?

Initial Operating:

9. What is a callsign ?
10. What frequencies am I allowed to use ?
11. What can I transmit ?
12. How do I know what to do ?
13. Where can I buy a radio ?
14. Can I build a radio ?
15. Can I modify a radio ?

International:
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16. I have a UK licence, can I use it abroad ?
17. What is a CEPT licence ?
18. I hold a CEPT licence, how do I sign in the UK ?
19. I want to operate in the UK, I don't have a CEPT licence.

Morse:

20. What is morse ?
21. Where do I learn morse ?
22. Do I need to learn morse ?

Repeaters:

23. What is a repeater ?
24. How do I use a repeater ?
25. What is CTCSS (Tone squelch) ?

Packet-Radio:

[Editor's note: the following section is necessarily brief but I will consider including better explanations of packet if they are offered, would anyone care to supply an explanation of ATV ?]

26. What is packet radio ?
27. What equipment do I need for packet radio ?
28. What are the limitations of packet radio in the UK ?
29. Can I leave my packet station unattended ?
30. Can I use packet to exchange messages with Internet users ?
31. How do I obtain a .ampr.org IP address ?

Licence Regulations:

32. UK Band Plans.
33. Can anyone use my radio ?
34. I have a dual-band rig, can I use it as a repeater ?
35. My neighbour complains that he can hear my voice on his television.
36. I want to take my radio to sea / in an aircraft.

Further Advice:

37. The Radio Society of Great Britain
38. The Radiocommunications Agency
39. Local clubs
40. Specialist clubs
41. Commercial magazines
42. Internet news-groups
43. Other FAQs

Misc:

44. Is the UK callbook available on disc/CD-ROM ?

73:

45. Caveat
46. Credits

---

1. Is a licence necessary ?

A licence for amateur frequencies is only required if you intend to transmit on those frequencies. A listener's licence does not exist. The requirement to hold a licence is in the Wireless Telegraphy Act 1949. You do not need a licence to purchase or own an amateur transceiver, only to transmit with it. No licence is required to receive any amateur transmission.

2. How do I get a licence ?

Unless you already hold a licence issued by another country (see below) then you must satisfy the licencing authority (the Radiocommunications Agency (RA) currently) that you are technically competent to use an amateur transmitter. The DTI lays out the minimum standards and the City & Guilds Institute holds examinations to test licence applicants. You must obtain a pass in the examination(s) before submitting the licence application form to the RA. A useful publication from the RA is 'How to Become A Radio Amateur' obtainable free from the RA at Waterloo Bridge House, Waterloo Bridge Road, London SE1 8UA. Telephone 071 215 2150 (+44 71 215 2150). This publication includes an application form.

3. What are the types of licence ?

The primary licence type is the Amateur Radio Licence. This licence has 'A' and 'B' variants. Holders of the 'A' licence are permitted to transmit on all the amateur frequency bands allocated in the UK. The 'B' licence holder is restricted to transmitting on those frequency bands above 30MHz. Obtaining either variant of licence requires a Pass in the Radio Amateur's Examination. The second licence type is the Amateur Radio Novice Licence. Holders of Novice licence are restricted to transmitting on a small number of the frequency bands available to holders of an Amateur Radio Licence, and to which portions of those bands they may use. There are 'A' and 'B' variants with holders of the 'B' licence restricted to transmitting on bands over 30MHz. Obtaining a Novice licence requires a Pass on an organised Novice Course and a Pass in the Novice Examination. In the case of either a Novice or a Radio Amateur Licence, the licence issued is a Class 'B' licence unless the applicant has passed a Morse code test in which case a Class 'A' licence is issued.

4. What is the Radio Amateur's Examination (RAE) ?

The RAE is a two paper multiple-choice examination held twice yearly at City & Guilds Examination Centres. It tests electronic theory, licence conditions, interference & operating procedures. The C&G reference is 765. The C&G charge GBP16.50 (1993 level) for each paper, a Pass on both is required. The Examination Centre may also make a charge. Several books exist for self-teaching of the necessary subjects to pass the RAE and these are available from the RSGB, amongst others (see below).

5. What is the Novice Course and Exam (NRAE) ?

The Novice Course is a 30 hour training course organised by the Radio Society of Great Britain and run at local radio clubs and schools. The course typically lasts 12 to 16 weeks. The courses will normally be timed to finish a few weeks before one of the four Novice RAE's held each year. The C&G reference is 773. The Novice Course Instructors will prepare a candidate for the NRAE. The Exam is one paper testing a wide range of subjects learnt on the Novice Course. A Pass on both the Course and the NRAE is required.

6. Where can I take these exams ?

Both the RAE and NRAE can be held at any City & Guilds exam centres, but it is up to each centre to decide whether to hold the examinations and local centres should be contacted direct. Some radio clubs and schools have registered themselves as C&G centres. There is a list of the participating C&G centres in the 'Callbook and Information Directory' published annually by the Radio Society of Great Britain (RSGB). The Novice Course is run locally but the RSGB has a register of courses and can advise you of the nearest one. Their telephone number is 0707 659015 (+44 707 659015).

7. What if I fail ?

If you fail one of the papers of the RAE then you can re-take only that paper at the next examination. If you fail both papers then you can re-take the RAE. There is no limit on the number of times you may take the RAE, but the fee will be charged each time. Similarly for the Novice Course and NRAE, either element can be re-taken.

8. I passed the exams, now what ?

Complete the application form (Novice Instructors have forms for Novice applicants) and send it with the RAE/NRAE Pass slip (and Novice Course Pass slip if for a Novice licence) to Subscription Services Ltd (SSL), together with the fee. See Q38. The fee is currently GBP15 for all classes of licence, but Novice licence holders under 21 years old are not required to pay the fee. The licence can take 4 to six weeks to be delivered. The licence will show your callsign. You also receive a booklet giving information about what your licence permits you to do.

9. What is a callsign ?

A callsign is a unique identifier for you whilst transmitting. Callsigns are issued to an individual radio amateur with their first licence document. A callsign consists of a mixture of letters and numbers from 3 characters long. In the UK, the shortest callsigns are 4 characters long. Holders of the Radio Amateur Licence in the UK have callsigns with the prefix 'G'. Holders of Novice Licences have the callsign prefix '2'. Sample prefixes for other countries are F;France, D;Germany, I;Italy, N,W,A;USA, VK;Australia. Prefixes are allocated by the International Telecommunications Union, an agency of the United Nations. There are secondary prefixes in the UK to determine which part of the UK the licence holder is operating from:

Radio Amateur Licence Novice Licence
England G 2E
Scotland GM 2M
Wales GW 2W
Northern Ireland GI 2I
Isle of Man GD 2D
Jersey GJ 2J
Guernsey & GU 2U
dependencies

In the case of club licences, a different secondary prefix may be used:

England GX
Scotland GS Novice licences may not
Wales GC be used as club licences.
Northern Ireland GN
Isle of Man GT
Jersey GH
Guernsey & GP
dependencies

Following the prefix, a UK callsign has a number that determines the class of licence, ie whether it's a class 'A' or class 'B' licence:

Radio Amateur Licence Novice Licence

Class A 0,2,3,4, all plus 0 plus three letters
three letters
2,3,4,6,8 plus two
letters

Class B 1,6,7,8 all plus 1 plus three letters
three letters

The latest callsigns being issued are in the G0, G7, 2E0, 2E1 series. A valid callsign would be G1PJJ or G3YMD or G2FA. The first one is Class B, the second two are Class A. A valid Novice Class A callsign would be 2E0AAK.

The callsign allocated must be transmitted in accordance with the current licence conditions.

10. What frequencies am I allowed to use ?

The frequency bands allocated to Amateurs are published in the licence conditions booklet that accompanies each licence. The current bands allocated to Radio Amateurs are:

1.810-2.000, 3.500-3.800, 7.000-7.100, 10.100-10.150, 14.000-14.350
18.068-18.168, 21.000-21.450, 24.890-24.990, 28.000-29.700,
50.000-52.000, 70.00-70.50, 144.0-146.0, 430.0-440.0, 1240-1325,
2310-2450, 3400-3475, 5670-5680, 5755-5765, 5820-5850, 10000-10500,
24000-24250, 47000-47200, 75500-76000, 142000-144000, 248000-250000.
All frequencies in MHz. Class B Licence holders are restricted to transmitting on bands above 30MHz. Geographical restrictions apply to

the 430-432MHz sub-band.

The current bands allocated to Novices are:

1.950-2.000, 3.560-3.585, 10.13-10.14, 21.100-21.149, 28.060-28.190,
28.225-28.500, 50.0-52.0, 432.0-440.0, 1240-1325, 10000-10500.
All frequencies in MHz. Class B Novice Licence holders are restricted
to transmitting on bands above 30MHz.

Bands from 1.8MHz to 30MHz are known as HF (High Frequency)
Bands from 50MHz to 146MHz are known as VHF (Very High Frequency)
Bands from 430MHz to 1.3GHz are known as UHF (Ultra High Frequency)
Bands above 1.3GHz are in the Microwave region and are also known as
SHF (Super High Frequencies)

11. What can I transmit ?

The transmission types available depend only on whether there's
sufficient bandwidth on the band you intend to use for that
transmission. You would not try to transmit a 6MHz television signal on
a 2MHz wide band. Otherwise, all phone, Morse, television, fax and data
modes are permitted on all bands. There is, however, general agreement
in the UK on use of particular modes on each band.

So far as the content of the transmission is concerned, this does
depend on the mode in use. You may not transmit any copyrighted
material. You cannot (except under emergency conditions) transmit a
message that is not from another amateur, however you cannot
store-and-forward any message that is not from yourself. This area of
licencing is not easy to explain in few words and the licence booklet
should be read. See Q33 in connection with those who may transmit at
your station and Q30 for restrictions regarding packet-radio messages.

For Novice Licence Holders, the restrictions are slightly more severe
and several bands are only available for Morse transmissions. Novices
are not permitted to use some bands at all, notably 144MHz.

See Q32 for the band-plans.

12. How do I know what to do ?

Hopefully in preparing for the exam, you've read and learnt the licence
conditions and operating procedures. The best way of learning though is
to listen to other amateurs operating. Hopefully you can listen whilst
you're learning so when the licence arrives you'll be ready to transmit
straight away. In any case, if you get it wrong 'on the air' then some-
one will correct you.

13. Where can I buy a radio ?

Many larger towns have shops that stock Radio Amateur equipment. Many
advertise in the Amateur Radio press. Local amateurs will advise on the
better local emporiums but a lot of business is mail-order, with the
usual caveats. You do not usually need to take your licence along when

purchasing a radio, but some suppliers are asking for proof of being licenced before selling you a radio, particularly higher-powered models. An alternative means of comparing and buying radios is at a Rally. These are held all over the country between March and October usually, with a few just before Christmas. A Rally is a way that Radio Amateurs can meet and talk, and there are usually many trade stands from local and national dealers. There's often a bring-and-buy where you can find a second-hand bargain. Rally information is published in all the Radio magazines and also broadcast on the RSGB's news service each Sunday, GB2RS (see Q37). Lists of Rallies are distributed on the packet-radio BBS network by G6CZV addressed to RALLY@GBR.

14. Can I build a radio ?

Yes, and you could save yourself lots of cash. Whether you want to try a design of your own, use a published design and etch your own boards or build a kit from one of the UK kit suppliers, there is no restriction on 'home-brew' - not yet. If you're not used to building, don't try and build a transmitter first, try out your skills on a receiver and see how you cope. You'll find many of the kit suppliers at rallies. Many of the magazines feature construction projects, often tied to a specific kit supplier.

15. Can I modify a radio ?

Yes. There is a lot of ex-commercial and ex-emergency services radio equipment around and plenty of information on modifying it to make it work on amateur frequencies. But, not all of it is suitable, so ask before you buy. Also, there is a restriction on converting former CB (27MHz) equipment for use on 28MHz and a permit is required from the Radiocommunications Agency.

16. I have a UK licence, can I use it abroad?

Holder of a full UK licence can use it abroad, subject to restrictions, holders of novice licences can't. If you intend to operate within Europe, then the country you're operating from may have signed the CEPT agreement, in which case no additional permission is needed to operate there, simply sign as (eg. for France) F/own-call . Check on your own licence validation document which countries have signed the CEPT agreement. Operating in any country that is not a CEPT signatory means obtaining advance permission from that country's authorities to operate there - normally well in advance of your trip. The RSGB can offer advice and application forms for most countries that have a reciprocal licencing agreement with the UK. The relevant embassy/high commission or consulate can also offer advice. Be aware that amateur radio is illegal in some countries. It is also illegal in some countries to even transit the country carrying radio transmitters without the appropriate licence. In all cases, check.

17. What is a CEPT licence ?

A CEPT licence is a licence issued by a country that is a signatory to the CEPT agreement no. T/R 61-01. CEPT is the European Posts and Telecommunications Committee and sets standards between European countries. Those countries that have signed the agreement include: Austria, Belgium, Switzerland, Germany, Denmark, Spain, France, Liechtenstein, Greece, Hungary, Italy, Irish Republic, Luxembourg, Monaco, Netherlands, Norway, Sweden, Finland, Czech Republic, New Zealand, United Kingdom. Under the terms of the agreement, holders of a CEPT class 1 licence, are allowed to use, without further formality, all amateur bands in the country being visited that are also permitted under the terms of the licence-holders own licence. Holder of a CEPT class 2 licence are restricted to bands above 144MHz that are available in the licencee's own country and the country being visited. If you have a UK licence, look at your licence validation document. At the top you will see a "CEPT equivalent class", this will be 1 for a class A licence, 2 for class B.

18. I have a CEPT licence, how do I sign in the UK ?

Holders of a licence issued in accordance with the CEPT (European Post and Telecommunications Committee) Recommendation T/R 61-01 may operate in those countries that have verified the Recommendation. The UK is a signatory and amateurs with CEPT licences can operate as G/own-call in England, GW/own-call in Wales etc. without formality. The bands available are restricted to those which are permitted in this country, if the licence holder is permitted to use them in their OWN country. A class 2 CEPT licence holder is restricted to 144MHz and above.

19. I want to operate in the UK, I don't have a CEPT licence.

If your licence is not marked as a CEPT licence, then you need to apply to the Radiocommunications Agency for a temporary reciprocal licence. There are reciprocal agreements with many countries, if in doubt ask your own licencing authority or national society. Obtain a reciprocal licence application form from your own national society or direct from the Radiocommunications Agency and return it with proof of your licence and the fee of (currently) GBP15. Allow 8 to 12 weeks if you need the licence returned to your home address, 4 to 6 weeks if it is to go to the address you'll be staying at in the UK. You sign as G/own-call in England, GM/own-call in Scotland etc. You are bound by the UK licencing conditions and will receive a copy of the licencing booklet with the reciprocal licence. The temporary reciprocal licence is valid for 12 months. You can contact the Radiocommunications Agency on 071 215 2150 (+44 71 215 2150).

20. What is morse ?

Morse is the simplest means of transmitting a recognisable signal between stations. Morse is, at its simplest, turning on and off the transmitter in a manner that represents letters or numbers, according to the Morse Code. Morse, by its nature, is likely to work between two stations when all other modes fail due to interference or sheer lack of signal strength, given the narrow bandwidth required and the low

signalling rate, although no mode is perfect.

21. Where do I learn morse ?

There are broadcasts on the HF, VHF and UHF amateur bands that are designed to bring you from a low level to a good level of morse, but these assume that you at least know the 'code' first. These broadcasts in the UK are co-ordinated by the RSGB (0707-659015) and are operated under the callsign GB2CW. There are other HF broadcasts world-wide and the most prominent of these are by the ARRL (American Radio Relay League) under the call W1AW. Another way of learning morse is from an instructional tape. These tapes are available from the RSGB and the G-QRP club (see below) amongst other sources.

22. Do I need to learn morse ?

If you have no intention of transmitting on the HF bands (below 30MHz) then no, you don't need morse. The main purpose of morse presently is to provide access to the HF bands, morse is a requirement of the ITU and is mandatory in most countries' licencing for HF licences. Above 30MHz morse may still be useful if you want to use meteor-scatter (MS) or use some satellites. If you want to use the HF bands, then a Class 'A' licence is required. If you already have a Class 'B' licence then you need to take either a 12 words-per-minute morse test (for an Amateur Licence 'A') or a 5 wpm morse test (for a Novice Licence 'A'). Additionally a holder of an Amateur Licence 'B' can take the 5 wpm morse test and be issued with a Class 'A' Novice Licence as well as their Class 'B' Licence. The morse tests are organised by the RSGB on behalf of the Radiocommunications Agency. Tests are held in most areas 3 or 4 times a year, depending on demand, as well as at some major rallies.

23. What is a repeater ?

Repeaters are to be found across the country, mainly on 145MHz and 433MHz. A repeater is an un-manned station that will retransmit on its output frequency any signal heard on its input frequency that satisfies certain conditions. On the 2m band (144-146MHz) repeaters are found on the following frequencies:

Output (MHz) Input (MHz) Channel no.
145.600 145.000 R0
145.625 145.025 R1
145.650 145.050 R2 The input frequency
145.675 145.075 R3 is always 600kHz below
145.700 145.100 R4 the output frequency.
145.725 145.125 R5
145.750 145.150 R6
145.775 145.175 R7

On the 70cm band (430-440MHz) repeaters are found on the following frequencies:

Output (MHz) Input (MHz) Channel no.
433.000 434.600 RB0
433.025 434.625 RB1
433.050 434.650 RB2
433.075 434.675 RB3
433.100 434.700 RB4
433.125 434.725 RB5 The input frequency
433.150 434.750 RB6 is always 1.6MHz above
433.175 434.775 RB7 the output frequency.
433.200 434.800 RB8
433.225 434.825 RB9
433.250 434.850 RB10
433.275 434.875 RB11
433.300 434.900 RB12
433.325 434.925 RB13
433.350 434.950 RB14
433.375 434.975 RB15

It's worth pointing out that repeaters cost money to run and the RSGB does not contribute to their costs, in fact it no longer pays for the licences. Repeaters are paid for by local groups and clubs. If you use a repeater, ask on the repeater how you can join the group.

24. How do I use a repeater ?

With your VHF or UHF transceiver, change the displayed frequency to the output frequency of the repeater you wish to use, there is insufficient space here to list all the repeaters available. Locate the button/function on the transceiver to enable repeater or duplex mode, where there is an option for either positive or negative transmit shift then make sure that it is set to negative for the 2m band and positive for the 70cm band. Refer to Q23 for the exact frequencies.

To use a repeater, key the PTT (push-to-talk), send a short burst of 1750Hz tone (tone-burst), keep the PTT keyed and speak for a few seconds (but not whilst the tone-burst is being sent), release the PTT and you should receive a pip or some other indication that your signal was retransmitted by the repeater. The 1750Hz tone-burst is required only when the repeater is not in use and on some transceivers is automatic when repeater/duplex mode is enabled.

Some repeaters have the facility to accept CTCSS instead of a tone-burst. If a transceiver is capable of sending CTCSS tones then this should be used instead of a tone-burst where possible. See Q25.

25. What is CTCSS (Tone Squelch) ?

CTCSS stands for Continuous Tone-Coded Squelch System. The principle is that a sub-audible tone is continuously transmitted in addition to the speech (or other) signal. The tones used are below the normal hearing frequency range and do not interfere with the other signal. In the UK these tones may be used instead of a 1750Hz tone to access repeaters. The UK has been divided into 23 areas and a particular tone has been

allocated to each area. Those repeaters that support CTCSS will
normally send the appropriate letter (designating the tone frequency)
in morse after the repeater callsign. The tones used are a subset of
those available and are :

Tone letter Frequency (Hz)
A 67.1
B 71.9
C 77.0
D 82.5
E 88.5
F 94.8
G 103.5
H 110.9
J 118.8

End of Part 1

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Summary: To answer frequently asked questions on amateur radio in
the UK.
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uk.radio.amateur Frequently Asked Questions
==

This will be a periodic posting to uk.radio.amateur and rec.radio.info of
UK-specific questions and answers on amateur radio. It is not intended to
be exhaustive, but to point you towards sources of further information
where necessary. I would welcome any constructive views on this FAQ to
ukfaq@topsy.demon.co.uk .

For ease of distribution, the edition of this FAQ posted to Usenet has been
cut into 2 parts.

The latest version of this FAQ is available for anonymous FTP from
ftp.demon.co.uk

Part 2 of 2
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26. What is packet radio ?

Packet radio is a data communications mode that uses a modified form of
the X25 signalling protocol. Simply put, two packet radio stations that
are within direct range of each-other can establish an error free data
connection, normally at 1200 bits per second (baud). Packet radio
stations may also act as automatic repeaters ('digipeaters') and can
relay other stations' signals. Using packet radio, many bulletin boards
or mailboxes exist to handle messages for those active on packet radio

in their locality, these messages can include 'bulletins' that are open to all and are often distributed across every packet radio bulletin board in the UK, or further afield. Most packet radio is operated in the 2m and 70cm bands.

For a fuller description of packet radio see the digital-faq posted in rec.radio.amateur.digital.misc and available by anonymous FTP from:
rtfm.mit.edu//pub/usenet/news.answers/radio
ftp.amdahl.com//pub/radio/amateur

27. What equipment do I need for packet ?

Life used to be simple, all you needed for packet was a VHF or UHF transceiver (depending on where you lived), a terminal or computer running a terminal-emulation program and a Terminal Node Controller unit (TNC). The TNC contains a microcomputer and controls all communication between the terminal and the remote TNC being connected to. Now cards containing a TNC (or two) are available for the PC & compatibles and other computers. Additionally, there is a system that uses a simple modem, or a TNC acting as a simple modem, with the host computer controlling the communications. Finally there are the TNC's that do not require a local terminal ..... ask an expert.

28. What are the limitations of packet-radio in the UK ?

At first packet was illegal in the UK, or maybe it wasn't. The licence did not make this clear. Now it is an established communication mode and recognised by the RA. This means that they have made a few special arrangements if you want to run packet. Firstly you must send a morse ident to give your full station callsign at least every 30 minutes. And you should send a packet ident every 15 minutes. Next, you may only pass on mail addressed to a specific amateur station, unless you hold a Notice of Variation to your callsign (designated by a GB7... callsign) - in which case you don't need to read this section :-) .

29. I want to leave my packet-radio station unattended.

Providing the commencement of unattended packet-radio operation is logged in the station log then unattended operation may be in the following bands or sub-bands: 50-51MHz, 70.3125MHz, 70.3250MHz, 70.4875MHz, 144-146MHz, 432.6-432.7MHz, 433.6-433.7MHz,1299-1300MHz (excluding Northern Ireland), 2310-2450MHz, 3400-3475MHz, 5650-5680MHz, 5755-5765MHz, 5820-5850MHz, 10000-10250MHz, 10270-10300MHz, 10400-10500MHz 24000-24050MHz and all bands including and above 47000MHz. The position regarding the 70cm band is changing and the latest position should be sought in all cases where the licencee is not certain.

30. Can I use packet to exchange messages with Internet users?

The only messages that may be carried by the packet network are those sent by licenced amateurs. There are no official gateways from packet to Internet in the UK due to the problem of controlling which messages

are from licenced amateurs on the Internet side. This is under review by the RA. There are, however, gateways in the US and elsewhere that will forward internet email from licenced amateurs onto the packet bbs system. It is necessary to register your callsign and email address before using these gateways.

31. What facilities are available in the UK by packet ?

Most user-level packet is at 1200baud with some linking still at 1200baud but moving to 9600baud, or beyond. At this data rate, little more than BBS access is possible although the DX Cluster network for notification of DX is very strong in some areas. TCP/IP (and its related servers) are established in some areas but there is by no means a national TCP/IP network.

31. How do I obtain a .ampr.org IP address ?

There are local co-ordinators assigned to each RSGB region, and in some cases they delegate address allocation further to local co-ordinators. Your nearest BBS sysop will probably know who runs TCP/IP locally - if he doesn't there's a fair chance that activity is so low that you won't find any other operators anyway !

If you have any difficulty, the UK co-ordinator is Paul Taylor, G1PLT (ptaylor@email.meto.govt.uk) . He should be able to put you in touch with your regional co-ordinator.

32. UK Band Plans

Use of the allocated bands in the UK is voluntary to a large extent. Providing your signal remains within the band edges you may transmit using any mode you like, but see the booklet BR68 from the Radiocommunications Agency. The voluntary band plans are as follows:

1.810-2.000MHz (160m)

1.810-1.838 CW only
1.838-1.842 Digital modes (excluding packet radio) and CW
1.842-2.000 Phone and CW

3.500-3.800MHz (80m)

3.500-3.580 CW only
3.580-3.620 Digital modes and CW
3.620-3.800 Phone, CW, SSTV, Fax

7.000-7.100MHz (40m)

7.000-7.035 CW only
7.035-7.045 Digital modes, SSTV, Fax and CW
7.045-7.100 Phone and CW

10.100-10.150MHz (30m)

10.100-10.140 CW only
10.140-10.150 Digital modes

14.000-14.350MHz (20m)

14.000-14.070 CW only
14.070-14.099 Digital modes and CW
14.099-14.101 Beacons
14.101-14.112 Digital modes, phone and CW
14.112-14.250 Phone, SSTV, Fax and CW
14.250-14.350 Phone and CW

18.068-18.168MHz (17m)

18.068-18.101 CW only
18.101-18.109 Digital modes and CW
18.109-18.111 Beacons
18.111-18.168 Phone and CW

21.000-21.450MHz (15m)

21.000-21.080 CW only
21.080-21.120 Digital modes and CW
21.120-21.149 CW only
21.149-21.151 Beacons
21.151-21.450 Phone, SSTV, Fax and CW

24.890-24.990MHz (12m)

24.890-24.920 CW only
24.920-24.929 Digital modes and CW
24.929-24.931 Beacons
24.931-24.990 Phone and CW

28.000-29.700MHz (10m)

28.000-28.050 CW only
28.050-28.150 Digital modes and CW
28.150-28.199 CW only
28.199-28.201 Beacons
28.201-29.200 Phone, SSTV, Fax and CW
29.200-29.300 Digital modes, phone and CW
29.300-29.550 Satellite downlinks
29.550-29.700 Phone and CW

50.000-52.000MHz (6m)

50.000-50.100 CW only
50.100-50.500 SSB and CW only
50.500-51.000 All modes
51.000-51.125 SSB and CW only
51.125-51.410 All modes
51.410-51.830 FM
51.830-52.000 All modes

70.000-70.500MHz (4m)

70.000-70.030 Beacons
70.030-70.250 SSB and CW only
70.250-70.300 All modes
70.300-70.500 FM phone and packet radio

144.000-146.000MHz (2m)

144.000-144.150 CW only
144.150-144.500 SSB and CW only
144.500-144.845 All modes
144.845-144.990 Beacons
144.990-145.200 FM Repeater inputs
145.200-145.600 FM simplex
145.600-145.800 FM Repeater outputs
145.800-146.000 Satellite uplinks/downlinks

430.000-440.000MHz (70cm)

430.000-431.000 All modes
431.000-432.000 All modes - see note
432.000-432.150 CW only
432.150-432.500 SSB and CW
432.500-432.800 All modes
432.800-432.990 Beacons
432.990-433.000 All modes
433.000-433.400 FM Repeater outputs
433.400-434.600 FM simplex and packet radio
434.600-435.000 FM Repeater inputs
435.000-438.000 Fast-scan TV and satellite uplinks/downlinks
438.000-439.800 Fast-scan TV
439.800-440.000 Packet Radio

note to 431-432MHz sub-band: This sub-band is not permitted to be used
within a 100km radius of Charing Cross, London.

1240.000-1325.000MHz (23cm)

1240.000-1243.250 All modes
1243.250-1260.000 ATV, FM TV repeater inputs
1260.000-1270.000 Satellite uplinks
1270.000-1272.000 All modes
1272.000-1291.000 ATV, FM TV repeater input
1291.000-1291.475 FM Repeater inputs
1291.475-1296.000 All modes
1296.000-1296.150 CW
1296.150-1296.800 SSB
1296.800-1296.990 Beacons
1296.990-1297.000 All modes
1297.000-1297.550 FM Repeater outputs
1297.500-1298.000 FM simplex
1298.000-1298.500 All modes
1298.500-1300.000 Packet radio

1300.000-1325.000 ATV, FM TV repeater outputs

[Editor's note: I do not propose to list the band-plans for the other microwave bands, unless asked.]

33. Can anyone use my radio ?

Anyone who holds a current UK-issued licence, or a valid CEPT licence, or a valid reciprocal licence, may use your station for frequencies for which they are licenced under their own callsign. In addition to those listed, a UK Novice licencee, holder of a pass slip from the Radio Amateur's Examination or an Amateur Radio Certificate (who does not hold a licence), or a licenced amateur from any other country, may operate under the station's callsign on frequencies that you are licenced to use providing you are in attendance.

When operating a club station, a message may be transmitted from any person providing it is a greetings message of less that two minutes duration and is sent and received only within: UK, USA, Canada, Falkland Islands or Pitcairn Island.

When using a digital mode, anyone may type the message for transmission.

34. I have a dual-band rig, can I use it as a repeater ?

Some VHF/UHF rigs are capable of acting as a cross-band repeater, operated by carrier-sense. Unless these are licenced as a repeater (with a GB3.. callsign) or being operating by an emergency communications group under a current 'talk-though' permit then they may not be used as a repeater.

35. My neighbour complains he can hear my voice on his television.

This is a case of Radio Frequency Interference and the correct term is 'Electromagnetic Compatibility' or EMC. Where the reasons behind the problem is not clear (and they seldom are), consult one of the many guides to EMC problem-solving. One good source is the ARRL Handbook (published annually by the American Radio Relay League). Another is the Radio Amateurs' Guide to EMC by R. Page-Jones G3JWI (published by the RSGB). Abbreviated advice from the latter volume is to be found in the RSGB Callbook & Information Directory. There is a network of EMC Co-ordinators to give local advice in extreme cases. Details from the RSGB. For those suffering interference, a useful guide is a booklet called How to Improve Television and Radio Reception, published by the Radiocommunications Agency a few years ago. It is now out of print, but many copies are in circulation.

36. I want to take my radio to sea / use it in an aircraft.

Maritime Mobile (/MM) operation has been a part of the UK licence for several years now, previously it was a separate licence. On a vessel that is not yours you must obtain the written permission of the vessel's master before installing or using a transceiver (this includes cross-channel ferries). The master may insist that you observe radio

silence at times and this must be done. In international waters, only those bands that are permitted for the ITU region being visited may be used. In non-UK territorial waters, be aware that amateur activity in harbours may not be permitted. If in doubt, seek advice from that country's authorities before travelling.

Aviation mobile in the UK is not permitted and the licence is quite specific about this. If you are carrying a transceiver by air make certain you can switch it on to satisfy the airport security then switch it off and leave it off.

37. The Radio Society of Great Britain (RSGB).

The RSGB is the national society representing amateurs in the UK to our licencing body (The Radiocommunications Agency). Many people have many views on the RSGB and it has often been criticised, but it's the only body of it's kind that we have :-)

The RSGB's address is: RSGB
Lambda House
Potters Bar
Herts
EN6 3JE
U.K.

The main telephone number is 0707 659015 (+44 707 659015)
The fax number is 0707 645105 (+44 707 645105)
They do not have a reliable (or easy) e-mail connection to HQ (they use BT Gold :-( ) but several RSGB Committee members are active on Internet and/or packet-radio and their details will be added to this FAQ as and when they are known.

The RSGB is the main publisher of amateur radio books in the UK, they also publish a monthly magazine for members called 'Radio Communication', more commonly known as 'RadCom'. The editorial team for RadCom can be contacted on 0707 659015, fax 0707 649503.

The RSGB broadcasts a weekly amateur radio news summary every Sunday under the callsign GB2RS. This is broadcast nationally on 3.640, 3.650, 3.660, 7.0475MHz. Local broadcasts are on 51.530, 144.250, 145.525MHz. Times vary, see the Callbook and Information Directory for full details. The text is copied to packet-radio (NEWS@GBR) and to Usenet by Ted Batts G8LWY.

38. The Radiocommunications Agency (RA).

The RA is the licencing body in the UK. Any queries about licencing that cannot be otherwise dealt with should be directed to the RA. Their address is: Radiocommunications Agency
Room 712
Waterloo Bridge House
Waterloo Bridge Road
London

SE1 8UA
U.K.

Their telephone number for enquiries is 071 215 2150 (+44 71 215 2150).

The RA publishes a number of advice leaflets and information sheets and these are generally free. These can be obtained by contacting the RA's Information and Library Service at Room 605 in Waterloo Bridge House. The telephone number is 071 215 2072 (+44 71 215 2072), fax 071 928 4309 (+44 71 928 4309).

For queries over licence renewals, contact Subscription Services Ltd (SSL): Radio Licencing Centre
Subscription Services Ltd
PO Box 885
Bristol
BS99 5LG.

Their telephone enquiry line is open Monday to Saturday 0830 to 2200hrs on 0272 258333. There have been many reported problems with licence renewals recently and this should be borne in mind.

39. Local Clubs.

Probably the best way to meet local radio amateurs is at the local club meetings. These are too numerous to list here but once again a full list is found in the Callbook and Information Directory, from the RSGB. Many clubs also feature in the "What's On/Meetings" section of local newspapers and the various amateur radio magazines.

40. Specialist Clubs.

For those with an interest in a specialist branch of amateur radio, then these clubs and societies tend to be very useful:

Satellites: AMSAT-UK

AMSAT-UK
94 Herongate Road
Wanstead Park
London
E12 5EQ
081 989 6741 (+44 81 989 6741)
fax 081 989 3430 (+44 81 989 3430)
Internet: R.Broadbent@ee.surrey.ac.uk
Compuserve: 100024,614 Ron Broadbent

AMSAT-UK publish an excellent magazine "Oscar News"
for those with an interest in amateur satellites.

Data: The British Amateur Radio Teledata Group - BARTG

Peter Adams
Membership Secretary

BARTG
464 Whippendell Road
Watford
Herts
WD1 7PT
Packet: G6LZB@GB7BST

BARTG publish a magazine "Datacom" aimed at all aspects of data communication, RTTY, Amtor, packet and the newer modes.

Television: The British Amateur Television Club - BATC

Dave Lawton
Membership Secretary
BATC
"Grenehurst"
Pinewood Road
High Wycombe
Bucks
HP12 4DD

The BATC publishes a useful magazine "CQ TV" covering all aspects of amateur television with many projects.

Low Power: The G-QRP Club

The G-QRP Club
St. Aidan's Vicarage
498 Manchester Road
Rochdale
Lancs
OL11 3HE
Tel/fax: 0706 31812 (+44 706 31812)
Internet: g3rjv@gqrp.demon.co.uk

The G-QRP Club is organised by the Rev. George Dobbs, G3RJV, a well-respected author of amateur radio articles. The Club publishes a magazine "Sprat" aimed at the home constructor and QRP operating in particular. It is a very readable magazine. The Club is also a prolific book producer, most of which are available from the RSGB.

Listening: International Short Wave League - ISWL

Mrs E. May
Hon. Secretary ISWL
10 Clyde Crescent
Wharton
Winsford
Cheshire
CW7 3LA

The ISWL caters for those with an interest in receiving
on both the amateur and broadcast bands. It publishes
a magazine "Monitor".

Of course, there are many more clubs than those listed above but these
are the clubs primarily dealing with branches of amateur radio.

41. Commercial Magazines.

The RSGB's RadCom is not available in newsagents as it is a members'
journal. Those that you will find in the newsagents are:

Practical Wireless
Short Wave Magazine
Ham Radio Today

All are published monthly.

42. Internet news groups

For UK-specific news, try uk.radio.amateur - this FAQ is intended for
that newsgroup.

The main Usenet groups for radio-related topics are listed below. The
policy group in particular has a heavy US bias.

rec.radio.amateur.antenna Antenna theory/techniques
rec.radio.amateur.digital.misc Packet radio etc
rec.radio.amateur.equipment Production amateur radio hardware
rec.radio.amateur.homebrew Amateur radio construction
rec.radio.amateur.misc General news
rec.radio.amateur.policy Radio use & regulation policy
rec.radio.amateur.space Amateur radio transmissions through space
rec.radio.broadcasting Local area broadcast radio
rec.radio.info Informational postings
rec.radio.noncomm Non-commercial radio
rec.radio.shortwave Shortwave radio enthusiasts
rec.radio.swap Offers to trade and swap radio equipment

43. Other FAQs

As stated elsewhere, this FAQ is not exhaustive. You may like to check
out the FAQ's on amateur radio that are posted regularly in
rec.radio.info and rec.radio.amateur.misc, obviously having regard for
the non-UK slant to many topics. The main ham-radio FAQ (US in origin)
and ham-digital-faq are available by anonymous FTP from:
rtfm.mit.edu//pub/usenet/news.answers/radio
ftp.amdahl.com//pub/radio/amateur

44. Is the UK callbook available on disc/CD-ROM ?

The information available on UK amateurs is much more restrictive than
that on US amateurs, due to differing legislation and attitudes to
public information. However, some of the information in the Callbook
published by the RSGB is available. This does not appear to include

callbook entries where postcode (zip-code) information only is given.

Ian Hampson G1DFT (ian@ainsdale.demon.co.uk) offered in uk.radio.amateur:
I've seen a couple of requests for the UK callbook on disc. Well, it's available on 2 HDD PC floppies from me if anyone wants it. Send me two blank disks and an SAE [sufficient IRC's outside the UK - Editor] and I'll do you a copy. Mark your envelope - 'callbook'. The callsign files come with an excellent PD search routine.

And John Heaton, in rec.radio.amateur.misc said:
For the last few weeks or so a copy of the UK Radio Amateurs Callbook 1994 has been passed around the UK amateur community. What I have done is to put the callbook up on our HTTP server :
http://www.mcc.ac.uk/htbin/callbook
This database holds just over 49000 UK amateurs

This information may also be available on one of the US-originated CD-ROMs but I have no details.

45. Caveat.

A lot of information for this FAQ has been taken from the licencing booklet BR68 and the RA's information sheets. The licencing information was probably correct at the time I copied it, but do not take anything as being authoritative. The licence is constantly under review and this FAQ could easily be out of date. If in doubt, check!

46. Credits.

The following have contributed to this FAQ:

Adrian Godwin G7HWN
Mick Bowers G7NOR

3275. 10M indoor problem.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-27 18:14:16 UTC
From: destree@unr.edu
Message-ID: <1994Mar27.181416.165@news.unr.edu>
Source record: 269477

I recently bought a HTX-100 (no equipment flames please...buying the FT-990 would keep me from continuing school), and have set it up with a "V" type 1/2 wave indoor antenna. I have not been able to talk to anyone from my apartment yet. However, I have had good results (when the band is in) from a measly 1/4 wave mag mount on my car.

The building I live in is made of stucco, with (I'm reasonably sure) chicken wire in the walls. Most stucco buildings I've seen have this wire in the walls. I am curious if the wire is acting as an attenuator. If anyone has had a similar experience, let me know.

Yes, it is possible for me to put the antenna outside. However, rather than having people lining up at my door complaining of TVI, I wanted to keep everything indoors.
Thanks!
Louis

--
Louis A. Destree University of Nevada, Reno
destree@equinox.unr.edu <> destree@equinox.bitnet Electrical Engineering
Amateur Radio: N7XNX (General Class) Bike: 1980 Honda CB750C
"When things go from bad to worse, the cycle will repeat itself!"

3276. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-27 18:21:08 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <764823762.F00002@ocitor.fidonet>
Source record: 269333

```
The following files were processed Sunday 3-27-94:

HAMMODS [ HAM: Radio and equip modifications ]
---------------------------------------------------------------------
FRGSC123.ZIP ( 35215 bytes) FRG-9600 scanner control program
V1.23.

---------------------------------------------------------------------
35215 bytes in 1 file(s)

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
ARLB028.ZIP ( 1559 bytes) 03/24/94 - FCC Call sign update.
ARLD016.ZIP ( 1323 bytes) ARRL DX Bulletin 03/24/94.
ARLD017.ZIP ( 2618 bytes) ARRL DX Bulletin 03/24/94.
ARLP012.ZIP ( 2013 bytes) ARRL Propagation Bulletin 03/25/94.
RTTY0325.ZIP ( 2325 bytes) RTTY DX Bulletin 03/25/94.

---------------------------------------------------------------------
9838 bytes in 5 file(s)

HAMSAT [ HAM: Satellite tracking and finding programs ]
---------------------------------------------------------------------
ARLK012.ZIP ( 2829 bytes) ARRL Keplerian elements 03/26/94.

---------------------------------------------------------------------
2829 bytes in 1 file(s)

HAMSCAN [ HAM: Scanner Freqs and Freq database programs ]
---------------------------------------------------------------------
LA_NEWS.ZIP ( 1649 bytes) Los Angeles Radio/Television News
frequencies.

---------------------------------------------------------------------
1649 bytes in 1 file(s)

HAMSRC [ Ham: Program Source Code ]
---------------------------------------------------------------------
DSPMORSE.ZIP ( 51386 bytes) Improved FFTMorse, copy cw with
soundblaster. 'C' source and header
files included.

---------------------------------------------------------------------
51386 bytes in 1 file(s)

Total of 100917 bytes in 9 file(s)
```

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)

3277. Need Programming info for Motrola Syntor X

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-27 21:40:28 UTC
From: brian@umbc.edu
Message-ID: <2n4ugcINN591@umbc7.umbc.edu>
Source record: 269328

If there's anyone out there that has any hints on the programming and use
of UHF Motorola Syntor X radios in the HAM 440 band, please drop
me a line.

Thanks

Brian

KA3BRZ

--
Brian Cuthie
Systemix Software, Inc.
brian@systemix.com

3278. Amateur Radio Newsline #867 25 Mar 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-27 22:14:11 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <pKWbjGG8yLR8057yn@dorsai.dorsai.org>
Source record: 269329
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text version is edited from the original scripts and transcribed from the audio reports by Dale Cary, WD0AKO, and is first published in The Radio & Electronics Round Table on the Genie Online System.

If you have any comment, suggestion, or news item you would like to submit, send them via E-Mail to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. You can contact Newsline at +1 805-296-7180. It is a combination answering and FAX machine, if you have a FAX to send, wait for the voice prompt and press your fax-send button.

All other information and disclaimers are in the text header below.

- - - - -
NEWSLINE RADIO - CBBS EDITION #117 - POSTED 03/26/94

The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newsline is posted on this CBBS twice monthly. For current information updates, please call

Los Angeles..... (213) 462-0008
Los Angeles (Instant Update Line)..... (805) 296-2407
Seattle..... (206) 368-3969
Seattle..... (206) 281-8455
Tacoma..... (206) 927-7373
Louisville..... (502) 894-8559
Dayton..... (513) 275-9991
Chicago..... (708) 289-0423
New York City..... (718) 353-2801
Melbourne, FL..... (407) 259-4479

For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

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For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

[867]

The following is a QST

The FCC names a well known ham to head up its new task force on personal communications services and a missing young ham has returned home.

HALLER TO HEAD PCS TASK FORCE

One of the nations best known and most respected ham radio operators has been selected to guide all personal communications into the next century and beyond. This, with the naming of FCC Private Radio Bureau Chief Ralph Haller, N4RH to head the newly created Commission task force on personal communications services, better known as the PCS.
The Commission says that the task force will provide a focal point for all of the PCS issues currently before it and those yet to surface. The group will would work with all of the FCC's bureaus and offices that are involved in PCS issues. It will also be responsible for assuring consistency between policies and rules for narrow-band and wide-band PCS services.
FCC Chairman Reed Hundt says that he choose Ralph Haller to head up the task force because he is confident that under his leadership the group will guide the Commission in the timely development of a comprehensive regulatory framework for the PCS.
Other members of the task force include FCC Chief Engineer Tom Stanley, Robert Pepper who is Chief of the Office of Plans and Policy, Donald Gips the Deputy Chief of Office of Plans and Policy and FCC Chief Economist Michael Katz.

CLINTON NAMES CHONG TO FCC

President Clinton has selected San Francisco telecommunications lawyer Rachelle B. Chong to fill one of two vacancies at the Federal Communications Commission. Chong, a 34 year old Republican, would become the FCC's first-ever Asian-American commissioner if confirmed by the Senate. She would replace Sherrie Marshall, whose seat at the FCC has been open for nearly a year. Chong's term would last through mid-1997.

President Clinton also intends to nominate Susan Ness, another communications lawyer as a Commissioner. Ness has worked as a senior lender and as group head in the communications industries division of American Security Bank in Washington. During the mid-1970s, she was assistant counsel to the House Banking Committee. She holds a law degree from Boston College Law School and a master's degree in business administration from the Wharton School.

FCC RFI SURVEY

The FCC has released the results of a just completed telephone interference survey and it says that going QRP makes little difference in telephone related RFI.
Thirty-five FCC field offices each picked three random cases of telephone interference on record and then visited the scene. The transmitting stations included 47 Citizens Band; 27 Amateur; 23 AM broadcast; 10 FM broadcast; and one international broadcast station.
At the location experiencing interference, the FCC's Field Operations Bureau personnel would first test the telephones on site, and then test their own RFI immune telephones, as well as several commercially available filters. In all, some 241 different telephones were tested.
Among the FCC's conclusions was that transmitter power did not seem to be a significant factor. In fact, transmitters that ran 10 watts or less caused significant telephone interference in one-third of the cases. The FCC also said that add-on filters provided a cure to the interference problem in only one-third of the incidents investigated.
The study did however conclude that manufacturers can design telephones. The FCC says that it hopes the survey will encourage affected parties to productively address and resolve this problem, but stopped short of ordering the manufacturing community to produce only RFI immune telephones.

SPECTRUM AUCTION

The Federal Communications Commission has taken a first step toward setting the ground rules under which businesses can bid for certain chunks of the airways. On March 8th, the FCC adopted set of so called generic rules for auctioning radio frequencies for a variety of new services, including the next generation of mobile telephone service called personal communications service. The rules will allow several auctions to be conducted at the same time, require $2,500 as a minimum up-front payment for parties to participate in the auction, set deadlines for payments on winning bid and also set aside a portion of the frequencies to be bid on by individuals or groups composed primarily of women, minorities, rural telephone companies and small businesses. Companies obtaining personal communications services licenses

will be able to offer consumers the next generation of mobile phone service, in which the number travels with the phone's owner.
The FCC says that it is exploring various options to submit bids. This includes electronic filing as well as oral and paper bids. A more detailed set of rules for specific services will be decided later. There are no plans now toward any reallocation by auction of the spectrum used by radio amateurs or other communications hobbyists.

WZ1W FOUND

A missing Massachusetts teenager, whose been the object of a nationwide search involving amateur radio, has been found. Nathan A. Taylor, WZ1W, who disappeared in August, was found March 8th in southeast Texas. That's where according to a friend of Taylor's family Nathan was taken into custody by federal authorities.
After nearly seven months, fourteen year old Nathan A. Taylor, is back in his home state of Massachusetts. Paul Topolski, N1IPG, is a friend of the Taylor family.

"He has trouble socializing with his piers and consequently he really didn't want to go back to school." Paul Topolski, N1IPG.

Nathan became heavily involved with computers. That according to Topolski triggered Nathan's actions.

"There's quite an underground network of computer operators on the bulletin boards and so forth. He got involved with the wrong group and consequently enticed into leaving home." Paul Topolski, N1IPG.

Nathan disappearance lead to fears that he was in the company of a man who has a known criminal record. That suggestion was raised after police viewed files on Nathan's computer system. For Nathan's parents in Gardner, Massachusetts the next several months would be filled with anxiety.

"All I know is what his parents have told me about a bus trip from Gardner through Memphis and then that was the last time anybody had seen him. The bus driver in Memphis remembered seeing him and then that was it, he appeared to jump off the bus at that time. He turned up in Houston, Texas and one evening his parents called me and consequently informed me that he had been arrested by the FBI. He is now back in the Gardner area." Paul Topolski, N1IPG.

Topolski says Nathan still has problems to work out.

"He seems to have calmed down quite a bit too." Paul Topolski, N1IPG.

The last several months have been extremely hard from Nathan Taylors family members. Now they can rest easier as well. Nathan's close ties to ham radio led to a nationwide plea on amateur radio packet systems. Topolski contacted ARRL Section Managers in Texas and Tennessee for assistance. He sent flyers to amateur radio clubs as the part of the effort to locate Nathan.

HI SEAS RESCUE

Two men rescued from a sinking boat in the Gulf of Mexico credit Amateur Radio for saving their lives. Larry Hooker, KB5ZNY, of Thaxton, Mississippi, and his sailing partner, Rett White, were returning from Honduras on Hooker's 35 foot sailing vessel "Off The Hook," when they ran into an unexpected storm and high seas.
Hooker had been in contact with his friend Randall O'Brian, KD5ZH, of West Point, Mississippi, since hoisting anchor on February 6th. The two were keeping regular schedules on 80, 40, and 20 Meters and O'Brian was the first to learn of their difficulties and eventually contacted the US Coast Guard.
O'Brian continued to help provide communication, along with the Coast Guard, who came up on 3.862 MHz.
On March 4th, Hooker and White were taken aboard the Coast Guard cutter Cushing. Their boat was put under tow but subsequently sank.
Hooker had visited his daughter, Tina, KB5YNN, a missionary with Global Outreach in the northeastern part of Honduras. This is an area accessible only by air or sea.

AMSAT NET ON GALAXY 3

Satellite users may be interested in an experiment being conducted in the Houston, Texas area. The group there is uplinking the Houston Area Amsat Net, heard locally on the 147.10 FM repeater, to the Galaxy 3, communications satellite Channel 17, on the 5.8 Mhz audio subcarrier of the Shop-At-Home Channel. The net is carried in realtime on Tuesday evening, from approximately 10 PM Central Standard Time until completion. This is an experiment but could be continued on a regular basis if interest is sufficient. Send reception reports to Craig Davidson, WD5BDX by packet or direct to his callbook address.

DELPHI

Delphi, a national bbs-type information service and Internet gateway has announced the opening of a special interest group dedicated go radio users in general, and Ham Radio operators in particular. During years past, Ham Radio was supported as a sub-topic on Delphi as part of the Delphi Hobby SIG. Through the efforts of Marty Goodman, KC6YKC and Andy Eddy, WB1FEV Amateur Radio has at last been given a separate special interest group of its own on Delphi.

During its first week of operation beginning March 2nd, this SIG has been able to offer a library of over 300 groups of files for downloading and an active forum. Also in the first week about 30 messages posted every day, with over 300 Delphi members visiting this forum. Those interested in this new SIG should contact Delphi services for more information.

1994 INTERNATIONAL DX CONVENTION

In DX, word that the 1994 International DX Convention is being held at the Holiday Inn, Plaza Park, Visalia, CA, April 15th to the 17th. Friday and Saturday night will see hosted cocktail parties plus a Sunday DX Breakfast and Saturday Night Banquet featuring the 3Y story. The address for information and registration is Don Bostrom, N6IC, at 4447 Atoll Ave., Sherman Oaks, California 91423.

ROBERTS TO SPEAK ARRL SW DIVISION CONVENTION

The man who has developed several high tech motorcycles will be the banquet speaker at the 1994 ARRL Southwestern Division Convention scheduled for later this year. Newsline recently got a call from Division Director Fried Heyn, WA6WZO who told us that its going to be a special night with inventor Steve Roberts N4RVE. Roberts is best known for his development of Behemoth a super high tech motorcycle with on-board computers and ham radio gear. Roberts will not only be speaking at the banquet. He also has promised to bring along one of his super bikes for everyone to see. The 1994 ARRL Southwestern Division Convention is slated for August 26th through the 28th in San Diego. The grand banquet will take place Saturday night August 27th with film maker Dave Bell, W6AQ as master of ceremonies.

DAYTON AWARDS FOLLOW-UP

The 1994 Dayton Hamventions Special Achievement Award goes to Russ Kroeker, N7HGE of Kent, Washington for his efforts in implementing the Evergreen Intertie repeater network in the northwest U.S. and British Columbia. Mr. Kroeker was honored, but also credited many others.

"It is a great honor and I think that the amateur radio society will be really delighted to hear that the time that they spent investing in it, a lot of members have invested their money to help put the equipment in, and a lot of their time Larry Babcock, WB7USL put a lot of time in, Mark La Combe, KF7II. These guys really, I think will be really happy to hear that the work they put in is getting recognized, in a national way, and it is a great honor for all of us. We just thank the lord that you folks did choose us." Russ Kroeker, N7HGE.

Mr. Kroeker will receive his award at the Hamvention Banquet at the Dayton Convention Center located in downtown Dayton, Ohio

Saturday evening April 30th.
More on the upcoming 1994 Dayton Hamvention next week.

For this week, that's all from the Amateur Radio Newsline.
You can write to us at P.O. Box 463, Pasadena, CA 91102.
--

3279. IPS Daily Report - 27 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-27 23:28:19 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar27.232819.2823@ips.oz.au>
Source record: 269330
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 27/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 27 MARCH AND FORECAST UP TO 30 MARCH
No warning is current.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 088/032

1B. SOLAR FORECAST
28 March 29 March 30 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 088/032

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth: quiet to unsettled

Estimated Indices : A K Observed A Index 26 March
Learmonth 09 2212 3233
Fredericksburg 05 09
Planetary 08 09

Observed Kp for 26 March: 2233 2322

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
28 Mar 10 Quiet to unsettled.
29 Mar 15 Mostly quiet to unsettled, with brief active active
periods possible.
30 Mar 25 Mostly quiet to unsettled, with brief active active
periods possible.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
27 Mar normal normal normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
28 Mar normal normal normal
29 Mar normal normal fair
30 Mar normal fair-normal poor-fair
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were 10-20% enhanced 00-08UT and from 17UT onwards, and otherwise near predicted monthly values. Spread F occurred 13, 15 and 17UT.

Observed T index for 27 March: 64

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
28 Mar 55 Mostly near predicted monthly values, with occasional enhancements of 15-30%.
29 Mar 50 Near predicted monthly values.
30 Mar 45 Near predicted monthly values.

4C. AUSTRALIAN REGION COMMENT
Sporadic E layer was observed throughout most of yesterday. Similar conditions are expected today, with night-time Spread F also possible. MUFs at Townsville were generally near predicted monthly values, while Hobart MUFs were closer to those observed at Sydney.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331 |PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329 |West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330 |AUSTRALIA

3280. Help!! Information on Hallicrafter equipment..

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 01:09:36 UTC
From: obiliset@honey.ecs.umass.edu
Message-ID: <2n5aog$9tb@risky.ecs.umass.edu>
Source record: 269331

Hi all,

A good friend of mine (lives in India) requested
the OWNERS and SERVICE manuals for the following
HAM equipment:

Transmitter (Hallicrafter)
Model: HT - 44

Power Supply (Hallicrafter)
Model: PS 150-120

Receiver (R L Drake Co.)
Model: 2-B Communication Receiver

I would be grateful if someone emails me the
numbers I should call, or any other relevant details.
If I am posting to the wrong group -- APOLOGIES!!

Thanks,

Sashi Obilisetty
Design Automation Engineer
Alternative System Concepts, Inc.
Windham, New Hampshire

3281. Address Access Test

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 01:38:12 UTC
From: FULLER@UWSTOUT.EDU
Message-ID: <01HAH8AIUX5E003BDP@UWSTOUT.EDU>
Source record: 269332

```
This is a test - >>KF9DU<<
```

3282. AMSAT-085 BULLETINS

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 02:44:50 UTC
From: cowdin@pogo.DEn.mmc.COM
Message-ID: <199403280247.SAA14501@AMSAT.Org>
Source record: 269334

SB SAT @ AMSAT $ANS-085.01
WEEKLY OSCAR STATUS REPORTS

HR AMSAT NEWS SERVICE BULLETIN 085.05 FROM AMSAT HQ
SILVER SPRING, MD MARCH 26, 1994
TO ALL RADIO AMATEURS BT
BID: $ANS-085.01

Weekly OSCAR Status Reports: 26-MAR-94

AO-13: Current Transponder Operating Schedule:
M QST *** AO-13 TRANSPONDER SCHEDULE *** 1994 Mar 19-Apr 04
Mode-B : MA 0 to MA 90 |
Mode-BS : MA 90 to MA 120 |
Mode-S : MA 120 to MA 122 |<- S beacon only
Mode-S : MA 122 to MA 145 |<- S transponder; B trsp. is OFF
Mode-S : MA 145 to MA 150 |<- S beacon only
Mode-BS : MA 150 to MA 180 | Blon/Blat 180/0
Mode-B : MA 180 to MA 256 |
Omnis : MA 230 to MA 30 | Move to attitude 235/0, Apr 04 240/0, Apr 04
[G3RUH/DB2OS/VK5AGR]

FO-20: The following is the current schedule for transponder operations:
ANALOG MODE:
23-Mar-94 7:52 -to- 30-Mar-94 8:15 UTC
6-Apr-94 6:45 -to- 13-Apr-94 7:10 UTC
20-Apr-94 7:35 -to- 27-Apr-94 7:55 UTC
11-May-94 6:54 -to- 18-May-94 7:20 UTC
Digital mode: Unless otherwise noted above.
[Kazu Sakamoto (JJ1WTK) qga02014@niftyserve.or.jp]

MIR: The packet call for MIR is R0MIR-1 and the operating frequency is
145.550 MHz. The crew usually has the Personal Messaging System
(PMS) running. If you hear voice operations ask for Victor, Yuri, or
Valeri. [VK3DFI]

AO-27: AMRAD-OSCAR-27 (AO-27) is up and going, and is said to be working
well. It is in popular use in Europe. The 436.800 MHz FM down-
link can be heard on a hand-held. Uplink is 145.850 MHz. It is
said to be only active in daylight passes. [G3IOR]

UFO: We have a UFO on 145.592 MHz sending data. It was first heard by
G3JQI at 18:50 UTC "dopplering" down until 18:55 UTC LOS on
16-MAR-94. [G3IOR]

The AMSAT NEWS Service (ANS) is looking for volunteers to contribute weekly
OSCAR status reports. If you have a favorite OSCAR which you work on a

regular basis and would like to contribute to this bulletin, please send your observations to WD0HHU at his CompuServe address of 70524,2272, on INTERNET at wd0hhu@amsat.org, or to his local packet BBS in the Denver, CO area, WD0HHU @ W0LJF.#NECO.CO.USA.NOAM. Also, if you find that the current set of orbital elements are not generating the correct AOS/LOS times at your QTH, PLEASE INCLUDE THAT INFORMATION AS WELL. The information you provide will be of value to all OSCAR enthusiasts.

/EX

3283. RTTY help...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 04:01:45 UTC
From: mgomez@mail.sas.upenn.edu
Message-ID: <2n5kr9$ari@netnews.upenn.edu>
Source record: 269335

HI there. I have a problem with my RTTY station. First of all,
here is the setup that I am running: Kenwood 940-s, PK232MBX and PC
Pakratt v 1.06, IBM XT. Now the problem. When I send out the type, it
echoes back to me jibberish. The characters that I send out are sometimes
deleted, but almost always backwards or inverted. I am told by other
stations that the type I send out is perfect. It is sent just as I typed
it, but what I see is all jumbled. Please, please, please, can somebody
help? I also have the same problem with AMTOR. Sheesh...
Tnx fer the help!!

Matt (AA3FQ)
The U of P ARC (N3KZ)

3284. World Wide Web Sites wanted!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 05:01:40 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCnCzAs.Mor@netcom.com>
Source record: 269336

I am looking for all pointers to Hypertext sites (World Wide Web sites).
I know there is a UK callsign server available via WWW.

What else is there?

Thanks much!

PLEASE PLEASE e-mail direct if possible.

Scott

--

==
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
oak.oakland.edu:/pub/hamradio
==

3285. Re: Ham-related mailing lists

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 05:51:08 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCnD1L8.3Jy@netcom.com>
Source record: 269337

In article <CnC4wu.A2r@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>In article <1994Mar26.222229.1@ntuvax.ntu.ac.sg> asirene@ntuvax.ntu.ac.sg writes:
>>Hi,
>>
>> Can someone post a list of all HAM-related mailing lists that
>>we can subscribe to? Tks.
>
>QRP (qrp-request@think.com)
>boatanchors (dedicated to tube radio equipment)
> (boatanchors-request@gnu.ai.mit.edu)
>DX (see the privious article)
>vintage solid state (don't know the sub address)
>contests (sub address unknown)
>
>There's one devoted to commercial radio equipement - can't recall the name.
>Someone on `boats' posted the entire list - there's at least a dozen more.
>
>Jeff NH6IL

We also have reflectors for:

Amateur Radio Newsline (newsline-list)
ARRL Official Bulletins (w1aw-list)
ARRL Letter (letter-list)
KY1N VEC listing (Local Boston area VE sessions - ky1n-list)

And we have interactive lists:

barc-list (local Boston-area stuff)
barc-races (again, local)
fieldorg-l (ARRL Field organization discussions)
ham-tech (Untamed technical discussions about the hobby)
fox-list (local Boston stuff - T-hunting)

To join any or all of the above:

Send a message to: majordomo@netcom.com
In the body of the message, type: subscribe list_you_want

73,
Scott, WY1Z, co-moderator
Phil, K9HI, co-moderator

P.S. All ARRL bulletins are archived on the anonymous FTP site of
oak.oakland.edu in the Boston Amateur Radio Club FTP area:
/pub/hamradio/w1aw-list/

P.P.S. Amateur Radio Newsline is now also being archived, too:
oak.oakland.edu:/pub/hamradio/docs/newsline/

--

==
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
oak.oakland.edu:/pub/hamradio
==

3286. Buying an HT -- Advice Wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 06:59:32 UTC
From: mrw13@bonjour.cc.columbia.edu
Message-ID: <2n5v8k$6dv@apakabar.cc.columbia.edu>
Source record: 269338
Cross-posted to: rec.ham-radio,rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.misc

I am interested in purchasing an HT would like some advice as to what are good models and the costs I am likely to run into. I plan on also using the HT as a scanner, so it must be able to pick up local police, fire, etc. as well as aircraft frequencies. I understand many HTs can get these frequencies but they need to be "modified" before hand, about how much does this cost? I have heard of dual-band HTs but am not totally sure as to what this means -- any helpful comments? One other consideration, I guess I might as well get a fairly powerful model as well (5 watts?) -- additional options (like getting cellular frequencies, a keypad with hundreds of features are nice, but not necessary. Where is the best and cheapest place to get such equipment? Also willing to buy a used model. Please email any responses.

Thanks in advance,

Marc Wollemborg
<mrw13@columbia.edu>

3287. Radio Amateurs on USENET List Mar 1994 Part 1 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 07:26:08 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Mar28.1@ve6mgs.ampr.org>
Source record: 269342
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part1
Last-modified: $Date: 94/25/28 00 25$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
First part contains primarily European calls with US call district 0.

The index of parts:
Part 1 contains 4x1bq through n0zyc
Part 2 contains nv1a through ka2zvz
Part 3 contains wn3a through kd4zzj
Part 4 contains kj5aa through kd6zzm
Part 5 contains aa7a through wa9zxm
Part 6 contains oa4hv through zs6tw

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
```

a return address, add optional `return user@host.domain'. For example:
Subject: Could be anything (sure!)
return wabbit@it.was.a.tewibble.storm.edu
lookup ka2nrc ve6tcp nm1d elmer
#
Last update March 28 1994
#
This document may be distributed freely, as long as there is no financial
gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
ISRAEL 4X,4Z
yosi@genius.tau.ac.il (Yossi Sharon) 4x1bq 93-12-11@
yosi@eng.tau.ac.il (Yossi Sharon) 4x1bq 93-12-11@
coolguy@circle.cs.jhu.edu (Guy Shechter) 4x1gs/n5uri 93-10-31
coolguy@cs.jhu.edu (Guy Shechter) 4x1gs/n5uri 93-10-24
gorski@vms.huji.ac.il (Azriel Gorski) 4x1pi/w7si 94-2-1
avip@acri.fr (Avi Plotnik) 4x6lp 93-9-23
cvtishbe@wis-ofer.weizmann.ac.il (Arye Tishbee) 4x6yo 94-2-15*
s2902081@techst02.technion.ac.il (Ben-Shalom Assi) 4z7aba 94-1-17@
s2301190@techst02.technion.ac.il (Yoram Rotbach) 4z9dea 94-1-17@
CYPRUS 5B
pci7787@zeus.tamu.edu (Ioannou Pantelis) 5b4acp 93-5-4@
PCI7787@TAMVENUS.TAMU.EDU (Ioannou Pantelis) 5b4acp 93-5-4@
JAMAICA 6Y
cheeky@cast.EDU.jm (Andrew) 6y5ew 93-6-5@
ALGERIA 7X

Nabil.Layaida@imag.fr (Layaida Nabil) 7x2kt 93-9-9@
layaida@imag.fr (Layaida Nabil) 7x2kt 93-9-9@
9A ???
sinisa@thphys.irb.hr (Sinisa Novosel) 9a7cwd 93-4-28@
9V Singapore
asirene@ntuvax.ntu.ac.sg (Daniel Asirene) 9v1nn 94-3-8*
hky@nova.np.ac.sg (Hang Kim Yam) 9v1wi 93-12-9@
0005851359@MCIMAIL.COM (James Brooks) 9v1yc 94-2-13*
TAIWAN BV
victorc%oakhill@sps.mot.com (Victor Chen) bv2ch 94-2-4*
idpt224@tpts1.seed.net.tw (Eugene Wang) bv2ci 93-4-9@
CHILE CE
amsat-ce@cecux1.cec.uchile.cl (Ignacio Martinez Astorquiza) ce2mh 93-9-18
poelcker@cec.uchile.cl (Patricio Eduardo Oelckers Alvarez) ce3eoa 93-9-18
poelcker@cipres.cec.uchile.CL (Patricio Eduardo Oelckers Alvarez) ce3eoa 94-3-22
poelcker@tamarugo.cec.uchile.cl (Patricio Eduardo Oelckers Alvarez) ce3eoa 94-3-22
rcadiz@tolten.puc.cl (Rodrigo F Cadiz) ce3ojy 93-4-23@
jcontrer@buho.dpi.udec.cl (Juan Contreras Arellano) ce5phx 94-3-22*
ce6ezg@enlaces.ufro.cl (Raul Eduardo Burgos Vivero) ce6ezg/ce6fyt 93-12-11
ce6fyt@ce6fyt.radio.cl (Raul Eduardo Burgos Vivero) ce6ezg/ce6fyt 93-12-11
ce2usm@inf.utfsm.cl (Rodrigo E Rodriguez) ce6nug 93-10-4@
rrodrigu@loa.disca.utfsm.cl (Rodrigo E Rodriguez) ce6nug 93-10-4@
ce6nug@k2cc-2.ampr.org (Rodrigo E Rodriguez) ce6nug 93-10-4@
rrodrig@huracan.cr (Rodrigo E Rodriguez) ce6nug 94-2-12@
emillar@enlaces.ufro.cl (Eduardo C Millar) ce6uf 94-2-4*
emillar@ce6uf.radio.cl (Eduardo C Millar) ce6uf 94-2-4*
CUBA CM CO
radioaf@infomed.cu (Jose A Amador) co2ja 93-7-4@
co2ja@amsat.org (Jose A Amador) co2ja 93-7-4@
PORTUGAL CT
ct1boh@mcimail.com (Jose Carlos Cardoso Nunes) ct1boh 94-2-10
etfalcao@ua.pt (Pedro Filipe Monica Falcao Pais) ct1dnf 93-10-21@
etfalcao@ci.ua.pt (Pedro Filipe Monico Falcao Pais) ct1dnf 93-10-21@
avale@bart.inescn.pt (Antonio Valentim Couto e Vale) ct1dzy 93-9-9@
avale@bart.inesn.pt (Antonio Valentim Cuoto e Vale) ct1dzy 93-9-9@
etjfonte@ci.ua.pt (Jose Miquel Fonte) ct1enq 93-12-14@
etjfonte@ua.pt (Jose' Miguel) ct1enq 93-12-15@
etjfonte@zeus.ua.ci.pt (Jose' Miguel) ct1enq 93-12-15@
etruben@ua.pt (Ruben Mendes) ct1etz 93-5-27@
etruben@zeus.ua.pt (Ruben Mendes) ct1etz 93-5-27@
etruben@ci.ua.pt (Ruben Mendes) ct1etz 93-6-28@
etruben@zeus.ci.ua.pt (Ruben Mendes) ct1etz 93-6-28@
etfaas@ua.pt (Fernando Santos) ct1ext 94-1-11@
etfaas@zeus.ci.ua.pt (Fernando Santos) ct1ext 94-1-11@
jluis@ci.ua.pt (Joao Luis Sousa) ct1ezw 93-12-25@
GERMANY DB-DH Y2-Y9
wk@muninn.sta.sub.org (Hubert Weikert) db1mq 93-3-30
weikert@muninn.sta.sub.org (Hubert Weikert) db1mq 93-3-30
weikert@cubenet.sub.org (Hubert Weikert) db1mq 93-3-30
100031.374@compuserve.com (Hubert Weikert) db1mq 93-3-30

bernd.meyer@fernuni-hagen.de (Bernd Meyer) db6ag 93-7-1
meyer@amundsen.fernuni-hagen.de (Bernd Meyer) db6ag 93-9-23
meyer@fernuni-hagen.de (Bernd Meyer) db6ag 93-9-23
Klaus.Leschhorn@lrz-muenchen.de (Klaus Dieter Leschhorn) db8ck 93-11-11
a2832af@lrz1.lrz-muenchen.de (Klaus Dieter Leschhorn) db8ck 93-11-11
leschhorn@lrz.lrz-muenchen.de (Klaus Dieter Leschhorn) db8ck 93-11-11
Vossen.pad@sni.de (Peter Vossen) dc0kk 93-7-7
erb@insu1.etec.uni-karlsruhe.de (Olaf Erb) dc1ik 93-6-6?
dc1ik@db0sao.ampr.org (Olaf Erb) dc1ik 93-5-1?
olaf@dc1ik.ampr.org (Olaf Erb) dc1ik 93-5-1?
erb@insu7.etec.uni-karlsruhe.de (Olaf Erb) dc1ik 93-5-1?
remco@hip-hop.suvl.ca.us (Remco Treffkorn) dc2xt 93-4-9
hschu@sunrise.rz.uni-ulm.de (Hermann Schumacher) df2dr 94-1-19
hschu@sunrise.e-technik.uni-ulm.de (Hermann Schumacher) df2dr 94-1-19
hschu@dulruu51.bitnet (Hermann Schumacher) df2dr 94-1-19
gregor@rnivh.rni.sub.org (Gregor Fismer) df2ic 94-1-23
Kueppers@uni-bonn.de (Guido Kueppers) df2kw 94-2-13
uweb@hpbbn.bbn.hp.com (Uwe Behle) df3du 93-8-4
sinn@sol.cs.uni-sb.de (Markus Sinnwell) df3vl 93-5-17@
UNRZ45@daphne.rrze.uni-erlangen.de (Dieter Dippel) df4rd 94-2-10
tdobert@telemation.de (Torsten Dobert) df6lt 94-1-19
hans.streibel@fernuni-hagen.de (Hans Streibel) df8xq 93-8-5
streibel@galaxy.fernuni-hagen.de (Hans Streibel) df8xq 93-8-30
streibel@fernuni-hagen.de (Hans Streibel) df8xq 93-8-30
wil@maschinenbau.tu-ilmenau.de (Wilfried Besig) dg0od 94-2-25*
mkl@rob.cs.tu-bs.de (Mario Klebsch) dg1am 93-11-30
sw@lobster.dinoco.de (Stephan Wanner) dg1gwn 93-3-22@
sven@anl433.erlm.siemens.de (Sven Werner) dg1hqo 93-7-13@
Sven.Werner@anl433.erlm.siemens.de (Sven Warner) dg1hqo 93-7-13@
sven@erlm.siemens.de (Sven Warner) dg1hqo 93-7-13@
sven@speedy.erlm.siemens.de (Sven Werner) dg1hqo 93-8-18@
boss@msoenix.GUN.de (Michael Soentgerath) dg3ed 93-3-30@
dimo@postwar.abg.sub.org (Udo Wiemers) dg3mgw 94-3-8*
kneip@scoop.ims.uni-hannover.DE (Johannes [Hans] Kneip) dg3rbu 93-9-14@
torsten@rnivh.rni.sub.org (Torsten Leibold) dg4fex 93-12-25@
root@rnivh.rni.sub.org (Torsten Leibold) dg4fex 94-1-28@
rose@server.et-inf.fho-emden.de (Rolf Rose) dg4scv 93-5-13
UJ89@ibm3090.rz.uni-karlsruhe.de (Bruno Boettcher) dg5iae 93-11-7@
freiss.pad@sni.de (Martin W Freiss) dg5kx 93-5-25
bsieker@techfak.uni-bielefeld.de (Bernd Sieker) dg6yhi 93-8-4@
tnfechne@faui06d.informatik.uni-erlangen.de (Torsten Fechner) dg7ro 94-2-4@
tnfechne@cip.informatik.uni-erlangen.de (Torsten Fechner) dg7ro 94-2-4@
JUERGEN@hugo.rz.fh-ulm.de (Juergen Mueller) dg7sfc 93-9-10@
juergen@fh-ulm.de (Juergen Mueller) dg7sfc 93-9-10@
kalle@dg8lav.deceiver.sub.org (Karlheinz Hagen) dg8lav 94-3-21*
hiot@automatix.rz.tu-clausthal.de (Oliver Teuber) dh0oae 93-10-24@
hiot@sun.rz.tu-clausthal.de (Oliver Teuber) dh0oae 93-12-12@
hiot@helios.rz.tu-clausthal.de (Oliver Teuber) dh0oae 93-12-12@
dh1iar@insu1.etec.uni-karlsruhe.de (Peter Herttrich) dh1iar 94-3-22*
tremmel@iraul1 (Wolfgang Tremmel) dh2paf 93-7-17@

dh2paf@dh2paf.ampr.org (Wolfgang Tremmel) dh2paf 93-7-17@
menzel@tfh-berlin.de (Olaf Menzel) dh7ta 94-3-23*
claude@bauv106.bauv.unibw-muenchen.de (Claude Frantz) dj0ot/f5fc 93-6-21
r31dnews@applsrv.rz.unibw-muenchen.de (Claude Frantz) dj0ot/f5fc 94-2-2
claude@bauv.unibw-muenchen.de (Claude Frantz) dj0ot/f5fc 94-1-12
dj6rx@vnet.ibm.com (Klaus Heintzenberg) dj6rx 94-2-10
mime@dk3hg.hanse.de (Michael Meifert) dk3hg 93-10-24
RZ76@IBM3090.rz.uni-karlsruhe.de (Juergen Oberbeck) dk5ic 93-4-18
ajk@pcs.dec.com (Dr Anton J Kuchelmeister) dk5tl 93-3-31
k202023@smog.DKRZ-Hamburg.DE (Clem Foerster) dk6xc 93-5-9
frgy01@cd4680fs.rrze.uni-erlangen.de (Rudolf Hein, DARC weekly DK0DX) dk7np 94-3-14*
KindsvaterS@News.RFERL.Org (Sergej Kindsvater) dl1abd/ua9ctp/uz9cg 93-7-26@
KindsvaterS@RFERL.Org (Sergej Kindsvater) dl1abd/ua9ctp/uz9cg 93-7-26@
woydt@server.et-inf.fho-emden.de (Hermann Woydt) dl1bbx 93-3-2
dl1bjl@dl1bjl.ampr.org (Mat Wermann) dl1bjl 93-7-5@
matthias@server.et-inf.fho-emden.DE (Mat Wermann) dl1bjl 93-7-13@
dl1bjl@mpt.et-inf.fho-emden.DE (Mat Wermann) dl1bjl 93-8-26@
dl1bjl@df0od.et-inf.fho-emden.de (Mat Wermann) dl1bjl 93-8-26@
matthias@wermann.et-inf.fho-emden.de (Mat Wermann) dl1bjl 93-5-9@
neumann@informatik.tu-muenchen.de (Christof A Neumann) dl1mhk 93-7-7@
ulki@hpbeo20.bbn.hp.com (Hans Ulrich Kienzle) dl1sbl 93-9-9
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3288. Radio Amateurs on USENET List Mar 1994 Part 2 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 07:26:23 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Mar28.2@ve6mgs.ampr.org>
Source record: 269343
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part2
Last-modified: $Date: 94/26/28 00 26$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Second part contains US call districts 1 and 2.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update March 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
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3289. Radio Amateurs on USENET List Mar 1994 Part 3 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 07:26:37 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Mar28.3@ve6mgs.ampr.org>
Source record: 269344
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part3
Last-modified: $Date: 94/26/28 00 26$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Third part contains US call districts 3 and 4.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update March 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
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3290. Radio Amateurs on USENET List Mar 1994 Part 4 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 07:26:44 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Mar28.4@ve6mgs.ampr.org>
Source record: 269345
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part4
Last-modified: $Date: 94/26/28 00 26$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Fourth part contains US call districts 5 and 6.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update March 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
US 5 District
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fjkrizan@maverick (Frank J Krizan) wa5abu 93-12-27
NIX@bigbrd.AUd.alcatel.COM (Paul N Nix) wb5agf 93-7-20
martin@datacomm.ucc.okstate.edu (Martin G McCormick) wb5agz 93-10-24
ekays@promus.com (Gene D Kays) ka5aln 94-2-9
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Dube.Todd@f7009.n124.z1.fidonet.org (Dube D Todd) ab5ap/n5pdk 93-11-14
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3291. Radio Amateurs on USENET List Mar 1994 Part 5 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 07:26:56 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Mar28.5@ve6mgs.ampr.org>
Source record: 269346
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part5
Last-modified: $Date: 94/26/28 00 26$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Fifth part contains US call districts 7, 8 and 9.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update March 28 1994
#
# This document may be distributed freely, as long as there is no financial
```

gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
#
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3292. Radio Amateurs on USENET List Mar 1994 Part 6 of 6

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 07:27:13 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <1994Mar28.6@ve6mgs.ampr.org>
Source record: 269347
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Archive-name: radio/ham-radio/hams-on-usenet/part6
Last-modified: $Date: 94/27/28 00 27$
Version: $Revision: 1.03 $

I would be pleased to take any e-mail updates to this list, preferably at
hams-on-usenet@ve6mgs.ampr.ab.ca. I have split this list into six parts. This
Sixth part contains whatever is left over ... Canadian, Down under
and spots left here and there over the globe. Some Amateur Radio Related email
services are also itmeized at the bottom of the list.

Ciao, 73 de VE6MGS/Mark -sk-

# Network address to name or call letters lookup table maintained by
# Mark Salyzyn VE6MGS mark@ve6mgs.ampr.org
#
# Only posting entries less than 12 months old (three terms at most educational
# institutions) in the interest of bandwidth savings. The entire list is
# accessible at the ftp sites and via the email server in any case.
#
# Please send corrections/deletions/additions hams-on-usenet@ve6mgs.ampr.ab.ca
# (if unreachable, mark@ve6mgs.ampr.org or adec23.UUCP!mark is ok). Many
# additions and updates are generated by collecting postings to the
# rec.radio.amateur.* hierarchy, so keep that in mind when requesting
# additions. Australian Amateur Radio Operators may prefer to mail their updates
# to Dean Davidson <ddavidso@metz.une.edu.au>. Any person interested in handling
# regional versions of the list are invited to drop me a note, I am
# particularily interested in representatives of non-english speaking regions
# so as to increase the accessibility of the list.
#
# archived for ftp @ ftp.cs.buffalo.edu:hams_on_usenet courtesy of
# Devon Bowen KA2NRC <bowen@cs.buffalo.edu>
# also ftp @ grivel.une.edu.au:pub/ham-radio/aus.radio/lists/internet.hams
# courtesy of Dean Davidson <ddavidso@metz.une.edu.au> for Australian hams.
# Canadian and US call sign lookups courtesy of the QRZ HAM Radio CDROM and
# thus thank Fred Lloyd <flloyd@qrz.com> for his efforts.
#
# email `grep' server reqnet@ve6mgs.ampr.ab.ca in the body of the message put
# a `lookup string ...'. email response limited to 10K. if you want to specify
# a return address, add optional `return user@host.domain'. For example:
# Subject: Could be anything (sure!)
# return wabbit@it.was.a.tewibble.storm.edu
# lookup ka2nrc ve6tcp nm1d elmer
#
# Last update March 28 1994
```

#
This document may be distributed freely, as long as there is no financial
gain. I do not condone this list being used for generating junk mail or
other annoyances as this is not the purpose of the list. If you are in this
list and wish to keep your entry hidden, or that the name I have here be
changed (My middle name is Gregory and I am **** proud of it :-), I would
oblige.
#
Entries have this format (-> denotes separated by at least one tab):
Address (Name) -> Call -> Date
#
Address
Network address popularily used by individuals on the network. Although
the address that many news posters add may be incorrect, personal
e-mail contacts or updates are always placed first in the list of
duplicate calls. Removal of entries is by complaint only, so some
(mainly .EDU) may be invalid over time. For fidonet addresses I have
used the form #:#/#.#@<Fido>, try <name>@p#.f#.n#.z#.FidoNet.Org
(note address numbers in reverse order).
Name Name of the individual.
Call Call letters of the individual. Old and alternate calls '/' separated.
Date Last update YY-M[-D] International format.
A trailing * denotes not searched in call book for verification yet, @
means not found in call book (1987, 1992 CAN or 1993 US). ? after means
recheck may be required (eg. Call does not match name).
#
This list has a life of it's own, so references to *my* list will be ignored.
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richardm@kralizec.zeta.org.au (Richard P Murnane) vk2sky 94-3-14
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drsmith@uts.EDU.AU (Darryl R Smith) vk2tds 93-8-27@
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tony@mpce.mq.edu.au (Tony Farrow) vk2tjf 94-3-22*
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gregh@swifty.dap.CSIRO.AU (Greg M Hammond) vk2yki 93-12-9
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contests@arrl.org (ARRL Contests) ARRL/w1aw 93-9-27
pschleck@unomaha.edu,bowen@cs.buffalo.edu (Archive) ARCHIVE 93-8-25
70524.2272@CompuServe.COM (Dave Cowdin, Amsat Postings) AMSAT 93-8-25
peter.henne@gmd.de (Peter Henne) APT-STATS 93-8-25
cq-contest@tgv.com (CW Contest maillist) CQ 93-12-9
cq-contest-request@tgv.com (CQ Contest request) CQ 93-12-9
digital-faq@wattres.SJ.CA.US (Digital Amateur Radio FAQ Coordinators) DIGITAL-FAQ 93-8-26
elmers-request@unomaha.edu (Ham Radio Elmer List) ELMER 93-8-25
esrac@stack.urc.tue.nl (Eindhoven Student Radio Amateur Club) ESRAC 93-11-30
rra-wg@amdahl.com (radio.amateur working group) FAQ 93-8-25
algedi!gateway@UCSD.EDU (Gateway) Packet-Gateway 94-1-26

repeaters@wattres.sj.ca.us (Repeater Mapping Project) REPEATER 93-8-25
listserv@knuth.mtsu.edu (KA9Q Unix List Administrivia) KA9Q-UNIX 93-8-25
ka9q-unix@knuth.mtsu.edu (KA9Q Unix List Postings) KA9Q-UNIX 93-8-25
pschleck@unomaha.edu,jmaynard@oac.hsc.uth.tmc.edu (Guide Coordinators) GUIDE 93-8-25
hamradio-faq@uts.amdahl.com (Ham Radio FAQ) HAM-FAQ 93-8-25
hams-on-usenet@ve6mgs.ampr.ab.ca (USENET Amateurs List) HAMS-LIST 93-8-25
icom-request@CSCI-WierPC.etsu.edu (Icom Mailing List) ICOM 93-8-25
tkelso@afit.af.mil (TS Kelso, Keplerian Postings) KEPS 93-8-25
auspace@afit.af.mil (AU SPACE STUDY TECHNOLOGY TEAM, TS Kelso) AUSPACE 93-10-10
nos-bbs@hydra.carleton.ca (NOS BBS List) NOS 94-1-25
ampr-ca@hydra.carleton.ca (NOS BBS List) NOS 93-7-27
nos-bbs-request@hydra.carleton.ca (NOS BBS List) NOS 93-8-25
ted@tedb.demon.co.uk (Edward Batts, RSGB contact) RSGB/GB2RS 93-8-25
70247.3516@Compuserve.Com (George Wood, SCDX Bulletins) SCDX 93-6-6
elements-request@alsys.com (Shuttle Elements List) SHUTTLE 93-8-25
oler@rho.uleth.ca (Cary Oler, Solar Reports) SOLAR 93-8-25
oler@beta.uleth.ca (Cary Oler, Solar Reports) SOLAR 93-8-25
lukpla@scorch.apana.org.au (Luke Plaizier SPACE TRIVIA LIST) SPACE 93-8-27
tapr@tapr.ampr.org (Tucson Amateur Packet Radio) TAPR 93-8-25
tcp-group@UCSD.EDU (Advanced Amateur Radio Networking Group) TCP 94-2-12
vhf@w6yx.stanford.edu (VHF discussion list) VHF 93-3-30
K3VOA@BOPS.VOA.GOV (Voice of America Amateur Radio Club) VOA 93-8-25
rec-radio-request@ve6mgs.ampr.ab.ca (rec.radio.info moderator) rec.radio.info 93-8-25
rec-radio-info@ve6mgs.ampr.ab.ca (rec.radio.info postings) rec.radio.info 93-8-25

3293. 6m Equipment?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 07:30:03 UTC
From: bkoen5@aol.com
Message-ID: <2n611r$fqk@search01.news.aol.com>
Source record: 269339

I am looking for good, INEXPENSIVE, 6m equipment. How do the Azden radios (mobile, HT) compare with some of the more expensive options that are available (Kenwood)? Also, what about used equipment? What is available?

Thanks,
Bryan Koen
N0YKN
bkoen5@aol.com

3294. Question on Kenwood 732 A

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 09:12:54 UTC
From: bwehr@iastate.edu
Message-ID: <2n672m$eer@news.iastate.edu>
Source record: 269340

Was wondering if anyone out there in radio land has had any experience with
the Kenwood TM-732A its a mobil dual band and looks like a real nice piece. So
If you own one or know someone that does let me know what you think of it.
Thanks.

-Brant

_____ Brant Wehr
N0UTT
internet bwehr@iastate.edu
Activities Director CARC
Electrical Engineering
_____

--
Brant
bwehr@iastate.edu

3295. WHAT IS THE BEST DUAL BANDER HAND HELD 2M/70CM

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 10:07:27 UTC
From: jerrys@holly.can.com
Message-ID: <CnDDGG.1H7@holly.can.com>
Source record: 269341

I am in the process of trying to decide what to buy, I know I am
asking for it, but I would greatly appreciate any comments on
Dual Band Hand Helds. I am looking for all sorts of comments.
GOOD BAD UGLY Etc. Please drop me a line. I have the money and
I am awaiting your response.
Thanks in Advance.
Jerry

SPEND, YAESU, ICOM, KENWOOD, ALINCO, STANDARD?

3296. Re: 10M indoor problem.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 12:53:43 UTC
From: higniro@gdss.grumman.com
Message-ID: <CnDL5M.sC@gdss.grumman.com>
Source record: 269348

In article <1994Mar27.181416.165@news.unr.edu> destree@unr.edu (Louis Destree) writes:
> I recently bought a HTX-100 (no equipment flames please...buying
>the FT-990 would keep me from continuing school), and have set it up with
>a "V" type 1/2 wave indoor antenna. I have not been able to talk to
>anyone from my apartment yet. However, I have had good results (when the
>band is in) from a measly 1/4 wave mag mount on my car.
>
> The building I live in is made of stucco, with (I'm reasonably
>sure) chicken wire in the walls. Most stucco buildings I've seen have
>this wire in the walls. I am curious if the wire is acting as an
>attenuator. If anyone has had a similar experience, let me know.
>
> Yes, it is possible for me to put the antenna outside. However,
>rather than having people lining up at my door complaining of TVI, I
>wanted to keep everything indoors.
> Thanks!
> Louis
>
>--
>Louis A. Destree University of Nevada, Reno
>destree@equinox.unr.edu <> destree@equinox.bitnet Electrical Engineering
>Amateur Radio: N7XNX (General Class) Bike: 1980 Honda CB750C
> "When things go from bad to worse, the cycle will repeat itself!"

The trick to TVI complaints from neighbors is to put up the external
antenna and not operate for 30 days or so. This will weed out the true
TVI problems and problem neighbors......

Rod - KB3MK

3297. dual band HT advice

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 14:54:25 UTC
From: phydoux@bert.cs.byu.edu
Message-ID: <phydoux.764866465@bert.cs.byu.edu>
Source record: 269349

Greetings!

I'm looking into buying a dual band HT, but I don't have access
to any mail-order catalogs or other information regarding the newer HTs
available. I was hoping that somebody who reads the newsgroups here
could give me their opinion about any of the models currently avaliable.
I've got a tax return check coming that might finance a new HT... Which
brands are good? Is there a certain brand/model I should stay away
from? Any advice/insights would be appreciated. You can respond via
mail or in this group, I am a regular reader.

73,
Michael Monsen
KB7YOP

3298. Re: Question on Kenwood 732 A

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 15:06:20 UTC
From: brett_miller@ccm.hf.intel.com
Message-ID: <brett_miller.81.000F1B75@ccm.hf.intel.com>
Source record: 269283

In article <2n672m$eer@news.iastate.edu> bwehr@iastate.edu (BDW) writes:

>Was wondering if anyone out there in radio land has had any experience with
>the Kenwood TM-732A its a mobil dual band and looks like a real nice piece. So
>If you own one or know someone that does let me know what you think of it.
>Thanks.

Its a great radio. I got mine when they first came out. I mount the remote head with velcro and put an RJ-11 jack on the cable for quick disconnect. It is very sensitive and get a lot of intermod in downtown areas. Lots of features - more than anyone needs. The Mic keypad buttons are a bit hard to press and (please correct me if this can be changed) do not make an audible beep or tone when you are sending DTMF tones, so its hard to tell if you pressed hard enough - use the autodial memories.

Brett Miller N7OLQ brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

3299. 10M indoor problem.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 15:33:06 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940328073306_3@ccm.hf.intel.com>
Source record: 269350

Text item: Text_1

>I am curious if the chicken wire is acting as an attenuator.
>Louis A. Destree

Hi Louis, of course, the chicken wire is forming a sort of Faraday shield for your RF energy. Put your 1/2 wave center-fed antenna outside at least 20 ft high and horizontal if at all possible. You are probably more likely to generate TVI with an indoor antenna than with an outdoor one... use a low-pass filter if you have TVI problems.

73, Cecil, kg7bk@indirect.com (I do not speak for Intel on Internet)

3300. RB319 Calling In Outsiders

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 15:41:43 UTC
From: enge@almaden.ibm.COM
Message-ID: <199403281544.HAA23547@ucsd.edu>
Source record: 269351

Bid: $RACESBUL.319
Subject: RB319 Calling In Outsiders

TO: ALL EMERGENCY MANAGEMENT AGENCIES VIA AMATEUR RADIO
INFO: ALL COMMUNICATIONS VOLUNTEERS IN GOVERNMENT SERVICE
INFO: ALL AMATEURS U.S (@USA: INFORMATION), CAP, MARS
FROM: CA GOVERNORS OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 Meadowview Rd., Sacramento, CA 95832
Landline BBS Open to All: 916-262-1657
RACESBUL.319 RELEASE DATE: March 28, 1994
SUBJECT: MGT - Calling in outsiders

During an incident there are times that it is necessary for a jurisdiction to request additional help from "outside". In California this involves mutual aid whereby local authorities turn to an "outside resource" (outside of their jurisdiction) to augment their own forces (or where none exists) to accomplish their mission. Either way (i.e., augment or provide) the so-called "outside" mutual aid people are ALWAYS under control of the REQUESTING government. The structure by which that functions is part of the Incident Command System.

In communications involving responding FCC Amateur licensees this aspect has at times been misunderstood by those not familiar with how mutual aid works in fire and law. Those "outside" resources NEVER come in to "take over". Mutual aid does NOT belittle the locals, but augments them with professionals trained in mutual aid response from other jurisdictions.

It is inconceivable that any jurisdiction would ever call in distant professionals to spite the locals, as we once heard it expressed by an exasperated amateur. It just ISN'T done for a number of very good reasons.

Just because there are local FCC licensed Amateurs doesn't necessarily mean a government will call upon them in an emergency if they haven't been active, trained in and familiar with a RACES or similar communications reserve program.

It is professionalism, whether paid or unpaid. No professional ever responds in mutual aid to do anything other than to support the local needs. That is the true mark of a professional (paid or unpaid), whether law, fire or communications.

Any communications responder who is such an amateur that he/she can't discern the difference between amateurish activity and professional activity shouldn't be responding no matter how well intended. Instead, that person needs to take training and familiarization programs to help understand the mutual aid process.

An ACS/RACES response from a city, county, or State OES in support of another government is due to a request from that government. To respond without a verified official request is the height of amateurish activity, and can have severe consequencies except in the most unusual of instances.
EOM.

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races or in hamradio/packet/tcpip/incoming and can be retrieved using FTP.

3301. RB319 Calling In Outsiders

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 15:41:43 UTC
From: Roy Engehausen <enge@almaden.ibm.com>
Message-ID: <$racesbul.319.1994@ampr.org>
Source record: 269352
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Bid: $RACESBUL.319

TO: ALL EMERGENCY MANAGEMENT AGENCIES VIA AMATEUR RADIO
INFO: ALL COMMUNICATIONS VOLUNTEERS IN GOVERNMENT SERVICE
INFO: ALL AMATEURS U.S (@USA: INFORMATION), CAP, MARS
FROM: CA GOVERNORS OFFICE OF EMERGENCY SERVICES
(W6SIG@WA6NWE.CA) Ph: 916-262-1600
2800 Meadowview Rd., Sacramento, CA 95832
Landline BBS Open to All: 916-262-1657
RACESBUL.319 RELEASE DATE: March 28, 1994
SUBJECT: MGT - Calling in outsiders

During an incident there are times that it is necessary for a jurisdiction to request additional help from "outside". In California this involves mutual aid whereby local authorities turn to an "outside resource" (outside of their jurisdiction) to augment their own forces (or where none exists) to accomplish their mission. Either way (i.e., augment or provide) the so-called "outside" mutual aid people are ALWAYS under control of the REQUESTING government. The structure by which that functions is part of the Incident Command System.

In communications involving responding FCC Amateur licensees this aspect has at times been misunderstood by those not familiar with how mutual aid works in fire and law. Those "outside" resources NEVER come in to "take over". Mutual aid does NOT belittle the locals, but augments them with professionals trained in mutual aid response from other jurisdictions.

It is inconceivable that any jurisdiction would ever call in distant professionals to spite the locals, as we once heard it expressed by an exasperated amateur. It just ISN'T done for a number of very good reasons.

Just because there are local FCC licensed Amateurs doesn't necessarily mean a government will call upon them in an emergency if they haven't been active, trained in and familiar with a RACES or similar communications reserve program.

It is professionalism, whether paid or unpaid. No professional ever responds in mutual aid to do anything other than to support the local needs. That is the true mark of a professional (paid or unpaid), whether law, fire or communications.

Any communications responder who is such an amateur that he/she can't discern the difference between amateurish activity and professional activity shouldn't be responding no matter how well intended. Instead, that person needs to take training and familiarization programs to help understand the mutual aid process.

An ACS/RACES response from a city, county, or State OES in support of another government is due to a request from that government. To respond without a verified official request is the height of amateurish activity, and can have severe consequencies except in the most unusual of instances.
EOM.

RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races or in hamradio/packet/tcpip/incoming and can be retrieved using FTP.

3302. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 15:45:57 UTC
From: mcveigh@elf.stuba.sk
Message-ID: <Pine.3.87.9403281757.D16358-0100000@decef.elf.stuba.sk>
Source record: 269353

```
subscribe Jay R McVeigh
```

3303. DAYTON

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 15:49:44 UTC
From: vev@msen.com
Message-ID: <hKjbj4t02OxJ058yn@msen.com>
Source record: 269354

I did something stupid, and let someone else try to get our flea market
spots this year. What a mistake! Does anyone have an extra spot??????????
PLEASE??

email please (vev@msen.com)

Vince Vielhaber KA8CSH Email: vev@msen.com Flame mail: /dev/null
include <std/disclaimer.h>
Expect everything, then nothing can surprize you!

3304. Info-Hams Digest V94 #335

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 15:50:12 UTC
From: SSW: <>;
Message-ID: <01HAHXV075G28ZEHB0@BIIVAX.DP.BECKMAN.COM>
Source record: 269355

From: POSTMSTR @SSW
To: HCHOAGLAND @MRGATE
IN%"Info-Hams @UCSD.EDU" @MRGATE @BV8500

Author: IN%"Info-Hams@UCSD.EDU"
Sender: IN%"INFO-HAMS @UCSD.EDU"@MRGATE@BV8500
Subject: Info-Hams Digest V94 #335
Message Class:

Recipients:

Profile Recipient(s):

CCMAIL -RL636614 *RLMEYERING @CCMAIL @BIIVAX

The MAILbridge Server/DEC was unable to deliver mail
from Sender IN%"INFO-HAMS@UCSD.EDU"@MRGATE@BV8500.
Please contact your Soft-Switch E-Mail Administrator to register this user
in the Name Translate Directory.

3305. **Sudbury Amateur Radio PHONE BBS (NEW)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 15:51:49 UTC
From: guy@penage.cs.laurentian.ca
Message-ID: <2n6uel$2hl@penage.cs.laurentian.ca>
Source record: 269356

Warmest Greetings All,

For your information and all thoes on fidonet, the Sudbury Amateur
radio phoneline BBS is now operational. This phoneline BBS is on fidonet
(1:224/50) The phone number is (705) 522-8381. The sysop is Mark Lehto
VE3 LSP. PLease if you have the opportunity check out this BBS. Mark
has big plans for this BBS but first we need to expand our client base.

It is the hope of Mark that this BBS could be used by the Club here
in Sudbury, Ontario, Canada. If you know of any other BBS that is Club owned
or sponsered please email me with information about the Club BBS.

Thank you for your time.

73's de Guy VE3 XGQ

3306. What's a good 2m/440 mobile?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 16:08:09 UTC
From: pmarsh@metro.mccneb.EDU
Message-ID: <9403281608.AA25437@metro.mccneb.edu>
Source record: 269357

It's time to buy a 2m/440 mobile rig, before the IRS refund is noted by the family checkbook inspector. I'm particularly interested in monitoring the 160 mHz and the 460 mHz ranges, as well as use the regular ham bands. (No, I'm not going to transmit - flamethrowers off, please). What units seem to be particularly well-qualified for out-of-band reception as well as having good ham-band performance?

What antennas are good for such machines -- without an appearance that would overly embarrass the spouse?

Paul Marsh N0ZAU Omaha pmarsh@metro.mccneb.edu

3307. Re: Hole in car roof: Affect vehicle value?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 16:24:07 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1994Mar28.162407.11421@rsg1.er.usgs.gov>
Source record: 269358

In article <2n079g$pl1@usenet.rpi.edu>, abelson@operators.its.rpi.edu (Mike Abelson) writes:
|> I am considering installing a new antenna in my vehicle and roof-mounting it.
|>
|> Of course, I'll need to make a hole in the roof, so the other day when at my local dealership I asked them what affect that might have on the vehicles value at trade-in/selling time. Their response was that it would lessen the value of the vehicle by $50|> 0-$600.
|>
|> This seems a bit steep for one hole in the roof (whether it's plugged or the antenna gets ultimately sold along with the vehicle).
|>
|> Is this estimate anwhere near accurate? What kind of depreciation (if any) should one really expect when selling/buying a used vehicle which has had a roof-mounted object?
|>
|> mla

Just plug the hole with a $30 cellular antenna prior to selling - and charge
THEM extra for this feature!!!!!!!

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

3308. Re: Yaesu 5200 Develops new "Feature"?!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 16:36:00 UTC
From: fms@sw.stratus.com
Message-ID: <2n711n$t1@transfer.stratus.com>
Source record: 269359

In article <1994Mar25.124326.1@skyler.mavd.honeywell.com>, estey@skyler.mavd.honeywell.com writes:
> My 2-year old Yaesu FT-5200 has recently displayed a new, and unique, feature.
> It turns itself OFF! (Stop the snickering! It happens both in Receive and
> transmit mode!)
>
> I have vibrated the FT-5200, wiggled the control cable of the seperation kit,
> with no direct correllation to the failure. Depressing the ON/OFF switch will
> sometimes not restore normal operation - sometimes the display becomes real
> dim when I try to turn the power back on - and repeated attempts don't always
> work. Failures have happened when the unit is ice-cold - and when the unit is
> warm so thermal problems seem unlikely. I fear sending the unit in as I
> am not absolutely sure the problem isn't with the cable running between the
> main unit under the seat and the control head on the dash.
>
> Has anyone experienced this new Yaesu feature???
>

This sounds familiar.

I've seen this in two instances. In the first, the air flow around the unit had gotten blocked, and the unit was overheating. Removing the offending blockage and allowing the unit to cool back down did the trick. However, this doesn't sound like your problem.

In the other instance, I had just had electrical work done on the car. The radio would randomly shut itself down. I also had it turn itself on automatically whenever I started the car. TO solve this one required resetting the unit (there's some combination of keys to hit at startup, or some internal button you have to press that resets the thing to factory settings. It's in the manual somewhere). I guess it had just gotten internally confused when my electrical system broke...

If none of these do the trick, you'll probably have to ship it back, but do give the factory reset a try before you dig out the shipping materials... Good luck!

73 de Faith N1JIT
--
Faith M. Senie InterNet: fms@vos.stratus.com
Stratus Computer, Inc. InterNet: fms@hoop.sw.stratus.com
55 Fairbanks Blvd. Pkt Radio: n1jit@wa1phy.ma.usa.na
Marlboro, MA 01752 Phone: (508)460-2632

Curiosity doesn't flourish among the burned-out...

3309. Re: 2 meter use in London, England?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 16:36:19 UTC
From: eac@world.std.com
Message-ID: <CnDvGJ.CrJ@world.std.com>
Source record: 269360

In <1994Mar23.093208.4906@ee.surrey.ac.uk> M.Willis@ee.surrey.ac.uk (Mike Willis) writes:
>representative selection of locals. After all, would would go to Miami airport if
>they believed the reports we have had in Europe? You get murdered for making a
>wrong turning or asking directions!

Or by knocking on a door at night in Texas!

73 Eric WB1HBU Amsat UK 5064 Amsat NA 10595

3310. Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 17:20:25 UTC
From: dhughes@prairienet.org
Message-ID: <2n73kp$o6i@vixen.cso.uiuc.edu>
Source record: 269361

I just passed my no-code test last week, and have been listening to some ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some of the most disgusting language I've encountered anywhere. One guy was spouting one obscentity after another, and three other guys were laughing at his inept signal and giving it right back to him. All but the instigator were regularly giving their calls. Is this pretty much what I have to look forward to?
--

3311. SUMMARY:2m HT Recomendations

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 17:23:38 UTC
From: harland@otter.mech.ubc.ca
Message-ID: <2n73qq$ot6@nntp.ucs.ubc.ca>
Source record: 269362

Summary of 2m HT recomendations:
First the specific features that people use/like is laid out
then I will list responses by manufacturer.

Responses to date: 14

Feateures:

Power: 2 people say 2-3W is enough fo local use
4 people say 5W+ is needed for longer distances

DTMF: 4 - must have

CTCSS: 2 - good to have
2 - not worth it

Paging: 2 - not worth it
1 - have but never use

Lighted Keypad: This came up quite frequently --> good idea

Manufacturers:

Kenwood:
28A: 4 - problems with intermod
2 - battery falling out
2 - poor battery life
78A: 1 - intermod
27A: 2 - good reviews but 1 poor battery life
22AT: 1 - good review
1 - Kenwood not woth the money

Radio Shack:
202: 5 - good reviews

Yaesu:
FT-530: 3 - good reviews
FT-416: 1 - very good review

Alinco:
DJ-180T/H 1 - very good review
1 - Alinco not worth them money

Standard:
C168A: 2 - good reviews

I-COM:
2GAT: 1 - big but worth it

Which one will I buy ?
I am going to check into Radio Shack but I am now looking
towards a Yeasu FT-530 or FT-411.

Thanks for all the great info, I would have bougth Kenwood
had it not been for all the intermod problems.

I hope this summary will help someone else who is also in the
market for a 2m HT.

--

Harland MacKenzie "Once you have eliminated
Department of Mechanical Engineering the impossible, what ever
University of Brithish Columbia remains, no matter how
Vancouver, B.C. Canada improbable, must be the
truth",
Internet: harland@mech.ubc.ca Sir Arthur Conan Doyle
CompuServe: 72162,2245

3312. CALLBOOK ON INTERNET

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 17:36:51 UTC
From: ddepew@CHM.TEC.SC.US
Message-ID: <1994Mar28.133651.340@pacs.sunbelt.net>
Source record: 269363

I have heard that there are several Callbook databases available through the net, but have been unable to locate any. If you have one that you like to use, please let me know by E-Mail. Thanks.

Dorr Depew
N4QIX

3313. Re: A novice needs some help!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 18:12:04 UTC
From: mike@garfield.csuohio.edu
Message-ID: <1994Mar28.181204.4206@news.csuohio.edu>
Source record: 269364

giridhar@ee.umr.edu (Giridhar Tatavarti) writes:
:
: I am a novice in the matters related to ham-radio.

Welcome!

: What I know about ham-radio is that it can be used for
: communications around world..as long as both the parties
: have a ham-radio each.

Correct, as well as a current Amateur Radio license, from
the FCC (in the US).

: I heard that ham-radio can help you make friends around the
: world. Can anyone please tell me if I can buy a pair
: of ham-radios for me and my friend in some other country..
: and talk whenever we want? That would save me my long
: distance bills..But is that allowed? Or does ham-radio
: have a condition attached that it should be used only
: for emergency purposes?

Ham radio has a tradition of being an emergency radio
service, and still functions in that capacity world wide
as well as locally. You can talk to anyone, at any time,
about anything (except anything related to business or
making money for yourself), in just about any part of the
world (a few countries are off limits, usually cuz of politics).
Lots of hams talk to friends worldwide, as long as it's not
business oriented.

Make sure your friend in their country has a ham license from
their government.

: What would be the price of a ham-radio set which I could
: use for international communication ?

Theoretically you can build a ham transmitter/reciever with
an handful of parts for under $50. But, usually, figure on a couple
or few hundred bucks for the equipment, antenna, etc. That's considered
a bare minimum, used stuff. Many hams have 10's of thousands invested in
equipemnt over the years. Go to a local hamfest and see all sorts
of good used equipment for not much $$. I think you can get set up
fairly well for around $500 or so, per station.

: What is the frequency at which the ham-radios operate?

Many, depending on where your interests are and what radio you buy.
All the way from 160 meters (2Mhz) on HF, 80/40/10M 'shortwave', thru
VHF, UHF, and up into the microwave freqs (GHz). What you can transmit
on depends on your class of license. In the US it starts as Novice,
then Technician, then General, then Advanced, then Amateur Extra (the
top). You also have more priveleges for phone (voice) communications
as you earn higher classes of licenses. The Novice HF license is almost
all CW (Morse code) with some SSB voice to whet your appetite for a
higher class license :-).
:
: I would greatly appreciate if anyone can take the time
: to answer these queries on the newsgroup, or in a mail
: to me at giridhar@ee.umr.edu...

A good source of info if you are just getting into ham is to
go buy "Now You're Talking" at Radio Shack. In fact, if you
study the entire book, you should have no trouble passing your
Technician class license (no-code). If you want to talk world wide
thought, you will have to pass the 5 words-per-minute code test.
If you go that route, without the Technician's test, you can
become a Novice class operator (there is also a written test).
The book tells a lot about it.

I hope this helps.

Mike
--
^v^v^v^v^v^v^v^v^v^v^v^v^v^v^v^v^v Catch the WAVE ^v^v^v^v^v^v^v^v^v^v^v^v^v^v^v^v^v
Michael Mayer, Senior Technical Support Engineer Amateur Radio KB8RJO
Visual Numerics, Inc. 32915 Aurora Rd. Suite 160, Solon OH 44139 USA
Email: mayer@boulder.vni.com Human: 216-248-4900 Fax: 216-248-2733
v^v^v^v^v^v^v^v^v^v Good * Cheap * Quick (pick any two) ^v^v^v^v^v^v^v^v^v^

3314. Rec.Radio.Amateur.Antennas activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 18:13:09 UTC
From: 00tlzivney@leo.bsuvc.bsu.edu
Message-ID: <1994Mar28.131309.28449@bsu-ucs>
Source record: 269365

I have posted two items to a newsgroup, rec.radio.amateur.antennas, but have never ever seen any other activity on that newsgroup. I have been checking for two weeks. Does anyone out there ever look in on that newsgroup??????

3315. Re: Voice mail on a repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 18:43:28 UTC
From: hammock@kelvin.jpl.nasa.gov
Message-ID: <2n78gg$sfh@lo-fan.jpl.nasa.gov>
Source record: 269366

In article <Cn8ttu.AHI@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>Are there any repeaters left in this country that just repeat, including
>no musical tones or beeps when you drop your carrier? I miss the old
>days when all one heard was a nice solid kurchunk of the repeater
>receiver's squelch tail quickly followed by a second squelch tail from
>my receiver (the repeater carrier would drop off after 1-2 seconds).
>This seemed to be the way most of the public safety repeaters were
>also set up (particulary the California Division of Forestry
>repeaters back when I was a fireman in the early 70s).
>
>Gary: I'll be disappointed if your repeater beeps.
>
>Jeff NH6IL
On our repeater, the beep is a signal that something has definitely occured (i.e. the timeout timer has reset). I have worked on a number of controller and it ssems that most of them send a courtesy beep just for the sake of sending a beep. The beep on our machine is triggered by the same timer that resets the TOT (17 year old hard wired logic) and that if you keep talking back and forth without anyone ever hearing the beep, the repeater WILL timeout. If the TOT function is disabled, then you will not hear the beep since why send a notification for an event that never happens. In our new design, the beep will continue to do the same and then some. The beeps will have different characteristics to indicate the current mode of the machine: links ups, timers on/off, remotes up, etc.

In fact, if you don't like hearing the beeps on our machines, all you have to do is turn on your CTCSS as our repeaters encode PL on their outputs ONLY when they are receiving a signal in the input. Except for occasionally hearing the IDer while someone else is talking, it is almost like talking simplex. You may or may not hear a squelch tail when on person stop talking to the repeater, the repeater will stop sending PL which causes your receiver to mute before the beep is heard and the subsequent drop of the repeater carrier.

Repeater systems just need to be smart not cute.

Randy KC6HUR
hammock@kelvin.jpl.nasa.gov

3316. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 18:51:45 UTC
From: kchen@apple.com
Message-ID: <2n7901$6n4@apple.com>
Source record: 269367

jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:

>Kok & Will: A number is appended following the prefix if and only if
^^^^^^^^^^^^^^
>the country in question has divided itself into districts. Thus, because
>the Marshall Islands are so small in land area (lots of islands, though)
>the Marshallese government has chosen not to partition the islands
>into different radio districts.

Well, Jeff. Now I *know* you are in mathematics :-).
(Were you really afraid that this audience does not recognise "iff"? :-)

My V7A "postcard" came, so it was not a figment of my imagination.

BTW, the OKDXA folks are really fast at QSLing. The V7A card arrived in
about 10 days from when I dropped mine in the mailbox. The 6D2X folks
are *even* faster, 7 days portal to portal! Hats off to K5TSQ. A miracle
considering, in total, the cards went through at least 4 post offices :-).

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

3317. Re: Macintosh Amateur Radio Software - January 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 18:51:53 UTC
From: lmblake@rodan.syr.edu
Message-ID: <1994Mar28.185153.25865@newstand.syr.edu>
Source record: 269368

In article <2mkse6$o2u@search01.news.aol.com> tstader@aol.com (TSTADER) writes:
>In article <2m4g40INNhgv@sweetpea.genrad.com>, dls@genrad.com (Diana L.
>Carlson) writes:
>
>And I have noted this in the latest version to be relased in amonth or so.
>
>Thanks Diana... sorry you lost your Mac! I know that many people enjoyed using
>your Hyoercard stacks to prep for their tests!
>
>Has anyone else picked up the role of keeping the stacks up-to-date? Is there a
>volunteer out there on the net?
>

>America Online Ham Radio Club Host
>Ham Radio Software for the Macintosh List Maintainer

Hi,
I would like to know if there is software for the mac which will help
you prepare to take the certification tests to be an operator. I know
there is a book that helps you learn all the regulations but I would
like to know if there is software also. Please email me at
lmblake@mailbox.syr.edu because I'm having trouble finding time to
read news regularly.

Thank you in advance,
Lisa

3318. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 18:55:12 UTC
From: jayk@fc.hp.com
Message-ID: <CnE1w1.B9o@fc.hp.com>
Source record: 269369

Dan Hughes (dhughes@prairienet.org) wrote:

: I just passed my no-code test last week, and have been listening to some
: ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
: of the most disgusting language I've encountered anywhere. One guy was
: spouting one obscentity after another, and three other guys were laughing
: at his inept signal and giving it right back to him. All but the
: instigator were regularly giving their calls. Is this pretty much what I
: have to look forward to?

Is that the only contact you listened too?? It doesn't take much SWLing
to notice that isn't the normal contact on the ham bands.

73, Jay K0GU jayk@fc.hp.com

3319. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 19:06:03 UTC
From: galen@picea.CFNR.ColoState.EDU
Message-ID: <1994Mar28.190603.55784@yuma>
Source record: 269370

In article <2n73kp$o6i@vixen.cso.uiuc.edu> dhughes@prairienet.org (Dan Hughes) writes:
>
>I just passed my no-code test last week, and have been listening to some
>ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
>of the most disgusting language I've encountered anywhere. One guy was
>spouting one obscentity after another, and three other guys were laughing
>at his inept signal and giving it right back to him. All but the
>instigator were regularly giving their calls. Is this pretty much what I
>have to look forward to?

Yep.
On HF, that is. I run 6m, 2m, and 70cm SSB, and people are nice and polite
and follow the rules.
Novel concept, eh?
With your tech, YOU TOO can get on >50MHz SSB. I wish I'd spent the $$$$
on better VHF/UHF gear and bought some old tube HF rig, but HF resale values
are pretty high these days....
AND, the antennas are a lot smaller ;-)
Galen, KF0YJ

3320. Re: Why no 10 meter activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 19:13:51 UTC
From: kchen@apple.com
Message-ID: <2n7a9f$9s8@apple.com>
Source record: 269371

henrys@netcom.com (Henry B. Smith) writes:

>Yesterday driving home from work (Dallas) I worked ZY5C (southern Brasil)
>and CX1NT (Uraguay) on 10 meters. Trans. Eq. skip??

No. It is a supernatural phenomenon called a "contest." :-) :-) Been
known to bring activity to a seemingly dead band.

I hope that the folks who have been complaining about 10m's death
turned their radios to 10m this (WPX) weekend. My 10m log for the
weekend shows CE, CX, HC8, HH, HK, HP, J3, KH6, KH8, KP2, KP4, LU, PY,
P4, TI, TG, VK9N, VP2E, VP2V, V3, YV, ZD8, ZL, 8P. All done with a
wimpy setup from an apartment.

73

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

3321. Re: WWV Voice announcments??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 19:33:18 UTC
From: debmoore@netcom.com
Message-ID: <debmooreCnE3nI.6J6@netcom.com>
Source record: 269372

Jose Miguel Fonte (etjfonte@ci.ua.pt) wrote:
: Stan Olson (solso@prairienet.org) wrote:

: : Does any one have a schedule of when WWV announces the solar flux
: : and stuff?? If you could mail me the times/freqs, that would be
: : great!! Thanks

: WWV broadcast every hour at minute 18 (e.g. 20:18 , 21:18...)
: and the freq. are 5Mhz,10Mhz,15Mhz,20Mhz (I think the last one its better)
: good luck with Dxing ...

: best 73's de CT1ENQ

I believe there is also a braoadcast at :45 mins. I think this one is
from WWVH. I don't have any info here at work, but maybe someone else
could verify this.
--
==========
Bob Shilling Berkeley, CA debmoore@netcom.com
KK6QQ rcshilling@lbl.gov
DoD# 1195

3322. Fricker HF Propagation papers ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 19:58:51 UTC
From: rbloom@netcom.com
Message-ID: <rbloomCnE4u4.474@netcom.com>
Source record: 269373

I am looking for some BBC technical reports, in all their
gory detail on the Fricker FoF2 and mode-find algorithms.
In the journal articles there are references to BBC
"pamphlets" which were "readily available" in the mid-'80s.
Any ideas?

Ron
WA6MQC

3323. AO-13 operating schedule notations

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 20:15:58 UTC
From: mark_t._phillips.henr801c@xerox.COM
Message-ID: <"28-Mar-94.15:15:58.EST".*.mark_t._phillips.henr801c@Xerox.com>
Source record: 269374

Received: from rigel (rigel.eso.mc.xerox.com) by zombi.eso.mc.xerox.com (4.1/SMI-4.1) id AA28634; Mon, 28 Mar 94 15:15:54 EST

Can someone tell me what is meant by the "MA" numbers listed with AO-13 operating schedules? They look like this:

Mode-B: MA 0 to MA 90
Mode-BS MA 90 to MA 120
Mode-S: MA120 to MA 122

I understand the meaning of the "modes" (tho I'm not familiar with Mode-BS).

=Mark=
n2rpz@eso.mc.xerox.com

3324. New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 20:18:18 UTC
From: kd1hz@anomaly.sbs.com
Message-ID: <2n7e2a$7mp@paperboy.ids.net>
Source record: 269375

In this age of political correctness, its unfair that we have a "DXCC"
award for HF operators, but nothing that a no-code tech can aspire to
achieve by yacking on two meters.

Therefore, the RI 2x2 Amateur Repeater Association is pleased to announce
that it will be awarding a new award especially designed with no-codes in
mind.

The coveted "DXCB" award is available to any licensed amateur, although is
especially designed with the no-code techncian in mind. To qualify for the
award, the operator must have 100 confirmed repeater QSOs on a single two-meter
"good buddy box", and demonstrate that since receiving their license they've
done nothing but operate 2 meter FM voice.

Recipients of the award receive a certificate suitable for framing next
to their FCC license, and will be listed in the DXCB "Hall Of Fame".

To receive your award, mail evidence of 100 confirmed repeater QSOs,
a sworn statement indicating that you've never operated a mode other than
2 meter FM voice, along with 10 box-tops from your favorite breakfast cereal,
to:

The Rhode Island 2x2 Amateur Repeater Association
Attn: DXCB Award Desk
Route 104, Box 17220
Smithfield, RI 02917

Please enclose $20 to cover return postage.

Allow 4-6 weeks for delivery of your certificate.

MD

--
-- Michael P. Deignan, KD1HZ -
-- Internet: kd1hz@anomaly.sbs.com - I never tell the truth, because I
-- UUCP: ...!uunet!anomaly!kd1hz - I don't believe that there is such
-- AT&TNet: 401-273-4669 - a thing...

3325. Re: Hole in car roof: Affect vehicle value?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 20:29:19 UTC
From: northup@hoop.sw.stratus.com
Message-ID: <2n7emv$cao@transfer.stratus.com>
Source record: 269376

bodoh@dgg.cr.usgs.gov (Tom Bodoh) writes:
: In article <2n079g$pl1@usenet.rpi.edu>, abelson@operators.its.rpi.edu (Mike Abelson) writes:
: |> I am considering installing a new antenna in my vehicle and roof-mounting it.
: |>
: |> Of course, I'll need to make a hole in the roof, so the other day when at my local dealership I asked them what affect that might have on the vehicles value at trade-in/selling time. Their response was that it would lessen the value of the vehicle by $50|> 0-$600.
: |>

I asked my local dealership about adding roof racks that bolted thru
the roof with steel backing plates. This is a lot bigger than an
antenna hole. They told me it didn't make any difference to them.
Last week when I did trade it in they gave me ~ $1000 more than I
felt it was worth.

Bill

--
--

Bill Northup PHONE: (508) 460-2085
Stratus Computer Inc. INTERNET: northup@sw.stratus.com
55 Fairbanks Boulevard Packet: N1QPR@WA1PHY.#EMS.MA.USA.NA
Marlboro, MA 01752 Amateur Radio: N1QPR

3326. Re: Question on Kenwood 732 A

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 20:32:35 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1994Mar28.203235.20707@rsg1.er.usgs.gov>
Source record: 269377

In article <1994Mar28.130852.40544@dbsoftware.com>, adair@atldg02.dbsoftware.com (Owen Adair) writes:
|> BDW (bwehr@iastate.edu) wrote:
|> : Was wondering if anyone out there in radio land has had any experience with
|> : the Kenwood TM-732A its a mobil dual band and looks like a real nice piece. So
|> : If you own one or know someone that does let me know what you think of it.
|> : Thanks.
|>
|> I love mine, in spite of the intermod problems... If you live near a metro
|> area, you might not be happy with the rcvr, especially on UHF. The features are
|> really fun to play with...
|>
|> Also be aware that this month's QST has a new model , 733, advertised. I don't
|> know if this rig is available, but I'd check before I bought a 732. The rcvr
|> problems are likely to be fixed on this model...
|>
|> Again, if you don't live in a high RF environment, I'd buy the 732 - It's a great
|> radio.

I called my favorite mail order outfit and they do not have the 733 yet, but they figure they'll sell for around $650 or so, which is $115 over their current price on the 732. They also said that Kenwood is running very short of the 732. This may be due to the fact that the 732 is cellular capable and couldn't be imported after April 26th. The 732 was due for replacement so they are replacing it with the 733 rather than just fixing the firmware to eliminate cellular (as may happen with other rigs). I wonder if the 733 is really worth the extra $115 - did they address intermod problems for instance????

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

3327. The word HAM

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 20:44:29 UTC
From: derry@NeXTwork.Rose-Hulman.Edu
Message-ID: <2n7fjd$ces@master.cs.rose-hulman.edu>
Source record: 269278

Another 2 cents worth:

> The origin of the word 'HAM' come from the first letters of the
> first three guys to experiment radio. They were from the Harvard Radio
> Club... Their names are Hyman, Almy and Murray.
>
> Originally, they named their telegraph station
> "HYMAN-ALMY-MURRAY" but it was too long, so they reduce it to
"HY-AL-MU",
> but there was a problem : a mexican boat was named "HYALMO", so there
> was
> a little confusion... So, they finally named their station "HAM"...
>
> Oh yeah... That was in 1908....
>
> 73's de Alex, ve2cnd@CAM.O
>

Howdy,

I think I read somewhere that this story has been debunked by someone who did some snooping and found that there were no such students at Harvard when this was supposed to have taken place.

????

73 de K9CUN, Jack

3328. Re: CD-ROM QRZ! vs Buckmaster

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 21:45:43 UTC
From: john@anasazi.com
Message-ID: <1994Mar28.214543.28127@anasazi.com>
Source record: 269279

ken@boxhill.com (Ken Stamm) writes:

>I have the QRZ! CDROM, and bought it specifically because the callsign
>databases inside were not encrypted in any way.
>The callsign databases are simply comma-separated one-line-per-call
>text records.

We did that on purpose, so people could do their own processing against
the database. The comma separation was there so PC Basic could be used.
--
John Moore Scottsdale, AZ 85253 USA (602-951-9326) Std Disclaimer Applies!
john@anasazi.com Amateur call:NJ7E Civil Air Patrol:Thunderbird 381
- - Gun Control Means Hitting What You are Aiming At! - -
- - - "It is better to be judged by twelve, than carried by six." - - -

3329. obscenity and obesity

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 22:00:33 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2n7k21$i6d@geraldo.cc.utexas.edu>
Source record: 269280

dhughes@prairienet.org (Dan Hughes) asks:

>>I just passed my no-code test last week, and have been listening to some
>>ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
>>of the most disgusting language I've encountered anywhere. One guy was
>>spouting one obscentity after another, and three other guys were laughing
>>at his inept signal and giving it right back to him. All but the
>>instigator were regularly giving their calls. Is this pretty much what I
>>have to look forward to?

Frankly, yes. That is, if you listen to 75m in the evenings, you will hear people who are generally obscene, obnoxious and probably obese, not to mention obsolete. It is the gathering ground for all that is objectionable in amateur radio.

The good news is that you don't have to listen to it. There are some real human beings on 75m as well, I'm sure, and there are people on the higher bands who are less objectionable.

If you have the no-code license, you won't be tempted to talk to this Low Life, and if you pass the code test you can work people on CW who don't act like this (it takes so long to swear on CW).

Fortunately, most of the scum on the ham bands collects in a few distinct places and while you find it, listen to it and weep, there is nothing that says you have to. Just tune past it and you will soon find something more to your liking.

I am as sad as you are that this stuff continues, but we are not going to change it overnight, and I have a load of fun, mainly on HF and mainly on CW, without running into any of this muck. Don't give up!

Derek "The Pure" Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

3330. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 22:37:45 UTC
From: slay@netcom.com
Message-ID: <slayCnEC6z.KDF@netcom.com>
Source record: 269281

Dan Hughes (dhughes@prairienet.org) wrote:

: I just passed my no-code test last week, and have been listening to some
: ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
: of the most disgusting language I've encountered anywhere. One guy was
: spouting one obscentity after another, and three other guys were laughing
: at his inept signal and giving it right back to him. All but the
: instigator were regularly giving their calls. Is this pretty much what I
: have to look forward to?
: --
Unfortunately - that might be the case. Try listening on the CW bands.
You will rarely, if ever, hear that kind of language. Many of us duck
down to the CW bands to get away from the garbage on phone.

73 and good luck; and keep the faith (in Ham Radio)
de Sandy WA6BXH/7J1ABV slay@netcom.com

PS: There are plenty of Extra Class licensees who are guilty of the
transgressions you mention. You should NOT infer that I am saying
anything about "no coders". I've lived in Japan for many, many
years where 92% of all licensed amateur stations belong to "no coders".
They are pretty good - but, there are the bad apples in every barrel.

3331. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 22:45:30 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CnECJu.2L0@news.Hawaii.Edu>
Source record: 269282

In article <2n7901$6n4@apple.com> kchen@apple.com (Kok Chen) writes:
>jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>
>>Kok & Will: A number is appended following the prefix if and only if
> ^^^^^^^^^^^^^^
>>the country in question has divided itself into districts. Thus, because
>>the Marshall Islands are so small in land area (lots of islands, though)
>>the Marshallese government has chosen not to partition the islands
>>into different radio districts.
>
>
>Well, Jeff. Now I *know* you are in mathematics :-).
>(Were you really afraid that this audience does not recognise "iff"? :-)
>
>My V7A "postcard" came, so it was not a figment of my imagination.
>

I have been proved wrong (phooey). Delete the `and only if' in the
above, for as some folks have pointed out there are other reasons
for appending a number besides whether or not the country has divided
itself into radio districts.

Kok: Know who first used `iff' in the literature? Hint: He used to be
Chairman of the U.H. Math Dept. (didn't stay long, though...) and he
is quite famous. [VERY big hint: his intials are P.H.]

73,
Jeff NH6IL

3332. Do you post these E V E R !

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 23:13:00 UTC
From: FISHERB@a1.mec.mass.EDU
Message-ID: <01HAJI6XWRRW0034AV@mr.mec.mass.edu>
Source record: 269284

WHY MEN ARE BETTER THAN HAMS

1) They can go all night doing something worthwhile.

2) Their rubber ducky works but the ham's part doesn't.

3) They are ALWAYS communicative in a real way.

4) If they get boring you can always hit the belly button.

5) They have no problem with "Frequency."

6) They are alive.

7) You don't want to "squelch" them.

8) They can be "reprogrammed" to act human

9) A ham will tell you all men's secrets that they never experianced
for themselves

10) Their "transmitters" are never empty.

OK OK Im ducking sorry sorry sorry, I couldn't resist!!!

Are y'all still gonna ever speak to me!!!!!

I 'pologize! Honest! Sincerely! Would I lie?????

Burt Fisher South Dennis (Cape Cod), Mass.
Teacher of, Video, Broadcasting, Electronics
Cape Cod Regional Vocational High School
(Home of WCCT-FM 90.3 MHZ)

FISHERB@A1.mec.mass.edu
Amateur Radio Call K1OIK

3333. IPS Daily Report - 28 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 23:25:52 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar28.232552.22120@ips.oz.au>
Source record: 269285
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 088/032

1B. SOLAR FORECAST
29 March 30 March 31 March
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 088/032

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth: quiet to unsettled

Estimated Indices : A K Observed A Index 27 March
Learmonth 12 3322 3332
Fredericksburg 08 09
Planetary 12 08

Observed Kp for 27 March: 2131 2233

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
29 Mar 15 Mostly quiet to unsettled, with brief active active
periods possible.
30 Mar 25 Mostly quiet to unsettled, with brief active active
periods possible.
31 Mar 15 Quiet to unsettled.

2C. MAGNETIC COMMENT
None.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
28 Mar normal normal normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH

29 Mar normal normal fair
30 Mar normal fair-normal fair-poor
31 Mar normal normal fair
3C. GLOBAL HF PROPAGATION COMMENT
None.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were 15-30% enhanced 00-10UT and from 19UT onwards,
and otherwise near predicted monthly values. Spread F occurred 11UT,
15-16UT and 19-20UT.

Observed T index for 28 March: 63

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
29 Mar 65 15-30% enhanced during local daylight hours, and near
predicted monthly values at night.
30 Mar 60 10-20% enhanced during local daylight hours, and near
predicted monthly values at night.
31 Mar 60 10-20% enhanced during local daylight hours, and near
predicted monthly values at night.

4C. AUSTRALIAN REGION COMMENT
Sporadic E layer was observed throughout most of yesterday. Similar
conditions are expected today, with night-time Spread F also
possible. MUFs at Townsville and Hobart were generally near predicted
monthly values.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331 |PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329 |West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330 |AUSTRALIA

3334. Hamfest List

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 23:35:49 UTC
From: cps@access.digex.net
Message-ID: <2n7pkl$1jk@access3.digex.net>
Source record: 269286
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap

MID-ATLANTIC HAMFEST LISTING March 27, 1994

The following is a listing of known hamfests in the MD/NJ/PA/VA area.
I will update this list as necessary. Please send any additions or
corrections to me at cps@access.digex.net so that others may benefit.

Thanks,

Chris Smolinski, N3JLY

May 21, 1994:

Cherryville Hamfest, 8AM-2PM, $6 admission, $10 tailgating, $15 tables
Warren County Farmers Fairgrounds, Rt 518 North, Harmony, NJ I78-exit 3.
Contact Keith Burt, KF5FK, (908) 788-4080 before 10PM
VE Test Session Contact Marty Grozinski, NS2K, (908) 806-6944 before 9PM
Talk-In 147.375+ & 146.820-

May 22, 1994:

Great Hagerstown Hamfest, 8AM-3:30PM, $5 adm, $5 tailgating, $20 tables
Hagerstown Jr COllege Rec Center, Exit 32B from I-70, right at Edgewood Rd
Contact Page Pyne or Fred Bailey (301) 714-0688
VE Exams 9AM contact Pat KQ8E at (304) 289-3576
Talk-In 146.34+

June 5, 1994:

Ole Virgina Hamfest, 8AM-3PM
Prince William County Fairgrounds, Manassas, VA

June 19, 1994:

Father's Day Hamfest, 8AM-3PM, $5 adm, $5 tailgating
Walkersville Fire Co, Walkersville, MD, rt 15 to rt 26 to rt 194
Frederick Amateur Radio Club, PO Box 1260, Frederick, MD 21702
Talk-In 146.52, 147.06+, 448.425-

July 10, 1994:

Maryland Hamfest, 8AM-?, tailgating opens at 6AM
Timonium Fairgrounds, York Rd, I-695 to I-83 to Timonium Rd
BRATS, PO BOx 5915, Baltimore, MD 21208
VE Exams 10AM, Pre-registration required
Talk-In 147.03+, 224.96-

July 16, 1994:

Red Rose Repeater Assn, 9AM-3PM $5 adm, $5 tailgating, $20 tables
McCaskey High School, Reservoir & N Franklin Streets, Lancaster, PA
Red Rose Repeater Assn, PO Box 8316, Lancaster, PA 17604
Talk-In 147.015+

August 7, 1994:

Southern Patuxent Hamfest, 7AM-2PM, $5 adm, $5 tailgating, $25 tables
Prince George County Equestrian Center, Upper Marlboro, MD
Rt 301/ Rt 4, exit 11-A (Rt 4 Pennsylvania Ave) from DC Beltway I-495
Contact: Southern Patuxent ARC, PO Box 399, St Leonard, MD 20685
(410) 586-2177
Talk-In 147.15

Hamfest 94, 8AM-?, $5 adm, $3 tailgating
Bucks County Drive In Theater, rt 611, 6mi N of Pa Turnpike exit 27
Mid Atlantic Radio Club, PO Box 352, Villanova, PA 19085
Talk-In 147.06, 145.13

August 14, 1994:

SARA Carroll County Hamfest, 8AM-?, $5 adm, $5 tailgating, $8 tables
Carroll County Ag Center, Smith Ave, Westminster, MD
Contact: Alan Parker, KS3L, (410) 859-1475
SARA Hamfest, 607 Brentwood Rd, Linthicum, MD 21090
Talk-In 146.52, 224.68, 224.64

Hamfest & Computerfest, 8AM-?, $4 adm, $7 tailgating, $25 tables
Career Institute of Technology, Easton, PA
Delaware-Lehigh ARC, RR 4 Greystone Bldg, Nazareth, PA 18064-9211
(610) 820-9110
Talk-In 146.70

September 17&18, 1994:

Virginia Beach Hamfest $6 adm, $15 tailgating, $30 tables, $125 booths
Virginia BEach Pavillion
Manny Steiner, K4DOR, 3512 Olympia Lane, Virginia Beach, VA 23452
(804) HAM-FEST

September 18,1994

South Jersey Radio Assn, 8AM-3PM, $5 admission, $5 tailgating
Pennsauken High School Parking Lot, near US rt 130 / NJ rt 73
Contact Diane Nafis, N2LCQ, (609) 227-6281, (609) 228-8088
VEC Test Session registration at 9:30 AM
Talk-In 145.290-

October 30, 1994:
Mason Dixon Hamfest 8AM-?, $5 adm, $5 tailgating, $15 tables
Carroll County Ag Center, Westminster, MD
Mason Dixon Hamfest, PO Box 763, Hanover, PA 17331
VE exams $5.60, 9AM, reg 8AM, Page Evans NE3P, (717) 359-7610
Talk-In 145.410-

3335. HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-28 23:46:04 UTC
From: zawada@softage.demon.co.uk
Message-ID: <CnEFCs.Hso@demon.co.uk>
Source record: 269287
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,uk.misc

Help, has anyone out there heard of a chip XR2206?

It's used in a converter to send SSTVFAX in a shareware program called SSTVFAX2. From what I can make out, it seems to be some kind of modem chip, but I can't find it in any of the catalogues I have. Can anyone help me with any of the following information?

1. Has it got an equivalent chip I can use instead?

2. About how much is it?

3. Give me an address anywhere (any country), I can order it from.

Thanks in advance.

Mark
--

Mark Simpson

3336. Re: Is 10M Dead?!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 00:06:37 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9403281901591.DLITE.gilbaronw0mn@delphi.com>
Source record: 269288

>In article <Jk1MhuV.jokent@delphi.com> John Kent <jokent@delphi.com>
writes:
>>Steven Q. Stultz <sqstultz@delphi.com> writes:
>>
>>>For some reason, there doesn't seem to be much activity at all across the
band.
>>>Are we in the low part of the cycle? Or are gremlins inside my radio?
>>
>
> You should have been on Saturday 1800 UTC. The band was wide open.
>I had six 59's from Mass., Maryland, Miss., El Salvador, Brazil , and
>Argentina. This was using Radio Shack HTX 100 from the car. Just
>straight 25 watts.
>
>--
>
--+--------------------------.
>| INTERNET: pineapp@netcom.com (DC436) | Daniel Curry WB6STW |

>| AMPRNET : dan@wb6stw.ampr.org [44.4.20.144] | E-:-) Ham Radio Operator |
>| AX.25 : wb6stw@n0ary.#NOCAL.CA.USA.NA | Redwood City, CA USA |

>'--+--------------------------'
>
We are in a low part of the cycle and getting lower. Openings will occour
from time to time. Try a CQ now and then. you may be surprised.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.3 key at key servers or upon request

3337. HT1000s WANTED

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 00:43:16 UTC
From: moore@spk.hp.com
Message-ID: <CnEI05.Ku6@spk.hp.com>
Source record: 269289

My fire department is looking for used Motorola MT1000s, which I guess have been superceded by the HT1000. We need about three of them pretty quickly.
o cover 154 mHz region
o 16 channel w/ scan

We would also like to acquire the programming cable for these.

Any sources would be appreciated.

3338. Good novice HF rig recommendation

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 00:50:43 UTC
From: swohl@kodaki.kodak.com
Message-ID: <1994Mar29.005043.16424@kodak.rdcs.kodak.com>
Source record: 269290

oFollow up to dkerk@eis.calstate.edu, this message is being posted as
a courtesy. Any mail sent to this address will be trashed

Hi, I just passed my novice exam, and I am looking for
recommendations on a good startup rig. These are the qualities I am
looking for:

a) Reliable, stable, well mannered radio.
b) About 100 w maximum power. Runs on DC or AC
c) Really low TVI, phone interference, and such. This is
critical, with a lot of nearby neighbors.
d) All band receive
e) Good receiver selectivity and noise rejection. Lots of
electrical static near the home.
f) Good basic SSB performance for when I move up.
g) About $300 to $400.
i) Service and support still available.
j) Transmits on all the standard amateur bands. 80,40,15, and
10 at least.
k) Good CW, not chirpy or a bad hum, etc.

I've considered something like a Kenwood TS 180.

I'd appreciate the recommendations of the net. Please e-mail to
dkerk@eis.calstate.edu or dkerk@ctp.org. Thank you.

3339. Q: Where do I get test practice software?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 01:18:03 UTC
From: dbushong@wang.com
Message-ID: <CnEJM4.EAC@wang.com>
Source record: 269291

My son is getting ready to take his Tech written. What is the name of that software that lets you print out a sample test for purposes of practicing? And where do I get it?

Thanks, and 73,

Dave, KZ1O

--
Dave Bushong, Wang Laboratories, Inc.

3340. rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 01:40:57 UTC
From: ikluft@kluft.com
Message-ID: <ham-radio-faq-1-764905255@kluft.com>
Source record: 269292
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.1.1.4
Archive-name: radio/ham-radio/faq/part1
Revision: 3.0 1993/11/07 18:38:38

Rec.radio.amateur.misc Frequently Asked Questions
Part 1 - Introduction to the FAQ and Amateur Radio
------------------------------------------------------------------------------

This is a regular posting of frequently-asked questions (FAQ) about Amateur
Radio, also known as Ham Radio. It is intended to summarize some common
questions on the rec.radio.amateur.misc newsgroup and Info-Hams mail list
as well as to help beginners get started.

Please provide a copy of the FAQ to any new or soon-to-be Hams you know.

Regular FAQ postings can help save network bandwidth and maintain a good
signal-to-noise ratio in the newsgroup. However, they can't do it alone - you,
the reader, have to use them. If you are a new user, please print and review
the FAQ articles and look at the instructions in the news.announce.newusers
newsgroup before posting any articles. If you are an experienced user, please
help by refraining from answering frequently-asked questions on the newsgroup
if they are already answered by the FAQ articles. Instead, send e-mail to the
user who asked the question. (It will be helpful if you include the part of
the FAQ that answers their question, but not the whole thing.)

The FAQ cannot always prevent people from posting repetitive questions. But
even if hundreds of questions get posted, it saves you from having to answer
them hundreds of times. Also, a friendly pointer to the FAQ in your first
answer can help that person refer to the FAQ in the future. That is when we
can begin to get a real savings of network bandwidth.

To reduce the size of each article, the FAQ information is posted in 3 parts:
Part 1 - Introduction to the FAQ and Amateur Radio
Part 2 - Amateur Radio Organizations, Services, and Information Sources
Part 3 - Amateur Radio Advanced and Technical Questions

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--Rec.radio.amateur.misc Frequently-asked Questions------------------Part 1--

** Introduction to the FAQ

* How to Contribute to the FAQ Articles

We accept suggestions from the Amateur Radio community. Please consider that all new contributions need to be SHORT and concise in order to be included. If a contribution is too long, the FAQ editors can help you find a more appropriate FTP archive or mail server for your article.

We always accept corrections. Please allow some time (often not the next issue of the FAQ) because the FAQ maintainers do this as volunteers so each must give higher priority to their employers.

Send correspondence to hamradio-faq@amdahl.com so that it will reach all the FAQ coordinators: (listed in alphabetical order)

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* Acknowledgements

All questions listed as modified "pre-4/92" are entirely Diana Carlson KC1SP's work or her editing of a contributor's work. Diana

established this FAQ and credit is due to her for founding this project.

Thanks to Devon Bowen KA2NRC for accepting this FAQ in e-mail every month to keep the FTP archive at ftp.cs.buffalo.edu up-to-date.

* Notes on "Netiquette"

The rec.radio.amateur.misc newsgroup and Info-Hams mail list have a large daily volume of traffic. They can operate more efficiently if the following netiquette guidelines are followed. Please take them seriously.
* If you are new to UseNet, the introductory articles in news.announce.newusers are required reading. Go to that newsgroup now. Definitely, read the instructions there before posting anything. Other rec.radio.amateur.* readers will appreciate it!
* Pick the right newsgroup. Use only the most specific newsgroup for your subject. For example, a question about a homebrew antenna only needs to be posted to rec.radio.amateur.antenna. Also, don't post to rec.radio.amateur.misc when the subject can go in another rec.radio.amateur.* newsgroup. So, when there is a more specific newsgroup, that's the one you want.
* When posting a followup article, ALWAYS try to minimize the number of lines of quoted material from the original article.
* As a general rule when you try to determine whether to reply to someone by e-mail or with a followup article, remember to "praise in public, criticize in private." It's OK to disagree technically but be careful not to attack the person with whom you disagree. Also, be careful with your use of the word "you" when posting a follow-up article. Many unnecessary flame wars have started that way.
* Use a descriptive subject. For example, a message subject of "Ham Radio" tells the reader NOTHING about the contents of your article since the whole newsgroup is about Ham Radio. Other examples of subjects which are so broad that they become useless could include, "Help," "A Question," "Antennas," or "Frequencies." Maybe "Books on Antennas?" or "Where can I find Repeater Frequencies?" would be better, for example. Remember, in a busy newsgroup a lot of users decide which articles to read from the subject line alone. If you post, don't deprive yourself of an audience!
* Before answering a question, check if the FAQ adequately answers it or if someone else already answered it. If you have more to add, make sure to reference either the FAQ or the related articles.
* If a user posts a question which is directly answered by the FAQ, there is no need to post an answer - the information is already available on the newsgroup. Instead, just send an e-mail message which politely explains where to find the FAQ. They will probably appreciate it if you include the answer to their question. (Don't send a "nastygram" - that would just discourage future participation.)
* Pay attention to the size of your audience - use the "Distribution:" header. If you leave it blank, your message will go to every civ-

ilized country in the world and occupy disk space in all news systems in all those places. If that's what you intend, that's fine but make sure your article is relevant outside your country. (In particular, Hams should already know there is more to the world than just their own country.)
* If you have an item for sale, please limit the distribution area so that, for example, an article about a radio for sale in New Jersey won't get to California or Europe. If you wish, you may cross-post your for-sale article to rec.radio.swap.
* Software sources should be posted to either alt.sources, comp.sources.misc, or comp.sources.* for a specific machine type. Software binaries should be posted to the appropriate subgroup of comp.binaries.

** What is Amateur Radio?
Amateur Radio is a non-commercial radio communication service whose primary aims are public service, technical training and experimentation, and communication between private persons. Amateur Radio operators are commonly called hams. Hams often communicate with each other recreationally but also provide communications for others at public events or in times of emergency or disaster.

** Who can become a ham?
The answer to this question differs in every country.

The answer for the USA is listed below. If your country has a newsgroup specifically for it (i.e. UK, Australia, Germany) the most accurate answers can be found there. See Part 2 for the list of region-specific newsgroups.

If that doesn't help, the American Radio Relay League (ARRL) may be able to help because they communicate with similar organizations in other countries, probably including yours. They can be reached by electronic mail or surface mail (see Part 2.)

In the USA, anyone who is not a representative of a foreign government can be an Amateur Radio operator. There are tests that you must pass to get a license, however the tests are not insurmountable. On that general level, the requirements are probably similar in almost every country.

For more information on becoming a Ham in the USA, the ARRL has a toll-free number where you can request information: 1-800-32-NEW-HAM (don't worry about the number being one digit too long - the phone system ignores it.) Other information can also be obtained from the ARRL e-mail information server in the file called PROSPECT. Details on the server are in Part 2.

** Where can I locate information and books on Amateur Radio?
Your local Radio Shack sells some ham radios and Amateur Radio license books. Books can also be obtained through the mail

from ham radio organizations, such as ARRL in Newington, CT (203-666-1541) and W5YI in Dallas, TX (1-800-669-9594). There may be one or two ham radio stores in the local area (ie, within 50 miles). Try looking in the Yellow Pages under Radio Communications.

For the Novice license, get a Novice License manual, plus 5-word-per-minute Morse code tapes, costing around $25. For the Technician license, get a combined Novice and Technician License manual, and an FCC Rules manual, costing around $32. The FCC Rules manual is a good idea for Novice also, but not necessary, since the Novice License manual contains all the FCC Rules that are required for the Novice License.

The ARRL Education Activities Department has several programs to help amateurs (or prospective amateurs) to get started. Ask for a "New prospect package" available free of charge, from ARRL HQ, Educational Activities Department, 225 Main St, Newington, CT 06111.

Information on Ham Radio can also be obtained with your computer. Part 2 of this FAQ contains a significant amount of material on that subject.

** How much does it cost?
To take the tests for any class of amateur radio license, there is a small charge (around $5-$6 currently) to cover copying costs and running the testing sessions. (Due to changes in 1993, Novice tests are under same procedures as the others.) The cost of a radio is really dependent on what you want to do. You can make your own radio and antenna for under $150. You can buy a used single-band radio for $150-$300. Or you can buy a new multi-band multi-mode radio with all the doodads for $300-$3000. I'd suggest you learn more about ham radio, talk to local hams, find out what you want to do with ham radio first.

** Where can I take the tests?
The Novice tests Used to be given by any two qualified hams of General class license or above. Now all the license tests are given by three qualified Volunteer Examiners (VEs) who volunteer their time.

To locate an ARRL testing session in your area, you can contact ARRL at 203-666-1541 x282.

See also the section "Where can I find VE sessions in my local area?" in Part 2 because more information is available via UseNet.

** What are the tests like?
First off, come prepared to VE sessions. Bring: TWO forms of ID, one of which has a picture on it; a calculator (if necessary); a pen and two pencils; the applicable examination fee (around $5-$6 for 1993); the original AND a copy of your current Amateur Radio license (if you have one); the original AND a copy of any CSCEs for tests you've already passed (if you have any).

Each of the written tests (Novice, Technician, General, Advanced, and Extra) are generally a multiple choice test of approximately one-tenth of the question pool. For example, if the question pool is approximately 300 questions, then the test will be a 30-question test. You need to get 75% correct to pass. Note that they truncate to determine the correct number of questions. That means for a 30 question test, you need to get 22 right, which is actually only 73.3%.

Once you've paid the small fee for Technician-Extra tests, it costs no extra to take another test, so I'd suggest you keep taking the next more advanced test until you fail. If you pass the written but not the Morse code (or vice versa) for a specific class license, you have up to one year to take the other test before you would have to retake the written test again. Note that some VEs will not allow you to take the written test unless you've first taken the Morse code test.

The Morse code test is a receiving test only. The test run 5 to 7 minutes. After the test, you are given a 10-question multiple-choice or fill-in-the-blank test. Passing grade is 7 or more. If you fail the 10-question test, the examiner team will examine your copy sheet to see if you have 1 minute of solid copy with no errors. For 5 wpm, that's 25 characters, for 13 wpm, that's 65 characters, for 20 wpm, that's 100 characters. If they can find 1 minute solid copy, you've still passed.

Hints on Morse code tests: Generally, it will be a standard QSO (conversation), and it MUST contain at least one of each of the following:
26 letters A-Z, 10 numbers 0-9, comma (,), period (.), slant or slash (/), question mark (?), double dash prosign (BT), end of message prosign (AR), end of contact prosign (SK).
The letters count as one character, all others count as two characters. There are a couple other prosigns which are worth knowing, but will not be on the test, like "I'm done talking, next" is K, "I'm done talking, back to you" is KN, "Please wait" is AS.

** What can I do with a ham radio license?
There are so many things, it's a difficult question to answer, but here's some ideas:
* Talk to people in foreign countries.
* Talk to people (both local and far away) on your drive to work.
* Help in emergencies by providing communications.
* Provide communications in parades or walkathons.
* Help other people become hams.
* Hook your computer to your radio and communicate by computers.
* Collect QSL cards (cards from other hams) from all over the United States and foreign countries and receive awards.
* Participate in contests or Field Day events.
* Provide radio services to your local Civil Defense organization thru ARES (Amateur Radio Emergency Service) or RACES (Radio Amateur Civil Emergency Service).

* Aid members of the US military by joining MARS (Military Affiliate Radio System).
* Participate in transmitter hunt games and maybe build your own direction-finding equipment.
* Have someone to talk to on those sleepless nights at home.
* Receive weather pictures via satellites.
* Build radios, antennas, learn some electronics and radio theory.
* Talk to astronauts in space, or use the moon to bounce signals back to people on the Earth.
* Experiment with Amateur TV (ATV), Slow-Scan TV (SSTV), or send still-frame pictures by facsimile.
* Experiment with amateur satellite communications.

** What can't I do with an Amateur Radio license?
The most important thing you can't do is transact business of any kind over ham radio. Interference to other hams or services, as well as obscene, profane or indecent language is not tolerated and is illegal. Music and broadcasting are not allowed on ham radio. Some personal conversations may not be appropriate to Amateur Radio. Do you really want the whole world to hear about Aunt Mabel's hemorrhoids?

** I'm interested, who will help me?
There are hams who are willing to become "Elmers" (mentors, helpers) in your local area. Look around and ask local hams. Search out local radio clubs. As well, some people have volunteered to be an Elmer over the Usenet. A list of UseNet Elmers and their e-mail addresses is posted to the newsgroup monthly. If anyone wants to be an Elmer, send e-mail to
elmers-request@unomaha.edu

There is also a lot to be said for exploring on your own. Take a look around the FTP archives and e-mail servers listed in Part 2. There's so much out there on UseNet, you'll find plenty of things you're interested in.

** Should I build my own equipment or antenna?
[see also rec.radio.amateur.homebrew and rec.radio.amateur.antenna]
"Homebrewing" is a fun and educational part of ham radio. It is a thrill to build your own transmitter and put it on the air. However, building your own receiver can be quite complicated; if you don't have electronics experience, you may want to buy a receiver instead. Most homebrew transmitters are QRP (transmit very low power). That's fine for an experienced ham with a very good antenna, but a Novice ham will just get frustrated. Your first rig, therefore should NOT be a home-brew.

Antennas can be much simpler projects than the transceiver, though some types are also quite involved. Most hams build their own antennas for base station use and buy antennas for mobile (car) use. Most beginner ham books describe how to build different types of antennas. Order of difficulty, from easiest to more difficult, for some common

antennas are: wire dipole, Zepp, Yagi, Quad, and Log-Periodic. Books from many sources, including ARRL and several Hams, discuss antennas in depth.

When building or even understanding antennas, it is good to know the relationship between the antenna element length and the frequency or wavelength it is designed for. An antenna performs best at multiples of 1/4 of that wavelength, though 5/8 wave also has beneficial qualities. The wavelength is related to the frequency with the following formula:

wavelength (in meters) = 300 / frequency (in megahertz)

You do not need a huge antenna or tower like ones you may see around your neighborhood. Large beam antennas and 40-foot towers are very expensive. As a beginner, a simple dipole antenna is perfectly adequate. As you gain experience (and money :-), you may want to invest in something bigger.

If you can afford new rigs and antennas, there are many mail order stores that advertise in ham radio magazines. If you want to buy a used rig, the best place is at a "hamfest" (ham flea market). You should take along an experienced ham, since some of the used equipment may be inoperative, overpriced or poor quality. You can also answer ads in ham magazines or posted at ham radio stores, although often, by the time you call, the equipment has already been sold.

3341. rec.radio.amateur.misc Frequently Asked Questions (Part 2 of 3)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 01:41:02 UTC
From: ikluft@kluft.com
Message-ID: <ham-radio-faq-2-764905255@kluft.com>
Source record: 269293
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

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Posted-By: auto-faq 3.1.1.4
Archive-name: radio/ham-radio/faq/part2
Revision: 3.3 1994/02/09 01:33:36

Rec.radio.amateur.misc Frequently Asked Questions
Part 2 - Amateur Radio Organizations, Services, and Information Sources
------------------------------------------------------------------------------

Questions discussed in Part 2: (dates indicate last modification)
** Where can I find Ham Radio information with a computer? (11/92)
* The rec.radio.* newsgroups (2/94)
* The ARRL e-mail server (1/93)
* The KA6ETB e-mail "HAM-server" (2/94)
* The Internet File Transfer Protocol (FTP) (2/94)
* Access to FTP archives via electronic mail (1/93)
* World-Wide Web, WAIS, and Gopher (2/94)
* The Ham-Radio mail list: rec.radio.amateur.misc by mail (9/93)
* Telephone BBS's with Ham-related information (9/93)
* Callsign servers and geographical name servers (1/94)
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** Are there Dialup News services or BBSs for Amateur Radio? (4/92)
** Where can I find VE sessions in my local area? (9/93)
** Why isn't XXX available electronically? (1/94)
** I'd like to volunteer to help ham radio through electronic
information services like those mentioned in this FAQ list.
Where should I start? (2/94)

--Rec.radio.amateur.misc Frequently-asked Questions------------------Part 2--
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** Where can I find Ham Radio information with a computer?
This question has many answers spanning several electronic media including UseNet, electronic mail, the Internet, dialup bulletin board systems (BBS) and others. Various electronic information sources are summarized under the subheadings that follow.

All electronic mail addresses listed are in Internet format. If your site is not connected to the Internet and does not support Internet-style mail addresses, you will need to contact either your system administrators or a local "guru" to find out how or if you can send mail to the sites listed. Ask them, "how can I get mail to the Internet?" and show them the address you're interested in.

* The rec.radio.* newsgroups
The primary distribution mechanism for this FAQ is UseNet. There are several newsgroups dealing with Amateur Radio and other aspects of radio. The full list is as follows:

rec.radio.amateur.misc (*) Ham Radio - misc/general topics
rec.radio.amateur.antenna Ham Radio - antenna construction/theory
rec.radio.amateur.equipment Ham Radio - manufactured equipment/mods
rec.radio.amateur.digital.misc Ham Radio - digital radio modes: packet/AMTOR/RTTY/etc (formerly r.r.a.packet)
rec.radio.amateur.homebrew Ham Radio - radio experimentation, kits
rec.radio.amateur.policy Ham Radio - policy & regulation
rec.radio.amateur.space Ham Radio - satellites, EME, shuttle/MIR
rec.radio.broadcasting public broadcast radio
rec.radio.cb Citizens' Band Radio
rec.radio.info (*) periodic info from all rec.radio groups
rec.radio.noncomm misc non-commercial radio topics
rec.radio.shortwave Shortwave Radio
rec.radio.scanner Utility Radio above 30Mhz
rec.radio.swap radio equipment wanted and for sale

Country- or region-specific newsgroups include the following:
aus.radio Australia (misc radio topics)
aus.radio.amsat Australia (amateur satellites)
aus.radio.packet Australia (packet radio)
de.comm.ham Deutschland/Germany
fj.comm.ham Japan
uk.radio.amateur United Kingdom
in.ham-radio USA, Indiana
sbay.hams USA, CA, South Bay Area/Silicon Valley
triangle.radio USA, NC, Research Triangle area

This FAQ is cross-posted to the newsgroups marked with asterisks (*). It is also cross-posted to rec.answers (the archive for FAQs in the rec.* newsgroups) and to news.answers (UseNet's general repository for FAQs.) These should be the first places to look for new current copies of the FAQ.

Most of the rec.radio newsgroups have their own FAQs as well.

* The ARRL e-mail server
ARRL is the American Radio Relay League, representing and promoting
Amateur Radio in the USA. They have established an automated file
server which responds to information requests via electronic mail.
To use the server, send mail to info@arrl.org with any number of
one-line commands in your message. Valid commands are as follows:

help sends more detailed instructions about the e-mail server
index sends a list of the files currently available
send file sends a file (replace "file" with the file's name)
several files are referenced by name in parts of this FAQ
quit ends command processing - use it if a signature will be
appended to your message

The server program will respond to the commands, each in a separate
message. Among many other informative files, a current copy of the
FAQ (updated monthly) can be obtained from the ARRL e-mail server.
Other parts of this FAQ refer to specific files on the ARRL server.

* The KA6ETB e-mail "HAM-server"
Steve Harding KA6ETB has an e-mail server on his 386 PC at home with
over 40 megabytes of Ham Radio-related files (at the time of this
writing.) You can request any of those files with an e-mail message
to the HAM-server at ham-server@grafex.sbay.org. This site
has a mostly-different selection of files than the ARRL, though some
overlap is unavoidable. The HAM-server seems to have more emphasis
on MS-DOS programs and binary files though there are many plain-text
articles as well.

Use these commands to send requests to the KA6ETB HAM-server.
HELP instructions and info about the HAM-server
INDEX list of files available from the system
GET <file> send a file (see the HELP notes for more info on
getting binary files in uuencode or xxencode format)
NEWFILES <date> list of new files since the given date
PING used for testing your path to the HAM-server, it just
sends a simple reply so you can look at the path data
QUIT makes the HAM-server stop reading the message (so it
won't try to read your .signature)

* The Internet File Transfer Protocol (FTP)
Sites connected to the Internet can access large amounts of data
almost anywhere in the world, often at high speeds. One common way
to transfer the data you want is FTP. Some sites offer a service
called "anonymous FTP" which allows remote users to access a set of
public files without requiring a password.

Perry Rovers coordinates a fairly definitive list (formerly
maintained by Tom Czarnik) of anonymous FTP sites, their IP
IP numbers, time zones, general contents, and access policies
which he posts to several newsgroups, including comp.archives,
comp.sources.wanted and news.answers. It is itself available
via anonymous FTP (how about that?? :-) from (among other places)

rtfm.mit.edu under directory /pub/usenet/news.answers/ftp-list.

For specific information about exact locations of files by name,
the Archie database server may be of help. First check if anyone has
installed the "archie" program on your machine and use it. Archie may
also be accessed by telnetting to one of many sites. The list
of archie sites is numerous and growing fast. For a current
list of sites, telnet to archie.sura.net (login "archie"), then
please use the one closest to you to conserve network bandwidth.

For those without telnet capability, the database may be accessed non-
interactively via mail server. Send E-mail with the word "help" to
archie@host where host is one of the Archie sites above.

The above two resources (the FTP list and the Archie server) are
extremely powerful tools for finding out "what's out there" at various
FTP sites around the world. *PLEASE* exhaust their capabilities
before posting requests to the net.

The following is a brief summary of major ham-related FTP sites and
places where you can obtain a current copy of this FAQ:

ftp.cs.buffalo.edu
(submissions to this ftp site should be made to
bowen@cs.buffalo.edu) - Contains many ham radio files,
including the FAQs, Elmer list, SWL and scanner info, Packet
FAQ, examination opportunities, information on various
regulations, information on commercial radios (i.e. GE or
Motorola), SSTV (slow-scan TV), HTs (handheld transceivers).
Recently, the rec.radio.amateur Working Group (rra-wg,
see below for more information about their mailing list)
has started to encourage archivers of radio modification
instructions to mirror them at this site. In this way,
maintainers may come and go but the collection of
mods will remain continuously available (and undergo
constant positive growth). This FAQ is updated monthly
here.
grivel.une.edu.au
This site contains a mirror of ftp.cs.buffalo.edu's Ham Radio
archives. It provides a shorter distance if you're in
Australia or if Australia is a shorter net.path for you than
New York.
nic.funet.fi
This is one of the largest FTP sites in Europe and maybe the
most popular. There are many directories of Ham-related files
in /pub/ham. /pub/ham/info contains a mirror of Buffalo.
Other topics available here include amiga, antenna, HF, packet,
satellite, scanners, program sources, VHF and others.
This site is also one of the article archives for the
rec.radio.info newsgroup.
ftp.uu.net
A large FTP site in the USA - UUNET contains sources and

binaries for many different types of computers.
wuarchive.wustl.edu
A "mirror" of the files that were on the now-defunct
wsmr-simtel20.army.mil FTP site, plus a *LOT* more.
If you are on a Unix box locally, see if your system
administrator will "NFS-mount" these files for faster/
easer access.
ucsd.edu
The "home" site (with the most recent versions for the largest
number of different computer platforms) of the KA9Q TCP/IP
Network Operating System (NOS), other ham-related software,
and the archives for the Info-Hams, Packet-Radio, Ham-Policy,
Radio-Info and TCP-Group digests.
vixen.cso.uiuc.edu
cd pub/ham-radio - This site contains the HyperCard Hamstacks
written by Diana Carlson as well as ASCII readable ham radio
question pools.
ftp.apple.com
cd pub/ham-radio - Ham software and information, especially
Macintosh software
wolfen.cc.uow.edu.au
athene.uni-paderborn.de
ham radio files and software for the Amiga computer system
rtfm.mit.edu
cd pub/usenet/news.answers - all participating FAQs and
periodic informational postings are archived here, including
those from the rec.radio.* newsgroups which can be found in
pub/usenet/news.answers/radio. Participating FAQs are
automatically archived here when they are posted on UseNet.
ftp.amdahl.com
cd pub/radio/amateur - the most up-to-date copy of the FAQ
(updated nightly when changes are made)
world.std.com
This site contains many ham radio related programs and
documents. It also is the only FTP-able site containing
up-to-date copies of the files also available via e-mail
on the ARRL's information server.

See also the file FTP-INFO on the ARRL e-mail server.

If you experience difficulty connecting to the above FTP sites, some
troubleshooting hints are shown below. The unfortunate situation here
is that Netnews is far more prevalent than direct Internet hookups,
accurate name servers, smart mailers and routers, and of course,
telnet and FTP client services. What this means is that your trouble
may be caused by MANY factors.

Here's some hints to check what's wrong:
* It may very well be that your newsfeed and email are via dialup line
and UUCP (Unix-to-Unix copy) in the wee hours of the morning. If
this is the case, then you have no direct connection to the Internet

and thus cannot use real-time interactive services like FTP and
telnet.
* If you are at a college or university, your host (ie, the computer
you are logged onto) may be on the Bitnet network, which has an
email gateway to the Internet, but no direct connect capability.
* If you do have a direct connection to the Internet, does your host
have telnet and/or FTP client programs? (ie, if you type "ftp" or
"telnet" at your command prompt, do you get anything?) Many hosts,
particularly IBM mainframes not running Unix, do not support these
services!
* Can you telnet to other hosts and get a login prompt?
It may very well be that some hosts are "not recognized" due to
misconfigured connections and inaccurate host tables/name servers
(*.mil computers are *NOTORIOUS* for this!)
* If you get "host not in host table" or "host unknown" or similar
error, try telnetting via the IP number, a set of four 1-3-digit
numbers separated by periods (eg, 198.137.220.1). The exact IP
number for the site can be obtained via the nslookup utility, if
your computer supports it. (The FAQ does not print IP addresses any
more because they change so often.) Your system may not recognize
the "fully-qualified domain name" (like callsign.cs.buffalo.edu),
but it should ALWAYS recognize an IP number if their network is
reachable from yours.
* If you get "network unreachable" check with some more knowledgeable
users if your site is actually connected to the Internet. If it is,
a link in the network may be temporarily disconnected for maintenance
(or by accident.)
* In the case of telnetting to a non-default port (as in the case
with the callbook servers), if telnet <host> <port#> doesn't work,
but you can telnet to the default login port (ie, no qualifiers),
then the manner at which the port qualifier is entered may be
system dependent. Also, at many education sites, it is common
practice to block telnet connections above TCP socket 1000 or
so in a somewhat misguided attempt to block usage of
"recreational" TCP socket applications such as Multiple User
Dungeons (MUD's) or Internet Relay Chat (IRC). In most cases,
a polite word to the system administrators, pointing out
the worthwhile services available on sockets 2000 and 3000
will get telnet service unblocked, at least for those ports.
* Syntax for telnetting from different operating systems differ.
Some common command syntaxes are: (angle brackets are for
readability, do not type these in literally)
Berkeley Unix or VMS with Wollongong TCP/IP uses syntax:
telnet <host> <socket#>
Other possibilities to try:
telnet console <host> (for 2000 port)
telnet <CR> open <host>:<port#>
telnet <host>/<port#>
telnet <host>/port=<port#> (for Multinet on VMS)
* Compression techniques are different for different operating systems.

However, these hints should help:
foo.sit needs Macintosh UnStuffit to unstuff
foo.hqx needs Macintosh BinHex to uncompress
foo.tar needs Unix or GNU tar utility to extract archived files
foo.Z needs Unix 'uncompress' to uncompress or VMS
compress_vms.exe (on gatekeeper.dec.com) will work too.
foo.z needs the GNU gzip utility (from prep.ai.mit.edu) to
uncompress it. gzip will also uncompress *.Z files.
If more than one method was used,
like for foo.hqx.Z, start at the outside and work in (so uncompress
on Unix with 'uncompress' first, transfer to MacIntosh, then
uncompress with BinHex to get uncompressed file).
* There is an excellent introduction to FTP and archiving software
regularly posted to comp.binaries.ibm.pc and news.answers.
* If all else fails, ASK your system administrator or check system
documentation.

* Access to FTP archives via electronic mail
ANY BITNET, EARN, or NorthNET site can access the Princeton mail
server. It will be most efficient if you know the complete path
and filename for anything you wish to transfer, but you can use
'cd' and 'ls -l' commands to move about and browse the remote site's
directories. The Archie database server may also be useful to search
for files and their directory locations on FTP sites around the world
(see below). Please be patient when using non-interactive mail
servers such as BITFTP as each request may take several hours (or
longer) to be fulfilled.

For access to the FTP server, send email to bitftp@pucc.bitnet (for
BITNET, EARN and NorthNET users ONLY!). Subject doesn't matter.
The text of the email is the FTP commands one after another. For
example, suppose you wanted to access the FTP site lcs.mit.edu:
FTP lcs.mit.edu
USER anonymous
PASS yourname@yoursite (not required)
ASCII
CD telecom-archives
GET filenames
BYE
A help file is available giving detailed instructions by putting
the single word HELP into the text of the email.

For nonBITNET users, there is also a FTPMAIL server at
ftpmail@decwrl.dec.com. Commands include: REPLY <mailaddr>,
CONNECT [HOST [user [pass]]], ASCII, BINARY, COMPRESS, COMPACT,
UUENCODE, BTOA, LS <directory>, DIR <directory>, GET <file>, QUIT,
HELP. Get the help file for more information by sending mail with
the single line "help". The ftpmail site may complain if you try
try to get more than 1 file per email request. Here is an example of
a request:
reply your_name@your_site

```
connect vixen.cso.uiuc.edu
binary
uuencode
get pub/ham-radio/extra-pool.txt
quit
```

A note on the use of FTP mailservers: If you want to use FTP mailservers, like FTPMAIL, please be considerate of any systems that your mail must pass through. The quickest way to find yourself cut off from the world is to make the admins of sites that pass your mail pass 60Mb of X11 graphics system source. If you need large amounts of information from a mailserver, contact your admin for help -- it may already be available, or he may know a better way to get it.

* World-Wide Web, WAIS, and Gopher
A new generation of information retrieval tools exploded into great popularity on the Internet in 1993. They are the gopher protocol, wide-area information server (WAIS) and World-Wide Web (WWW). They are indeed complete topics of discussion unto themselves which can be found, among other places, in the following newsgroups:

```
comp.archives
comp.infosystems.announce
comp.infosystems.gopher
comp.infosystems.wais
comp.infosystems.www
```

Please read those newsgroups if you have questions about the software or how to use it.

At the current rate of growth, we can never hope to list all the servers. We would like cooperation from people who assemble WWW servers to add references to other useful Ham Radio information available at other WWW, gopher, WAIS, and FTP sites. That way the FAQ can direct readers to servers that can reference more servers with more information than we can include on a periodic UseNet posting.

Some useful URLs (uniform resource locators) which can be used with WWW are as follows:
file://ftp.cs.buffalo.edu/pub/ham-radio Buffalo FTP files via WWW
file://rtfm.mit.edu/pub/usenet/radio/ham-radio Ham Radio FAQs & info
wais://rtfm.mit.edu/usenet/radio all radio FAQs & info
http://www.acs.ncsu.edu/HamRadio NC State HamRadio WWW Server
http://gluon.imsa.edu/~scott/hamradio.html Experimental WWW Page

Although still very much works-in-progress, the last two URL's are excellent examples of WWW servers with numerous references to other resources.

* The UCSD Ham-Radio mail list: rec.radio.amateur.misc by mail
You can use rec.radio.amateur.misc even if your site has no NetNews feed. To subscribe to rec.radio.amateur.misc, send email to:
Ham-Radio-Request@ucsd.edu

In the body of the message, write:
subscribe Ham-Radio
If your local e-mail software does not provide a valid return address
(i.e. Bitnet, many Milnet sites, and many non-Unix e-mail packages)
you can provide your return address between the "subscribe" and the
name of the mailing list (i.e. "subscribe myname@here.org Ham-Radio".)

Similarly, to subscribe to some other rec.radio.* newsgroups, use
the following directions: (all addresses here are @ucsd.edu)
Request address List address Newsgroup
Ham-Radio-Request Ham-Radio rec.radio.amateur.misc
Ham-Digital-Request Ham-Digital rec.radio.amateur.digital.misc
Ham-Policy-Request Ham-Policy rec.radio.amateur.policy
Ham-Equip-Request Ham-Equip rec.radio.amateur.equipment
Ham-Ant-Request Ham-Ant rec.radio.amateur.antenna
Ham-Homebrew-Policy Ham-Homebrew rec.radio.amateur.homebrew
Ham-Space-Request Ham-Space rec.radio.amateur.space
Radio-Info-Request Radio-Info rec.radio.info

IMPORTANT NETIQUETTE NOTE: never ever send a request to subscribe
or unsubscribe from *any* mail list to the list itself. Always use
the REQUEST address. Otherwise you'll end up broadcasting your
request to everyone on the list and getting lots of people angry at
you. (Seriously - this is a completely avoidable mistake and it
does irritate a lot of people.)

TO UNSUBSCRIBE, follow directions above, changing the command word
"subscribe" to "unsubscribe"
DON'T POST TO THE NEWSGROUP ITSELF! USE THE REQUEST ADDRESS!
Help is available by using the command word "help". Note that command
words MUST be the first word on each line of the message.

You can post to rec.radio.amateur.* by sending your posting email to
the mail list addresses at ucsd.edu. Since rec.radio.info is a
moderated newsgroup, requests to post to it may be sent to Radio-Info
but they will be mailed to the moderator,
rec-radio-info@ve6mgs.ampr.ab.ca, for posting.

All of the Amateur radio newsgroups are archived for FTP on ucsd.edu
under subdirectory mailarchives/{mail-list-name}. However, Radio-Info
is not archived at UCSD because almost everything is either on one of
the other lists or in the news.answers archives at rtfm.mit.edu
(see also funic.funet.fi above).

To subscribe to rec.radio.shortwave, send email to
listserv@cuvma.columbia.edu, message is "subscribe swl-l (your name)"

* Telephone BBS's with Ham-related information
Among many, a large one is WB3FFV. Use 8/N/1. The phone numbers are
(410)-661-2475 1200-38400/MNP5/V32bis/V42bis
(410)-661-2598 1200-38400/MNP5/V32bis/V42bis/PEP
(410)-661-2648 1200-19200/MNP5/V42bis/PEP

Login is bbs, no password. This BBS is also available via UUCP,
login is uucpanon, no password. For a list of available files, try:
uucp wb3ffv!~/FILES /usr/spool/uucppublic

Another one is N8EMR at phone 614-895-2553, login hbbs. Data settings
are 8 bits, NO parity, 1 stop bit. N8EMR has a comprehensive list of
other ham-related BBS's on-line.

ARRL has a BBS called "HIRAM", named after the League's founder.
The number is 203-666-0578. More information can be obtained from
the file ARRL-BBS on the ARRL e-mail server.

For a more complete list of Ham Radio BBS's, see the file BBS on
the ARRL server. See also the file BBS_LIST.TXT on the KA6ETB
HAM-server. Also see many of the FTP sites listed earlier in this
section. There is now way to keep a list like this anywhere near
up-to-date so giving you a lot of sources is the next-best thing!

* Callsign servers and geographical name servers
We know of online callsign servers for the USA, Canada and UK.

If you are at an Internet site you can connect using telnet to the
following callbook server (covering the USA and Canada):
callsign.cs.buffalo.edu

There is also a general geographical name server at
martini.eecs.umich.edu

For the UK, you can use a WWW client to access the following URL:
http://www.mcc.ac.uk/htbin/callbook

The callbook server sits on port number 2000 and the geographical
name server sits on port 3000. These are different port numbers
than what telnet usually defaults to. So if you just telnet to these
machines, you will get a login prompt instead of the server. How you
tell your telnet program to connect to port 2000 or 3000 instead of
the default port is operating system dependent but it is usually done
with a line like

telnet callsign.cs.Buffalo.edu 2000

If this doesn't work, check the telnet/FTP troubleshooting hints
above or consult your local systems guru for the proper command string.

The interactive servers are designed to be somewhat self-explanatory
and they support fairly detailed help facilities. The first command
you should execute when connecting to one of these servers is "info".
This will list general info about that server and how to use it. You
should then type "help" to list the various commands available.
Typing "help" followed by a command name will give you a little more
detail about that command. Servers allow searches by call, last name,
zip code or city and also provide regular expression filters to trim
your searches so you get a reasonable amount of output.

Both these servers are built from a database distributed by Rusty Carruth, N7IKQ. This database currently contains US and Canadian callsigns and it does not contain club calls. A new version of the database is sent around approximately once a year.

There is also an email callsign server at callbook@sat.datapoint.com (The UUCP address is ...!uunet!dptspd!callbook). In the body of the text, say "lookup" followed by callsigns you want to look up. If your mailer appends signature files, you should put a line "quit" at the end of your request (before the signature file). If you want help, put the word "help" on a line by itself. Here is what a request might look like:

```
help
lookup kc1sp wn4bbj
lookup n0fzd
quit
```

There is another email callsign server at callbook@n8emr.cmhnet.org. The subject line is the list of callsigns to lookup. All other lines are ignored. This same callsign server can be accessed with packet radio via cbook@n8jyv.#cmh.oh.usa.na. The body of the message should include "REPLY n8jyv!HOME_BBS!CALL" (where HOME_BBS is YOUR home BBS, and CALL is YOUR callsign), carriage return, "CALL call1 call2 ..." (where call1 call2 .... is space separated list of callsigns you want to lookup).

If you are a packet radio station, callserver data is available from REQQTH@WA4ONG.VA.USA.NA, subject line should be up to 5 US callsigns, separated by spaces. For Canadian calls, use the callserver at REQQTH@VE3JF.ON.CAN. Body of message is ignored. The server is an OS interface to the MBL packet BBS using the Buckmaster CD-ROM callsign database.

The FCC "call sign hotline" at 717-337-1212 is available for those who wish to listen to the call signs allocated in each group for each district. This requires only a touch-tone telephone to use.

* FTP access to FCC Part 97 and FCC Amateur Radio question pools
Part 97 is part of the FCC regulations and only applies to the USA. As of 1/94, a current copy can be found at ftp.cs.buffalo.edu in the /pub/ham-radio directory.

An ASCII copy of the question pools are available by ftp from the ARRL e-mail server.

* Lists of radio modifications and extensions
[see also rec.radio.amateur.equipment]
The largest collection of mods data that we know about is kept at ftp.cs.buffalo.edu in the /pub/ham-radio/mods directory. The maintainer of this archive strongly encourages all existing archivers of mods to mirror their collections on this site. in this way, maintainers will come and go, but the collection of mods will remain stable and accessible.

There is a packet radio Mods Server. To get the directories, send
a packet as follows:
SP REQFIL@N2IMC.NJ.USA.NA
Subject: MODS\Dir.1
/EX
To get the mod, send to same place, with Subject MODS\Filename.ext.

REMEMBER that any modification is likely to void your warranty and
that these mods are NOT guaranteed to work. This list is supplied
here because it is a frequently-asked question on the newsgroup.

** Can I send ARRL or W5YI electronic mail?
Several ARRL HQ staffers can be contacted via the net. Their e-mail
addresses are available from the ARRL e-mail file server in the
file called "EMAIL".

ARRL requests that you include your postal address (the slow kind) in
case they need to send you nonelectronic material in answer to your
request.

W5YI, a large VEC, can be reached at the following address:
Fred Maia, W5YI 3511297@mcimail.com

** "Why doesn't the ARRL do...?"
If you want the ARRL to do something, tell them! Direct input from a
concerned member (or, actually, any concerned Ham) carries a lot more
weight than hearsay from any source. Their e-mail addresses are
available from the ARRL e-mail file server (see above). They want
direct input - that's why those addresses are available.

** What magazines are available for Ham Radio?
Your local ham store may have some, but here's some popular ones
(this is NOT a complete list!):
QST, ARRL, 225 Main St, Newington, CT 06111 - basic projects and
contesting
CQ The Radio Amateur's Journal, 76 North Broadway, Hicksville, NY
11801 - beginner ham radio articles
73 Amateur Radio Today, WGE Center, Forect Rd, Hancock, NH 03449,
FAX (603) 525-4423, email: COMPUSERVE 70310,775 or Internet
70310.775@compuserve.com - more technical ham radio articles
QEX, ARRL, 225 Main St, Newington, CT 06111 - more technical projects
WorldRadio, 2120 28th St, Sacramento, CA 95818, (916) 457-3655.
Subscriptions to 201 Lathrop Way, Ste D, Sacramento, CA 95815,
(800) 365-SUBS - lots of special interest columns, like QRP,
ATV, YL, etc.
W5YI Report, PO Box 565101, Dallas, TX 75356, 1-800-669-9594 -
up-to-date information on Amateur Radio happenings, including
VE information and statistics

** How do I use the incoming and outgoing QSL bureau?
To use the outgoing QSL bureau, you must be a member of ARRL. In
general, you send a bundle of foreign (not States!) QSL cards to
the outgoing bureau in Newington, Connecticut, along with a label

off of your QST magazine (which shows ARRL membership), along with $2 per pound of cards (approximately 150 cards) or $1 for 10 cards or less.

To use the incoming QSL bureau, you do NOT have to be a member of ARRL. Send one or more Self-Addressed Stamped Envelopes (size 5x7 or 6x9, NO BIGGER, NO SMALLER) with one ounce of postage attached and with your callsign in 3/4" letters in top left hand corner where the return address label would go. If you expect a large quantity of foreign QSL cards, attach extra money or postage with a paper clip; do NOT affix extra postage to envelope. Send the envelopes to the QSL bureau for your callsign area. If your callsign is xx3xxx/5, you would send it to the 3rd call area, NOT the 5th call area. Addresses for QSL bureaus are listed in QST and on the ARRL e-mail server (see below); if you don't have access to a QST magazine, ask another ham. IMPORTANT: BE PATIENT! Turnaround time for a US QSL bureau, not considering foreign QSL bureaus, is about 3 months. Foreign QSL bureaus and hams can be as fast as 2 months or as slow as TEN YEARS, while average is about 6-12 months.

Addresses for the US incoming and outgoing QSL Bureaus are available from the ARRL e-mail server in the files called "QSL-IN" and "QSL-OUT". See the question above

** Are there any news groups for CAP?
There is no news group just for Civil Air Patrol discussions. However, rec.aviation.misc is appropriate for CAP aviation discussions and for CAP radio information, these rec.radio.amateur.* groups are available. CAP-related files are also stored on the FTP site sunburn.cps.udayton.edu in pub/capital.

** What's the name of the QRP club that issues QRP numbers?
QRP Amateur Radio Club International, c/o Bill Harding K4AHK, 10923 Carters Oak Way, Burke, VA 22015.

See also the file QRP-ADDRESSES on the ARRL e-mail server.

** How do I become a 10-10 member?
10-10 is simply an organization to sponsor the use of the 10 meter band. It was first conceived when propagation was poor on 10 meters, as a method to get more hams to use 10 meters. The past few years have been great for 10 meters worldwide. However, "the bands are closing down" again, and 10 meters will once again be limited more for local communications, except for sporadic band openings, until the next sunspot cycle.

To join 10-10, work ten 10-10 members and LOG each 10-10 number, call sign, operator's name and location. Send the list to your numeric call sign or DX area manager (as shown below), with $5.00 U.S. new membership registration fee ($6.00 for foreign addresses).

10-10 International Area Managers:
USA 1 - Al Kaiser N1API, 194 Glen Hills Rd, Meriden, CT 06450

USA 2 - Larry Berger WA2SUH, 9 Nancy Blvd, Merrick, NY 11566
USA 3 - Chester Gardner N3GZE, 9028 Overhill Dr, Ellicott Cty,MD 21042
USA 4 - KY, TN, FL, VA, NC, SC only
Rick Roberts N4KCC, 7106 Ridgestone Dr,Ooltewah, TN 37363
USA 4 - GA, AL, Puerto Rico only
Jim Beswick W4YHF, 112 Owl Town Farm, Ellijay, GA 30540
USA 5 - Grace Dunlap K5MRU,* Box 445, LaFeria, TX 78559
*summer addr Jun-Oct Box 13, Rand, CO 80473
USA 6 - Dick Rauschler W6ANK, 4371 Cambria St, Fremont, CA 94538
USA 7 - Willie Madison WB7VZI, 10512 W Butler Dr, Peoria, AZ 85345
USA 8 - John Hugentober N8FU, 4441 Andreas Ave, Cincinatti, OH 45211
USA 9 - Jim Williams N9HHU, 240 Park Rd, Creve Coeur, IL 61611
USA 0 - Debbie Peterson KF0NV, RR 1 Box 35, Duncombe, IA 50532
All DX- Carol Hugentober K8DHK,4441 Andreas Ave, Cincinatti, OH 45211

For more info, see the file 10-10-INFO on the ARRL e-mail server.

** How do I join MARS?
To join MARS, you have to be 14 years or older (parental consent required under age 17), be a US citizen or resident alien, possess a valid Amateur Radio license, possess a station capable of operating on MARS HF frequencies, and be able to operate the minimum amount of time for each quarter (12 hours for Army and Air Force; 18 hours for Navy-Marines). Novices must upgrade to Technician within 6 months, else be dropped from MARS. No-Code Techs can apply, provided they have transmit and receive HF capability for MARS frequencies (they don't need transmit capability for Amateur HF frequencies). For application forms contact:

Chief, Air Force MARS
HQ AFC4A/SYXR
203 W. Losey St. Room 1020
Scott AFB, IL 62225-5219
(618)256-5552 Fax: (618) 256-5126

Chief, US Army MARS
HQ USA Information Systems Command
ATTN: ASOP-HF
Ft. Huachuca, AZ 85613-5000
800-633-1128

Chief, Navy-Marine Corps MARS
Naval Communication Unit
Washington, DC 20397-5161

** How do I join RACES?
Contact your nearest Civil Defense or Emergency Management Agency. The Radio Amateur Civil Emergency Service is a part of a municipal, county, or state government. This does not mean, however, that every such government has a RACES program. If your government does not have a RACES, ask them to refer you to the nearest jurisdiction that does have a RACES program.

** What organizations are available to help handicapped hams?
Courage Center
Handihams
2915 Golden Valley Rd
Golden Valley, MN 55422
(612) 520-0515
ARRL has a Handihams information package (get it by requesting it through 2155052@mcimail.com) and a book called "The ARRL Plan for the Disabled", available at no charge from the ARRL Regulatory Information Branch.

** I am looking for a specific ham, can anyone help me find him?
Rather than sending out a message on Usenet, you might first try the "Radio Amateurs on Usenet" listings, maintained and posted by Mark Salyzyn VE6MGS. The articles can be found monthly on rec.radio.info and rec.radio.amateur.misc. If the copy in your news spool has expired for some reason, you can look up an entry in the list by sending an e-mail to reqnet@ve6mgs.ampr.ab.ca with either of the following commands in the body of the message:
lookup keyword keyword keyword ...
return user@machine.subdomain.domain
(Fill in the proper info for the search keyword or e-mail address.)
An automated server program will reply to your message.

If you have his/her callsign or name, you should also try one of the on-line callservers shown above. This works in most cases. (!!!)

Also try directory assistance from the phone company or the locator service provided by the Salvation Army. A Salvation Army post in your local area may be able to help you. Also, the Quarter-Century Wireless Assn maintains a collection of callbooks going back to "the beginning of time". Their address is: 1409 Cooper Drive, Irving, TX 75061. Also, the Callbook has a dial-in line for accessing new ham callsigns. Try (1-708-234-8011) at 2400 baud.

** Can I post my neat new ham related program on rec.radio.amateur.misc?
This is really not a good idea, since many of the readers receive these newsgroups as mail digests. Posting is also a one-shot thing. If you post and someone missed it, it is gone. A better way would be to announce the existence of your program here, along with information on how to obtain a copy of your program. You can also submit it to one of the FTP archive sites, which will allow the world to access it without you having to mail it to each requestor. If you just GOTTA post it somewhere, post it to more appropriate groups, like comp.sources.unix or alt.sources or comp.binaries.ibm.pc.

** Where can I get ham radio software for my computer?
See the information about Anonymous FTP, e-mail servers, and ham-related telephone BBS's above. For PC-clones, see the KA6ETB HAM-server. For Macintosh computers, see the file SOFTWARE-MAC on the ARRL e-mail server for locations to look.

** Are there Dialup News services or BBSs for Amateur Radio?
There are two major news services for ham radio. Both are run by volunteer hams and provide bulletins of specific interest to amateurs, hence they are perfectly legal to rebroadcast on ham bands according to FCC Regulation 97.111B(6). To lessen the load on the dialup lines, consider getting your local repeater operator to rebroadcast it, or tape record it to play at your favorite HF net.

RAIN (Radio Amateur Information Network) is produced by Hap Holly, KC9RP, located in Illinois. The news is typically updated 8am CST Fridays. Phone numbers are 1-708-299-INFO (299-4636) and 1-708-827-RAIN (827-7246).

NEWSLINE is another, produced by Bill Pasternak, WA6ITF. Donations for NEWSLINE are accepted at Newsline Support Fund, c/o Dr. Norm Chalfin K6PGX, Pasadena, CA 91102. Phone numbers are:
Chicago 1-708-289-0423
N.Florida 1-407-259-4479
West Palm Beach 1-407-965-1234
Los Angeles 1-805-296-2407 (Instant Update Line)
Los Angeles 1-213-462-0008
NYC 1-718-353-2801
Ohio 1-513-275-9991
Seattle 1-206-368-3969

** Where can I find VE sessions in my local area?
VE sessions are often announced in the local newspapers, but more often, they are announced by local radio bulletin boards. The local packet BBS will most likely have a monthly updated schedule for VE sessions. ARRL or W5YI can generally be called and asked for local VE sessions as well. Don't forget that you will need the following when you go in for an upgrade: a copy of your current Amateur license; your original Amateur license; any CSCEs (duplicate not required), if applicable and less than a year old; a picture ID, preferably a driver's license, passport or visa; and the VE test fee (approximately $5 right now).

Bart Jahnke, KB9NM, the ARRL VEC Manager (bjahnke@arrl.org) posts a listing of VE exams indexed by state (and some overseas sites, usually at embassies and military bases) to the net every 6 weeks or so. The same list can be obtained from the ARRL e-mail server under the file EXAM-SCHEDULE. Another file of interest is EXAM-INFO.

The ARRL list is the definitive list for ARRL VEC sessions. There are other smaller VECs around the USA. ARRL includes their schedules when the info is available. The other VECs phone numbers are listed with the ARRL info so you may wish to give them a call to check their schedule if they didn't provide it to ARRL.

** Why isn't XXX available electronically?
This is a theme for a lot of common questions. For the "XXX" above, substitute any of the following:
Callbooks

DX QSL Lists
Radio station lists
various publications
and more...

Except for the Callbook (via callsign servers), these are not available because of any of several reasons. Either there are copyright restrictions, royalty fees, or the source just may not have done the work. Also, not everyone that has information has reliable UseNet access.

** I'd like to volunteer to help ham radio through electronic information services like those mentioned in this FAQ list. Where should I start?
This FAQ would not be complete without a reminder that useful resources on the net do not grow on trees, they are the work of many dedicated volunteers. The rec.radio.amateur.* newsgroups are very fortunate to have quite a number of such volunteers providing everything from FAQ lists to telnettable callsign servers. This doesn't mean, however, that there isn't room for more information and services from additional volunteers. One such service would be more detailed FAQ lists for the recently--created special-interest rec.radio.amateur.* newsgroups (such as those for antennas, homebrew electronics, equipment and ham radio in space) to supplement this general FAQ.

Recently an electronic mailing list for amateur radio FAQ maintainers, archive custodians, service providers, and other volunteers was set up. It is the rec.radio.amateur.* Working Group (rra-wg). Anyone with a sincere interest is welcome to subscribe by sending E-mail to rra-wg-request@amdahl.com. The readers of that forum would be more than happy to provide advice and guidance with regard to an existing information project, or even suggest a new one to fill a currently-unmet need.

3342. rec.radio.amateur.misc Frequently Asked Questions (Part 3 of 3)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 01:41:08 UTC
From: ikluft@kluft.com
Message-ID: <ham-radio-faq-3-764905255@kluft.com>
Source record: 269232
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.answers,news.answers

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Posted-By: auto-faq 3.1.1.4
Archive-name: radio/ham-radio/faq/part3
Revision: 3.0 1993/11/07 18:39:26

Rec.radio.amateur.misc Frequently Asked Questions
Part 3 - Amateur Radio Advanced and Technical Questions
------------------------------------------------------------------------------

Questions discussed in Part 3: (dates indicate last modification)
** What are the different US amateur classes and what can each of them do?
(pre-4/92)
** What is the best way to learn Morse Code? (10/92)
** What is the standard for measuring Morse code speed? (pre-4/92)
** What is the standard phonetic alphabet? (new 9/93)
** I'm confused. What do all those abbreviations mean??? (6/93)
** What do all those "tones" mean? (pre-4/92)
** Where can I learn more about Amateur Radio if I live outside the US?
(9/93)
** How can I get a "reciprocal license" if I am a licensed ham from another
country or if I am a FCC licensed ham who wants to operate in another
country (on vacation)? (9/93)
** My apartment or housing complex does not allow outdoor antennas, now what
do I do? (9/93)
** I got TVI...HELP!!! (9/93)
** On what frequencies do JPL and GSFC retransmit the shuttle audio?
(10/92)
** Can I take my HT on an airplane and operate it if I get the permission
of the captain? (4/92)
** How do I modify my current Amateur license? (9/93)
** I'm confused about XXX, should I ask the FCC? (9/93)
** Is there any information on antique radios? (pre-4/92)
** Where can I buy vacuum tubes? (9/93)
** What do I need to get started in packet radio? (9/93)
** What do I need to get started in satellite communications? (9/93)
** What is available to get started in ATV, SSTV and WEFAX? (9/93)
** What are these contests I sometimes hear, and how do I participate? (9/93)

--Rec.radio.amateur.misc Frequently-asked Questions------------------Part 3--

** What are the different US amateur classes and what can each of them do?
Novice - has CW (Morse code) privileges on 4 HF bands (80, 40, 15,
and 10 meter), Voice privileges on 10 meters, and privileges
on 2 VHF/UHF bands (220 MHz and 1290 MHz).
Required are 5 wpm Morse code test and 30-question Novice test.
```

Technician - has full privileges on all VHF/UHF bands above 30 MHz.
Required are Novice test and 25-question Tech test.
Technician may access Novice HF bands by passing the 5 wpm Morse
code test.
General - has all Technician privileges, plus larger access to more
HF bands, including CW and Voice on 160, 80, 40, 30, 20, 17, 15,
12, and 10 meter bands. A General class amateur can give Novice
tests.
Required are 13 wpm Morse code test, Novice, Tech and 25-question
General test.
Advanced - has all General privileges, plus wider band access on 80,
40, 20, and 15 meter bands. An Advanced class amateur can
also become a VE and give tests to Novice and Tech tests.
Required are 13 wpm Morse code test, Novice, Tech, General and
50-question Advanced test. The Advanced test is the most difficult
of the five written tests.
Amateur Extra - has full privileges on all amateur bands. An Extra
can become a VE and give all amateur tests.
Required are 20 wpm Morse code test, Novice, Tech, General,
Advanced and 40-question Extra test.

** What is the best way to learn Morse Code?
This is becoming an increasingly common question as many "no-code"
Technicians realize they can add more privileges to their license if
they learn Morse Code. The following list of suggestions should
be helpful in finding ways to approach the effort.

* Listen to code at a rate faster than you can copy.
* Participate in Novice-Roundup and/or Field Day. Practice whenever
you get the chance!
* Avoid the "deciphering" plateau around 5 WPM and and character
plateau at 10 WPM by listening to the fast Farnsworth-paced
"beat" of each letter and the "beat" of common words. (See the
question on Morse code speed for more information on Farnsworth
pacing.)
* Practice to develop a "copy buffer" so you copy about 5 characters
behind. (This is not easy but it's how the higher speeds are done.)
* Practice both with headphones and "open-air" copy as the code test
may be in either format. (If you only practice one, you may fumble
on the other.)
* Most of all, don't give up! Recognize when you reach plateaus
and keep trying until you break through them.

** What is the standard for measuring Morse code speed?
The word PARIS was chosen as the standard length for CW code speed.
Each dit counts for one count, each dash counts for three counts,
intra-character spacing is one count, inter-character spacing is three
counts and inter-word spacing is seven counts, so the word PARIS is
exactly 50 counts:

```
PPPPPPPPPPPPP AAAAA RRRRRRRRR IIIII SSSSSSSSS
. - - . . - . - . . . . . .
1 1 3 1 3 1 1 3 1 1 3 3 1 1 3 1 1 3 1 1 1 3 1 1 1 1 1 7 = 50
^ ^ ^
^Intra-character ^Inter-character Inter-word^
```

So 5 words-per-minute = 250 counts-per-minute / 50 counts-per-word or one count every 240 milliseconds. 13 words-per-minute is one count every ~92.3 milliseconds. This method of sending code is sometimes called "Slow Code", because at 5 wpm it sounds VERY SLOW.

The "Farnsworth" method is accomplished by sending the dits and dashes and intra-character spacing at a higher speed, then increasing the inter-character and inter-word spacing to slow the sending speed down to the desired speed. For example, to send at 5 wpm with 13 wpm characters in Farnsworth method, the dits and intra-character spacing would be 92.3 milliseconds, the dash would be 276.9 milliseconds, the inter-character spacing would be 1.443 seconds and inter-word spacing would be 3.367 seconds.

** What is the standard phonetic alphabet?
Though no standard phonetics are required on amateur radio, good operating procedures include using the standard phonetic alphabet to help communicate more clearly. The recommended phonetics are those also in use by aviation (internationally by ICAO treaty) and some militaries (in most English-speaking countries.)
alfa bravo charlie delta echo foxtrot golf hotel india juliet kilo lima mike november oscar papa quebec romeo sierra tango uniform victor whiskey x-ray yankee zulu

The numbers are spelled differently to suggest a particular pronunciation. Also, nine was changed to "niner" to avoid confusion with the German word "nein" for "no", though that change is not commonly used by Hams. (Usually you'll only hear "niner" from Hams who are also pilots.)
zero one two tree fower fife six seven eight niner

When first making contact with another Ham, it is a good idea to say callsigns in phonetics to give the other side a better chance of understanding them correctly.

** I'm confused. What do all those abbreviations mean???
AM Amplitude Modulation
AMSAT Amateur Satellite Corporation [see rec.radio.amateur.space]
AMTOR Amateur Teleprinter Over Radio. A more sophisticated version of RTTY. Also used commercially as SITOR (Simplex Teleprinter Over Radio). [see rec.radio.amateur.digital.misc]
ARRL American Radio Relay League
ATV Amateur Television - a way to see who you're talking to!
CAP Civil Air Patrol is a volunteer organization that searches for downed aircraft and missing kids and uses frequencies just outside of the ham bands and often uses modified Amateur radios
CB Citizen's Band radio, this is NOT part of Amateur Radio and

does not require any license to operate [see rec.radio.cb]
CQ An on-the-air request for a conversation with anyone
"dupes" A dupe sheet is a duplicate check sheet, in matrix format, used
to quickly check that you have not had a "duplicate" contact
with someone (on a specific band or mode) in a contest
Elmer An amateur radio mentor, or "Master Craftsman" to a new ham.
Could refer to anyone, regardless of age or gender.
FCC Federal Communications Commission, the "law enforcers"
FM Frequency Modulation
FieldDay A June activity to practice emergency communications for
24 hours....wives call it 'an exercise in male bonding' :-).
HF High Frequency - 3 MHz to 30 MHz
HT Handy-Talky, a shorthand for "hand held radio"
LF Low Frequency - 30 kHz to 3 MHz
MARS Military Affiliate Radio System, military affiliated Amateurs
who provide free communications for overseas GIs and other
Federal services. MARS operators are licensed under DoD
instead of FCC.
NTS National Traffic System, a way to send radiograms
OF Old Friend, or Old F#$%, used to denote an older ham
OM Old Man, refers to any ham, including female hams
packet computer bulletin boards/electronic mail via Amateur Radio
[see rec.radio.amateur.digital.misc]
PRB Private Radio Bureau, administers Amateur and CB services
QSO One of the Q signals used in Morse code to mean "conversation"
QCWA Quarter Century Wireless Association, membership means you've
been a ham for more than 25 years
RTTY Radio Teletype - older form of computer communications on HF
[see rec.radio.amateur.digital.misc]
SAREX In Amateur Radio talk, Shuttle Amateur Radio EXperiment, a
chance to talk to astronauts in space. In CAP talk, Search
and Rescue EXercise, practicing for the real thing.
[see rec.radio.amateur.space]
SK Silent Key, a nice polite way to say a ham has passed on "to
that great antenna farm in the sky"
SSB Single Side Band - need less band width than AM or FM
SSTV Slow Scan TeleVision - REALLY slow, low data rate, typically
used on the lower frequency bands
SWL shortwave listening [see rec.radio.shortwave]
UHF Ultra High Frequency - 300 MHz and above
ULF Ultra Low Frequency - 30 Hz to 300 Hz
VHF Very High Frequency - 30 MHz to 300 MHz
VLF Very Low Frequency - 300 Hz to 30 kHz, audio frequencies
WARC World Administrative Radio Conference, a summit meeting that
occurs every few years, required by international treaty to
determine how the spectrum get sliced up to all vying
communications services (last one was in 1992)
XYL eX-Young Lady, or wife
YL Young Lady, non-ham girlfriend or female ham
2m Shorthand for "2 meters" (144-147.995 MHz), which is a

reference to the wavelength of a common Amateur frequency
band used for local communications

** What do all those "tones" mean?
Sub-Audible Tone: A low tone that you're not supposed to be able to
hear. It's used as a "PL Tone." PL is "Private Line", a trademark
of Motorola for their implementation of CTCSS (Continuous Tone Coded
Squelch System). Basically, the transmitter sends the signal with
the Sub-Audible tone and the receiver only opens when it hears signals
with that tone. Signals without the proper tone are ignored. This
is useful for "closed" repeaters, or for repeaters on the same
frequency that have overlapping geographic areas.
Tone encode refers to the feature of providing the tone on transmit.
Tone decode refers to the feature of responding to the tone on receive.
Tone squelch refers to all of the above. DTMF refers to Dual Tone
Multi-Frequency, or "Touch Tone" which is a trademark of AT&T. DTSS
probably means Dual Tone Squelch System and refers to the feature of
providing a predefined sequence of Touch Tone digits to open the
repeater for transmit. DTSS is an alternate method from CTCSS, which
provides a way to use a "closed" repeater even if your radio doesn't
do Sub-Audible Tones.

** Where can I learn more about Amateur Radio if I live outside the US?
First, check if there is a Ham Radio-related newsgroup specific to
your country. See the country-specific newsgroups in "the rec.radio.*
newsgroups" in Part II of this FAQ.

Also, write to the ARRL and ask. They can usually tell you how to get
a license in your country. See also the ARRL e-mail server. (Details
are in Part 2.)

If you know of any location where this information is available
electronically, whether by an e-mail server, anonymous FTP, or a
contact person, please mail it to us so we can include it here. Send
it to hamradio-faq@amdahl.com.

** How can I get a "reciprocal license" if I am a licensed ham from another
country or if I am a FCC licensed ham who wants to operate in another
country (on vacation)?
Editor's note (11/92): the regulations affecting this question are
being changed. Contact your local Volunteer Examiner (VE) and ask
about a VE 60-day pass. More details will be included in future
revisions of the FAQ.

This paragraph is soon to be obsolete:

You need to submit a FCC Form 610-A to the FCC, PO Box 1020,
Gettysburg, PA 17326. They will then send you a reciprocal permit
for alien amateur licensee (FCC Form 610-AL). You must be a citizen
of a country with which the United States has arrangements to grant
reciprocal operating permits to visiting alien Amateur operators.

This information is still current:

For FCC licensed hams operating abroad, the following guidelines apply:
* A reciprocal license is required in all foreign countries (that have a reciprocal operating agreement with the US), except Canada, where the FCC license is automatically valid.
* Send a SASE to ARRL Regulatory Information Branch, telling them which country you are going to visit and they will send you the info and an application form. Foreign hams can likewise request information from their national Amateur radio society.
* Submit your application with a certified copy of your Amateur license (ie, notarized copy), and fee if applicable (use a bank draft of a bank that does business in that country) to the appropriate licensing administration of the foreign country. Processing may take 30 to 90 days.
* If less than one month, you could try sending the application and pick up the permit upon arrival in that country.
* Most countries will not allow you to bring communications equipment into their country without a license or permit. If you applied, but haven't received the permit yet, show the copy and your FCC license to the customs officer, however, the equipment may still be held at customs until your departure.
* Be sure to use only those frequencies covered by your FCC license which are also used in the foreign country, unless otherwise authorized.

See also the file RECIP-OP on the ARRL e-mail server. (See Part 2.)

** My apartment or housing complex does not allow outdoor antennas, now what do I do?
[see also rec.radio.amateur.antenna]
First of all, don't despair. Many hams have similar problems. Many books offer advice for the growing group of hams that cannot put up antennas. Some options are:
* Install an "invisible" antenna made of magnet wire.
* Disguise an antenna as a flag pole.
* Install an antenna in the attic.
* ASK the apartment manager. You may find they will let you put up something as long as it "is invisible" or "doesn't disturb your neighbors" or "doesn't attract lightning".
* Operate primarily from your car.
* If the restriction is due to local ordinance, you may have relief via PRB-1. Meet with the local government and seek an informal compromise. It is possible to win in court...but it's expensive and time consuming.
* If you are restricted by "covenants" attached to the deed of your home, your options are severely limited. Covenants are considered to be private, voluntary contracts between individuals and are outside of the intended application of PRB-1. In many cases, you can petition the Homeowner's Association for an exception. Sometimes you can win in court on the basis that other violations of the covenants by others without action taken constitutes abandonment of the agreement.

* For further information, contact the General Consel's office of the ARRL, 225 Main St, Newington, CT 06111.

See also the file ANTS-INDOOR on the ARRL e-mail server.

** I got TVI...HELP!!!
Here's some hints on Television interference, but this is not a complete list. There are also books on the subject available from ARRL.
* If cable TV is an underground feed, look for central distribution box. Check for a grounding rod.
* Try installing torroids on the cable TV cable close to the TV, and maybe torroids on the AC cord as well.
* VCRs are notorious for RF leakers, try disconnecting the VCR.
* Check to see if interference is better or worse when cable is disconnected and you use rabbit ears instead. It could be the cable company's problem!
* Calling the cable company may get results, since they are also responsible for RF leakage from their equipment. However, they are very often obstinate. Good luck! Try some or all of these suggestions before calling the cable company:
1. Log the interference, noting geographical location, frequency, and characteristics.
2. Bring it to the cable company's attention in writing, preferably addressed to "Chief Engineer", or "Technical Staff".
3. Don't be accusatory, instead ask for assistance in resolving the problem. Try to work it out with someone technically knowledgeable.
4. Do mention your "licensed radio system", but try not to be too specific about "ham" or "CB" unless requested.
* Try moving the radio antenna further away from the TV sets. Make sure the SWR is LOW.

See also the series of files on the ARRL e-mail server on various aspects of electromagnetic interference. The filenames start with "EMI-" like EMI-CATVI (cable TV), EMI-GEN (general notes on EMI), EMI-AUDIO (interference to audio devices), etc.

** On what frequencies do JPL and GSFC retransmit the shuttle audio?
[see also rec.radio.amateur.space]
Station VHF 10m 15m 20m 40m 80m Video
WA3NAN 147.45 28.650 21.395 14.295 7.185 3.860
W6VIO 224.04 21.280 14.282 7.165
K6MF 145.585 7.165 3.840
W5RRR 146.64 28.495 21.350 14.280 7.227 3.850
W6FXN (temporarily out of service - looking for new frequency)
KA9SZX 146.88 426.25
K4GCC 146.94
WA4VME 145.17
W6TRW 145.32

All frequencies are in MHz. Use FM on VHF, USB on 10-20m, LSB on
40-80m.
WA3NAN - NASA Goddard Space Flight Center (GSFC), Greenbelt, MD
W6VIO - NASA Jet Propulsion Laboratory (JPL), Pasadena, CA
K6MF - NASA Ames Research Center (ARC), Moffett Field, CA
W5RRR - NASA Johnson Space Center, Houston, TX
W6FXN - Los Angeles, CA
KA9SZX - Champaign-Urbana, IL
K4GCC - Titusville, FL (near or at Kennedy Space Center)
WA4VME - Melbourne, FL (near or at Kennedy Space Center)
W6TRW - TRW ARC, Redondo Beach, CA (shuttle audio may be overridden
by repeater usage)

** Can I take my HT on an airplane and operate it if I get the permission
of the captain?
Technically, maybe. But don't count on it. In general, you can't use
a radio or scanner on an airline (or charter) *unless* the airline
allows it and the pilot-in-command (PIC) determines that it will not
interfere with the instruments and radios on that specific aircraft.
Very few US airlines allow passengers to use radios so be ready to
disconnect the antenna when you ask. (Don't even ask to transmit.)
For reference (in the US) the pertinent portion of the Federal Aviation
Regulations (FARs) is Part 91, paragraph 91.21.

Due to airport security, you may have a little difficulty carrying the
HT (or any electronic equipment) onto the airplane. Generally, you
can appease the security guards, simply by showing that the unit is
operational and doesn't have a bomb inside. For a radio, just turning
it on and opening the squelch satisfies them. Expect more difficulty
during periods of increased security.

On a private airplane, it is legal to operate an amateur radio if you
have the permission of the PIC. It is still possible for the radio to
interfere with the plane's navigation or communication equipment, so
be sure to ask first. Always obey the requests of the PIC. He knows
his airplane and radios better than you do.

** How do I modify my current Amateur license?
To modify your license (change of address, change of station location,
change of name, renewal, or even change of callsign), submit an FCC
Form 610 to the FCC. Forms are available from the FCC or ARRL or a
local VE session or ham radio store. Do NOT use a photocopy. Check
off the appropriate boxes, fill in the new/changed information, SIGN
THE FORM, and attach a copy of your current license (or a brief letter
of explanation for its absence, ie, "my dog ate it"). NOTE: If you
check the box to change your callsign, YOU WILL GET A NEW CALLSIGN,
even if all you wanted was to supply a new address; if you want to keep
your callsign, DON'T CHECK THAT BOX. Send the form to FCC, POB 1020,
Gettysburg, PA 17326. Turnaround time (for CURRENT licensees only)
is about 2-4 weeks.

ANY ham can apply for a new callsign (this is different from the past
where you can only get a new callsign if you move or upgrade). You

can't specify WHICH ONE you want, a new one comes from the same pool as new licensees for that class of license. The callsign is based on your mailing address. For overseas military and civilians, be sure to specify a station location that is within FCC jurisdiction.

New licenses are for 10-year terms. If you apply for renewal before its expiration date, the expired license is valid for 60 days after expiration to allow for the new license to arrive. You have up to 2 years after expiration (5 years for an old 5-year license) to renew before re-examination is required (but you can't operate with an expired license). You will lose your current callsign after 1 year after expiration if you don't renew.

For more information on FCC Form 610, see the file FCC-610-INFO on the ARRL e-mail server. (See Part 2 for details.)

** I'm confused about XXX, should I ask the FCC?
[see also rec.radio.amateur.policy]
Whatever "XXX" is in this case, the overwhelming ARRL and net opinion is a resounding "NO!", at least not as a first step. Amateurs are generally very law-abiding people and have historically written the FCC asking for clarification on some operating practice or another. This is a very dangerous practice, for several reasons.

Most amateur radio regulations (contained in Part 97) are generally very loosely-worded, so as not to restrict experimentation and new techniques. But asking the FCC for a clarification will set in motion the process of "clarifying" it for everyone (i.e. new rulemaking.)

Examples of such restrictive rulings include varying topics like when Hams can help non-profit agencies or effectively forcing packet BBS sysops to screen messages before forwarding them. They were the result of well-intentioned questions by Hams that forced the FCC to make a ruling where they previously allowed the amateur radio community to police itself.

Under all circumstances, it is better to first read the rules yourself. Then, if there's a problem, ask your national amateur radio organization (such as the ARRL in the US) which can give qualified advice about interpretation of FCC regulations. Organizations like the ARRL also have the influence to ask the FCC informally, without forcing a ruling.

Even if asking the FCC doesn't result in a restrictive ruling, it is generally a good idea to not overburden an under-staffed and under-funded government agency with a lot of correspondence. The Amateur Radio Service has traditionally been a low-workload "hands-off" service, and has enjoyed a wide latitude from the FCC. Please don't ruin this image for your fellow amateurs.

For more discussion on how and when to contact the FCC, see the file FCC-CONTACTING on the ARRL e-mail server. (See Part 2 for details.)

** Is there any information on antique radios?
Antique radio classifieds: ARC, PO Box 802-B6, Carlisle, MA 01741 -
old radios, TVs, ham equipment, 40s and 50s radios,
telegraph, books, etc.
Hallicrafter Service manuals: Ardco Electronics, PO Box 95, Dept Q,
Berwyn, IL 60402
Antique Wireless Association, Bruce Kelley, W2ICE, Route 3, Holcomb,
NY 14469 - sponsors the Wireless Museum

** Where can I buy vacuum tubes?
Kirby, 298 West Carmel Drive, Carmel, IN 46032 (1-317-843-2212)
Antique Electronic Supply, Box 1810, Tempe, AZ 85281 (1-602-894-9503)
Fair Radio Sales, Box 1105, Lima OH 45802
Fala Electronics, Box 1376-1 Milwaukee, WI 53201
Southern Radio Supply, 1909 Tulane Ave, New Orleans, LA 70112
(10504-524-2343)

See also the file VACUUM-TUBES on the ARRL e-mail server. (See Part 2)

** What do I need to get started in packet radio?
[see also rec.radio.amateur.digital.misc]
Packet radio is a digital form of communication using radios. There
are OTHER digital forms, as well, like CW, RTTY and AMTOR. To use
packet radio, you'll need a radio (2 meters and 70 centimeters are
most popular), a box that converts radio signals to digital signals
that a computer can understand (called a TNC or terminal node control-
ler) and a computer or terminal. For some computers or TNCs you may
need special software as well. However, most TNCs and computers get
along quite well with just a terminal emulator software package. Most
personal computers can be interfaced to use with packet radio. Since
there are many digipeaters, generally even an HT will work with
packet radio.

Your first source of information on Packet Radio should be the
rec.radio.amateur.digital.misc newsgroup. It has its own regularly-
posted FAQ that goes into much more depth on the subject than this
one can. See also the mailing list and archives info in Part 2.

For more information on packet radio, you might try TAPR (Tucson
Amateur Packet Radio), PO Box 12925, Tucson, AZ 85732 (602-749-9479).

See also the files PACKET-INTRO, PACKET-NEW, and PACKET-GLOSSARY on
the ARRL e-mail server or the directory /hamradio/packet on the
KA6ETB e-mail HAM-server. (See Part 2.)

** What do I need to get started in satellite communications?
[see also rec.radio.amateur.space]
For more information about Amateur Satellite Communications, try
AMSAT (Radio Amateur Satellite Corporation), PO Box 27, Washington,
DC 20044 (301-589-6062). They also have an international net on
Sundays on 14.282 MHz at 1900Z.

ARRL publishes a book on this subject: The Satellite Experimenter's
Handbook. Ham Radio stores in your area may either have it or be

able to order it. Or you can order it direct from ARRL.

See also the contents of the directory /hamradio/satelite on the KA6ETB e-mail HAM-server. The ARRL e-mail server has a bibliography on satellite materials in the file SATELLITES-B.

** What is available to get started in ATV, SSTV and WEFAX?
This is a large subject area in itself. Amateur Television (ATV), Slow-scan TV (SSTV), and Weather FAX (WEFAX) all deal with transmitted pictures. (ATV includes moving pictures and audio just like your household TV.)

Equipment is available to interface to most common microcomputers including PC clones, Amigas (which are prominent in most video applications anyway), Atari ST, and others. (At last check, we didn't see Macintosh on the list.) There are also a handful of publications on the subject.

All this information is available via FTP in the /pub/ham-radio directory at ftp.cs.buffalo.edu. (See Part 2 for more information on FTP.) The file called sstv_wefax_info is maintained by John Langner WB2OSZ (johnl@avs.com).

The ARRL e-mail server contains an introduction to SSTV in the file SSTV-INFO. (See Part 2 for more information on the ARRL e-mail server.) There is a bibliography of ATV articles from QST in the file TV-B. (See Part 2 for details.)

The KA6ETB e-mail HAM-server has files on SSTV and WEFAX in the directory /hamradio/sstvfax.

Another resource is the regularly-posted UseNet Elmers Directory. The list contains a volunteer Elmer who can help with ATV, SSTV, and WEFAX questions.

** What are these contests I sometimes hear, and how do I participate?
Dozens of contests are held each year, usually at weekends, and can provide useful operating experience. They typically last for 24 or 48 hrs, and are usually on SSB or CW only (the Russian CQ-Mir contest is on both modes at the same time). You can participate by making one QSO or several thousands. In most contests you send a signal report (traditionally 59 or 599) followed by a number that is different for different contests - the most common one is a serial number (so you send 599 001 for your first QSO, then 599 002 etc). The exchange may, however, be your age (All Asian contests), your CQ or ITU zone (CQWW and IARU contests, respectively), your state (ARRL contests) or something else. Read "Contest Corral" in QST for the rules for all major contests - the more serious contester may wish to subscribe to the National Contest Journal, or join the e-mail contest mailing group (write to Trey, WN4KKN, at garlough@tgv.com). Knowing the rules can prevent embarrassment - you will get a cool reception if you are a W or VE and call a W/VE in the ARRL contests, since they can only work non-W/VE stations. Otherwise, QSOs made in contests are just as

valid for DXCC (DX Century Club - more than 100 contacts), WAS (worked all states) and other awards as are 30-minute ragchews. Although not strictly a contest, the annual Field Day provides very useful operating experience under less than optimal conditions and is highly recommended for new operators - check with your local club for their Field Day plans some weeks before the (late June) event.

For more information on contests, the ARRL e-mail server has the following files: CONTESTS-93 (as of this writing, substitute current year), CONTEST-LOGS (for contest log formats), FORM-10M (10m contest entry form), FORM-VHF (VHF contest entry form), and others.

3343. Daily Summary of Solar Geophysical Activity for 26 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 02:07:16 UTC
From: oler@rho.uleth.ca
Message-ID: <9403290207.AA22830@rho.uleth.ca>
Source record: 269294
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

26 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 26 MARCH, 1994

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 085, 03/26/94
10.7 FLUX=088.5 90-AVG=105 SSN=039 BKI=2323 1211 BAI=007
BGND-XRAY=A7.5 FLU1=2.8E+06 FLU10=1.7E+04 PKI=2233 2322 PAI=009
BOU-DEV=017,022,014,031,009,21583,005,006 DEV-AVG=2710 NT SWF=00:000
XRAY-MAX= B3.8 @ 1503UT XRAY-MIN= A5.3 @ 0703UT XRAY-AVG= B1.2
NEUTN-MAX= +002% @ 1150UT NEUTN-MIN= -002% @ 2155UT NEUTN-AVG= -0.0%
PCA-MAX= +0.1DB @ 2255UT PCA-MIN= -0.5DB @ 1615UT PCA-AVG= -0.0DB
BOUTF-MAX=55343NT @ 0550UT BOUTF-MIN=55320NT @ 1806UT BOUTF-AVG=55334NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+078,+000,+000
GOES6-MAX=P:+122NT@ 1753UT GOES6-MIN=N:-083NT@ 0519UT G6-AVG=+096,+023,-041
FLUXFCST=STD:090,090,090;SESC:090,090,090 BAI/PAI-FCST=010,010,020/010,015,020
KFCST=2104 5011 2104 5011 27DAY-AP=007,008 27DAY-KP=1233 2120 1133 2123
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 25 MAR 94 was 45.0.
The Full Kp Indices for 25 MAR 94 are: 3+ 2- 3- 3- 3+ 3+ 3o 3-
The 3-Hr Ap Indices for 25 MAR 94 are: 20 6 11 13 20 18 16 12
Greater than 2 MeV Electron Fluence for 26 MAR is: 1.6E+08

SYNOPSIS OF ACTIVITY

Solar activity was very low. The only x-ray flare of the
past day was a B3 (no optical) at 26/1503Z. All sunspot regions
currently on the disk are small and relatively inactive.

Solar activity forecast: solar activity is expected to be
very low.

The geomagnetic field was quiet to unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled, becoming active by 29 March
due to a recurrent disturbance.

Event probabilities 27 mar-29 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 27 mar-29 mar

A. Middle Latitudes
Active 15/15/25
Minor Storm 10/10/25
Major-Severe Storm 05/05/10

B. High Latitudes
Active 15/15/25
Minor Storm 10/10/25
Major-Severe Storm 05/05/10

HF propagation conditions were normal over all regions.
No changes are expected until 29 March when minor signal
degradation may begin to be observed over some higher latitude
night-sector paths.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 26/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7692 N18W73 160 0020 HRX 01 001 ALPHA
7694 N10E16 071 0010 BXO 05 004 BETA
7695 S16E29 058 0020 BXO 03 004 BETA
7696 S17W08 095 PLAGE
REGIONS DUE TO RETURN 27 MARCH TO 29 MARCH
NMBR LAT LO
7687 N18 338
7685 S08 342
7689 S10 324
7690 S14 326

LISTING OF SOLAR ENERGETIC EVENTS FOR 26 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 26 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 26/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
25 Mar: 0809 0821 0903 B1.4

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Uncorrellated: 0 0 0 0 0 0 0 0 001 (100.0)

Total Events: 001 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ --------------------------
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3344. Re: CALLBOOK ON INTERNET

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 02:54:44 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCnEo38.LJ5@netcom.com>
Source record: 269295

In article <1994Mar28.133651.340@pacs.sunbelt.net> ddepew@CHM.TEC.SC.US writes:
>I have heard that there are several Callbook databases available
>through the net, but have been unable to locate any. If you have
>one that you like to use, please let me know by E-Mail. Thanks.
>
>Dorr Depew
>N4QIX

What capabilities do you have? Gopher, WWW (World Wide Web) and/or LYNX,
telnet?

For US calls, try: telnet callbook.cs.buffalo.edu 2000

For international info. please e-mail me.

73,
Scott

--
```
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
================================================================================
```

3345. FT-530 MOTD (Measurement of the Day -- Intermod!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 02:58:46 UTC
From: kennish@kabuki.EECS.Berkeley.EDU
Message-ID: <2n85h6$9vp@agate.berkeley.edu>
Source record: 269296
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

OK, UHF measurements for sensitivity and intermod....

Raw F3E sensitivity (opens squelch set at threshold):

UHF receiver (right side):

Freq (MHz) Pin (dBm)

300 -83
315 -96
330 -105
345 -111
360 -117
375 -122
390 -122
405 -121
430 -122
445 -122
460 -120
475 -119
490 -115
500 -114

VHF receiver (left side):

PLL does not lock for 300 MHz:

Freq (MHz) Pin (dBm)

300 x
315 -74
330 -74
345 -77
360 -71
375 -84
390 -100
405 -100
430 -118
445 -122
460 -115
475 -105
490 -104
500 -104

TTID (Twin Tone Intermod)

f1 = 445 MHz, f2 = 446 MHz, tune 447 MHz for 3rd IM:

breaks squelch at -66 dBm on UHF side, -69 dBm on VHF side.

f1 = 475 MHz, f2 = 460 MHz, tune 445 MHz for 3rd IM:

breaks squelch at -59 dBm. NO VHF side measurement (sorry).

What this means: For best IM rejection, listen to UHF on the VHF side! As advertised in the manual, cross band RX has a narrower range, and hence better out of ham band IM rejection. Didn't test this on the bench, sorry, but remember that 1 dB of RF attenuation drops the 3rd IM products by 3dB......

More numbers when I have time, next will be VHF sensitivity and IM rejection, followed by UHF+ (800 MHz) measurements.

People that are dying for a particular measurement can mail me and I will try to set it up.

-Ken

p.s for those that must know, my FT-530 has the Jumper 13 mods done, and the serial number begins with 3D131...

3346. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 03:48:08 UTC
From: mcduffie@unlinfo.unl.edu
Message-ID: <2n88do$3qb@crcnis1.unl.edu>
Source record: 269297

dhughes@prairienet.org (Dan Hughes) writes:

>I just passed my no-code test last week, and have been listening to some
>ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
>of the most disgusting language I've encountered anywhere. One guy was
>spouting one obscentity after another, and three other guys were laughing
>at his inept signal and giving it right back to him. All but the
>instigator were regularly giving their calls. Is this pretty much what I
>have to look forward to?
>--

There are frequencies where that will happen. More accurately, there
are people with whom that will happen. As the saying goes, if you
don't like what you hear, spin the dial again. There's plenty of good
stuff out there. Hunt for it, and don't let a few people ruin your
entry into this great "hobby".

73 (and congrats!),
Gary

3347. Re: 10M indoor problem.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 03:58:59 UTC
From: wrt@eskimo.com
Message-ID: <CnEr2n.3B3@eskimo.com>
Source record: 269298

In article <CnDL5M.sC@gdss.grumman.com>, <higniro@gdss.grumman.com>
wrote:
>In article <1994Mar27.181416.165@news.unr.edu> destree@unr.edu (Louis
Destree) writes:
>> I recently bought a HTX-100 (no equipment flames please...buying
>>the FT-990 would keep me from continuing school), and have set it up
with
>>a "V" type 1/2 wave indoor antenna. I have not been able to talk to
>>anyone from my apartment yet. However, I have had good results (when
the
>>band is in) from a measly 1/4 wave mag mount on my car.
>>
>> The building I live in is made of stucco, with (I'm reasonably
>>sure) chicken wire in the walls. Most stucco buildings I've seen have

>>this wire in the walls. I am curious if the wire is acting as an
>>attenuator. If anyone has had a similar experience, let me know.
>>
>> Yes, it is possible for me to put the antenna outside. However,
>>rather than having people lining up at my door complaining of TVI, I
>>wanted to keep everything indoors.
>> Thanks!
>> Louis
>>
>>--
>>Louis A. Destree University of
Nevada, Reno
>>destree@equinox.unr.edu <> destree@equinox.bitnet Electrical
Engineering
>>Amateur Radio: N7XNX (General Class) Bike: 1980 Honda
CB750C
>> "When things go from bad to worse, the cycle will repeat itself!"
>
>
>The trick to TVI complaints from neighbors is to put up the external
>antenna and not operate for 30 days or so. This will weed out the true
>TVI problems and problem neighbors......
>
>Rod - KB3MK

Chicken wire is a RF killer for sure. KB3MK's suggestion is a good one,
but second best is an attic antenna (above the chicken wire!). A 10
meter dipole will fit easily and work like a charm. Just keep it away
from anything metal and if there are phone wires, etc, try to run it ant
a 90 degree angle to them if possible. I worked DXCC with 100 watts and

an attic antenna. Have fun!

73 es gl

Bill, W7LZP

3348. Re: CALLBOOK ON INTERNET

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 04:11:06 UTC
From: wrt@eskimo.com
Message-ID: <CnErML.41F@eskimo.com>
Source record: 269299

In article <1994Mar28.133651.340@pacs.sunbelt.net>,
DORR DEPEW <ddepew@CHM.TEC.SC.US> wrote:
>I have heard that there are several Callbook databases available
>through the net, but have been unable to locate any. If you have
>one that you like to use, please let me know by E-Mail. Thanks.
>
>Dorr Depew
>N4QIX

I know of one: telnet to callsign.cs.buffalo.edu 2000 and do the usual readmes, etc. This is FCC data only, so no furriner info available. If anyone knows of others, I'd like to know about 'em too.

73 es gl

Bill, W7LZP

3349. New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 04:15:44 UTC
From: jangus@skyld.grendel.com
Message-ID: <764914544snx@skyld.grendel.com>
Source record: 269300

In article <2n7e2a$7mp@paperboy.ids.net> kd1hz@anomaly.sbs.com writes:

[DXCB award drivel deleted...]

My first thought on reading this was, "what kind of an asshole would
dream this up?"

Then I saw this...

> -- Michael P. Deignan, KD1HZ -

It all became blindingly clear.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3350. IC901A Fiber link

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 04:41:17 UTC
From: djk@bobsbox.rent.com
Message-ID: <280394p2341@bobsbox.rent.com>
Source record: 269301

I am curious if anyone has had any experience with setting up the Icom IC901A using the fiber optic link of 500 feet. The emergency office of management in my town is setting an office of communications. We have the opportunity to use a celluar tower on a building about 500 feet anyway. The tower is about 100 feet. The IC901A's fiber kit seems to ideal for full function remote control of the radio. The tech support people at Icom say that there was a customer in Alaska several years ago that used the same fiber kit on a marine radio succesfully. The tech could not remember if they used pastice or glass cable. We have tried a 500 foot run of the plastice cable and it did not work. The question is does any body know of a source on glass cable that match the custom connectors that Icom uses. Along with the source of such a cable any knowledge as to whether or not glass will work. I would appreciate any information or suggestions. Please forward responses to me directly.

1. Source of glass fiber (not plastice) compatible with the Icom 901
2. Capability of the glass fiber working over 500 feet
3. Send responses to DJK@bobsbox.rent.com

--
-- David Klippel djk@bobsbox.rent.com

3351. WHAT IS THE BEST DUAL BANDER HAND HELD 2M/70CM

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 04:54:59 UTC
From: jangus@skyld.grendel.com
Message-ID: <764916899snx@skyld.grendel.com>
Source record: 269302

In article <CnDDGG.1H7@holly.can.com> ** none ** writes:

> I am in the process of trying to decide what to buy, I know I am

From experience with all three:

Kenwood Handhelds, TH-75 Nice dualbander, but difficult to see display
in the dark. Because of this and a couple of near misses on the freeway,
I sold it and replaced it with a TH-77. All the accessories are (for the
most part) interchangable. The TH-77 has back-lit buttons and is a SNAP
to adjust in the dark.

The TH-78 is a smaller product and in their haste to make it smaller,
Kenwood threw out any requirements for intermodulation susceptibility.
An otherwise nice radio as long you only user the rubber antenna and
work solid repeaters.

73 es GM from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3352. ANARTS RTTY NEWS BULLETIN 802 27/03/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 04:59:22 UTC
From: dave@eram.esi.com.au
Message-ID: <2n8cja$gik@eram.esi.com.au>
Source record: 269303
Cross-posted to: aus.radio,rec.radio.amateur.misc,rec.radio.info

[ANARTS - Australian National Amateur Radio Teletype Society]

ANARTS NEWS BULLETIN 802 27/03/94

SUNDAY TRANSMISSION SCHEDULES
3.545 MHz 0930 UTC This relay is in
recess until April.
7.045 MHz -3 0030 UTC VK2CTD (Col)
14.070 MHz (amtor/fec) 0030 UTC VK2DPM (Alan)
14.091 MHz 0030 UTC VK2BQS (JIM)
146.675 MHz 0030/0930 UTC VK2JPA (PAT)
144.850 MHz (ax25 bbs) VK2JPA @ VK2RWI
146.675 MHz (rtty mmbbs/repeater) VK2RTY

Views expressed in this news bulletin are not necessarily
those of the Broadcast Officer, the Relay Officers, or of the
Society.

News from W.A.

R.T.T.Y. MAIL BOX AT WIRELESS HILL PARK

The radio for this project is undergoing final testing at the
QTH of ROB VK6THP , and after a period of OPERATIONAL activ-
ity from Robs QTH It hoped to have it installed at Wireless
Hill park by MID APRIL

PROPOSED SOUTH WEST DIGIPEATERS FOR THE PACKET NETWORK

It is proposed to establish a digipeater at the MT WILLIAM
site , to complement the current Turner Hill digipeater. The
proposal is to use frequency of 144.850 at Turner HILL
(presently 144.750) and to use 144.750 on MT WILLIAM

This will provide better coverage into areas such as Collie,
Donnybrook and other south/west towns. Both Turner Hill and Mt
William will be linked by VHF ROSE links, and also back to
PERTH. Another advantage of this proposal , will be the
provision of an alternate BBS forwarding link on 144.850 to
VK6AJJ BBS

Finally it was decided that a general access port be esta-
blished at WIRELESS HILL PARK as and when time and finances
permit. This will be on 2m and 70cm , the frequencies for
these have yet to be decided , after tests have been carried

out on site to determine there will be no interference
generated to existing servies who use the site.

ARE YOU, THOSE WHO are READING THIS BULLETIN?, FINANCIAL
MEMBERS OF W.A.A.D.C.A. ??????

W.A.A.D.C.A is very short of funds.if you use the digipeaters
and services provided by the small group of financial members
of W.A.A.D.C.A. and wish to see the continued DEVELOPMENT of
the packet network , as described above,
THE COMMITTEE WOULD APPRECIATE YOUR FINANCIAL SUPPORT
and membership APPLICATION as soon as possible.

73 to all DE CLEM VK6CW W.A.A.D.C.A.
BROADCAST OFFICER

SARTG WW AMTOR contest

Dates this year are 16th-17th April.

Contest periods are 0000-0800 UTC Saturday, 1600-2400 UTC
Saturday, and 0800-1600 UTC Sunday.

Bands : 80, 40, 20, 15 and 10 metre amateur bands. The same
station may be contacted once on each band for QSO and
multiplier credits.

Mode : Only Amtor allowed. Use FEC (mode B) for calling. Use
ARQ (Mode A) for exchange of contest messages. Exchanging of
contest messages in FEC or in any way other than ARQ is
subject to disqualification.

Message : RST, Name, QSO number starting with 001.

Classes : A. single operator -- all bands
B. single operator -- single band
C. Multi operator -- single TX, all bands
D. SWLs -- all bands

More next week

ANARTS April meeting

Please note that, because of Easter, the meeting will be put
back a week until Friday 8th April. This is normal practice
when the meeting clashes with a public holiday, and the 1st
April is Good Friday.

Hope to see some of you there. Time is 7.30 pm and takes place
at the QTH of Keith VK2ZZO. For further information contact

Col VK2CTD, Jim VK2BQS, or Pat VK2JPA (work 230 3722). Supper supplied.

IPS weekly report

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18 MARCH - 24 MARCH 1994

Issue No 12
Date of issue: 25 March, 1994

INDICES:
Date 18 19 20 21 22 23 24
10cm 087 089 089 091 091 092 093
A 18 14 10 22 17 15 (17 estimated)
T -06 43 47 25 18 57 60

SUMMARY OF ACTIVITY

Solar activity was very low over the period.

The geomagnetic field at Learmonth (WA) was unsettled to active on 18th, quiet to unsettled on 19th, unsettled to active on 20th, active on 21st, unsettled to active on 22nd with a brief minor storm period, quiet to unsettled with brief active periods on 23rd and 24th March.

Ionospheric F2 critical frequencies at Sydney were depressed by up to 30 per cent during local daylight hours on 18th March, otherwise near predicted levels until late on 21st when frequencies became depressed by up to 20 per cent until 22rd when conditions became enhanced by up to 20 per cent. On 24th, frequencies were mostly near predicted monthly values apart from brief enhanced periods of up to 30 per cent. Spread F was observed during local night on 18th.

FORECAST FOR THE NEXT WEEK (25 -31 MARCH)

SOLAR: Low to very low.

GEOMAGNETIC: Quiet to unsettled, with active periods possible 29-30 March.

IONOSPHERIC Mostly near predicted monthly values, with occasional enhamcements of 15-30 per cent.

Courtesy of IPS Radio and Space Services

VK2SG RTTY DX NOTES 18 MAR 94
VK2SG RTTY DXNOTES FOR WEEKENDING 18 MARCH 1994 (BID RTDX0318)

OUR INFORMATION THIS WEEK CAME FROM: 9X5LJ, DJ3IW AND THE
CENTRAL-EUROPE DX CLUSTER NODE DB0SPC, I5FLN, IK5AAX AND THE
IK5PWJ PACKET CLUSTER, N2DBI, W2JGR AND THE NJ0M NODE THE
TWIN-CITIES DX PACKET CLUSTER, W5KSI AND ZS5S.

THANK YOU ALL FOR YOUR ASSISTANCE.

BANDPASS
FRIDAY 11
0237-14086 FG5GI 1334-14087 YI1AL
1336-14090 UU9JWB 1426-14086 SV5AZP
2146-21088 C21/YI SEE NOTES 2146-14088 TU4EI QSL W3HCW

SATURDAY 12
0131-14087 ZP5JCY 1242-14089 RU9CX
1244-14082 UU9JWB 1249-14089 ES4MM
1250-14086 HK0DPA 1351-14082 KG4CW
1509-14089 ES4MM 1514-14090 J28JJ
1545-21083 ZD7DP 2120-14088 CO2KG
2128-14089 HK0DPA 2203-14088 KG4CW
2313-14084 CO2KG

SUNDAY 13
1212-14086 UY0IO 1212-14084 SV1CQO
1324-14087 ES4MM 1452-21083 ZD7DP

MONDAY 14
1553-14086 UT5DX 1611-14083 SV1CQO
1627-14088 4X6UO 1842-21086 ZK1AIQ SO. COOK
2148-14088 HK0DPA

TUESDAY 15
0257-14085 ZK1AIQ 1647-14085 CU1AC
2221-14088 TU2EI

WEDNESDAY 16
1554-14087 OD5PL 1558-14090 UU8JA
1618-14090 EI3GZ 1621-14087 OK1DXS
1733-14083 HG6N 1830-14086 UT5DG
2000-14085 9I2Z QSL DL7VRO 2157-14087 CO2KG
2204-21087 XE3LMV INVERTED

THURSDAY 17
0026-14085 CX3ABE 0103-14084 TI2KSR
1550-14085 UR4UYI 1550-14084 RW3GK
1615-14087 4N7M 1714-14090 UU8JA
1740-14087 OZ1GML ZEALAND IS. EU-029
1908-14090 S92ZM 2051-21084 J28BS
2103-21083 ZD7DP 2143-14088 J28BS

NOTES OF INTEREST.
NAURU, C21. C21/MI AND C21/YI ARE THE CALLSIGNS ISSUED TO
JF2MBF, MITSUNOBU ICHINO AND JI1NJC, YASUNORI IITSUKA FOR
THEIR OPERATION. C21 WITH THE PORTABLE DISIGNATOR CONSISTING

OF THEIR INITIALS. QSL JR2KDN.

SPRATLY ISLANDS, 9M0. THE NEXT OPERATION FROM SPRATLY, IS SCHEDULED FOR SOMETIME AROUND APRIL 2ND. CALLSIGNS WILL BE 9M0A, 9M0AG AND 9M0BZ. TO BE ACTIVE ON RTTY, AMTOR, PACTOR AND PACKET. LOOK FOR THEM ON RTTY FREQUENCIES, 7030, 14085, 21085 AND 28085.

DXAC. PROPOSED MARCH SCHEDULE. DXAC CHAIRMAN W4VQ, ROBERT BEATTY, ANNOUNCED A PROPOSED VOTE. ONE OF THE TOPICS IS THE DELETION OF MOUNT ATHOS. MORE ON THIS LATER.

FOR NEXT WEEK'S BULLETIN, SEND YOUR BANDPASS AND NOTES OF INTEREST TO JULES, W2JGR AT W2TKU.#SRQ.FL.USA.NA
REMEMBER, DX DON'T SLEEP.
GL DE BOB, WB2CJL AT W5KSI.#NOLA.LA.USA.NA

Coming events
1994

April 8th ANARTS meeting

16th-17th SARTG WW AMTOR Contest

23rd-24th 1ST WW SPDX RTTY Contest

Paper for Teleprinters

Please, PLEASE, does anyone want some teleprinter paper, I have boxes of it. It is triplex paper (three sheets of paper, two sheets of carbon paper), you can have it for the cost of freight (you pay the freight). This paper will work in any pressure machine, or even typewriters, no good for tractor machines. When you unroll it you finish up with three rolls of paper and two rolls of carbon paper. The paper you can use, the carbon -- well you can give it to the children to mess up the house. Don't worry about the amount you want, I have enough.

Contact Syd VK2SG, phone 02-631 2576 or ok in the call book.

Society information

The Society may be contacted at : PO Box 860, Crows Nest 2065 Australia, for such matters as membership and general enquiries. Enquiries can also be made by packet to the President (Col) VK2CTD, or the Secretary (Pat) VK2JPA @ VK2RWI

News items may be sent to Broadcast Officer PO Box 60 Blacktown 2148 Australia, or by packet to VK2JPA @ VK2RWI.

Email address for the Broadcast Officer is :

patl@conmusic.pitt.su.oz.au

The Society welcomes news items on any digital subjects from anywhere in the broadcast footprint. We know we reach ZL and many South Pacific islands. We are looking forward to news from your areas to let other amateurs know what you are doing in the hobby. Hope to hear from you.

73s de Pat VK2JPA Broadcast Officer
That concludes ANARTS News802 27/03/94.

Inserted by VK2BQS (Jim) Vice-President ANARTS.

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2AAB.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

3353. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 05:03:55 UTC
From: ceb@synergy.ai.mit.edu
Message-ID: <2n8crrlNN451@life.ai.mit.edu>
Source record: 269314
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <CnEFCs.Hso@demon.co.uk>, zawada@softage.demon.co.uk (A Gnome On A Mission) writes:
|> Help, has anyone out there heard of a chip XR2206?
.
.
.
|> Mark Simpson

This device is a Monolithic Function Generator made by EXAR.
Don't know where do get them anymore. I think EXAR died or
or was purchased by someone. Expect the part number of have the
same numbers but change its prefix.

It should be inexpensive ($10 or less).

I do know of a supplier that stocks old - hard to find stuff.
American II Electronics 1-800-767-2637 813-573-0900

Chris

3354. Re: What's a good 2m/440 mobile?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 05:19:37 UTC
From: jganhold@magnus.acs.ohio-state.edu
Message-ID: <2n8dp9$1il@charm.magnus.acs.ohio-state.edu>
Source record: 269304

In article <9403281608.AA25437@metro.mccneb.edu>,
Paul Marsh <pmarsh@metro.mccneb.EDU> wrote:
>It's time to buy a 2m/440 mobile rig, before the IRS refund is noted by
>the family checkbook inspector. I'm particularly interested in monitoring
>the 160 mHz and the 460 mHz ranges, as well as use the regular ham bands.
>(No, I'm not going to transmit - flamethrowers off, please). What units
>seem to be particularly well-qualified for out-of-band reception as well
>as having good ham-band performance?
>
>What antennas are good for such machines -- without an appearance that
>would overly embarrass the spouse?

Well, I have a Standard dual-band HT (C528A), and recently got to play
with one of their mobiles.. it's got a brick you put under the seat or
wherever, and the control head is the microphone.. very impressive.
Standard is an excellent company, and their radios while a bit more
expensive are an excellent investment.

-j

--
Jon Anhold N8USK (jganhold@magnus.acs.ohio-state.edu)
"Where you come from is gone. Where you thought you were going was never
there, and where you are ain't no good unless you can get away from it."
- Blue Velvet

3355. Re: Telecom and Meteors

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 05:38:18 UTC
From: wier@merlin.etsu.edu
Message-ID: <wier-280394233819@198.213.12.235>
Source record: 269305

In article <1994Mar23.125211.19448@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> There was a feature article on this in one of the Ham magazines, I think
> it was _Ham Radio_. The US government uses meteor scatter to gather information
> on snow pack thickness in the Rockies for hydrological forecasting. I don't
> recall whether it was the Corps of Engineers, NOAA, or some other branch
> of government doing it. But I do recall that they were using frequencies
> near 6 meters, 100 watts, and 3 element yagis to connect the reporting
> stations to receivers in Washington. Meteor scatter has also been used

In doing some climatological research on snowpack sublimation at high altitude (alpine) environments in the Rockies, I've dialed into the "SNOTEL" machine several times. I BELIEVE it's a Forest Service project (but am not totally sure - it's been several months since I last checked) in Washington State.

The system seems pretty reliable. SNOTEL sites are scattered throughout the west. The ones I check seem to get something transmitted every 3 days or so and frequently you get "runs" of data where readings are transmitted
every day for a number of consecutive periods...

THANKS & 73 de WB5KXH

======== insert usual disclaimers here ============
Bob Wier, East Texas State U., Commerce, Texas
keeper of the Adobe Photoshop, MC68HC11, ICOM mailing lists
wier@merlin.etsu.edu (watch for address change)

3356. Daily Summary of Solar Geophysical Activity for 28 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 05:44:48 UTC
From: oler@rho.uleth.ca
Message-ID: <9403290544.AA25168@rho.uleth.ca>
Source record: 269306
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

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DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

28 MARCH, 1994

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(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 28 MARCH, 1994

NOTE: The very intense stratospheric warming has reached the polar region at
10 HPA today. Temperature gradients remain reversed between 60N and
the pole in the middle and upper stratosphere. Final warming is in
progress.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 087, 03/28/94
10.7 FLUX=087.6 90-AVG=103 SSN=032 BKI=0221 3322 BAI=007
BGND-XRAY=A6.2 FLU1=1.4E+06 FLU10=1.4E+04 PKI=1332 3322 PAI=010
BOU-DEV=003,019,018,007,025,028,016,010 DEV-AVG=015 NT SWF=00:000
XRAY-MAX= B6.2 @ 0938UT XRAY-MIN= A3.8 @ 0704UT XRAY-AVG= A9.1
NEUTN-MAX= +001% @ 2010UT NEUTN-MIN= -003% @ 2110UT NEUTN-AVG= -0.7%
PCA-MAX= +0.2DB @ 2325UT PCA-MIN= -0.3DB @ 0655UT PCA-AVG= +0.0DB
BOUTF-MAX=55346NT @ 2358UT BOUTF-MIN=55318NT @ 1922UT BOUTF-AVG=55335NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+071,+000,+000
GOES6-MAX=P:+125NT@ 1704UT GOES6-MIN=N:-101NT@ 0554UT G6-AVG=+091,+022,-041
FLUXFCST=STD:088,088,088;SESC:088,088,088 BAI/PAI-FCST=020,020,010/018,022,010
KFCST=2224 5444 4445 4222 27DAY-AP=010,012 27DAY-KP=3143 2223 3123 3234
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 27 MAR 94 was 41.1.
The Full Kp Indices for 27 MAR 94 are: 2- 1- 3o 1- 2- 2- 3o 3o
The 3-Hr Ap Indices for 27 MAR 94 are: 7 3 15 3 7 7 15 15
Greater than 2 MeV Electron Fluence for 28 MAR is: 4.4E+07

SYNOPSIS OF ACTIVITY

Solar activity was very low. Region 7695 (S16E05)
produced the largest flare of the past day, a B6/SF at 28/0937Z.
This region is growing slowly and is presently a small C-type
sunspot group.

Solar activity forecast: solar activity is expected to be
very low. B-class flares are possible in Region 7695.

The geomagnetic field was quiet to unsettled.

Geophysical activity forecast: the geomagnetic field is
expected to become active by the end of tomorrow due to a
recurrent disturbance. The field should return to quiet to
unsettled levels by the end of the three day forecast period.

Event probabilities 29 mar-31 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 29 mar-31 mar

A. Middle Latitudes
Active 25/25/25
Minor Storm 25/30/20
Major-Severe Storm 10/10/10

B. High Latitudes
Active 25/25/25
Minor Storm 25/30/25
Major-Severe Storm 10/10/10

HF propagation conditions were normal over all regions.
Minor signal degradation may yet be observed over the high and
polar latitude regions during the next 48 hours, particularly
on night-sector transpolar and transauroral circuits.
Conditions should then improve to near-normal by 31 March or
01 April.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 28/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7695 S16E05 056 0050 CSO 07 011 BETA
7696 S15W37 098 0000 AXX 00 001 ALPHA
7694 N11W11 072 PLAGE
REGIONS DUE TO RETURN 29 MARCH TO 31 MARCH
NMBR LAT LO
7689 S10 324
7690 S14 326

LISTING OF SOLAR ENERGETIC EVENTS FOR 28 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 28 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
28/A2322 29/B1415 N01W14 DSF B2.6 17
28/A2322 29/B1415 N06W79 DSF

INFERRED CORONAL HOLES. LOCATIONS VALID AT 28/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
71 S21W36 S23W39 S16W59 S13W47 104 ISO NEG 002 10830A
72 N22W12 N10W28 N12W30 N25W19 077 ISO POS 001 10830A
73 S50E86 S55E86 S36E18 S20E57 005 ISO NEG 030 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
27 Mar: 2206 2210 2217 B1.9

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
Uncorrellated: 0 0 0 0 0 0 0 0 001 (100.0)

Total Events: 001 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,

EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3357. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 06:11:07 UTC
From: emd@ham.almanac.bc.ca
Message-ID: <91qXJc4w165w@ham.almanac.bc.ca>
Source record: 269307

dhughes@prairienet.org (Dan Hughes) writes:

>
> I just passed my no-code test last week, and have been listening to some
> ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
> of the most disgusting language I've encountered anywhere. One guy was
> spouting one obscentity after another, and three other guys were laughing
> at his inept signal and giving it right back to him. All but the
> instigator were regularly giving their calls. Is this pretty much what I
> have to look forward to?
> --

Just like everywhere else in society, we have our own assortment of
garbage mouths. As the civility of our overall society decreases (watched
many recently made movies lately?) so, too, does that of the amateur
population. Fortunately, the good guys are still in the majority, but for
how long?

Robert Smits There is *no* idiotproof filter.
VE7EMD Idiots are proof against anything!
Ladysmith B.C. - Richard Chycoski, VE7CVS
e-mail: emd@ham.almanac.bc.ca

3358. Kill that intermod!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 06:26:02 UTC
From: wrt@eskimo.com
Message-ID: <CnExvF.7Jp@eskimo.com>
Source record: 269308

[No readable article body recovered]

3359. Kill That Intermod!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 06:56:28 UTC
From: wrt@eskimo.com
Message-ID: <CnEzAy.8yB@eskimo.com>
Source record: 269309

I keep seeing complaints of intermod on vhf rigs, but little or nothing about how to cure it. Years ago I had a 2 meter rig (the company is now defunct for good reason!) with horrendous intermod from fm broadcast stations. I cured it by placing a 1/2 wave trap in the coax from the antenna to the rig. If you recall your transmission line theory, a 1/2 wave piece of transmission line looks like an open when the far end is open, and a short circuit when the far end is shorted. Here we will use the open-ended case. Just install a T-fitting somewhere in the coax, or even right at the input to the rig. Then prepare a 1/2 wave piece of coax (allowing for velocity factor) and plug it into the T. Make it a little long to allow for trimming. What you want to do is trim it so that at mid-band, it has no effect on SWR or power output as read on the meter of the rig. In other words, with the 1/2 wave section unplugged, take a close look at the power out/SWR reading. Then plug it in and cut off about 1/8 inch at a time until the reading returns to the exact same as before. You now have a high-Q trap which looks like an open circuit at your chosen frequency, and various degrees of off-resonant load at other frequencies.

I'm not saying this will cure all intermod problems, but it worked for me and won't cost more than a few pennies to try. Granted, it's not too cool for HTs, but for mobiles and bases, it just might be all you need.

73 es gl

Bill, W7LZP

3360. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 07:34:12 UTC
From: schnitt@access.digex.net
Message-ID: <2n8llk$p79@access3.digex.net>
Source record: 269241
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <2n8crrINN451@life.ai.mit.edu>,
Christopher Barnhart <ceb@synergy.ai.mit.edu> wrote:
>In article <CnEFCs.Hso@demon.co.uk>, zawada@softage.demon.co.uk (A Gnome On A Mission)
writes:
>|> Help, has anyone out there heard of a chip XR2206?
>.
>.
>.
>|> Mark Simpson
>
>This device is a Monolithic Function Generator made by EXAR.
>Don't know where do get them anymore. I think EXAR died or
>or was purchased by someone. Expect the part number of have the
>same numbers but change its prefix.
>
>It should be inexpensive ($10 or less).
>
>I do know of a supplier that stocks old - hard to find stuff.
>American II Electronics 1-800-767-2637 813-573-0900
>
>Chris

Hi,

We just got 25 (minimum order) of these at my work from either Exar
or from their distributor (I don't know which off-hand.) If you need more
info, email me; I have the data book on my desk.

Alan

3361. Re: Question on Kenwood 732 A

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 07:56:52 UTC
From: jeffl@comix.UUCP
Message-ID: <810@comix.UUCP>
Source record: 269310

In article <1994Mar28.233945.24985@cobra.uni.edu> conklic9391@cobra.uni.edu writes:
>In article <2n672m$eer@news.iastate.edu>, bwehr@iastate.edu (BDW) writes:
>> Was wondering if anyone out there in radio land has had any experience with
>> the Kenwood TM-732A its a mobil dual band and looks like a real nice piece.

Sounds like everyone like the TM-732A. Methinks otherwise.
There are some things I like about the radio, however here
are the bad points:

1. The legends on the front panel above the push buttons are invisible
red letters on black background with no backlighting. I have to use
a flashlight to see the labels at night. The LCD backlighting can
be adjusted from too bright to extremely over bright.

2. The projecting rubber bumps that maquerade as a microphone
touch-tone pad have had all the silk screening rubbed off.
Clue: paint doesn't stick to rubber very well.

3. I bought one of the original models. DTMF squelch does not work
if the memory channel 100Khz digit is odd. Works fine if it's even.
Kenwood has offered to fix this for free. I gave up playing phone
tag with them and never had mine fixed.

4. DTMF squelch does not allow for additional digits (#) to convince
a repeater to pass touch tones instead of muting them. Paging is
unfathomable.

5. The removable front panel has no easy way to mount on or under a
dashboard. The $45 mounting and cable extension kit is a kludge.
I had to use velco for lack of anything better. This gives it a
nice mushy feel or a moving target when pushing buttons.

6. The cute little fan ate something and died. I guess you could
call this abuse. I would have prefered some better grill protection.

7. The RJ45 telco connector that is used for the microphone has
fallen apart twice from exessive side loading (something it was
not designed to handle). At least the old round connector provided
some strain relief.

8. RX intermod on the UHF band is awful. Driving through town,
all I hear is paging and IM on UHF. VHF appears to be ok. I don't
have two signal generators so I can't verify this with measurements.

9. The UHF receiver is essential deaf below 435Mhz.

10. The 4 function keys on the microphone use a crud D/A (digital
to analog) converter. Moisture condensation has made using these

buttons in the morning a real challenge.

11. The controls and functions are arranged in what I consider to
be a disorganized manner. Operation of the function key can be:
just the button
funct key followed by the button
funct key held > 1 second followd by the button
funct key held while pressing the button.
funct key held while pressing the button and turning on the power.
I have to create a cheat sheet to operate the radio. I have my
own idea on how a radio should be controlled. Function keys were
basically a good idea when there were only a few functions and
a crummy idea when expanded to the huge number of goodies that need
to be controlled in todays radios.

12. Many of the radio "modes" are either not displayed or well
hidden on the front panel.

13. The squelch has little or no hysteresis. This is because
it's actually a 5 bit (32 position) A/D converter. This yields
a ganularity of about 10 degrees. If hysteresis had been introduced,
it would have been difficult to adjust the squelch. Lacking squelch
hysteresis, weak signals sound like a machine gun.

14. The radio does NOT include a built in diplexer. This resulted in
my doing something stupid. I used seperate antennas for VHF and
UHF on my truck. They were about 10 inches apart. I blew out the
UHF front-end FET. A duplexer offers reasonable isolation between
the VHF and UHF sides. Add $50.

15. The radio arrived with the deviation set to 6.5Khz, PL=400Hz,
and -250Hz off frequency. (Should be 5.0Khz, 750Hz, 0Hz).
Microphone gain appears exessive and is not adjustable.

Before you declare the TM-732A a lost cause, you might consider
that many of the above complaints also apply to comparable equipment.
I did some shopping around when I bought mine 2 years ago, and
found equal or worse problems with the competition.

Credibility check: I used to play RF design engineer and have
designed or worked on about 20 different radios in the past.

--
Jeff Liebermann Box 272 1540 Jackson Ave Ben Lomond CA 95005
408.336.2558 voice wb6ssy@ki6eh.#nocal.ca.usa wb6ssy.ampr.org [44.4.18.10]
408.699.0483 digital_pager 73557,2074 cis [don't]
jeffl@comix.santa-cruz.ca.us scruz.ucsc.edu!comix!jeffl

3362. Canadian Reciprocal Licences

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 08:41:00 UTC
From: R.G.Harris@sheffield-hallam.ac.UK
Message-ID: <2D97E9D1@cerberus.shu.ac.uk>
Source record: 269311

The licence issuers in the US seem to take a real pasting from many people
in
the US for their long delays. I've got to say that the Canadians at
Industry Canada,
are so fast it is hard to believe.

Calender :
14 March posted request here for reciprocal info
16 March replies to posting (thanks to those who replied)
17 March Fax to Edmonton Office of Industry Canada to confirm procedure
17 March Reply by fax saying send copy of licence (and NO money - it's
free)
21 March Sent copy of licence by fax
28 March Canadian licence arrives here (it left Edmonton on 21 March)

Now that's service, and at a price I like!

By the way, the RSGB in the UK think it takes 3 months and that you contact
the Dept of Communications.
I'd better tell them that its a little quicker than that.

Finally, the licence says I need to use G4APV/VE6. I thought that
convention would put the VE6 bit in
front?

Hope to hear some of you when I am in Edmonton in June/July this year

Bob Harris
G4APV (/VE6)

3363. Re: obscenity...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 08:50:18 UTC
From: linley@netcom.com
Message-ID: <linleyCnF4Ju.55q@netcom.com>
Source record: 269312

In ye olden post oo7@astro.as.utexas.edu (Derek Wills) spake...
>dhughes@prairienet.org (Dan Hughes) asks:
>
>>>I just passed my no-code test last week, and have been listening to some
>>>ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
>>>of the most disgusting language I've encountered anywhere. One guy was
>>>spouting one obscentity after another, and three other guys were laughing
>>>at his inept signal and giving it right back to him. All but the
>>>instigator were regularly giving their calls. Is this pretty much what I
>>>have to look forward to?
>[...]
>
> If you have the no-code license, you won't be tempted to talk to this
>Low Life, and if you pass the code test you can work people on CW who
>don't act like this (it takes so long to swear on CW).

Ah yes, yet another reason to learn CW. On the other hand, I don't want to
just let the low-lifes take over the phone bands either. The best way to get
rid of them, IMHO, is for more good hams to get on the bands where the scum
live. Quiet frequencies (be it on HF or VHF/UHF repeaters) seem to attract
these kinds of low-lifes. A busy frequency is usually a "clean" frequency.

dahdahdididi dididididahdah
dahdidah di dahdididididi di dahdahdidah dahdahdidi

--
Bruce James Robert Linley ---- linley@netcom.com ---- Amateur radio: KE6EQZ

3364. Digest of Articles -- QST May 93 (Long - 42k)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 11:03:29 UTC
From: wvanhorn@magnus.acs.ohio-state.edu
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Digest of Articles -- QST, May, 1993

Following are digests of articles printed in the May, 1993 issue of QST. Such digests are being prepared for each issue of QST, and posted periodically. Subsequent issues will be posted one per week until they "catch up" to the current date in mid-1994, thereafter monthly.

It is hoped that other hams will volunteer to post similar digests of the other ham technical publications such as QEX, CQ, 73, COMMUNICATIONS QUARTERLY, RTTY JOURNAL, et al. Especially desirable would be digests of publications in other countries, such as the RSGB RADIO COMMUNICATIONS and ham magazines in Europe, Japan, Australia, and other countries around the world. We English speakers would especially enjoy them if they were translated into our language, but they would also be valuable additions to the world's knowledge if they were posted in the language of origin. Who knows? Some bi-lingual ham somewhere might translate them into English and re-post them.

Worldwide communications are getting better and better. The time has come to make the world's ham press available to all hams throughout the world!

The major value of digests is to give readers sufficient information to decide whether to obtain a copy of the full text. If any U.S. reader wants a copy of an article in QST, please inquire of other hams in your own neighborhood. Many have collections of back issues. Anyone who is unsuccessful in finding a fellow ham with a collection should try every library in the area, especially those at universities and technical colleges. If all else fails, a copy can be obtained from the ARRL Technical Department, 225 Main St., Newington, CT 06111-1494 USA for a fee of $3.00 per copy. Remember, it is both cheaper and quicker to obtain one locally.

Readers in most other countries can obtain copies from their own national ham organizations, sometimes translated into their own languages.

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to W. E. "Van" Van Horne, W8UOF, author of this compilation.

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TECHNICAL ARTICLES (TA)

Title>TA1:Home-Brewing a 10 GHz. SSB/CW Transverter - Part 1
Author>Lau, Zack - KH6CP
Source>QST May 1993, pp. 21-28
Abstract>First of a 2-part construction article describing a 10 GHz. transverter. It utilizes only readily-available parts but to build it requires the builder to have had some experience with VHF/UHF gear and to have access to certain test equipment.

Digest>The author has built a 10 GHz. transverter which, when used in tandem with a 2-meter transceiver, will receive and transmit on "X-band", or 10 GHz. One notable thing about this project is that it uses readily available components, nothing exotic or available only from military surplus.

He has built the transverter as a series of building blocks, each connected with the next through plug connectors and coax jumpers. Thus, each block can be tested independently, or changed in future upgrades. In this first instalment, Mr. Lau supplies wiring diagrams, parts lists including recommended sources, and construction details for the local oscillator building blocks.

Near the beginning of the article, he addresses a question that all interested readers must answer for themselves: "Do I have the VHF/UHF construction experience and the test equipment required to handle this project?" It is his opinion that the construction details are not that difficult and he suggests two commonly-available ham publications that give sufficient background information to allow the average construction-minded ham to build the equipment. But the rub comes in tuning the amplifiers, mixer, and filters. He states that it should be possible to accomplish the task with equipment reasonably available to hams, but optimizing the circuits is much easier if one has access to relatively sophisticated bench instrumentation, including a spectrum analyzer.

In a side-bar with the article, Rus Healy, NJ2L, senior assistant technical editor, recommends that anyone who has not had the experience of building a lower-frequency transverter should do so before undertaking the X-band project.

Conceptually, the transverter is easy enough to understand. On the receiver side, the 10 MHz. signal from the antenna goes through a pre-amplifier, a band-pass filter, and into a mixer where it is heterodyned against a local oscillator signal and converted to 144 MHz. output. On the transmitter side, the r.f. output from the 2-meter rig goes to a mixer where it, also, beats against the local oscillator

signal which converts it up to 10 GHz. From the output of the mixer, the signal goes through a band-pass filter, an amplifier, an optional second band-pass filter, and out to the antenna.

The "local oscillator" is actually made up of a crystal oscillator at 106.499 MHz., followed by a series of multipliers, each of which is a separate building block and contains multiple band-pass and low-pass filters with sufficient amplification to overcome the insertion losses. The first building block contains the crystal oscillator and the 6:1 multiplier. The output of that block is a spectrally-pure 639 MHz. signal. Following is a quadrupler block, the output of which is 2.556 GHz. The last block within the local oscillator chain is another quadrupler with a 10.224 GHz. output frequency.

In next month's issue will be the second, and final, installment. It will describe the preamplifer, mixer, and power amplifier to complete the project.

Title>TA2:Single-Conversiion Microwave SSB/CW Transceivers
Author>Campbell, Rick - KK7B
Source>QST May 1993, pp. 21-28
Abstract>Construction details for a microwave transceiver using receiver and transmitter building blocks described in previous articles, plus other components. The transceiver can be built to operate on any band from 432 through 5760 MHz. On the receiver side, the design uses a crystal-controlled converter to feed an i.f. system at 144 MHz.; that system is, itself, a direct-conversion single-signal receiver. The transmitter side is a phasing-type SSB or CW transmitter.

Digest>This is another article by Mr. Campbell who described the "R2" and "T2" PC-board building blocks in his QST articles in the issues of January and April, 1993. This article describes a microwave transceiver that uses them, plus a number of other building blocks, to make a microwave transceiver.

The first block is a "no-tune transverter" designed to be used outdoors at the antenna, utilizing a circuit board available from Down East Microwave Company, Troy, Maine. For this article he used one made for the 903 MHz. band; similar ones can be obtained from the same source for use on bands from 432 through 5760 MHz. In all cases, the units convert the received microwave signals to the 144 MHz. band, and the 144 MHz. transmitter signals to the microwave band.

Inside the shack, Mr. Campbell's system uses a direct-conversion transceiver with 144 MHz. input and output. The block diagram of the 2-meter transceiver shows, on the receive side, an optional i.f. (144 MHz.) preamp feeding into the r.f. input on the R2 board. A variable-frequency 144 MHz. oscillator output passes through a splitter with one-half of the output going through a 90-degree phase-shift network to the "I" and "Q" inputs of the R2 board. The output of the receiver goes to a headphone jack, or directly to a speaker.

On the transmit side, the other half of the oscillator output passes through a similar 90-degree phase-shift network to the "I" and "Q" inputs of the T2 board. The transmitter is actuated by either a key or a microphone, for CW or SSB operation. Its output goes directly to the output terminal.

The remainder of the article is primarily devoted to the design details of two alternate "local oscillator" modules. The first of these is a crystal controlled VXO circuit utilizing a 20.6 MHz. crystal. The output of the oscillator is made a square wave, rich in odd-harmonics. Following the output are two cascaded 144 MHz. band-pass filters that select the seventh harmonic. The tuning capacitor in the VXO circuit allows frequency to be varied, providing a 50 KHz. operating range at 144 MHz.

The other local oscillator circuit that the author describes is a "premixed VFO". By this, he means that an HF oscillator, in this case with a range of 13.0 to 13.12 MHz., is mixed with a 131 MHz. crystal oscillator to provide the 144 output. The circuitry used in this module is conventional.

The author's final comment is: "This article describes one of my favorite applications for the R2 and T2 boards....With the basic transmitter and receiver circuitry contained on a pair of small printed-circuit boards, the possibilities for custom-built radios are limited only by our imaginations."

Title>TA3:Build the HANDI-Finder!
Author>Leskovec, Bob - K8DTS
Source>QST May 1993, pp. 35-38
Abstract>How to build a very simple hand-held direction finder.

Digest>This construction article gives full details for building a simple hand-held direction finder for use in "Fox-Hunting". It can be used in conjunction with an HT for locating AM or FM transmitters over the frequency range of 45 to 470 MHz. The unit is completely built on a printed-circuit board. It uses only about a dozen components, one of which is an IC. The antenna is a "bow-tie" made of stiff wire that is supported by screws on the PC board. A handle attaches to the board at the center of the "bow-tie", completing the unit.

In operation, the circuit rapidly switches its input from one side of the "bow-tie" to the other at an audio rate. When the transmitter to be found is in line with (i.e. in the same plane of) the antenna, one side of the antenna is closer to it than is the other. It receives the signal a tiny fraction of a second earlier than does the other side. This causes a difference in the phase between the two sides, the result of which is phase-modulation that creates an audio tone in the receiver. The tone is determined by the switching frequency.

If the antenna is rotated so that the transmitter is in a line perpendicular to the antenna plane (i.e. "face-on"), then the signal

reaches both sides simultaneously and there is no phase-shift, hence no audio tone. This causes a sharp null in that direction, indicating the direction of the antenna. Note that it is the audio tone that is nulled, not the carrier. It is much easier to detect a null in the audio than a null in the carrier, hence the sensitivity of this unit is excellent. Of course, the null is bi-directional and the ambiguity must be eliminated by triangulation, which usually means that the hunter must move laterally to determine which direction is the true one.

A kit is available containing all the parts necessary except connectors, battery, and the wire antennas. It can be obtained for $27.95 from North Olmstead Amateur Radio Depot, 29462 Lorain Rd., North Olmstead, OH 44070. A PC board template package can be obtained from the ARRL Technical Department Secretary, 225 Main St., Newington, CT 06111 for a business-size SASE. Address it to Leskovec HANDI-Finder Template.

Title>TA4:Add Tracking Side-Tone to Your ICOM IC-765 Transceiver
Author>Mraz, Michael A. - N6MZ
Source>QST May 1993, pp. 39-42
Abstract>Modifications to an ICOM transceiver to allow CW operators to adjust the sidetone pitch to any desired value while the receiver automatically adjusts the received signal to the same pitch.

Digest>In the ICOM IC-765, the sidetone oscillator is fixed at 700 Hz. To adjust the transmitter to the same frequency as a received signal, it is necessary to tune the received signal to zero beat with the sidetone pitch, which requires the operator to listen to the received station always as a 700 Hz. tone. But many CW operators find that tone, or any fixed tone, unpleasant and want to adjust it.

The author has designed and built a circuit which generates a side-tone that tracks the receiving pitch within 1 or 2 Hertz. This article gives full construction details.

The system that Mr. Mraz designed uses an integrated-circuit function generator to generate an audio tone that tracks the setting on the front panel "CW Pitch" adjusting knob. That knob adjusts a potentiometer which, in turn, causes a varying voltage that can be accessed on the main receiver board. However, the relationship between the knob position and the pitch frequency is non-linear! Consequently, he had to add circuitry to cause an equal and opposite non-linearity in his sidetone generator so that the two tones would precisely track.

The author gives detailed instructions concerning how to perform the necessary "surgery" on the ICOM circuit board. He cautions any would-be follower that, if their transceivers are still in warranty, these modifications would void it.

A kit of parts, including etched and drilled circuit board, for building the unit is available for $49.00, plus $2.00 shipping within the USA from LTA, P.O. Box 77, New Bedford, PA 16140.

Title>TA5:An Introduction to Amateur Television - Part 2
Author>Taggart, Ralph E. - WB8DQT
Source>QST May 1993, pp. 43-46
Abstract>A description of the various equipment necessary or desirable to become active in ATV.

Digest>This is the second installment of this description of amateur television (ATV) activities. In this article, the author describes equipment available and other details required in getting started on the air. What he calls an "entry level" ATV setup comprises a TV camera, an ATV 70-cm. transceiver, a TV camera, microphone, an optional power amplifier, and an antenna.

The equipment that he describes is manufactured by three companies, AEA, PC Electronics, and Wyman Research. AEA is a well-known supplier of a broad line of amateur gear, whereas the other two are small proprietorships, each run by a veteran of ATV activities. The last two companies both supply crystal controlled transceivers with power outputs from 1 to as much as 15 watts PEP. Their video output signals are double-sideband amplitude-modulated (AM).

AEA's latest transceiver produces signals very similar to commercial broadcasting standards. It uses "vestigial sideband (VSB)" AM transmission. This means that the signal is a combination of a single-sideband with a carrier.

Most ATV operators use home-style camcorders for their TV cameras, and home-style TV sets for reception. All of the transceivers described produce video outputs switchable to channels 2, 3, or 4 for viewing. In amateur TV, as well as in commercial TV, the audio is transmitted by FM on a sub-carrier which is 4.5 megahertz above, (or both above and below, in the case of AM video) so that it can be reproduced on a standard home-TV set.

PRODUCT REVIEWS
conductor: James W. Healy, NJ2L

Title>PR1:HAL Communications PCI-4000 Clover-II Data Controller
Author>Ford, Steve - WB8IMY
Source>QST May 1993, pp. 71-73
Abstract>Review of a plug-in computer board made by HAL Communications that acts as a data controller for Clover-II communications. A description of the Clover-II protocol is included.

Digest>Clover is a new digital mode for HF communications. It was developed by Ray Petit, W7GHM, working with HAL Communications Company. That company is producing the PCI-4000 for use in an IBM-compatible computer with an 80286 CPU, or later, to control a radio transceiver in

the Clover Mode.

Clover provides much improved data communications in the noisy environment of HF radio, but occupies only 500 Hz. of band-width. It uses four audio tones, each of which is phase- and/or amplitude-modulated in one of 10 schemes. The format with the highest data rate uses 16-phase, 4-amplitude modulation (16P4A), to transmit at a rate of approximately 750 bits/second. Other formats are more robust in resisting noise and fading, but result in slower throughput. There are ten different formats, in all.

Clover's most interesting feature is its adaptive operating. Under varying conditions of propagation and noise, it adapts the power level, and also the modulation scheme, to obtain the maximum throughput of data. Faced with an increase of error rate or dropouts in the data, it automatically raises the power output or changes the modulation format, or both. When conditions improve, it reverses the sequence.

Clover uses the "Reed-Solomon" coding system which provides forward-error-correcting (FEC). Each block of transmitted text contains "check-bytes" which are used to correct many errors without requiring repeats of the data blocks concerned. This is a major step beyond the older digital modes, AMTOR and PACTOR, which verify the successful reception of data blocks but cannot correct them; they can only ask for repeats.

The reviewer found the PCI-4000 easy to install. He used it with a Kenwood TS-820S and found the results were "surprisingly good". On the air, tuning of the signals is very critical. If the transceivers at the two ends of the link differ in frequency by as much as 15 Hz., the link breaks! Consequently, Clover provides a screen display that includes a frequency indicator. It shows the difference between the two signals in Herz at all times. The display also shows a "Receive/ Transmit Status Table". This continuously reports the modulation format in use, signal-to-noise ratio, tuning error, phase dispersion, error-correction capacity, and transmitter power at both ends of the link!

Mr. Ford found one weakness in Clover; that is its "Listen" mode does not perform as well as does AMTOR and PACTOR. That is, it does not receive well when "listening in" to a QSO between two other stations. HAL Communications is reportedly trying to improve it.

In summary, the reviewer calls the Clover system: "Undoubtedly the most efficient HF digital communications mode yet devised for amateur radio." However, its price is of the order of three or four times the cost of AMTOR and PACTOR. Consequently, it will probably be used primarily for handling large quantities of data transfer on HF bands, such as main-line packet forwarding.

Title>PR2:AlphaLab TriField Meter
Author>Overbeck, Wayne - N6NB

Source>QST May 1993, pp. 73-74
Abstract>A review of a meter designed to measure a.c. magnetic field strength. It was found to be subject to errors so severe as to make it useless in radio work.

Digest>The TriField Meter is designed to measure electromagnetic field strength in view of the widespread furor over purported health effects of low-level a.c. fields. It supposedly measures magnetic and electric fields separately and also has a built-in r.f. probe to detect field strength at frequencies of from 50 MHz. to 3 GHz.

The reviewer found that, in the magnetic field modes, the meter gave readings that were consistently too high. The well-written instruction sheet accompanying the meter explains why: although its readings at 60 Hz. are supposed to be accurate, readings are a function of frequency and higher frequencies will give higher readings. But there is no way to measure the frequency of the field that the user is measuring, so it is not possible even to estimate how much in error the measurements are!

The reviewer's final conclusion was that "...its readings are almost certain to be misleading, creating a false sense of security or - more likely - causing undue alarm. It is not hard to envision groups of concerned citizens armed with these meters patrolling their neighborhoods in search of "radiation" - and finding hazards behind every bush!"

HINTS AND KINKS
conductor: David Newkirk, WJ1Z
Sr. Asst. Technical Editor

Title>HK1:Build a Quick PVC-Supported Quad for About $50
Author>Evans, Clark J. - WA4DLL
Source>QST May 1993, p. 75
Abstract>Construction details for a square loop antenna.

Digest>This short item includes a dimensioned drawing and construction details for a square loop antenna, which the author calls a "single-element quad". The spreaders, each 28 feet long, are made of 1-inch PVC pipe stiffened with dowel sticks along their entire lengths. The dowel sticks are 4-feet long. Eight of them are required to reinforce each of the two spreaders since they are overlapped 3-inches at the splice between adjacent sticks. They are attached to the PVC pipe by nylon-tape wraps about every two feet.

The bottom leg of the square is horizontal. It is broken at the center with an insulator. Coax feedline is attached at that point. In order to keep the weight of the feedline from causing the lower leg to droop, the author reinforces the spreaders with a 17-foot 8-inch length of 3/4" by 3/4" molding between spreader ends.

The author reports that he operates the antenna on 80, 20, 15, and 10 meters through the use of an antenna tuner. As for performance, he reports: "My DX has increased 10-fold".

Title>HK2:Installing a Huskier 160-M Fixed Capacitor in the Ten-Tec Titan
Author>Lynch, Joe - N6CL
Source>QST May 1993, pp. 75-76
Abstract>Step-by-step instructions for replacing a blown capacitor in the Titan amplifier, manufactured by Ten-Tec.

Digest>Mr. Lynch reports that, when operating his Ten-Tec Titan amplifier, the 160-meter fixed capacitor in the plate tank circuit blew out, and its identical replacement also blew out. He replaced it the second time with a capacitor obtained from Ten-Tec that is rated at three times higher working voltage than the originals (15 Kv. vs. 5 Kv.) Since the replacement capacitor is larger than the originals, he had to make a modification to the amplifier to mount it. He gives complete instructions of how to do this, and illustrates it with a photograph.

Title>HK3:Putting Variometry to Work in Matching Networks
Author>Zavarella, Art - W1KK
Source>QST May 1993, p. 76
Abstract>Using a variometer (variable inductor) in ham gear.

Digest>A variometer is an inductor in two parts, one of which can be moved relative to the other. When the two parts are perfectly in line, the turns of wire in the moveable part add to the turns in the other to form a coil with turns count equal to the sum of the two. If the moveable portion is turned by a full 180-degrees, however, then the field created by its turns subtracts from that of the fixed part, reducing the net inductance. Intermediate positions give intermediate inductances. Thus it becomes a continuously variable inductor without coil taps or moveable contacts.

Mr. Zavarella shows photographs of antenna tuners that he has built using variometers.

Title>HK4:When Antennas Should NOT Be Resonant
Author>Aitken, Hugh - W1PN
Source>QST May 1993, p. 76
Abstract>If the ends are not plugged, tubular Yagi elements resonate acoustically in the wind.

Digest>The writer reports that he erected a new tri-band Yagi antenna but failed to put the plastic end-caps on the elements. Now, when the wind blows the open-ended tubing resonates in the manner of organ pipes! The sounds are very annoying to his family, as well as neighbors.

He recommends that others be more careful and seal the ends of all tubing with caps or plugs.

TECHNICAL CORRESPONDENCE
conductor: Paul Pagel, N1FB
Associate Technical Editor

Title>TC1:Expanded-Range DC and AC Voltmeters
Author>Grebenkemper, John - KI6WX
Source>QST May 1993, pp. 77-78
Abstract>Construction of expanded-range a.c. and d.c. voltmeters.

Digest>The writer provides wiring diagrams and parts lists for contructing either a d.c. or an a.c. voltmeter with an expanded range, more properly termed a "suppressed-zero" meter scale. In other words, instead of reading from 0 to 15-volts, the meter reads from 11- to 15-volts, providing better resolution and accuracy over the operating range.

The meters can be accurately calibrated at both ends of the scale with a trim potentiometer to adjust each end.

Parts kits are available from FAR Circuits, 18N640 Field Ct., Dundee, IL 60118-9269. A PC-board and meter-face template package is available from ARRL Technical Department Secretary, 225 Main St., Newington, CT 06111 for a business-size SASE. Address the request to the "Grebenkemper DC and AC Expanded-Range Voltmeter Template".

FEEDBACK (FB)

Title>FB1:QST Apr 1993 Product Reviews
Author>Ford, Steve - WB8IMY and Jeff Bauer -WA1MBK
Source>QST May 1993, pp. 74
Abstract>Errors in Product Reviews in QST April, 1993.

Digest>In the April, 1993 Product Review of the AEA DSP-2232, pp. 65-66, the list price should be $999, not $899. Also the Doppler-shift correction feature has not yet been enabled.

In the same issue's Product Review of the Outbacker antenna, p. 70,the model reviewed was the Perth model, not the JR8. The Perth has a main shaft of 4-foot length with 3-foot whip, whereas the JR8 is 4-feet overall. On 75 meters, the Perth resonates down to 3.6 MHz., as reported, but the JR-8 resonates only between 3.9 and 4.0 MHz.

Title>FB2:Dipoles Above Real Earth
Author>Michaels, Charlie - W7XC
Source>QST May 1993, p. 78
Abstract>Errors in Technical Correspondence item, page 68, QST Nov 1992. Also, Feedback in QST Feb 1993 regarding this same item wrongly changed Equation 1.

Digest>Equations 3-5 of the Michaels letter titled: "Dipoles Above Real Earth" in Technical Correspondence, QST Nov 1992 contained errors. Corrections can be obtained from ARRL's Technical Department Secretary for an SASE. Ask for the Michaels Dipoles Corrections Template.

Also, in QST Feb 1993 Feedback, Michaels advised that an error had been made in Equation 1 of the same 1992 letter. He now states that that was incorrect; Equation 1 as originally published in 1992 is correct.

NEW HAM COMPANION

This section is devoted to articles and short features of special interest to newcomers to the ham radio hobby.

Title>NHC1:And the Most Popular Frequency is...
Author>Mabey, Jay - NU0X
Source>QST May 1993, pp. 60-61
Abstract>A study of frequency distribution of repeaters on the 144 and 430 MHz. bands.

Digest>This summarizes the number of repeaters on each frequency in the 2-meter and 70-centimeter bands throughout the United States and Canada. At last count, there were 6110 2-meter repeaters and 5059 70-centimeter repeaters!

Certain frequencies are much more popular than others. There are 156 repeaters on the single frequency 146.940 MHz. On the 70-centimeter band, things are more spread out. The most popular frequency on that band, 444.500 MHz., has only 23 repeaters.

The article also gives data on the number of "continuous tone-coded squelch systems" (CTCSS). These are systems that require a continuous audio tone to be transmitted by any transceiver that is accessing it. In some cases, they are used to prevent access by anyone other than a small group of members. In other cases, the tone signal required is openly published. On the 2-meter band, there are a total of 694 repeaters using CTCSS, 11 percent of the total. On the 70-centimeter band, there are 1131, or 22 percent.

The author ends the article with a description of the ARRL REPEATER DIRECTORY, of which he is Editor. He says of it: "It is a complete directory of repeaters in the USA and Canada from 10 meters through 23 centimeters."

Title>NHC2:Do You Need an Audio Filter?
Author>Gill, Steven J. - KG7YK
Source>QST May 1993, pp. 62-63
Abstract>Mr. Gill describes what audio filters are and how they are used. He emphasizes their use in CW operations. He also makes mention of digital signal processing (DSP), but does not discuss it in depth.

Title>NHC3:The Doctor is IN p. 64
Author>Various
Source>QST May 1993 - p. 64
Abstract>Questions and answers on topics of primary interest to newcomers.

Digest>In this issue, the questions include: 10-10 numbers, r.f. feedback; the difference between a duplexer and a diplexer; computers for use in ham stations; the illegality of automatic, unattended station operations on HF bands; and what to do if electronic equipment gets water-soaked.

Title>NHC4:A Disguised Flagpole Antenna
Author>Parker, Albert - p. 65
Source>QST May 1993, p. 65
Abstract>A description, with photographs, of a vertical antenna disguised as an attractive flagpole.

Title>NHC5:VHF/UHF Contesting
Author>Ford, Steve - WB8IMY
Source>QST May 1993, pp. 67-69
Abstract>A description of VHF/UHF contests, what they are, and when they take place.

Digest>The author encourages newcomers to participate in VHF/UHF contests and gives hints concerning how to boost one's scores. He also discusses "grid square" designators and includes a map of the USA with grids indicated.

RADIO TIPS (RT)

These are short items, scattered among the articles in the NEW HAM COMPANION section.

Title>RT1:What Is AMTOR?
Author>Ford, Steve - WB8IMY
Source>QST May 1993, p.61
Abstract>A description of the amateur radio mode: AMTOR - AMateur Teleprinting Over Radio.

Title>RT2:Lightning!
Author>Ford, Steve - WB8IMY
Source>QST May 1993, p. 63
Abstract>Hams are warned to protect their radio equipment from the destructive effects of lightning.

Digest>Antennas should have lightning arrestors with low-impedance leads to ground. All equipment should be protected and, preferably, disconnected from the antenna and also the power mains, when lightning conditions occur.

Title>RT3:The Ionosphere
Author>Ford, Steve - WB8IMY
Source>QST May 1993, p. 66
Abstract>A short description of the ionosphere including a diagram of the atmosphere showing the D, E, F1, and F2 layers. Also discusses the effects of ionization on radio propagation.

Title>RT4:Working the World on 10-Meters
Author>Ford, Steve - WB8IMY
Source>QST May 1993, p. 69
Abstract>A description of propagation conditions on 10-meters.

Digest>Directed primarily to Novice or Technician class amateurs with HF priveleges, it describes the 10-meter band as a "real powerhouse". Even in the present declining phase of the sunspot cycle, exciting propagation happens unpredictably, and beginners are encouraged to monitor the band for openings.

Title>RT5:Is Amateur Radio Safe?
Author>Ford, Steve - WB8IMY
Source>QST May 1993
Abstract>Purported hazards of electromagnetic fields, including radio waves.

Digest>This gives a balanced description of the questions that have been raised about the possible hazards of electromagnetic fields, including radio. Some sensible precautions are outlined for amateurs to follow when working with transmitters.

GENERAL INTEREST ARTICLES

Title>GI1:Festing (Notes of a Hamologist"
Author>Apteryx, Ann - W1NG/7
Source>QST May 1993
Abstract>Humor.

Digest>This is a humorous article in which the author compares people-watching at a hamfest with bird-watching. Among the posited "bird-types" are the purple dealhunter (hunticus bargainicus), the wandering buynothing (optex non-purchasicus), and the lesser cheapskate (pricens reducensis).

Title>GI2:PHASE 3D - A Satellite for All -- Part 1
Author>Jansson, Dick - WD4FAB and Tynan, Bill - W3XO
Source>QST May 1993, pp. 49-51
Abstract>A description of amateur satellites launched in the past, their limitations, and the ground equipment needed to use them; a discussion of why so few amateurs are doing so; and a description of the proposed new Phase 3D satellite now being built.

Digest>The two authors are Vice President of Engineering and President, respectively, of Radio Amateur Satellite Corporation (AMSAT). In this article, they discuss the satellites that have been launched over the past 30 years and the ones that are in orbit now.

They describe the different modes and methods of use that have been utilized in the past and speculate on why so few amateurs have actually tried to use them. They conclude that one reason is that many hams perceive that the technology is too difficult and/or the equipment too expensive for them to be interested. Another seems to be that many hams who are active in VHF and UHF are put off by the fact that satellites do not handle FM.

The authors' rebuttal to the first objection is that the technology of operating through satellites is no more difficult or more expensive than other aspects of amateur radio operating. Regarding FM, they point out that if a satellite were designed for FM repeating, the power requirement would be prohibitive and the number of stations that could access the satellite at any one time would be so severely limited as to make it impractical. They make an adequate case that CW and SSB modes are necessary in satellite operations.

Next, they discuss the kind of station equipment that is needed to take full advantage of the current satellites, especially the high-altitude ones. These, specifically OSCARs 10 and 13, provide nearly world-wide communications to amateurs throughout the world. They are in orbits in which the apogee (the point in the orbit that is farthest from earth) is so high that the satellite appears to move very slowly across the sky and stays visible for several hours each day. They make it possible for hams all over the northern hemisphere to communicate with each other.

Finally, they discuss the new Phase 3D satellite that is under construction at this time. Oscars 10 and 13, the present "high-altitude birds", are reaching the ends of their operating lives. The Phase 3D will be the largest and, by far, the most sophisticated one ever launched. Because of its high-powered transmitters and extra-sensitive receivers, it will be possible for hams all over the world to access it using simpler equipment than is required with Oscars 10 and 13. Furthermore, it will be possible for ground-based repeaters to link with other repeaters long distances away via the satellite! The result may be hams communicating with each other over inter-continental distances using HTs!

Next month, in Part 2 of this article, the authors will discuss design details of the Phase 3D satellite and its orbit.

Title>GI3:Inspiration: N2OVA
Author>Lorito, Philip - WB2HDY
Source>QST May 1993, pp. 52-55
Abstract>The true story of how a terminally ill boy became a ham in his final months on earth.

Digest>This is a human-interest story about a young boy who was suffering from a terminal illness. His strongest wish was to become a radio ham.

The author, and many other individuals, as well as the FCC, cooperated to make the boy's dream come true. His name was Jason Longboat, and his ham call was N2OVA. He received his license in early 1992, and died in November of that year, but his last months on earth were made distinctly happier through ham radio.

Title>GI4:Transmitter Hunting: Tracking Down the Fun - Part 2
Author>Moell, Joe - K0OV
Source>QST May 1993, pp. 56-58
Abstract>Second installment of a description of radio direction finding as a competitive activity.

Digest>In this article, Mr. Moell discusses details of organizing "Fox Hunts" and also describes different kinds of direction-finding equipment. In sidebars included with the article, there are discussions of several different types of RDF instruments that use something other than beam antennas to indicate bearing. One of these is a "homing set". The authors state that a homing set uses a pair of vertical antennas and a control box with a "right-left" indicator such as LEDs. However, they do not describe the principle of operation.

Another type is the time-difference-of-arrival (TDOA) system. This uses two antennas that are switched in sequence at an audio rate. It is the same principle as was discussed in the article: "Build the HANDI-finder!" by K8DTS in this issue.

The last type system described is doppler systems. These are usually mounted on vehicles, since they use multiple antennas (typically 4 or 8) which are rapidly sequenced to simulate a rotating antenna. As the putative antenna rotates, the received signal shifts up and down at an audio rate. The receiver detects this as an audio signal, the phase of which indicates the direction of arrival relative to the heading of the vehicle, and is often displayed on a CRT. This system is capable of giving instant display of heading from a short burst of transmitted signal. However, it is much less sensitive than beam antennas and cannot be carried on foot.

3365. Re: query about paging systems

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 11:59:16 UTC
From: isoper@matrix.cs.wright.edu
Message-ID: <1994Mar29.075916.1@matrix.cs.wright.edu>
Source record: 269315

In article <940323201739.85cb@gms.mh.wp.kgf.com>, RGS@gfimda.UUCP (Robert G. Schaffrath) writes:
>>I'm taking a Communications Engineering course for which I need to do a
>>short term paper. I was thinking about doing one on the technical
>>challenges that were faced when implementing the radio-pager systems that
>>are in place today. Can anyone suggest where I could obtain such
>>information. Does such technical information only exist within the confines
>>of Motorola? I'm an image processing person, so I'm not up on the
>>communications journals.
>>
>>Any help would be appreciated.
>>
>>
>>Regards and 73,
>>Neil
>>

Also check out the following:

IEEE Transactions on Vehicular Technology call no. TK7882.M6I2

Mobile Communications Design Fundemental by William C. Y. Lee
publisher H.W. Sams and Co. call no. TK6570.M6 L36 1986

Communications Magazine

This topic might also be called Landmobile Communications by some authors or publications. The IEEE for certain has a lot of information you might ask the reference librarian to see the IEEE cross index by subject for their pubications, They have numerous articles on the theroy of mobile communications system design. Another one I just thought of is the old Bell System journals they wrote some of the orignal papers on cellular communications concepts back in 70's when I took my comm classes I did that topic for my research paper and got overwhelmed quickly with info.

73, Wes WB8CEH

3366. HAMCOMM Help!!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 12:16:54 UTC
From: blake@pt5000.pto.ford.com
Message-ID: <blake.61.2D981C36@pt5000.pto.ford.com>
Source record: 269316

I am trying to get HAMCOMM 2.2 working. I build the receive circut and fed it with tape recorded morse. I'm still new at using an O-scope, but I think I'm getting enough signal out of pin 6 of the LM741. If I'm reading the scope right, pin six is about +10v with no audio input, then goes to a +10 to -10 rectangle when audio is presented. The scope function on HAMCOMM show no activity and CW mode is not copying anything. I checked the COM port and it seems OK. Anyone have any ideas on how to find the missing link? I had a friend localy who tried this about a year ago and never got it to work.

Thanks!

N4IZO - Mike Blake

+--+
| |
| Mike Blake blake@chaos.eng.wayne.edu |
| blake@pt5000.pto.ford.com |
| n4izo@hamgate.cc.wayne.edu |
| Packet n4izo@wsu.n8fow.ampr.org |
| |
+--+

3367. AEA Hot Rot whip for HT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 12:34:55 UTC
From: ah301@yfn.ysu.edu
Message-ID: <ah301-290394073455@sy_j.pgh.wec.com>
Source record: 269317
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.misc

I recently purchased an AEA HotRod 1/2 wave whip antenna from Kevin Jensen N1KCG from rec.radio.swap. He used it in his htx202 and said it was working.

However, when I got the antenna and connected it to my antenna, I did not get better coverage with the hotrod compared to the htx202 rubber duck antenna.
In fact it was worse, what I can reach with the rubber duck antenna, the hotrod antenna cannot.

I do believe Kevin when he said it was working with his ht (although he did not respond to my email when I asked him how come it was not working on mine).

Is there any tuning or fix I can do to make this antenna work ? or was I sold
a broken antenna ? I can still hit repeaters that are very close. I tested

it on an swr meter and its swr is > 3, my rubber duck is < 1.5 !

please email replies if possible
thanks in advance

jerry
N3RKD

3368. Re: New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 12:40:31 UTC
From: ehare@arrl.org
Message-ID: <1994Mar29.124031.4189@arrl.org>
Source record: 269318

Rev. Michael P. Deignan (kd1hz@anomaly.sbs.com) wrote:

: <inflammation deleted>

It is clear that you care more about your own self-gratification
than you do any real goal in ham radio. This kind of drek is as bad
as anything I have ever listened to on 11 meters. We know, after
all of your preaching, that you would never put it on the ham bands.
I, for one, would appreciate it if you would keep it off of here, too.
This forum is a useful tool for communcation and exchange of ideas.
Such deliberate inflammation really does detract from its usefulness.

Thanks, Ed.
--
Ed Hare, KA1CV, ARRL Laboratory, 225 Main, Newington, CT 06111
203-666-1541 ehare@arrl.org
My electronic posts and email do not necessarily represent the policy
of the ARRL, but I can probably get in trouble for them anyway!

3369. Re: New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 12:41:49 UTC
From: ehare@arrl.org
Message-ID: <1994Mar29.124149.4266@arrl.org>
Source record: 269319

Rev. Michael P. Deignan (kd1hz@anomaly.sbs.com) wrote:

: In this age of political correctness, its unfair that we have a "DXCC"
: award for HF operators, but nothing that a no-code tech can aspire to
: achieve by yacking on two meters.

In spite of the uselessness of the rest of the post, this concept has
some merit. Any ideas for good ways to do this?

Ed
--
Ed Hare, KA1CV, ARRL Laboratory, 225 Main, Newington, CT 06111
203-666-1541 ehare@arrl.org
My electronic posts and email do not necessarily represent the policy
of the ARRL, but I can probably get in trouble for them anyway!

3370. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 13:43:30 UTC
From: zlau@arrl.org
Message-ID: <1994Mar29.134330.4896@arrl.org>
Source record: 269320
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,uk.misc

A Gnome On A Mission (zawada@softage.demon.co.uk) wrote:
: Help, has anyone out there heard of a chip XR2206?

: 1. Has it got an equivalent chip I can use instead?

I don't think so, it is a special purpose chip.

: 2. About how much is it?
Probably as much as it costs for shipping and handling...
: 3. Give me an address anywhere (any country), I can order it from.

In the USA, JDR Microdevices
2233 Samaritan Drive
San Jose CA 95124

In the UK, you might try Mainline Electronics
PO Box 235 Leichester LE2 9SH (0533) 777648
--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

3371. Hustler Mobile ant help

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 13:45:36 UTC
From: PRENTICE@snycanva.BITNET
Message-ID: <01HAJDWYKBQQ0005MJ@scanva.canton.edu>
Source record: 269321

Hi all. I am planning on going mobile with the quad magnetic mount
for rooftop operations. I also have the Hustler mobile ant system
i/e the various resonators. I do not plan on running them all
on top, but rather just one resonator such as the 75 meter one.
When I want to change bands I will stop and change etc.
My questions are:
1. How to tune the resonators when in place as I have not paperwork
or instructions on this.
2. Any other hints you might have.

I plan on using the kenwood 440s with a dentron super tuner. Yes I know
the super tuner is big, but it is all I have at the moment and other
than size this should not present a problem.

Also I calculate this thing will be about 12 feet plus from the
road up. What dangers might I run into with this ? Surely do not
want to hit any power wires etc..

Again thanks for you input..

WA2MZF in the frozen tundra of northern New York. Yes one has to be
nuts to live up here !
73

3372. Army MARS on the Internet

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 14:03:03 UTC
From: kschildt@aol.com
Message-ID: <2n9cen$6tf@search01.news.aol.com>
Source record: 269322

```
NR 28 R 291300 MAR 94
FM KENNETH W SCHILDT/AAA9AT TN
ARMY MARS INTERNET/MILNET HOST ADMINISTRATOR
TO ALL ARMY MARS MEMBERS
GR NC
BT
ARMY MARS HAS ESTABLISHED AN EMAIL HOST ON THE INTERNET
IF YOU HAVE ACCESS TO THE INTERNET/MILNET WE WOULD LIKE
TO KNOW WHO YOU ARE PLEASE SEND A MESSAGE TO
REGISTER@MARS.ARMY.MIL ALONG WITH YOUR ARMY MARS CALL
IN THE SUBJECT LINE SGD KENNETH SCHILDT
BT

NNNN
```

3373. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 14:34:44 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar29.143444.20144@ke4zv.atl.ga.us>
Source record: 269323
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <CnE4xu.I03@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: In article <Cn8Los.3Ln@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>: >Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>: >
>: >: Phfffft! The phase flatness through the audio phase shift networks
>: >: used in amateur phasing SSB rigs was much worse than any phase
>: >: distortion in a filter rig. The audio phasing network had to cover
>: >: octaves while the crystal filter only has to work over a tiny fraction
>: >: of an octave.
>: >
>: >Not true. A phasing-type SSB generator specifically depends on a
>: >90 degree phase difference between the two channels. If the phase
>: >flatness were bad, you would get terrible unwanted sideband supression.
>
>: No. Phasing exciters depend on *quadrature* at a given frequency to
>: achieve SSB.
>
>*Sigh* Here we go again...
>
>"Quadrature" means exactly what I said above, a 90 degree phase difference.

I know that. I'm not arguing with you, just introducing an alternate
term for the I and Q channel phase relationship. Where I am arguing
with you is on a slightly subtle point. See below.

>: There must be a net 90 degree difference *at any given
>: frequency*, but the phase at say 300 Hz vis 3000 Hz is irrelevant
>: to the SSB generation, but not to the sound.
>
>True, but the way 90-degree phase shift networks work is to generate
>two signals with phases that ramp linearly with frequency, but always
>90 degrees out of phase. If the ramps weren't smooth, the phase
>difference wouldn't be 90 degrees.

Now this is where we differ. What's important to phasing SSB is that
I - Q = 90 degrees at each given frequency. You can have that with
an irregular frequency response as easily as you can with a smooth
declining ramp. What I'm talking about is the phase relationship
between different frequency components of the waveform. Let's assume that
we have two frequencies X and Y. They will have a phase relationship at
input defined as,

X(t) - Y(t) = K(t)

Now if we put this through a transmission media, a blackbox
network we'll call B, then the following condition must apply
if the phase relationship of the complex waveform is to be
maintained.

B(X)(t) - B(Y)(t) = K(t)

But that's not the response we get with a first order smooth
RC network with a declining linear phase delay versus frequency.
I and Q have to have a 90 degree difference, but that can be
generated a number of different ways. We can add delay in one
branch only, so I' = I and Q' = Q + 90. Or we can use lead/lag
networks so that I' = I + 45 and Q' = Q - 45. Or any mixture
in between. All the SSB phasing network cares about is that
there's quadrature at each given frequency. How each frequency
gets quadrature is irrelevant to the phasing exciter, but it's
not irrelevant to the resulting differential phase between two
frequency components of the input.

>: Ask yourself how many
>: milliseconds is a 90 degree phase delay at 300 Hz, then ask yourself
>: how many at 3000 Hz. ...
>
>That's why there is less phase shift at 300 Hz than 3000 Hz (phase ramps
>linearly with frequency, see above.) Linear phase = constant group delay.

I don't see what you're saying here. You need quadrature at every different
frequency, at 300 Hz and at 3000 Hz. The phase shift has to be the *same*
at every frequency (90 degrees), but that means the *delay* declines with
increasing frequency since it takes less delay to get 90 degrees of phase
shift at 3000 Hz than it does at 300 Hz. In other words, the high frequency
components start to outrun the low frequency components as they go through
the network because they suffer less delay. That can be seen in a television
system as chroma/luminance misregistration, also known as differential
phase distortion. Such delay characteristics aren't easily visible in
complex audio waveforms with ordinary scopes, but it certainly can be
heard. That's the click-boom effect I mentioned in the first post where
a percussive strike's high frequency components have outrun the low
frequency components.

>: >Same thing with amplitude flatness. The phase shift network's two
>: >channels must be matched to within a fraction of a dB to get good sideband
>: >suppression.
>
>: Same thing with amplitude flatness. The amplitude has to match *at
>: a given frequency* ...
>
>Again, the way to get amplitude matching is to make both channels flat.

It's *a* way to do that, but it's not necessary, or likely in real
circuits. All that's necessary for the SSB phasing exciter is that
I and Q have the same amplitude at any given frequency. There could
be many db of amplitude difference between two different frequencies

in either the I or Q channel as long as the same difference exists
in the complementary channel at that frequency. In other words, the
bandpass amplitude response could be very lumpy as long as the lumps
in both I and Q match. In fact, with a first order RC network, the
response is going to change by 3 db per octave.

>: >A typical SSB crystal filter has a couple dB peak-to-peak ripple across
>: >the passband with similar ripples in the group delay. It is easy to
>: >do much better than that with a phasing-type exciter.
>
>: How much time is a few degrees of phase shift at 9 MHz? How much effect
>: does that have on a 300 Hz waveform? One 9 millionth of a second is a
>: mighty small phase shift at 300 Hz.
>
>Doesn't matter -- the delay through a filter depends on the bandwidth,
>not the center frequency. For example, if you built a 9 MHz crystal
>filter with a fraction of a Hz bandwidth, you would have SECONDS of
>delay through the filter. A 9 MHz SSB filter will have similar group
>delay as an audio filter of similar bandwidth and rolloff characteristics.

I've been scratching my head over this. Since the percentage bandwidth at
9 MHz is so small, the Q has to be much higher which translates into more
filter ringing than in the very broad percentage bandwidth AF delay network.
But it seems to me that the differential delay of the lower Q audio filter
would be greater since the delta time span for a 90 degree phase shift is so
much greater for a 5 octave span than for a fraction of an octave span.
Perhaps they equate to the same percentage distortion, but is it the same
kind of distortion?

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3374. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 14:39:25 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar29.143925.20248@ke4zv.atl.ga.us>
Source record: 269324

In article <CnECJu.2L0@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>
>Kok: Know who first used `iff' in the literature? Hint: He used to be
>Chairman of the U.H. Math Dept. (didn't stay long, though...) and he
>is quite famous. [VERY big hint: his intials are P.H.]

PAUL HARVEY used to be chairman of the UH math department???

Gary

:-)

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3375. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 14:50:35 UTC
From: colbert@s6550b.nrl.navy.mil
Message-ID: <CnFL8D.2so@ra.nrl.navy.mil>
Source record: 269325
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <2n8crrINN451@life.ai.mit.edu>, ceb@synergy.ai.mit.edu (Christopher Barnhart) writes:
|> In article <CnEFCs.Hso@demon.co.uk>, zawada@softage.demon.co.uk (A Gnome On A Mission) writes:
|> |> Help, has anyone out there heard of a chip XR2206?
|> .
|> .
|> .
|> |> Mark Simpson
|>
|> This device is a Monolithic Function Generator made by EXAR.
|> Don't know where do get them anymore. I think EXAR died or
|> or was purchased by someone. Expect the part number of have the
|> same numbers but change its prefix.
|>
|> It should be inexpensive ($10 or less).
|>
|> I do know of a supplier that stocks old - hard to find stuff.
|> American II Electronics 1-800-767-2637 813-573-0900
|>
|> Chris

Exar is still alive and kicking. I bought som multipliers from them
last week. As for the XR2206, JimPak actually sells it in their line.
You can probably get it from JDR Electronics.

Mike Colbert
NRL
colbert@s6550b.nrl.navy.mil

3376. Re: AO-13 operating schedule notations

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 15:04:47 UTC
From: eac@world.std.com
Message-ID: <CnFLvz.IzI@world.std.com>
Source record: 269326

In <"28-Mar-94.15:15:58.EST".*.mark_t._phillips.henr801c@Xerox.com>
mark_t._phillips.henr801c@xerox.COM writes:

>Received: from rigel (rigel.eso.mc.xerox.com) by zombi.eso.mc.xerox.com
>(4.1/SMI-4.1) id AA28634; Mon, 28 Mar 94 15:15:54 EST

>Can someone tell me what is meant by the "MA" numbers listed with AO-13
>operating schedules? They look like this:

>Mode-B: MA 0 to MA 90

>I understand the meaning of the "modes" (tho I'm not familiar with
>Mode-BS).

The ma is mean anomaly. In this case it is mod 256. 0 is the lowest point
in the orbit and 128 is the highest. Satellite tracking programs sometimes
call this Phase.

I believe BS is mode B with the Mode S beacon operating. Due to a problem
the mode S transponder and mode S beacon can not be on at the same time.

73 Eric WB1HBU AMSAT-UK AMSAT-NA (Numbers available on Request).

3377. Re: obscenity...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 15:11:13 UTC
From: spikes@sc.hp.com
Message-ID: <2n9geh$m32@hpscit.sc.hp.com>
Source record: 269327

Hmmmmm, I've been TOLD that these lanquage-impaired bozos were just the guardians of the 'official' tune-up and testing frequencies.

Bill
wb6rzg

"What load, dummy?"

3378. HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 15:33:17 UTC
From: jwh7k@galen.med.Virginia.EDU
Message-ID: <CnFn7H.L2t@murdoch.acc.Virginia.EDU>
Source record: 269228

On December 18, 1993, I took an ARRL test session and earned a Technician w/HF license. During the week of February 20th, other people that were at the December 18th test session were receiving their new licenses. Not me!
After waiting a week, I called the ARRL to see what was going on.
They had received my paper work and sent it on to the FCC on January 6th.
The gentleman I talked at the ARRL said that licenses from the same test session are not always issued together. After waiting another week, I talked to some experienced local hams and was told to call the FCC. On March 3th, I called the FCC and asked the status of my license. The person I talked to said they have received the paper work from the ARRL, but mine was pulled for some problem. I could not get an answer as to what the problem was with my application. After I reported this information to the local hams, they said to wait and hope the FCC will sort it out. Well, I have waited and no license. It will be 90 days on April 6th since the FCC has had my application. This is my first ham license, I have _not_ had a ham license canceled by the FCC. Does anyone have any ideas what I can do to resolve this problem and finally get a license?
Many thanks for any help and 73

--
<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
The Cyberspace Cowboy(TM) riding the electronic frontiers...
Bill Holman, Clinical Robotics Lab, jwh7k@virginia.edu, (804) 924-8109
Box 168, UVa Health Sciences Center, Charlottesville, VA, 22908

3379. Re: Canadian Reciprocal Licences

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 15:34:29 UTC
From: edleslie@apogee.ccs.yorku.ca
Message-ID: <CnFn9H.GrL@newshub.ccs.yorku.ca>
Source record: 269229

Harris, Bob G. (R.G.Harris@sheffield-hallam.ac.UK) wrote:

: The licence issuers in the US seem to take a real pasting from many people
: in the US for their long delays. I've got to say that the Canadians at
: Industry Canada, are so fast it is hard to believe.

Just to make those in the US even greener, I called Industry Science Canada back in November, to find out if I had passed the test. I had, so I drove down to the office here in Toronto, filled out the papers, paid my fee, and walked out with a temporary licence permit and my call letters. The actual licence arrived in the mail a few weeks later.

How's that for fast! :-)

73 de Ed / VE3ZVZ

3380. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 15:40:16 UTC
From: lweissma@motown.ge.com
Message-ID: <2n9i50$5kn@cnn.MOTOWN.GE.COM>
Source record: 269230

The XR-2206 is a monolithic function generator IC capable
of producing sine, square, triangle ramp, and pulse
waveforms. It is used for communications, instrumentation,
and function generator applications. I have the data book
from EXAR from March 1985. I don't know the availability
of the part, but the phone number in the book is
408-732-7970. 750 Palomar Ave, Sunyvale, CA 94086. I don't
know of any equivalent parts, but I'll keep my eyes open
for one. If you need a copy of the spec, let me know and I
can mail it to you.

Where have all the sunspots gone?

Larry Weissman AD3Y | All opinions expressed are my own and
Martin Marietta Corp. | in no way related to my company. All my
Moorestown, NJ USA | designs are my companies and in no way
lweissma@motown.ge.com | considered my own.

3381. Re: Voice mail on a repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 15:59:37 UTC
From: bote@access1.digex.net
Message-ID: <bote.764956634@access1>
Source record: 269231

jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>Are there any repeaters left in this country that just repeat, including
>no musical tones or beeps when you drop your carrier? I miss the old

Try the 147.180 repeater in Silver Spring, Maryland.

It does have autopatch (sorry Gary!) but it does
not have any obnoxious beeps, save for the beep
when the controller recovers from a hardware reset.
If it beeps, then something is wrong!

Otherwise, when you talk, it repeats you. When
you quit talking, it gives whatever squelch tail
the MICOR receivers in the voting system decide
to give you, then quits talking about 1.5 seconds
later.

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 5 days until Opening Day! How 'bout them Os!!

3382. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 16:02:41 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar29.160241.20722@ke4zv.atl.ga.us>
Source record: 269233
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <1994Mar26.201156.9246@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>
>: Phfffft! The phase flatness through the audio phase shift networks
>: used in amateur phasing SSB rigs was much worse than any phase
>: distortion in a filter rig. The audio phasing network had to cover
>: octaves while the crystal filter only has to work over a tiny fraction
>: of an octave.
>
>This is *wrong*
>
>SSB crystal filters are designed for steep skirts for good
>shape factors. This means that without any equalizing networks
>(which normally double the complexity and send the cost through
>the roof), the phase response at the passband edges are *terrible*
>The fact that the center frequency of the crystal filter is much
>higher just means that the Q of the parts has to be that much
>better. The mathematics of the phase and amplitude response
>tradeoffs are unchanged-- the tradeoffs are identical for a
>3 kHz audio filter and a 3 kHz SSB filter (assuming ideal
>parts--with real parts its easier at audio...)

Apples and oranges. The phasing SSB exciter is using an audio
phase shift network, the filter exciter is using a RF filter.
Now the AF phasing network may be considered a sort of filter,
but that's not it's designed purpose, and for sure it's not a
3 kHz bandpass response. Instead it has to maintain a constant
90 degree phase shift across multiple octaves. That's tougher.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3383. Plain old repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 16:04:07 UTC
From: bote@access1.digex.net
Message-ID: <bote.764956814@access1>
Source record: 269234

gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>Mr. Herman wrote:
>>Gary: I'll be disappointed if your repeater beeps.

>Sorry, you're disappointed. It does "roger beep" to signal user
>carrier drop and timer reset. We run near zero tail so remote base
>operators aren't locked out. We tried it without the beep, but users
>complained they couldn't get in the machine. They couldn't hear their
>kerchunk because their receivers weren't recovering fast enough. The
>beep gives them 300 ms to recover. Users with noiseless squelch radios
>never knew when the repeater dropped without the beep.

I cannot believe what I am reading.

Just when you had built up my respect for you, Gary,
you go a do something like this! :)

Instead of giving them training-wheel beeps to tell when
the repeater has dropped, maybe they should actually
wait a second to see that the other guy has
finished transmitting.

A side benefit is that someone who wants to
break in has the time to do so, maybe even
with an emergency.

I know it's unfashionable to be neighborly
these days, but it can't hurt to try it on
a repeater.

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 5 days until Opening Day! How 'bout them Os!!

3384. Plain old repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 16:09:16 UTC
From: bote@access1.digex.net
Message-ID: <bote.764957247@access1>
Source record: 269235

hammock@kelvin.jpl.nasa.gov (Randy Hammock) writes:
>In fact, if you don't like hearing the beeps on our machines, all you
>have to do is turn on your CTCSS as our repeaters encode PL on their
>outputs ONLY when they are receiving a signal in the input. Except for

We tried something similar to this for a while.

We repeated the PL of users, so that some of us
only heard certain users who transmitted the
PL for which we were listening.

When we went to multiple sites that became problematic,
so we have reverted to the transmitter sending
PL full time.

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 5 days until Opening Day! How 'bout them Os!!

3385. (none)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 16:14:37 UTC
From: gosset@pbr322.ceingebi.unam.MX
Message-ID: <9403291614.AA22545@pbr322.ceingebi.unam.mx>
Source record: 269236

Hello everyone:

There is an Internet accessible call sign server sponsored
by the Rhode Island 2x2 Amateur Repeater Association, in the
Anomaly Amateur Radio Server:

telnet ns.risc.net (155.212.2.2) login:hamradio
(BuckMaster and Buffalo Callbooks on line)

73 & DX de XE1RGL.

3386. WWV and WWVH, Detailed Info

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 16:28:17 UTC
From: gswanson@arrl.org
Message-ID: <1994Mar29.162817.6066@arrl.org>
Source record: 269237

NBS TIME AND FREQUENCY DISSEMINATION SERVICES

Time and Frequency Division
National Measurement Laboratory
National Bureau of Standards
Boulder, Colorado 80303

issued September 1979

FORWARD: This publication presents a description of the time and frequency dissemination services of the National Bureau of Standards. Those interested in information on the NBS atomic clock system, transmitting antennas, or discussion of technological applications of the dissemination services should refer to Section 9, OTHER PUBLICATIONS.

This SPECIAL PUBLICATION 432 will be revised and reissued only as necessary to update information.

INTRODUCTION

The time and frequency community is a small community, generally unknown to the world at large, yet vitally important to many of the basic activities of everyday living. Electric power companies, radio and television stations, telephone companies, and navigators of ships and planes all depend heavily on precise frequency and time information. They must have a constantly available source - a reliable, nationally and internationally recognized STANDARD - with which to compare and regulate their own timing equipment. For over 55 years, the National Bureau of Standards (NBS) has been providing this standard for most users in the United States.
Since the inception of the broadcast services from radio station WWV in 1923, NBS has continually improved and expanded its time and frequency dissemination services to meet the ever-growing needs of an ever-widening community of users. Today, still striving for better ways to serve its public, NBS is making major contributions to the nation's space and defense programs, to worldwide transportation and communications, and to a multitude of industrial operations, as well as providing convenient, highly accurate time service to many thousands of users throughout the world. Services are presently available from stations WWV and WWVB in Fort Collins, Colorado, and from WWVH in Kauai, Hawaii. In addition, services using network television and satellite signals are also available. This booklet is offered as a guide to these services.

1. WWV and WWVH

NBS broadcasts continuous signals from its high-frequency radio stations WWV and WWVH. The radio frequencies used are 2.5, 5, 10 and 15 MHz. WWV also broadcasts on an additional frequency of 20 MHz. All frequencies carry the same program, but because of changes in ionospheric conditions, which sometimes adversely affect the signal transmissions, most receivers are not able to pick the signal on all frequencies at all times in all locations. Except during times of severe magnetic disturbances, however - which make all radio transmissions almost impossible - listeners should be able to receive the signal on at least one of the broadcast frequencies. As a general rule, frequencies above 10 MHz provide the best daytime reception while the lower frequencies are best for nighttime reception.
Services provided by these stations include:

Time announcements, Standard time intervals, Standard frequencies, Geophysical alerts, Marine storm warnings, Omega Navigation System status reports, UT1 time corrections, BCD time code

Figure 1 gives the hourly broadcast schedules of these services along with station location, radiated power, and details of modulation.

Figure 1
*** This section has been SLIGHTLY modified to adopt it more sufficiently to a text file presentation.

The Hourly Broadcast Schedules of WWV and WWVH

W W V B R O A D C A S T F O R M A T

via telephone (303) 499-7111

Latitude: 40 degrees, 40 minutes, 49 seconds North
Longitude: 105 degrees, 02 minutes, 27 seconds West

NBS Radio Station WWV
2000 East County Rd 58
Fort Collins, CO 80524

Standard Broadcast Frequencies and Radiated Power:

2.5 MHz: 2500 Watts
5.0 MHz: 10000 Watts
10.0 MHz: 10000 Watts
15.0 MHz: 10000 Watts
20.0 MHz: 2500 Watts

* BCD TIME CODE on 100 Hz Subcarrier
* Beginning of each hour is identified by 0.8 sec long 1500Hz TONE
* Beginning of each min. is identified by 0.8 sec long 1000Hz TONE
* The 29th and 59th SECOND pulse of each minute is omitted

Hourly Schedule

Minutes after the top of the hour/Broadcast information

00 min Station Identification
02 min 440 Hz 1-HOUR mark
04 min reserved
08 min Storm information
09 min Storm information
10 min Storm information
16 min Omega reports
18 min Geo Alerts, Solar-terrestrial indices
30 min Station Identification

In addition, minutes 45-50 have no audio tones so that storm
forecasts from WWVH can be heard

W W V H B R O A D C A S T F O R M A T

via telephone (808) 335-4363

Latitude: 21 degrees, 59 minutes, 26 seconds North
Longitude: 159 degrees, 46 minutes, 00 seconds West

NBS Radio Station WWVH
PO Box 417
Kekaha, Kauai, HI 96752

Standard Broadcast Frequencies and Radiated Power:

2.5 MHz: 5000 Watts
5.0 MHz: 10000 Watts
10.0 MHz: 10000 Watts
15.0 Mhz: 10000 Watts

* BCD TIME CODE on 100 Hz Subcarrier
* Beginning of each hour is identified by 0.8 sec long 1500Hz TONE
* Beginning of each min. is identified by 0.8 sec long 1200Hz TONE
* The 29th and 59th SECOND pulse of each minute is omitted

Hourly Schedule

Minutes after the top of the hour/Broadcast information

01 min 400 Hz 1-HOUR mark
03 min reserved
29 min Station Identification
47 min Omega reports
48 min Storm information
49 min Storm information
50 min Storm information
59 min Station Identification

In addition, minutes 08-10 and minutes 15-19 have no audio tones so
that informational broadcasts out of WWV can be heard.

*** END figure 1 as edited for text file presentation ***

1a. Accuracy and Stability

The time and frequency broadcasts are controlled by the primary NBS Frequency Standard in Boulder, Colorado. The frequencies as transmitted are accurate to within one part in 100 billion at all times. Deviations are normally less than one part in 1,000 billion from day to day. However, changes in the propagation medium (causing Doppler effect, diurnal shifts, etc.) result in fluctuations in the carrier frequencies as received by the user that may be very much greater than the uncertainty described above.

1b. Antennas and Modulation

The broadcasts on 5, 10, and 15 MHz from WWVH are from phased vertical half-wave dipole arrays. They are designed and oriented to radiate a cardioid pattern directing maximum gain in a westerly direction. The 2.5 MHz antenna at WWVH and all antennas at WWV are half-wave dipoles that radiate omnidirectional patterns.

At both WWV and WWVH, double sideband amplitude modulation is employed with 50 percent modulation on the steady tones, 25 percent for the BCD time code, 100 percent for the seconds pulses, and 75 percent for voice.

1c. Time Announcements

Voice announcement are made from WWV and WWVH once every minute. To avoid confusion, a man's voice is used on WWV and a woman's voice on WWVH. The WWVH announcement occurs first - at 15 seconds before the minute - while the WWV announcement occurs at 7.5 seconds before the minute. Though the announcements occur at different times, the tone markers referred to are transmitted simultaneously from both stations. However, they may not be received at the same time due to propagation effects.
The time referred to in the announcements is "Coordinated Universal Time" (UTC). It is coordinated through international agreements by the International Time Bureau (BIH) so that time signals broadcast from the many stations such as WWV throughout the world will be in close agreement.
The specific hour and minute mentioned is actually the time at the time zone centered around Greenwich, England, and may be considered generally equivalent to the more well-known "Greenwich Mean Time" (GMT). UTC differs from your local time only by an integral number of hours. By knowing your local time zone and using the chart of world time zones in figure 3, the appropriate number of hours to add or subtract from UTC to obtain local time can be determined. The UTC time announcements are expressed in the 24-hour clock system -i.e., the hours are numbered beginning with 00 hours at midnight through 12 hours at noon to 23 hours, 59 minutes just before the next midnight.

1d. Standard Time Intervals

The most frequent sounds hears on WWV and WWVH are the pulses that mark the seconds of each minutes, except for the 29th and 59th seconds pulses which are omitted completely. The first pulse of every HOUR is an 800-millisecond pulse of 1500 Hz. The first pulse of every minute is an 800-millisecond pulse of 1000 Hz at WWV and 1200 Hz at WWVH. The remaining seconds pulses are brief audio bursts (5 millisecond pulses) that resemble the ticking of a clock. All pulses commence at the beginning of each second. They are given by means of a double-sideband amplitude modulation.
Each seconds pulse is preceded by 10 milliseconds of silence and followed by 25 milliseconds of silence to avoid interference which might make it difficult or impossible to pick out the seconds pulses.

1e. Standard Audio Frequencies

In alternate minutes during most of each hour, 500 or 600 Hz audio tones are broadcast. A 440 Hz tone, the musical note A above middle C, is broadcast once each hour. In addition to being a musical standard, the 440 Hz tone can be used to provide an hourly marker for chart recorders or other automated devices.

1f. Official Announcements

Forty-five-second announcement segments are available on a subscription basis to other Federal agencies to disseminate official and public service information. The accuracy and content of these announcement are the responsibility of the originating agency, not necessarily NBS.
Most segments except those reserved for NBS use and the semi-silent periods are available. Arrangements for use of segments may be made through the Time and Frequencies Services Group, 524.06, National Bureau of Standards, Boulder, CO 80303.

+ Omega Navigation System Status Reports

Omega Navigation System status reports are broadcast in voice from WWV at 16 minutes after the hour and from WWVH at 47 minutes after the hour. The international Omega Navigation System is a very low frequency (VLF) radio navigation aid operating in the 10 to 14 kHz frequency band. Eight stations are in operation around the world. Omega, like other radio navigation systems, is subject to signal degradation caused by ionospheric disturbances at high latitudes. The Omega announcements on WWV and WWVH are given to provide users with immediate notification of such events and other information on the status of the Omega system.
For more information about the Omega Navigation System, contact Mr. David Scull, United States Coast Guard HQ, (G-ONSOD 43), Washington, DC 20590.

+ Geophysical Alerts

Current geophysical alerts are broadcast in voice from WWV at
18 minutes after each hour. The messages are changed approximate
every six hours at 1800, 0000, 0600, and 1300 UTC. Part A of the
message gives the solar-terrestrial indices for the day; namely,
the 1700Z solar flux from Ottawa, Canada at 2800 MHz, the estimated
A value for Fredericksburg, Virginia, and the current, Boulder,
Colorado, K-index. Part B gives the solar-terrestrial conditions
for the previous 24 hours, and Part C gives the forecast for the
next 24 hours. If stratwarm conditions exist, a brief advice is
given at the end of the message.

1. Solar activity is classified as:

VERY LOW Usually only quiet regions on the solar disk and no
more than five of these; fewer than ten class-C
subflares without centimetric radio burst of SID
observed or expected.

LOW Usually more than five but less than ten quiet
regions on the solar disk; only class-C subflares
without centimetric radio bursts or SID (sudden
ionospheric disturbances) observed or expected.

MODERATE Eruptive regions on the solar disk; fewer than five
class-M X-ray events with centimetric radio bursts
and SID observed or expected.

HIGH Active regions on the solar disk; several class-M
X-ray events with centimetric radio bursts and
strong SID; and/or one to two importance=2
chromospheric flares or class-X X-ray events
observed or expected.

VERY HIGH Region capable of producing protons on the sun; one
or more chromospheric flares of importance-2 or
greater; with outstanding centimetric radio bursts
(500 flux units or greater), Class-X X-ray bursts,
and major SID observed or expected.

2. The geomagnetic field is classified as:

QUIET A <= 7, usually no K-indices > 2
UNSETTLED 7 < A < 15 usually no K-indices > 3
ACTIVE 15 <= A < 30 a few K-indices of 4

3. The geomagnetic storms are classified as:

MINOR 30 <= A < 50, K-indices mostly 4 and 5
MAJOR A > 50, some K-indices 6 or greater. Sudden
commencements indicated by beginning time to
nearest minute. Gradual commencement indicated by
beginning time to nearest hour.
4. The rest of the report as follows:

SOLAR FLARES

CLASS C any solar X-ray burst with a peak flux at 1-8 angstroms of less than 1 microwatt per square meter

CLASS M a solar X-ray burst with a peak flux at 1-8 angstroms, greater than or equal to 10 but less than 100 microwatts per square meter.

CLASS X a solar X-ray burst with a peak flux at 1-8 angstroms, greater than or equal to 100 microwatts per square meter.

MAJOR SOLAR
FLARE a flare of optical importance (at least 2B - BRIGHT) with a centimetric outburst of 500 flux units or more; or an X-ray event of Class-X intensity of duration 3 hours or more regardless of optical flare importance.

PROTON FLARE protons by satellite detectors (or polar cap absorption by riometer) have been observed in time associated with Ha flare.

SATELLITE LEVEL
PROTON EVENT a proton enhancement detected by Earth orbiting satellites with measured particle flux of at least 10 protons per square centimeter per second per steradian of at least 10 Million electronvolts.

POLAR CAP
ABSORPTION proton-induced absorption at least 2 dB as measured by a 30 MHz riometer located within the polar cap.

STRATWARM reports of stratospheric warmings in the high latitude regions of winter hemisphere of the earth associated with gross distortions of the normal circulation associated with the winter season

Inquiries regarding these messages should be address to NOAA, Space Environment Services Center R43, Boulder, CO 80303. These messages are also available by dialing (303) 499-8129

PROPAGATION FORECASTS

The radio propagation forecasts broadcast on WWV were discontinued on September 30, 1976. Some of the information previously contained in these forecasts is now included in the Geophysical Alert announcements at 18 minutes after each hour. However, neither NBS nor the Space Environment Services Center which sponsors the Geophysical Alerts make radio propagation predictions, nor do they maintain a literature file on the subject. Users interested in further reading material on the effect of solar and geophysical activity on radio propagation should consult the latest edition of the AMATEUR RADIO HANDBOOK, published by the American Radio Relay League.

MARINE STORM WARNINGS

Weather information about major storms in the Atlantic and eastern North Pacific are broadcast in voice from WWV at 8, 9, and 10 minutes after each hour. Similar storm warning covering the eastern and central North Pacific are given from WWVH at 48, 49, and 50 minutes after each hour. An additional segment (at 11 minutes after the hour on WWV and at 51 minutes on WWVH) may be used when there are unusually widespread storm conditions. The brief messages are designed to tell mariners of storm threats in their areas. If there are no warnings in the designated areas, the broadcasts will so indicate. The ocean areas involved are those for which the U.S. has warning responsibility under international agreement. The regular times of issue by the National Weather Service are 0500, 1100, 1700, and 2300 UTC for WWV and 0000, 0600, 1200, and 1800 UTC for WWVH. These broadcasts are updated effective with the next scheduled announcement following the time of issue.
Mariners might expect to receive a broadcast similar to the following:
"North Atlantic weather West of 35 West at 1700 UTC. Hurricane Donna, intensifying, 24 North, 60 West, moving Northwest, 20 knots, winds 75 knots; storm 65 North, 35 West, moving east, 10 knots; winds 50 knots, seas 15 feet."
Information regarding these announcements may be obtained from the Director, National Weather Service, Silver Spring, MD 20910.

1g. "Silent" Periods

These are periods with no tone modulation. However, the carrier frequency, seconds pulses, time announcements, and 100-Hz BCD time code continue.

END TRANSCRIPTION

I have ended the transcription from the original literature here. The remaining material is on WWVB, the 60 kHz sister station to WWV and WWVH, and other totally unrelated topics.

Here's a few more things you might like to know (TRIVIA):

The telephone numbers listed in Figure 1 dial-in directly to the broadcasts of WWV and WWVH. If you don't have a radio, this is the only way to get these broadcasts

The station identification and time-of-day announcement are pre-recorded -- not "live". The announcer for WWV is Don Elliott of Atlanta, Georgia. Mrs. Jane Barbe is the announcer for WWVH, and she is also from Atlanta.

TOURS:

Guided tours are available at all NBS radio station. However, arrangements for visiting the sites should be made in advance with

the EIC. There aren't any 'regular' visiting hours.

Tours of the NBS Boulder Labs, including visits to the atomic clock and the other dissemination services, are available. Information can be obtained from the Program Information Office, NBS, Boulder, CO 80303.

Correspondence pertaining directly to station operations may be address to:

Engineer-in-Charge
NBS Radio Stations WWV and WWVB
2000 East County Road 58
Fort Collins, CO 80524
(303) 484-2372

Engineer-in-Charge
NBS Radio Station WWVH
PO Box 417
Kekaha, Kauai, HI 96752
(808) 335-4361

If you wish to receive the document this material is copied from, so that you can read about the other frequency standard and about radio station WWVB at 60kHz, write to the station locations given in Figure 1 and ask for the document entitled "NBS TIME AND FREQUENCY DISSEMINATION SERVICES".

73 = (Best Regards)

3387. Amateur Radio Newsline #867 25 Mar 94 (resend)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 17:02:05 UTC
From: bigsteve@dorsai.dorsai.org
Message-ID: <Dy5cjGG8yzdN057yn@dorsai.dorsai.org>
Source record: 269238
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

Due to mail and posting problems this past weekend here at Dorsai, we are reposting the Newsline.

The electronic publication of the Amateur Radio Newsline is distributed with the permission of Bill Pasternak, WA6ITF, President and Editor of Newsline. The text version is edited from the original scripts and transcribed from the audio reports by Dale Cary, WD0AKO, and is first published in The Radio & Electronics Round Table on the Genie Online System.

If you have any comment, suggestion, or news item you would like to submit, send them via E-Mail to 3241437@mcimail.com or B.PASTERNAK@genie.geis.com. You can contact Newsline at +1 805-296-7180. It is a combination answering and FAX machine, if you have a FAX to send, wait for the voice prompt and press your fax-send button.

All other information and disclaimers are in the text header below.
- - - - -
NEWSLINE RADIO - CBBS EDITION #117 - POSTED 03/26/94

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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newsline is posted on this CBBS twice monthly. For current information updates, please call

Los Angeles..... (213) 462-0008
Los Angeles (Instant Update Line)..... (805) 296-2407
Seattle..... (206) 368-3969

Seattle..... (206) 281-8455
Tacoma..... (206) 927-7373
Louisville..... (502) 894-8559
Dayton..... (513) 275-9991
Chicago..... (708) 289-0423
New York City..... (718) 353-2801
Melbourne, FL..... (407) 259-4479

For the latest breaking info call the Instant Update Line listed above. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

Articles may be reproduced if printed in their entirety and credit is given to AMATEUR RADIO NEWSLINE as being the source.

For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

****

Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN and many others in the United States and around the globe!!!

****

[867]

* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *
* *
* The following is a closed circuit advisory. According *
* to Newsline Support Fund administrator Norm Chalfin K6PGX, *
* the funds needed to keep Newsline in operation are once *
* again low. According to Norm, it now costs a bit over $850 *
* a month to pay the telecommunications and equipment supply *
* bills. That's up over $150 from the same time last year. *
* For those of you unaware, Newsline pays the cost of *
* three telephones including the one used for news gathering. *
* We also pay for several electronic news and information *
* services, we pay for electronic mail, for raw tape stock *
* and the cost of repairing and updating our production *
* facilities. Over the past year we have had several offers *
* of free or reduced rate E-mail services. While this is *
* very much appreciated, there are several services that are *

* used by the ham radio publications industry that are not *
* available except on a direct basis. Obviously, changing *
* the electronic mail services is not possible unless the *
* entire ham radio publishing wants to make such a move. At *
* this time the industry is not so inclined. *
* Right now, Newsline has enough funds to carry it through *
* to the end of April, but that's it. Therefore we are once *
* again appealing to all of our listeners to assist in any *
* way that you can so that Newsline can continue to being you *
* these weekly ham radio news bulletins. Our address is the *
* Newsline Support Fund, P.O. Box 463, Pasadena, CA 91102. *
* Again, and as always, we thank you for your ongoing *
* interest and support. That ends the closed circuit *
* advisory with Newsline report number 867 for release on *
* Friday, March 25th 1994. *
* *
* *

The following is a QST

The FCC names a well known ham to head up its new task force
on personal communications services and a missing young ham has
returned home.

*****
HALLER TO HEAD PCS TASK FORCE

One of the nations best known and most respected ham radio
operators has been selected to guide all personal communications
into the next century and beyond. This, with the naming of FCC
Private Radio Bureau Chief Ralph Haller, N4RH to head the newly
created Commission task force on personal communications
services, better known as the PCS.
The Commission says that the task force will provide a focal
point for all of the PCS issues currently before it and those
yet to surface. The group will would work with all of the FCC's
bureaus and offices that are involved in PCS issues. It will
also be responsible for assuring consistency between policies and
rules for narrow-band and wide-band PCS services.
FCC Chairman Reed Hundt says that he choose Ralph Haller to
head up the task force because he is confident that under his
leadership the group will guide the Commission in the timely
development of a comprehensive regulatory framework for the PCS.
Other members of the task force include FCC Chief Engineer Tom
Stanley, Robert Pepper who is Chief of the Office of Plans and
Policy, Donald Gips the Deputy Chief of Office of Plans and
Policy and FCC Chief Economist Michael Katz.

*****
CLINTON NAMES CHONG TO FCC

President Clinton has selected San Francisco telecommunications lawyer Rachelle B. Chong to fill one of two vacancies at the Federal Communications Commission. Chong, a 34 year old Republican, would become the FCC's first-ever Asian-American commissioner if confirmed by the Senate. She would replace Sherrie Marshall, whose seat at the FCC has been open for nearly a year. Chong's term would last through mid-1997.
President Clinton also intends to nominate Susan Ness, another communications lawyer as a Commissioner. Ness has worked as a senior lender and as group head in the communications industries division of American Security Bank in Washington. During the mid-1970s, she was assistant counsel to the House Banking Committee. She holds a law degree from Boston College Law School and a master's degree in business administration from the Wharton School.

*****
FCC RFI SURVEY

The FCC has released the results of a just completed telephone interference survey and it says that going QRP makes little difference in telephone related RFI.
Thirty-five FCC field offices each picked three random cases of telephone interference on record and then visited the scene. The transmitting stations included 47 Citizens Band; 27 Amateur; 23 AM broadcast; 10 FM broadcast; and one international broadcast station.
At the location experiencing interference, the FCC's Field Operations Bureau personnel would first test the telephones on site, and then test their own RFI immune telephones, as well as several commercially available filters. In all, some 241 different telephones were tested.
Among the FCC's conclusions was that transmitter power did not seem to be a significant factor. In fact, transmitters that ran 10 watts or less caused significant telephone interference in one-third of the cases. The FCC also said that add-on filters provided a cure to the interference problem in only one-third of the incidents investigated.
The study did however conclude that manufacturers can design telephones. The FCC says that it hopes the survey will encourage affected parties to productively address and resolve this problem, but stopped short of ordering the manufacturing community to produce only RFI immune telephones.

*****
SPECTRUM AUCTION

The Federal Communications Commission has taken a first step toward setting the ground rules under which businesses can bid for certain chunks of the airways. On March 8th, the FCC adopted set of so called generic rules for auctioning radio frequencies

for a variety of new services, including the next generation of mobile telephone service called personal communications service. The rules will allow several auctions to be conducted at the same time, require $2,500 as a minimum up-front payment for parties to participate in the auction, set deadlines for payments on winning bid and also set aside a portion of the frequencies to be bid on by individuals or groups composed primarily of women, minorities, rural telephone companies and small businesses. Companies obtaining personal communications services licenses will be able to offer consumers the next generation of mobile phone service, in which the number travels with the phone's owner.
The FCC says that it is exploring various options to submit bids. This includes electronic filing as well as oral and paper bids. A more detailed set of rules for specific services will be decided later. There are no plans now toward any reallocation by auction of the spectrum used by radio amateurs or other communications hobbyists.

*****
WZ1W FOUND

A missing Massachusetts teenager, whose been the object of a nationwide search involving amateur radio, has been found. Nathan A. Taylor, WZ1W, who disappeared in August, was found March 8th in southeast Texas. That's where according to a friend of Taylor's family Nathan was taken into custody by federal authorities.
After nearly seven months, fourteen year old Nathan A. Taylor, is back in his home state of Massachusetts. Paul Topolski, N1IPG, is a friend of the Taylor family.

"He has trouble socializing with his piers and consequently he really didn't want to go back to school." Paul Topolski, N1IPG.

Nathan became heavily involved with computers. That according to Topolski triggered Nathan's actions.

"There's quite an underground network of computer operators on the bulletin boards and so forth. He got involved with the wrong group and consequently enticed into leaving home." Paul Topolski, N1IPG.

Nathan disappearance lead to fears that he was in the company of a man who has a known criminal record. That suggestion was raised after police viewed files on Nathan's computer system. For Nathan's parents in Gardner, Massachusetts the next several months would be filled with anxiety.

"All I know is what his parents have told me about a bus trip from Gardner through Memphis and then that was the last time anybody had seen him. The bus driver in Memphis remembered

seeing him and then that was it, he appeared to jump off the bus at that time. He turned up in Houston, Texas and one evening his parents called me and consequently informed me that he had been arrested by the FBI. He is now back in the Gardner area." Paul Topolski, N1IPG.

Topolski says Nathan still has problems to work out.

"He seems to have calmed down quite a bit too." Paul Topolski, N1IPG.

The last several months have been extremely hard from Nathan Taylors family members. Now they can rest easier as well. Nathan's close ties to ham radio led to a nationwide plea on amateur radio packet systems. Topolski contacted ARRL Section Managers in Texas and Tennessee for assistance. He sent flyers to amateur radio clubs as the part of the effort to locate Nathan.

*****
HI SEAS RESCUE

Two men rescued from a sinking boat in the Gulf of Mexico credit Amateur Radio for saving their lives. Larry Hooker, KB5ZNY, of Thaxton, Mississippi, and his sailing partner, Rett White, were returning from Honduras on Hooker's 35 foot sailing vessel "Off The Hook," when they ran into an unexpected storm and high seas.
Hooker had been in contact with his friend Randall O'Brian, KD5ZH, of West Point, Mississippi, since hoisting anchor on February 6th. The two were keeping regular schedules on 80, 40, and 20 Meters and O'Brian was the first to learn of their difficulties and eventually contacted the US Coast Guard.
O'Brian continued to help provide communication, along with the Coast Guard, who came up on 3.862 MHz.
On March 4th, Hooker and White were taken aboard the Coast Guard cutter Cushing. Their boat was put under tow but subsequently sank.
Hooker had visited his daughter, Tina, KB5YNN, a missionary with Global Outreach in the northeastern part of Honduras. This is an area accessible only by air or sea.

*****
AMSAT NET ON GALAXY 3

Satellite users may be interested in an experiment being conducted in the Houston, Texas area. The group there is uplinking the Houston Area Amsat Net, heard locally on the 147.10 FM repeater, to the Galaxy 3, communications satellite Channel 17, on the 5.8 Mhz audio subcarrier of the Shop-At-Home Channel. The net is carried in realtime on Tuesday evening, from approximately 10 PM Central Standard Time until completion. This

is an experiment but could be continued on a regular basis if interest is sufficient. Send reception reports to Craig Davidson, WD5BDX by packet or direct to his callbook address.

*****
DELPHI

Delphi, a national bbs-type information service and Internet gateway has announced the opening of a special interest group dedicated go radio users in general, and Ham Radio operators in particular. During years past, Ham Radio was supported as a sub-topic on Delphi as part of the Delphi Hobby SIG. Through the efforts of Marty Goodman, KC6YKC and Andy Eddy, WB1FEV Amateur Radio has at last been given a separate special interest group of its own on Delphi.
During its first week of operation beginning March 2nd, this SIG has been able to offer a library of over 300 groups of files for downloading and an active forum. Also in the first week about 30 messages posted every day, with over 300 Delphi members visiting this forum. Those interested in this new SIG should contact Delphi services for more information.

*****
1994 INTERNATIONAL DX CONVENTION

In DX, word that the 1994 International DX Convention is being held at the Holiday Inn, Plaza Park, Visalia, CA, April 15th to the 17th. Friday and Saturday night will see hosted cocktail parties plus a Sunday DX Breakfast and Saturday Night Banquet featuring the 3Y story. The address for information and registration is Don Bostrom, N6IC, at 4447 Atoll Ave., Sherman Oaks, California 91423.

*****
ROBERTS TO SPEAK ARRL SW DIVISION CONVENTION

The man who has developed several high tech motorcycles will be the banquet speaker at the 1994 ARRL Southwestern Division Convention scheduled for later this year. Newsline recently got a call from Division Director Fried Heyn, WA6WZO who told us that its going to be a special night with inventor Steve Roberts N4RVE. Roberts is best known for his development of Behemoth a super high tech motorcycle with on-board computers and ham radio gear. Roberts will not only be speaking at the banquet. He also has promised to bring along one of his super bikes for everyone to see. The 1994 ARRL Southwestern Division Convention is slated for August 26th through the 28th in San Diego. The grand banquet will take place Saturday night August 27th with film maker Dave Bell, W6AQ as master of ceremonies.

*****
DAYTON AWARDS FOLLOW-UP

The 1994 Dayton Hamventions Special Achievement Award goes to
Russ Kroeker, N7HGE of Kent, Washington for his efforts in
implementing the Evergreen Intertie repeater network in the
northwest U.S. and British Columbia. Mr. Kroeker was honored,
but also credited many others.

"It is a great honor and I think that the amateur radio
society will be really delighted to hear that the time that they
spent investing in it, a lot of members have invested their money
to help put the equipment in, and a lot of their time Larry
Babcock, WB7USL put a lot of time in, Mark La Combe, KF7II. These
guys really, I think will be really happy to hear that the work
they put in is getting recognized, in a national way, and it is a
great honor for all of us. We just thank the lord that you folks
did choose us." Russ Kroeker, N7HGE.

Mr. Kroeker will receive his award at the Hamvention Banquet
at the Dayton Convention Center located in downtown Dayton, Ohio
Saturday evening April 30th.
More on the upcoming 1994 Dayton Hamvention next week.

*****

For this week, that's all from the Amateur Radio Newsline.
You can write to us at P.O. Box 463, Pasadena, CA 91102.

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--
< ^^>
< "Big Steve" Coletti >
< Shortwave Listener, Broadcaster, Computer Consultant >
< and all around nice guy >
< Internet: bigsteve@dorsai.dorsai.org ==== S.COLETTI2@genie.geis.com >
< UUCP: steve.cole@islenet.com ==== steveny@lopez.marquette.mi.us >
< Fidonet: 1:278/712 US Mail: P.O. Box 396, New York, NY 10002 >
< Voice: +1 212 995-2637 >
~~~~~~
~~~~~~

3388. WANTED: MT1000

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 17:17:09 UTC
From: moore@spk.hp.com
Message-ID: <CnFs0L.51v@spk.hp.com>
Source record: 269239

My fire department is looking for used Motorola MT1000s, which I guess have been superceded by the HT1000. We need about three of them pretty quickly.
o cover 154 mHz region
o 16 channel w/ scan

We would also like to acquire the programming cable for these.

Any sources would be appreciated.

3389. Re: World Wide Web Sites wanted!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 17:19:11 UTC
From: nsyslaw@riogrande.acs.ncsu.edu
Message-ID: <2n9nuf$45f@taco.cc.ncsu.edu>
Source record: 269240

Scott Ehrlich (wy1z@netcom.com) wrote:

: I am looking for all pointers to Hypertext sites (World Wide Web sites).
: I know there is a UK callsign server available via WWW.
: What else is there?
: Thanks much!
: PLEASE PLEASE e-mail direct if possible.

Done.

: Scott

Here's a couple: (for everybody's benefit)

* North American Ham Radio WWW server:
http://www.acs.ncsu.edu:80/HamRadio

* United Kingdom Ham Radio WWW Server:
http://www.mcc.ac.uk/OtherPages/AmateurRadio.html

The first server has links to Sarex Information,
North American and United Kingdom callbooks, Bill Pasternak's
Amateur Radio Newsline, and an online Repeater Database.

There is a quiz server being written (to take simulated
tests - generated on the fly), and a searchable index
for the repeater database is in the works too. There is
also a feedback page for you to voice your suggestions
and opinions.

Enjoy!

--
Lou Williams (nsyslaw@acs.ncsu.edu) | aka: KE4ARM
Unix Systems Programmer | Phone: (919) 515-2794
NCSU Administrative Computing Services | FAX: (919) 515-3787

URL: http://www.acs.ncsu.edu/~nsyslaw

3390. Re: Do you post these E V E R !

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 17:46:11 UTC
From: rwilkins@ccnet.com
Message-ID: <2n9ph3$h9e@ccnet.ccnet.com>
Source record: 269242

Burt Fisher, Cape Cod Reg Tech (FISHERB@a1.mec.mass.EDU) wrote:

: Amateur Radio Call K1OIK

Is this one of the new incentive 1x1 calls? Oh ! I guess it is one of
those fancy fm broadcast calls...you know, with the frequency cleverly
included. Had to say something good :)

Bob

--
Bob Wilkins work bwilkins@cave.org
Berkeley, California home rwilkins@ccnet.com
94701-0710 play n6fri@n6eeg.#nocal.ca.us.noam

3391. Re: SUMMARY:2m HT Recomendations

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 17:55:36 UTC
From: brunelli_pc@delphi.com
Message-ID: <JqyvZFA.brunelli_pc@delphi.com>
Source record: 269243

The information here is a bit fragmented, no?

Ownoing a th78, it has good features, loytso memory, and a bunch of paging
stuff that i will never use
However, it has the best VFO flexibilioty in the game.
I just got to play with a ft-530 and it has some shortcomings in that
department. Namely,
that when you try to monitor 2 meters on the 70cm vfo, or v.v, you
do not have access to your memory programming. The 78 gives you 2
VFOs that are at parity, except for a few freqs via modification.

All dual in band work necessitates direct netry for the off band...
I think that this is a shortcoming. So, who cares about paging! buy
a pager. Not that this feature breaks the radio, but it is a more significant
point that
some other "features".

Note: if the 530 does allow mem recoll on the sub band, OOOPS...
73 es sri fer bad editor
n1qdq

3392. Youth Net at the Hamvention

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 18:07:02 UTC
From: alexn9kyj@aol.com
Message-ID: <2n9qo6$9ef@search01.news.aol.com>
Source record: 269244
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

From: Alexis Leynes N9KYJ
BBS: N9KYJ@W9ZMR.IL.USA.NOAM
e-mail: Alex.N9KYJ@aol.com (Internet)

Attention all young hams, teaching hams, and other interested hams.
There will be a youth net at the Dayton Hamvention on the first Friday night (April 29, 1994) of the event at 8:00 p.m. (Dayton time) of the Hamvention, this net will be held for approximately for an hour. The youth net will be held on the Miami Valley FM Association N8ACV repeater on 146.64 Mhz (negative 600 input). This is the first time a youth net will be held on a local Dayton repeater during the
Hamvention, so I hope to hear you on the air. If you have any question, please send me a message to my packet address or to my e-mail address. I'll be more than happy to answer any of your questions. 73 DE Alex =>

3393. Re: HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 18:36:34 UTC
From: fms@sw.stratus.com
Message-ID: <2n9sfi$lj0@transfer.stratus.com>
Source record: 269245

jwh7k@galen.med.Virginia.EDU (John W. Holman) writes:
>
> On December 18, 1993, I took an ARRL test session and earned a Technician w/HF
> license. During the week of February 20th, other people that were at the
> December 18th test session were receiving their new licenses. Not me!
> After waiting a week, I called the ARRL to see what was going on.
> They had received my paper work and sent it on to the FCC on January 6th.
> The gentleman I talked at the ARRL said that licenses from the same test
> session are not always issued together. After waiting another week, I talked
> to some experienced local hams and was told to call the FCC. On March 3th, I
> called the FCC and asked the status of my license. The person I talked to
> said they have received the paper work from the ARRL, but mine was pulled for
> some problem. I could not get an answer as to what the problem was with my
> application. After I reported this information to the local hams, they said
> to wait and hope the FCC will sort it out. Well, I have waited and no license.
> It will be 90 days on April 6th since the FCC has had my application. This is
> my first ham license, I have _not_ had a ham license canceled by the FCC. Does
> anyone have any ideas what I can do to resolve this problem and finally get
> a license?

I would suggest that you get back on the phone to the ARRL. They have had lots
of practice dealing with the FCC on such matters. Let them know exactly what
the FCC folks said to you, and ask if they would please give you a hand in finding
out what's going on. They are very good at clearing up things like this.

Good luck, and let us know how things work out!

73 de Faith N1JIT
--
Faith M. Senie InterNet: fms@vos.stratus.com
Stratus Computer, Inc. InterNet: fms@hoop.sw.stratus.com
55 Fairbanks Blvd. Pkt Radio: n1jit@wa1phy.ma.usa.na
Marlboro, MA 01752 Phone: (508)460-2632

Curiosity doesn't flourish among the burned-out...

3394. Index file for BARC FTP area now available

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 18:45:55 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCnFw4K.BoD@netcom.com>
Source record: 269246
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,alt.radio.scanner

I finally finished the Index file for the Boston ARC's hamradio
section on Oakland University's anonymous FTP site oak.oakland.edu

The file is called 00-Index.txt, and is located in the /pub/hamradio
directory.

The format of this file is:

/name of directory/
files a one-line description of each file
within
the
directory

I know this project has been long overdue, but the inclusion of the
archives on the QRZ CD-ROM was just the insentive I needed.

If you do not have direct FTP capability, and would like a copy of the
file, please let me know.

73,
Scott, WY1Z

--
```
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
================================================================================
```

3395. Relm WHS-150

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 18:51:24 UTC
From: ckf@christa.unh.edu
Message-ID: <2n9tbc$8pn@mozz.unh.edu>
Source record: 269247

I just purchased a new Relm WHS-150 portable two way for my job on my hometown ambulance. I was wondering if anyone has any info on it so I can be prepaired when it arrives (sometime this month). It's a sixteen chanell, scan, l/o, priority, etc., blah, blah. I've posted this to rec.radio.scanner, but I thought this newsgroup would help to. Reply here or on my E-mail. Thank you
Chris Fowler

3396. Re: Plain old repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 18:51:36 UTC
From: hammock@kelvin.jpl.nasa.gov
Message-ID: <2n9tbo$m58@lo-fan.jpl.nasa.gov>
Source record: 269248

In article <bote.764957247@access1> bote@access1.digex.net (John Boteler) writes:
>hammock@kelvin.jpl.nasa.gov (Randy Hammock) writes:
>>In fact, if you don't like hearing the beeps on our machines, all you
>>have to do is turn on your CTCSS as our repeaters encode PL on their
>>outputs ONLY when they are receiving a signal in the input. Except for
>
>We tried something similar to this for a while.
>
>We repeated the PL of users, so that some of us
> only heard certain users who transmitted the
>PL for which we were listening.
>
>When we went to multiple sites that became problematic,
>so we have reverted to the transmitter sending
>PL full time.

I can understand the problems with that. Here in So. Ca. the 220 band is so congested, the coordinateing body requires that ALL repeaters be PLed. So it is not a question of allowing a user to select a PL that only his friends will hear him. Using CTCSS allows you listen to the users of your machine but not hear all the rubbish coming from a co-channeled machine.

Actually, we regenerate the PL not just pass it through. Another side benefit of this scheme is that those who use a dual-band mobile as an extender for their hand-helds don't have to wait for the repeater to drop carrier so that their "link" will turn around. We use this system to link two of our repeater together which are close together in frequency allowing the link repeater use a single set of cans and antenna. The linking repeater scans between the outputs of the two repeaters. When it sees a carrier with a PL, it locks on that frequncy and brings up the tansmitter (with PL) to the other repeater. When the person talking quits, the PL on the first repeater is reverse phase keyed causeing the link repeater to imediately reverse pahse key it's PL and resume scanning giving very fast link turn around. While the link is only half duplex, it does have the advantage of not needing any additional link frequencies (a rare commodity in So. Ca.). Our club actually received a citation (commendation) from the FCC for this link system and it's efficeint use of frequency spectrum.

Basically, you could say, we all use what works for us. Different systems have different needs.

Rnady Hammock KC6HUR
hammock@kelvin.jpl.nasa.gov

3397. W1AW SCHEDULE

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 18:57:19 UTC
From: gswanson@arrl.org
Message-ID: <1994Mar29.185719.10472@arrl.org>
Source record: 269249

W1AW Schedule

Time (EST)	Mode	Days
12 AM	RTTY	Daily
12:45 AM	VOICE	Daily
9 AM	CWs	Wed, Fri
9 AM	CWf	Tue, Thu
10 AM	CWb	Tue-Fri
11 AM	RTTY	Tue-Fri
4 PM	CWf	Mon, Wed, Fri
4 PM	CWs	Tue, Thu, Sat, Sun
5 PM	CWb	Daily
6 PM	RTTY	Daily
7 PM	CWs	Mon, Wed, Fri
7 PM	CWf	Tue, Thu, Sat, Sun
8 PM	CWb	Daily
9 PM	RTTY	Daily
9:45 PM	VOICE	Daily
10 PM	CWf	Mon, Wed, Fri
10 PM	CWs	Tue, Thu, Sat, Sun
11 PM	CWb	Daily

Frequencies (MHz)

CW:	1.818	3.5815	7.0475	14.0475	18.0975	21.0675	28.0675	147.555
RTTY:	-	3.625	7.095	14.095	18.1025	21.095	28.095	147.555
VOICE:	1.855	3.99	7.29	14.29	18.16	21.39	28.59	147.555

Notes:
CW frequencies include code practices, Qualifying Runs and CW bulletins.
CWs = Morse Code practice (slow) = 5 - 7.5 - 10 - 13 - 15 WPM
CWf = Morse Code practice (fast) = 35 - 30 - 25 - 20 - 15 - 13 - 10 WPM
CWb = Morse Code Bulletins = 18 WPM
RTTY= Teleprinter Bulletins = BAUDOT (45.45 baud) and AMTOR-FEC (100 Baud).
ASCII (110 Baud) is sent only as time allows.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

A DX bulletin replaces or is added to the regular bulletins between 8 P.M. Eastern time Thursdays and 8 P.M. Eastern time Fridays.

On Tuesdays and Saturdays at 6:30 P.M. Eastern time, Keplerian Elements for active amateur satellites are sent on the regular teleprinter frequencies.

In a communications emergency, monitor W1AW for special bulletins as follows: voice on the hour, teleprinter at 15 minutes past the hour, and CW on the half hour.

W1AW is open to visitors during normal operating hours: from 1 P.M. to 1 A.M. on Mondays, 9 A.M. to 1 A.M. Tuesday through Friday, 1 P.M. to 1 A.M. on Saturdays, and from 3:30 P.M. to 1 A.M. on Sundays. FCC licensed amateurs may operate the station from 1 to 4 P.M. Monday through Saturday. Be sure to bring your current FCC amateur license or a photocopy.

Headquarters and W1AW are closed on New Year's Day, President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving and the following Friday, and Christmas Day. On the first Thursday of September, Headquarters and W1AW will be closed during the afternoon.

3398. Re: Do you post these E V E R !

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 19:18:41 UTC
From: brett_miller@ccm.hf.intel.com
Message-ID: <brett_miller.85.00135045@ccm.hf.intel.com>
Source record: 269181

In article <01HAJI6XWRRW0034AV@mr.mec.mass.edu> FISHERB@a1.mec.mass.EDU (Burt Fisher, Cape Cod Reg Tech 508-432-4500 Ext.226) writes:

>WHY MEN ARE BETTER THAN HAMS
>

Having problems with the wife, are we?

Brett Miller N7OLQ brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

3399. But Seriously

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 19:19:24 UTC
From: greg@netcom.com
Message-ID: <gregCnFxoC.JIF@netcom.com>
Source record: 269250

Since Ed's decided to take this one seriously, I've altered the subject
line so that those who may have dumped the original in their kill files
have the opportunity to participate:

In article <1994Mar29.124149.4266@arrl.org> ehare@arrl.org (Ed Hare (KA1CV)) writes:
>
> [counter-inflammation deleted] this concept has
>some merit. Any ideas for good ways to do this?

The subject is 'what kind of award makes sense for no-code techs?'

At risk of sounding a bit patronizing, I'd look really hard at the
Boy Scout merit-badge and ranking model.

It is set up to encourage the participant to try new things, and to
gain some mastry of them. The result of each of these class of things
is a 'merit badge.' After so many merit badges, in a number of categories
(we want to be well-rounded), the participant is eligable for an award
(i.e. the next level of rank).

So, we can start by listing some things that are worth-while for the
new ham to try, by which s/he'll learn. And some categories to put
those things in (e.g. Technical, Operational, Experimental, Organizational).

And yes, I think a couple of repeater contacts ought to be worth something,
but not in and of itself. Here's a partial list of things that might
score points toward the, Personal Frontiers award:

1. Technical
a. Complete a home-brew antenna project
b. Install a mobile rig in your car
c. Find a cable-TV leak
d. Build a code-practice oscillator
e. Build an HF receiver kit

2. Operational
a. Complete a VHF or UHF simplex QSO of more than
<pick a figure> miles
b. Complete a VHF or UHF QSO on SSB or CW
c. Participate in a fox-hunt
d. Check into a VHF or UHF traffic net
e. Handle a piece of traffic from a PBBS
f. Sign up for an upgrade class
g. Get up to 5 words per minute.

3. Organizational
a. Attend a meeting of a local ham club

b. Provide amateur radio communications at a public event,
under sponsorship of a local amateur radio group
c. Participate in RACES or ARES activities during
an emergency
d. Attend a ham-fest...

I'm sure there are more that can be added. The idea is to figure out the things that new hams can be doing to grow and develop in the hobby/service and both suggest them and recognize an effort towards giving them a try. The list of items has to be big enough so that the issue of 'but we haven't had a natural disaster this year' doesn't really hamper getting a certificate.

I'd limit the award to the first couple of years after licensing, and also to Novice and Technician classes. The idea is to get NEW hams expanding their horizons, trying new things, and into the various organizations.

3400. Re: Supermorse under windows.?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 19:23:38 UTC
From: brett_miller@ccm.hf.intel.com
Message-ID: <brett_miller.86.0013656E@ccm.hf.intel.com>
Source record: 269182

In article <1994Mar29.195120.22353@ll.mit.edu> fcr@ll.mit.edu (Frank Robey) writes:

>Has anybody been successful in getting supermorse to run under windows?
>If so, I would appreciate any help that you could give me.

Windows just doesn't care about real-time. I couldn't get it to work either.
The best menu option in Windows is under the File menu. Its called:
Exit Windows...

Look into a Windows based morse trainer. I'm not sure how they work.

Brett Miller N7OLQ brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

3401. Resend of Daily Summary of Solar Activity for 27 March 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 19:25:18 UTC
From: oler@rho.uleth.ca
Message-ID: <9403291925.AA28089@rho.uleth.ca>
Source record: 269251
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

27 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 27 MARCH, 1994

NOTE: Very intense stratospheric warming exists over northeastern Europe and
Siberia and is spreading into the polar region. The coldest air has
been displaced to southern Greenland/Baffin Island today. The
temperature gradient is reversed between 60N and the polar at 10 HPA
and above. Final warming is in progress.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 086, 03/27/94
10.7 FLUX=088.4 90-AVG=104 SSN=041 BKI=1121 2223 BAI=006
BGND-XRAY=A6.7 FLU1=3.6E+06 FLU10=1.7E+04 PKI=2131 2233 PAI=008
BOU-DEV=008,20004,019,008,015,015,019,027 DEV-AVG=2514 NT SWF=00:000
XRAY-MAX= B1.9 @ 2210UT XRAY-MIN= A5.8 @ 0703UT XRAY-AVG= A8.2
NEUTN-MAX= +002% @ 1425UT NEUTN-MIN= -004% @ 1905UT NEUTN-AVG= -0.5%
PCA-MAX= +0.1DB @ 2140UT PCA-MIN= -0.5DB @ 2320UT PCA-AVG= -0.0DB
BOUTF-MAX=55342NT @ 1448UT BOUTF-MIN=55312NT @ 1800UT BOUTF-AVG=55333NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+085,+000,+000
GOES6-MAX=P:+149NT@ 1807UT GOES6-MIN=N:-076NT@ 0504UT G6-AVG=+102,+022,-037
FLUXFCST=STD:088,088,088;SESC:088,088,088 BAI/PAI-FCST=010,020,020/015,020,025
KFCST=2104 5011 2224 5444 27DAY-AP=008,010 27DAY-KP=1133 2123 3143 2223
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 26 MAR 94 was 41.0.
The Full Kp Indices for 26 MAR 94 are: 2o 2o 3o 3o 2- 3o 2- 2-
The 3-Hr Ap Indices for 26 MAR 94 are: 7 8 15 15 7 15 7 7
Greater than 2 MeV Electron Fluence for 27 MAR is: 2.8E+08

SYNOPSIS OF ACTIVITY

Solar activity was very low. No flares were observed
since yesterday. All regions remain small and fairly inactive.

Solar activity forecast: solar activity is expected to be
very low.

The geomagnetic field was quiet at middle latitudes and quiet
to unsettled at high latitudes.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled for the next day. Recurrent
active conditions are possible on the second and third days.

Event probabilities 28 mar-30 mar

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 28 mar-30 mar

A. Middle Latitudes
Active 15/25/25
Minor Storm 10/25/30
Major-Severe Storm 05/10/10

B. High Latitudes
Active 15/25/25
Minor Storm 10/25/30
Major-Severe Storm 05/10/10

HF propagation conditions were normal over all regions.
Minor signal degradation may begin to be observed over the
higher latitude paths on 29 or 30 March. These slightly
disturbed conditions are expected to persist beyond 31 March.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 27/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7692 N18W86 160 0000 AXX 00 001 ALPHA
7694 N11E02 072 0000 AXX 00 001 ALPHA
7695 S17E19 055 0030 CRO 06 009 BETA
7696 S17W21 095 PLAGE
REGIONS DUE TO RETURN 28 MARCH TO 30 MARCH
NMBR LAT LO
7687 N18 338
7685 S08 342
7689 S10 324
7690 S14 326

LISTING OF SOLAR ENERGETIC EVENTS FOR 27 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 27 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
NO EVENTS OBSERVED

INFERRED CORONAL HOLES. LOCATIONS VALID AT 27/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
71 S24W22 S26W22 S13W35 S12W32 098 ISO POS 002 10830A
72 N24E05 N08W15 N10W19 N24E05 076 ISO POS 004 10830A
73 S45E86 S45E86 S34E33 S20E44 013 ISO NEG 020 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
---
26 Mar: 1448 1503 1526 B3.8
1701 1720 1737 B1.4

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
Uncorrellated: 0 0 0 0 0 0 0 0 002 (100.0)

Total Events: 002 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,
Spray = Limb Spray,
Surge = Bright Limb Surge,

EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3402. Re: obscenity...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 19:26:07 UTC
From: greg@netcom.com
Message-ID: <gregCnFxzJ.K5L@netcom.com>
Source record: 269252

In article <2n9geh$m32@hpscit.sc.hp.com> spikes@sc.hp.com (Bill Spikes) writes:
>
>Hmmmmm, I've been TOLD that these lanquage-impaired bozos were just the
>guardians of the 'official' tune-up and testing frequencies.
>
...keeping in mind, as you do, that malicious interference is illegal,
whether or not you judge the communication being interfered with to
have merit.

To say nothing of the fact that your carrier may interfere with efforts
to bring enforcement actions against the offending stations.

Not to mention that if you really do make a nuisance of yourself, they
will slide up or down a few kHz, probably on top of someone else. This
means that you have now effectively even further reduced the amount
of bandwidth available to civilized users.

All of which leads me to believe that the above is not an appropriate
response to a newcomer's question about how to deal with inappropriate
and anti-social behavior on the bands.

Greg

3403. Re: HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 19:30:33 UTC
From: jlw3@cec3.wustl.edu
Message-ID: <2n9vkp$57m@bigfoot.wustl.edu>
Source record: 269207

you wroTE:

: On December 18, 1993, I took an ARRL test session and earned a Technician w/HF
: license. During the week of February 20th, other people that were at the
: December 18th test session were receiving their new licenses. Not me!

: it will be 90 days on April 6th since the FCC has had my application. This is
: my first ham license, I have _not_ had a ham license canceled by the FCC. Does
: anyone have any ideas what I can do to resolve this problem and finally get
: a license?

If it's any consolation, I took my test on 23 Dec, and also have not
received my licence. It's getting pretty frustrating, but I am also
currently time-strictened having signed up for more hours that I can
reasonably keep up with. I posted a question about this a few days ago
(maybe a week?) and somebody said that somebody *else* mailed him in
response to his request for more information saying that he had to wait
4 months for a licence. As I don't have any phone numbers to call and
inquire, I am forced to just sit back and wait. Let me know if you
find out anything new!!

--jesse

3404. 2m awards

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 19:40:18 UTC
From: oo7@astro.as.utexas.edu
Message-ID: <2na072$m7o@geraldo.cc.utexas.edu>
Source record: 269253

ehare@arrl.org (Ed Hare (KA1CV)) says:

>>Rev. Michael P. Deignan (kd1hz@anomaly.sbs.com) wrote:

>>: In this age of political correctness, its unfair that we have a "DXCC"
>>: award for HF operators, but nothing that a no-code tech can aspire to
>>: achieve by yacking on two meters.
>>
>In spite of the uselessness of the rest of the post, this concept has
>some merit. Any ideas for good ways to do this?

I have in front of me the invaluable ARRL Operating Manual and in
the chapter on Operating Awards, the first one mentioned is the Rag
Chewers' Club certificate. It says here this is "often the first
award a new ham aims for.....Chew the rag over the air for at least
a solid half hour". This certificate is "a free ARRL service to
all amateur licensees". Sounds ideal for anyone who just wants to
"yack on two meters".

Personally, I don't think the ARRL should waste its money this way
and encourage new hams to tie up a frequency for a solid half-hour,
but I accept that some people think it is to be encouraged.

Derek Wills (AA5BT, G3NMX)
Department of Astronomy, University of Texas,
Austin TX 78712. (512-471-1392)
oo7@astro.as.utexas.edu

3405. Re: AO-13 operating schedule notations

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 19:41:06 UTC
From: zlau@arrl.org
Message-ID: <1994Mar29.194106.10795@arrl.org>
Source record: 269254

Eric A Cottrell (eac@world.std.com) wrote:
: In <"28-Mar-94.15:15:58.EST".*.mark_t._phillips.henr801c@Xerox.com>
mark_t._phillips.henr801c@xerox.COM writes:

: I believe BS is mode B with the Mode S beacon operating. Due to a problem
: the mode S transponder and mode S beacon can not be on at the same time.

It refers to both transponders working simultaneously,
possibly allowing crossmode contacts. According to the
designer, Bill McCaa (Feb 89 QST), it was *suppose*
to be impossible for the beacon to be on when the
mode S transponder was on, though he had second thoughts
after it was done. I'm sure Bill will be available
to talk to at the Microwave Update this fall in
Estes Park, Colorado.

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

3406. Supermorse under windows.?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 19:51:20 UTC
From: fcr@ll.mit.edu
Message-ID: <1994Mar29.195120.22353@ll.mit.edu>
Source record: 269255

I am in the process of trying to configure an IBM compatible PC for my
parents to use. My folks are computer illiterate, so I am trying to make
it as easy as possible for them. My dad, N0OWI, is a no-code tech and
is trying to learn the code, so I put supermorse on the system. I
would like for my dad to be able to call it up under windows, but
no matter what I change in the PIF, I get stutters and missing characters.

Has anybody been successful in getting supermorse to run under windows?
If so, I would appreciate any help that you could give me.

Thanks,
Frank C. Robey N1PKT
fcr@ll.mit.edu
MIT Lincoln Laboratory

3407. STOP SENDING HAMS ON USENET CRAP !!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 20:41:11 UTC
From: dihi@bsdihi.atr.bso.nl
Message-ID: <764973671snx@bsdihi.atr.bso.nl>
Source record: 269256

It happens again and again. Every couple of weeks six tremendous large
files with AMATEURS ON USENET. This times each part from the six even
three times. I think al the FCC's and PTT's like it, because it keeps
my modem so busy....

ok, ok, I know it is a lot of work to keep this list updated and, ok it
is usefull to know who you can reach by usenet. But why not this alternative:

AMATEURS ON USENET: Those interested can download the latest updated
version by ftp form server....

This saves a lot of unnecessary downloadtimes, my phonebill and I must
say some irritation.
What do Y'all think of my idea??

Dick Hissink PA3DSP
Email:dihi@bsdihi.atr.bso.nl

3408. New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 21:13:00 UTC
From: rc@cmr.ncsl.NIst.GOV
Message-ID: <9403292113.AA13416@cmr.ncsl.nist.gov>
Source record: 269257

Deignan and Hare lament the lack of "awards" available to no-code techs. Where have they been?
Two that I can think of are:
1) RCC Rag Chewers Club
2) VUCC VHF UHF Century Club 100 grid squares on 6, or 100 on 2 , less on the higher bands. Yes it does require SOME effort, and more than a handitalkie, but do we want to dumb-down even the operating awards.
3) Various satellite operating awards.
So, there are a number of operating awards available to the no-code ham... and I might point out that DXCC CAN be achieved by a no-coder on six meters, given another good solar cycle.

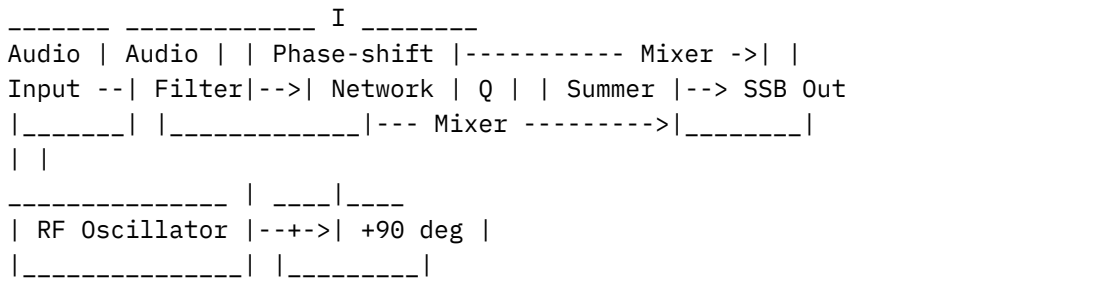
What say Ed?

73 de Bob w3otc@amsat.org

3409. How phasing SSB Exciters Work (Was: RF and AF speech processors)

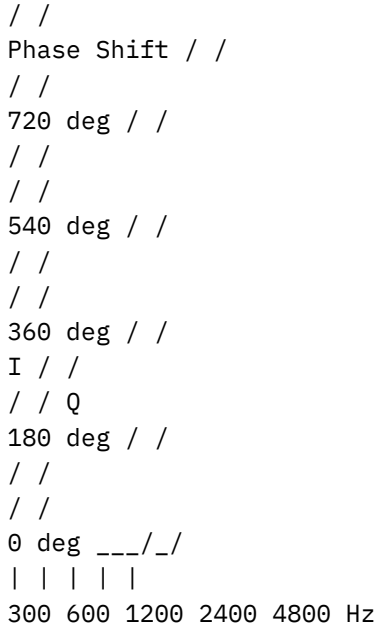
Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 21:26:17 UTC
From: alanb@sr.hp.com
Message-ID: <CnG3Jt.Htw@srgenprp.sr.hp.com>
Source record: 269258
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In another thread, I claimed that phasing-type single-sideband generators sound better than filter-type generators because phasing exciters have flatter amplitude and delay response. Gary Coffman disputed that. Rather than respond to Gary's long replies in detail, I'll just summarize how phasing-type SSB exciters work:



I and Q are two audio outputs with a constant phase difference between them of 90 degrees. The input filter limits the audio frequency response to the range of the phase-shift network. The "+90 deg" box can be switched to -90 degrees to get the opposite sideband. (The output of each mixer is a DSB signal.)

The audio phase shift network is the interesting (read difficult) part of the system. It must maintain a 90 degree phase difference and excellent amplitude matching between the two outputs over something like a 10:1 frequency range (300 Hz - 3000 Hz). It generally does that by causing each of the two outputs to have a constantly-rising phase shift versus frequency characteristic, like thus:



Frequency

I may have gotten the scaling off a bit, but the principle is right:
Both channels have constantly-changing phase shifts, but the difference
is always 90 degrees. Note that the frequency scale is logarithmic.
If phase were linear with frequency, then that would equal constant
delay. Since that's not true, there is some variation in group delay
with frequency, but it is a nice smooth curve that has little affect
on audio quality. (As opposed to the crystal filter used in a filter-
type SSB generator which has "bumpy" group delay, expecially at the
high and low band edges.)

The design of the two channels' phase-shift networks is such that
any errors in linearity occur in different places. That means that
you can't make it work properly unless both channels have nice
linear phase versus log(frequency). The same goes for amplitude.
I suppose you could design a diabolical phase-shift network that
had unflat (but matched) frequency response in the two channels,
but why would you do that?

The input audio filter can also add to amplitude or delay distortion.
However, it's not hard to design the filter to minimize the problem.
You don't need the sharp cutoff of a crystal filter designed for
receiving applications because any spurious below 30 or 40 dB down
will be covered up by the transmitter power amplifier's splatter
anyway. Also, audio filters are easier to build accurately than
crystal filters because of the lower Q and lower frequency.

The conclusion: Phasing-type SSB generators have flatter group delay
and amplitude than filter-type generators. You really can hear the
difference in the on-the air signal, in my experience.

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <1994Mar26.201156.9246@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
: >SSB crystal filters are designed for steep skirts for good
: >shape factors. This means that without any equalizing networks
: >(which normally double the complexity and send the cost through
: >the roof), the phase response at the passband edges are *terrible*
: >The fact that the center frequency of the crystal filter is much
: >higher just means that the Q of the parts has to be that much
: >better. The mathematics of the phase and amplitude response
: >tradeoffs are unchanged-- the tradeoffs are identical for a
: >3 kHz audio filter and a 3 kHz SSB filter (assuming ideal
: >parts--with real parts its easier at audio...)

: Apples and oranges. The phasing SSB exciter is using an audio
: *phase shift network*, the filter exciter is using a RF filter.

I think Zack was referring to the input audio filter.

: Now the AF phasing network may be considered a sort of filter,
: but that's not it's designed purpose, and for sure it's not a
: 3 kHz bandpass response. Instead it has to maintain a constant

: 90 degree phase shift across multiple octaves. That's tougher.

But the hard part is getting the ampltude and phase matching
to within a fraction of a dB or degree. As explained above, if you
do that, the overall amplitude and delay response versus frequency
will be quite good.

AL N1AL

3410. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 21:34:37 UTC
From: brucep@nimbus.com
Message-ID: <1994Mar29.213437.3313@nimbus.com>
Source record: 269259
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

EXAR is still around - they are a subsidiary of Rohm, a Japanese IC company:

EXAR (in San Jose): 408-434-6400

3411. Re: The FCC Rule Book

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 21:41:47 UTC
From: wps@ElSegundoCA.NCR.COM
Message-ID: <5842@tdbunews.teradata.COM>
Source record: 269260

Try your local Ham dealer. That's where I saw them here in the LA Area.

Bill

Bill Starkgraf wps@ElSegundoCA.ncr.com
AT&T Global Information Solutions (310) 524-5754
El Segundo, CA (800) 222-8372 x5754

Call: KD6UQB Simi Settlers ARC
Simi Valley, CA

3412. METEOR SCATTERING - Companies involved...?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 21:46:43 UTC
From: Warren Doud <warrendoud@delphi.com>
Message-ID: <JU9tZZD.warrendoud@delphi.com>
Source record: 269261

Can anyone tell me of companies or organizations involved in communications using meteor scattering techniques?

Warren Doud
doud@galileo.tracor.com

3413. Hustler Mobile ant help

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 22:10:08 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940329141008_3@ccm.hf.intel.com>
Source record: 269262

Text item: Text_1

>I plan on using the kenwood 440s with a dentron super tuner.
>WA2MZF in the frozen tundra of northern New York.

Hi James, With an antenna tuner, you can use your 10m Hustler on
17m-10m and maybe even 20m. The 10m Hustler resonator is less
lossy on 17m than the 17m resonator! I use a Radio Shack CB 108 in.
metal whip on 20m-10m with an antenna tuner with good results.
Your 30m resonator will radiate more RF on 40m than your 40m
resonator. Once you get used to a mobile antenna tuner, you'll
never go back to the hassle of changing resonators every time
you change bands.

73, Cecil, kg7bk@indirect.com (I do not speak for Intel on Internet)

3414. Repeater Info

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 22:14:19 UTC
From: wps@ElSegundoCA.NCR.COM
Message-ID: <5844@tdbunews.teradata.COM>
Source record: 269263

I would like to know if there are linked repeaters (2m or 70cm)
in the LA area. I know of the LA linked system, I can get access
at home via Sulphur Mountain (WB6ZTU - 447.325). This allows
one to QSO up and down California. I was wondering if any one
knows of another system? I do know there is CONDOR on 220, but
I don't know if there are any repeaters that are cross-linked
from 2m or 440 into that system.

tnx,

Bill

Bill Starkgraf wps@ElSegundoCA.ncr.com
AT&T Global Information Solutions (310) 524-5754
El Segundo, CA (800) 222-8372 x5754

Call: KD6UQB Simi Settlers ARC
Simi Valley, CA

3415. A novice needs some help!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 22:15:12 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940329141512_4@ccm.hf.intel.com>
Source record: 269264

Text item: Text_1

>...tell me if I can buy a pair of ham-radios for me and my
>friend in some other country and talk whenever we want?
>Giridhar Tatavarti

Hi Giridhar, Contrary to what you may hear, international schedules are difficult to keep unless Mother Nature is cooperating and you are running maximum legal power and a multi-element beam antenna. We are near the low of a sunspot cycle which has a negative effect upon round-the-world communications and you will be competing with other amateurs who run the legal maximum power and beam antennas.

You can almost always find *A* foreign amateur radio operator to talk to... unfortunately, it may not be *THE* amateur radio operator to whom you wish to talk. I do not mean to discourage you, but we must be realistic about what is possible at any given moment. Last night I could hear no amateurs on SSB above 40 meters.

73, Cecil, kg7bk@indirect.com (I do not speak for Intel on Internet)

3416. Re: AEA Hot Rot whip for HT

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 22:24:15 UTC
From: cottle@prism.sps.mot.com
Message-ID: <1994Mar29.222415.18207@newsgate.sps.mot.com>
Source record: 269265
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.antenna,rec.radio.amateur.misc

When I got my HTX202, I found the rubber duck to be a very poor
antenna, and could only hit close repeaters. When I bought the
AEA Hotrod, my performance went up and I can regularly hit repeaters
known to be 40 or 60 miles away. I wouldn't trade mine for anything.
I think your antenna might be broken.

Rick
N7ZZD

In article <ah301-290394073455@sy_j.pgh.wec.com> writes:
> I recently purchased an AEA HotRod 1/2 wave whip antenna from Kevin
Jensen
> N1KCG from rec.radio.swap. He used it in his htx202 and said it was
> working.
>
> However, when I got the antenna and connected it to my antenna, I did
not
> get better coverage with the hotrod compared to the htx202 rubber duck
> antenna.
> In fact it was worse, what I can reach with the rubber duck antenna,
> the hotrod antenna cannot.
>
> I do believe Kevin when he said it was working with his ht (although he
> did not respond to my email when I asked him how come it was not working
> on mine).
>
> Is there any tuning or fix I can do to make this antenna work ? or was I
> sold
> a broken antenna ? I can still hit repeaters that are very close. I
tested
>
> it on an swr meter and its swr is > 3, my rubber duck is < 1.5 !
>
> please email replies if possible
> thanks in advance
>
> jerry
> N3RKD

--
R i c k C o t t l e
Email:rrbk50@email.sps.mot.com

3417. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 22:50:33 UTC
From: drt@world.std.com
Message-ID: <CnG7GB.1s1@world.std.com>
Source record: 269266

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <CnECJu.2L0@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
: >
: >Kok: Know who first used `iff' in the literature? Hint: He used to be
: >Chairman of the U.H. Math Dept. (didn't stay long, though...) and he
: >is quite famous. [VERY big hint: his intials are P.H.]

: PAUL HARVEY used to be chairman of the UH math department???

And now you know ... the REST of the story!

-drt

(If I hadn't, someone else would've ... :-)

3418. Re: CALLBOOK ON INTERNET

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 23:23:48 UTC
From: hlester@nelson.as.arizona.edu
Message-ID: <2nada4$hk4@auggie.CCIT.Arizona.EDU>
Source record: 269267

In article <CnErML.41F@eskimo.com> wrt@eskimo.com (Bill Turner) writes:
>
>I know of one: telnet to callsign.cs.buffalo.edu 2000 and do the usual
>readmes, etc. This is FCC data only, so no furriner info available. If
>anyone knows of others, I'd like to know about 'em too.

telnet pc.usl.edu 2000 has more recent updates than does cs.buffalo.edu 2000.

Howard

3419. Re: HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 23:26:29 UTC
From: tgm@netcom.com
Message-ID: <tgmCnG945.69o@netcom.com>
Source record: 269268

John W. Holman (jwh7k@galen.med.Virginia.EDU) wrote:
: It will be 90 days on April 6th since the FCC has had my application. This
: is my first ham license, I have _not_ had a ham license canceled by the FCC.
: Does anyone have any ideas what I can do to resolve this problem and
: finally get a license?
:

If the ARRL can't help you, call your local congressman. It is
an election year, seven months to go till election day. Your
congressman will help ...

Thomas

3420. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 23:30:57 UTC
From: scott@lvld.hp.com
Message-ID: <2nadnh$1a6@hplvec.lvld.hp.com>
Source record: 269269

Dan Hughes (dhughes@prairienet.org) wrote:

: I just passed my no-code test last week, and have been listening to some
: ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
: of the most disgusting language I've encountered anywhere. One guy was
: spouting one obscentity after another, and three other guys were laughing
: at his inept signal and giving it right back to him. All but the
: instigator were regularly giving their calls. Is this pretty much what I
: have to look forward to?
: --

You're going to get a lot of advice on this one, ranging from "go down to the CW subband, everyone's great there" to "bag HF and move up in frequency" to "it's not too bad, don't worry about it."

I guess I'd have to fall pretty much into the third camp. I'd hate to see good operators abandon HF phone due to a few idiots. Yup, there's a bit of obnoxious behaviour out there. Evenings on 75 meters (especially in the General phone band) can be... umm interesting. But for the most part, these folks need not spoil your enjoyment of the hobby. They're there, just as they're everywhere in society. Don't assign them more importance than they should have. Move off a bit and enjoy contacts with some of the fine folks who still inhabit the bands.

I'm fairly new at all of this too, and I don't like some of the behaviour I hear either, but I refuse to let it spoil my enjoyment. I've worked 49 states and quite a bit of DX on 75 phone this winter, and rarely has anyone managed to spoil my fun. I've enjoyed virtually every bit of it. Welcome to the hobby, and hang in there. There're a lot of really good folks to talk to, even on 75 phone!

(PS - Does anybody in Hawaii ever work 75 phone? I'd love to get my last state on the band, but I've never even heard a Hawaiin station, let alone been able to contact one!)

Scott Turner N0VRF scott@hpisla.LVLD.HP.COM

3421. Re: Plain old repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-29 23:32:18 UTC
From: mcduffie@unlinfo.unl.edu
Message-ID: <2nadq2$hfn@crcnis1.unl.edu>
Source record: 269270

bote@access1.digex.net (John Boteler) writes:

>gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>Mr. Herman wrote:
>>>Gary: I'll be disappointed if your repeater beeps.

>>Sorry, you're disappointed. It does "roger beep" to signal user
>>carrier drop and timer reset. We run near zero tail so remote base
>>operators aren't locked out. We tried it without the beep, but users
>>complained they couldn't get in the machine. They couldn't hear their
>>kerchunk because their receivers weren't recovering fast enough. The
>>beep gives them 300 ms to recover. Users with noiseless squelch radios
>>never knew when the repeater dropped without the beep.

>I cannot believe what I am reading.

>Just when you had built up my respect for you, Gary,
>you go a do something like this! :)

>Instead of giving them training-wheel beeps to tell when
>the repeater has dropped, maybe they should actually
>wait a second to see that the other guy has
>finished transmitting.

Okay... I'll bite. Have we quit building full duplex remote bases now?
The remote shouldn't care if there is a zero tail or a 20 second tail.
What gives?

Gary (not THAT one, the OTHER one!)

3422. Kill That Intermod!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 00:16:56 UTC
From: jangus@skyld.grendel.com
Message-ID: <764986616snx@skyld.grendel.com>
Source record: 269271

In article <CnEzAy.8yB@eskimo.com> wrt@eskimo.com writes:

> I keep seeing complaints of intermod on vhf rigs, but little or nothing
> about how to cure it. Years ago I had a 2 meter rig (the company is now
> defunct for good reason!) with horrendous intermod from fm broadcast
> stations. I cured it by placing a 1/2 wave trap in the coax from the
> antenna to the rig.

> I'm not saying this will cure all intermod problems, but it worked for
> me and won't cost more than a few pennies to try. Granted, it's not
> too cool for HTs, but for mobiles and bases, it just might be all
> you need.

I have a Kenwood (No, this isn't witnessing, that's another thread)
TR-7950 2 meter synthesized radio. For quite some time I had one hell
of a problem with intermods caused by a local FM broadcast station and
the Channel 2 TV carrier. It was 5 KHz off of the repeater output we
were all operating Packet on.

I checked with the Kenwood BBS (the holy oracle for those so inclined)
and found a service bulletin describing the same problem. The PIN diodes
used for TR switching of the RF path between the RX and TX sections of the
radio were at fault. I got the replacement diode from RF Parts for under
$10 and the radio has worked like a champ ever since.

73 es GE from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3423. Re: HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 00:19:57 UTC
From: ip@g8sjp.demon.co.uk
Message-ID: <764986797snz@g8sjp.demon.co.uk>
Source record: 269272

In article <2nbv3k$p6n@msuinfo.cl.msu.edu>
cravitma@cps.msu.edu "Matthew B Cravit" writes:

> Wait a bit (maybe until after the Easter Weekend) and then give the
> ARRL/VEC a call and explain to them the situation. At the least, they
> can tell you when the paperwork went over to the FCC and they will
> probably be able to help you find out what the snag is.

Not intended to be a flame, but:

I got a *better* idea. Go reread the ORIGINAL post, where it was stated that
the FCC had the paperwork and " ... it had been pulled for some reason ..."

--
Iain Philipps

3424. Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 00:38:55 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2nahmv$9q9@hpscit.sc.hp.com>
Source record: 269273
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Phasing type SSB exciters produce a higher fidelity output
than filter type exciters *using filters of the type typically
found in ham equipment*. If you get high quality filters like
the Lumda FDM telecom filters, you get do just as well with
a filter type exciter. These filters will run you about $125 each.

In any event, if the receiver is a transceiver, and it uses
the same filter for receive and transmit, then all the nasty
ripples you avoided with a phasing type transmitter will
be reintroduced at the receiver. So you really need a phasing
transmitter and phasing receiver to get "hi-fi" audio. Or
use Lumda filters at both ends.

(Lumda is a small outfit that took over the FDM xtal filter
market when the big boys pulled out after T1 replaced FDM for
99% of the telecom market. FDM is still used for phone calls
to Alaska and Hawaii. It's SSB but doesn't sound like ham SSB.)

Rick Karlquist N6RK
rkarlqu@scd.hp.com

3425. Re: HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 00:48:08 UTC
From: HOFFMANMK@CONRAD
Message-ID: <2nai88$3c6@lester.appstate.edu>
Source record: 269274

In <tgmCnG945.69o@netcom.com> tgm@netcom.com writes:

> John W. Holman (jwh7k@galen.med.Virginia.EDU) wrote:
> : It will be 90 days on April 6th since the FCC has had my application. This
> : is my first ham license, I have _not_ had a ham license canceled by the FCC.
> : Does anyone have any ideas what I can do to resolve this problem and
> : finally get a license?
> :
>
> If the ARRL can't help you, call your local congressman. It is
> an election year, seven months to go till election day. Your
> congressman will help ...

Chill out guys and gals.....it may not be a perfect world but the people in our club who tested around December 27 got their licenses about ten days ago.

I know it frustrating to wait but everyone seems to have to do it. Some time back there were postings in this group or rec.radio.amateur.misc that the FCC in Gettysburg only issues ham licenses one day per week and that there are delays at the VEC and at the FCC.

Marv Hoffman, KD4EGV
Boone, NC

3426. WWW International Callsign Server

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 01:01:27 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCnGDIF.GM4@netcom.com>
Source record: 269275

```
From bern@kleopatra.Uni-Trier.DE Mon Mar 28 14:12:46 1994
Return-Path: <bern@kleopatra.Uni-Trier.DE>
Received: from kleopatra.Uni-Trier.DE by mail.netcom.com (8.6.4/SMI-4.1/Netcom)
id OAA22087; Mon, 28 Mar 1994 14:12:37 -0800
Received: by kleopatra.Uni-Trier.DE (4.1/2.00)
id AA29588; Tue, 29 Mar 94 00:11:27 +0200
Date: Tue, 29 Mar 94 00:11:27 +0200
From: bern@kleopatra.Uni-Trier.DE (Jochen Bern)
Message-Id: <9403282211.AA29588@kleopatra.Uni-Trier.DE>
To: wy1z@netcom.com
Subject: Re: World Wide Web Sites wanted!
Reply-To: bern@uni-trier.de
Organization: CS Dpt., University of Trier, Germany
Status: RO

Since many people have asked for the address of the UK callbook, here it is:

http://www.acs.ncsu.edu/HamRadio

The US callbook is at least telnettable via:
telnet callsign.cs.buffalo.edu 2000

73,
Scott

--
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
================================================================================
```

3427. Morse code training software

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 02:20:21 UTC
From: jstander@ml.csiro.au
Message-ID: <1994Mar30.022021.27014@ml.csiro.au>
Source record: 269276

I am just learning the code and wondering if there is some
public domain or shareware available for morse code training.

Replies via email will be appreciated.

Thanks

Jeff

Jeff.Stander@ml.csiro.au _--_|\ Database Analyst
CSIRO Division Of Fisheries / \ Pelagic Fisheries Resources
GPO Box 1538, Hobart _.--._/ Tasmania 7001, Australia
Aus Tel: 002-325-332 v Intl Tel: +61-02-325-332
Aus Fax: 002-325-000 Intl Fax: +61-02-325-000

3428. dual band HT advice

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 02:41:11 UTC
From: jangus@skyld.grendel.com
Message-ID: <764890393snx@skyld.grendel.com>
Source record: 269277

In article <CnDyFn.690@cbfsb.cb.att.com> cropley@cbnewsf.cb.att.com writes:

> Q. Are dual banders (say a 2m and 70cm) poor performers due to any
> compromises that are need to rx/tx on dual bands with 1 antenna?

Not necessarily so. What does cause the problems with intermods is that
hams want their HT's to perform double duty as a DC to Light scanner.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3429. Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 02:41:25 UTC
From: jangus@skyld.grendel.com
Message-ID: <764890570snx@skyld.grendel.com>
Source record: 269178

In article <2n73kp$o6i@vixen.cso.uiuc.edu> dhughes@prairienet.org writes:

>
>
> I just passed my no-code test last week, and have been listening to some
> ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
> of the most disgusting language I've encountered anywhere. One guy was
> spouting one obscentity after another, and three other guys were laughing
> at his inept signal and giving it right back to him. All but the
> instigator were regularly giving their calls. Is this pretty much what I
> have to look forward to?
> --
>

Not unless you fail to learn how to adjust the receive frequency of your
radio.

Unfortunatly these type are everywhere, the only real cure is to ignore them
and learn to listen somewhere else.

73

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3430. Is 10M Dead?!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 03:00:49 UTC
From: jangus@skyld.grendel.com
Message-ID: <764896648snx@skyld.grendel.com>
Source record: 269179

In article <pineappCnBxF3.Gtv@netcom.com> pineapp@netcom.com writes:

> You should have been on Saturday 1800 UTC. The band was wide open.

Sound's like what I always heard from the guys at the beach. (Note that
at the times I went down there, the water would look like window glass.)

"You should have been here yesterday, waves 25' tall and good for an
hour at least...."

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3431. Rec.Radio.Amateur.Antennas activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 03:00:55 UTC
From: jangus@skyld.grendel.com
Message-ID: <764896841snx@skyld.grendel.com>
Source record: 269180

In article <1994Mar28.131309.28449@bsu-ucs> 00tlzivney@leo.bsuvc.bsu.edu writes:

> I have posted two items to a newsgroup, rec.radio.amateur.antennas,
> but have never ever seen any other activity on that newsgroup. I have
> been checking for two weeks. Does anyone out there ever look in on
> that newsgroup??????
>

Perhaps if you changed it to rec.radio.amateur.antenna (singular)

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3432. Re: New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 03:55:05 UTC
From: ddtodd@ucdavis.edu
Message-ID: <ddtodd.4.0013EBA4@ucdavis.edu>
Source record: 269183

In article <1994Mar29.124031.4189@arrl.org> ehare@arrl.org (Ed Hare (KA1CV)) writes:
>Xref: news.ucdavis.edu rec.radio.amateur.misc:23438
>Newsgroups: rec.radio.amateur.misc
>Path: news.ucdavis.edu!agate!howland.reston.ans.net!usc!elroy.jpl.nasa.gov!decwrl!olivea!
sgigate.sgi.com!sgiblab!wetware!spunky.RedBrick.COM!psinntp!psinntp!arrl.org!ehare
>From: ehare@arrl.org (Ed Hare (KA1CV))
>Subject: Re: New Award Announcement
>References: <2n7e2a$7mp@paperboy.ids.net>
>Organization: American Radio Relay League
>Date: Tue, 29 Mar 1994 12:40:31 GMT
>X-Newsreader: TIN [version 1.2 PL2]
>Message-ID: <1994Mar29.124031.4189@arrl.org>
>Lines: 18

>Rev. Michael P. Deignan (kd1hz@anomaly.sbs.com) wrote:

>: <inflammation deleted>

>It is clear that you care more about your own self-gratification
>than you do any real goal in ham radio. This kind of drek is as bad
>as anything I have ever listened to on 11 meters. We know, after
>all of your preaching, that you would never put it on the ham bands.
It's about time you figured it out Ed. He would put it on the radio too.
Didn't you read the posts where he describes how he taunts "CB transplants" by
using all sorts of CBisms? I think the justification was to show them how
stupid they sound. (or something equally ridiculous) Kinda reminds mo of
those guys on HF swearing at one another to stop swearing and get off my freq.

cheers,
Dan

3433. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 04:02:47 UTC
From: ddtodd@ucdavis.edu
Message-ID: <ddtodd.5.00140C7E@ucdavis.edu>
Source record: 269184

In article <1994Mar29.143925.20248@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>Xref: news.ucdavis.edu rec.radio.amateur.misc:23457
>Newsgroups: rec.radio.amateur.misc
>Path: news.ucdavis.edu!agate!howland.reston.ans.net!europa.eng.gtefsd.com!emory!wa4mei!ke4zv!gary
>From: gary@ke4zv.atl.ga.us (Gary Coffman)
>Subject: Re: 1x1 Callsigns?
>Message-ID: <1994Mar29.143925.20248@ke4zv.atl.ga.us>
>Keywords: oops....
>Reply-To: gary@ke4zv.UUCP (Gary Coffman)
>Organization: Destructive Testing Systems
>References: <2m8ktm$21a@apple.com> <Cn15pI.L7H@news.Hawaii.Edu> <2n7901$6n4@apple.com> <CnECJu.2L0@news.Hawaii.Edu>
>Date: Tue, 29 Mar 1994 14:39:25 GMT
>Lines: 18

>In article <CnECJu.2L0@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>>
>>Kok: Know who first used `iff' in the literature? Hint: He used to be
>>Chairman of the U.H. Math Dept. (didn't stay long, though...) and he
>>is quite famous. [VERY big hint: his intials are P.H.]

>PAUL HARVEY used to be chairman of the UH math department???

And now we know... The rest of the story!
:-) :-)

>:-)

3434. Re: Is 10M Dead?!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 04:18:47 UTC
From: Troyce@bio.tamu.edu
Message-ID: <Troyce-300394101847@idmb-secretary.tamu.edu>
Source record: 269185

I certainly hope it's not too dead. I should have my rig finally ready to hit the airwaves this weekend, and hope to be CQ'ing away on 10 meter novice band, so listen up folks :)

Troyce
KC5CBI

--

Please read THE ELEMENT OF FIRE by Martha Wells, a Tor hardback at quality bookstores near you. I live with the author and want to go back to Disney World this year :)

3435. Re: 1x1 Callsigns?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 05:37:19 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CnGqA8.9z7@news.Hawaii.Edu>
Source record: 269186

In article <1994Mar29.143925.20248@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman) writes:
>In article <CnECJu.2L0@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>>
>>Kok: Know who first used `iff' in the literature? Hint: He used to be
>>Chairman of the U.H. Math Dept. (didn't stay long, though...) and he
>>is quite famous. [VERY big hint: his intials are P.H.]
>
>PAUL HARVEY used to be chairman of the UH math department???
>
>Gary
>
>
>:-)

Ha ha ha! That's cute! But you did get the first name correct.

Jeff NH6IL

3436. PRIBOLOV ISLANDS - ACTIVE HAM

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 05:48:46 UTC
From: cq068@cleveland.Freenet.Edu
Message-ID: <2nb3ru$k84@usenet.INS.CWRU.Edu>
Source record: 269187

If you are looking for grid square or otherwise and need an AK
or island station I have relative there who is active on 15 and
10 when open.
Leave name, call and I'll forward sched to you and to him.

Steven Lapinskas
KA1JJA
cq068@Cleveland.freenet.edu

3437. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 06:24:33 UTC
From: emd@ham.almanac.bc.ca
Message-ID: <mBmZJc2w165w@ham.almanac.bc.ca>
Source record: 269188
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,uk.misc

zawada@softage.demon.co.uk (A Gnome On A Mission) writes:

> Help, has anyone out there heard of a chip XR2206?
>
> It's used in a converter to send SSTVFAX in a shareware program called
> SSTVFAX2. From what I can make out, it seems to be some kind of modem
> chip, but I can't find it in any of the catalogues I have. Can anyone
> help me with any of the following information?
>
> 1. Has it got an equivalent chip I can use instead?
>
> 2. About how much is it?
>
> 3. Give me an address anywhere (any country), I can order it from.
>
> Thanks in advance.
>

The XR-2206 is made by EXAR, and is a monolithic function gernerator. It
makes a sig generator - it can make sine, square, triangle, ramp and
pulse waveforms.

I don't know of any crosses, but most electronics wholesalers ought to be
able to supply EXAR ics.

Robert Smits There is *no* idiotproof filter.
VE7EMD Idiots are proof against anything!
Ladysmith B.C. - Richard Chycoski, VE7CVS
e-mail: emd@ham.almanac.bc.ca

3438. CB Power meter

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 07:30:07 UTC
From: mauricio@crash.cts.com
Message-ID: <CnGvI7.Mr7@crash.cts.com>
Source record: 269189

Hello everyone, I have a question concernong measuring power output from a ramsy FM-10, I have a RADIO SHACK CB Power meter 3 - 30 mhz(its what it said on the box), and i just want to know if hooking this up to my fm-10 will give me an accurate power reading or not, if not how can i convert this reading to that of what i want? The meter goes between the Xmiter and the antenna. Any help would be appreciated.

thanx
mauricio@crash.cts.com

3439. Re: Question on Kenwood 732 A

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 07:47:27 UTC
From: jeffl@comix.UUCP
Message-ID: <811@comix.UUCP>
Source record: 269190

In article <brett_miller.84.0013359E@ccm.hf.intel.com> brett_miller@ccm.hf.intel.com (Brett Miller - N7OLQ) writes:
>In article <810@comix.UUCP> jeffl@comix.UUCP (Jeff Liebermann) writes:
>>In article <1994Mar28.233945.24985@cobra.uni.edu> conklic9391@cobra.uni.edu writes:

>I don't think programming the radio in the dark was what the designers had in
I make no attempt to program the radio while moving. This has
nothing to do with the illumination. Simple things like switching
OFF the PL encode, changing the PL tone, and switching to simplex
on the repeater output should be easily accomplished. My eyes aren't
as good as they were when I was younger. Non-illuminated red letters
on a black background are simply a rotten choice of colors. White
letters or translucent letters on a black background would have been
just fine.

>memorized by now. If you hit the wrong button, no harm done.
I ended up in a ditch trying to FIND the button. No harm done.

>I've had mine for two years, and they are all still there. Of course I don't
>use autopatch too much. You forgot to mention that you can't hear the outgoing
>DTMF tones.
Sorry. You can't hear the tones. In my diesel, you can't hear
anything exept the engine, so it's academic. The legends rubbed
off from abrasion on the car seat and my trousers in about a month.
I guess hot stamping the numbers is too much to ask for.

>I screwed the mounting
>bracket into the head and then put the velcro on the other end of the bracket.
>Solid as a rock.
You cheated. You bought the $45 mounting kit. I stuck the velcro
right on the back of the control head. The real problem was that
I don't have a flat spot anywhere on my dashboard.

>>10. The 4 function keys on the microphone use a crud D/A (digital
>>to analog) converter. Moisture condensation has made using these
>>buttons in the morning a real challenge.
>Do you drive around in the rain with the top down? No problems with mine.
Condensation near the ocean (I live near the ocean) is a real problem.

>Yes I made my own reference chart too. You just can't put that many functions
>into a radio and expect to access them with about 9 buttons. We need voice
>commands!
You give up too easy. What's necessary are TWO shaft encoders.
The left one sets the menu item, the right one selects the choice.
A "save" button saves the setting as the default. Most of the
newer and smaller radios are going to something like this.

I've also had some experience with voice control. Good idea
with lots of problems. Not this week.

>>13. The squelch has little or no hysteresis. This is because
>I like that. I want the squelch to be where I set it. If a bad signal breaks
>through, I up the setting. I'm not working moon bounce from my truck though.
Hysteresis does nothing to cause the squelch to move. What it does
is prevent a weak or varying signal from sounding like a machine gun.
I've designed several radios that required quite a bit of human
factors research in squelch action. The Motorola Micor has a
very unique adjustable release time squelch circuit. Kenwood
decided that it's more important to have a smooth squelch adjustment
than a usable signal and threw hysteresis out the window. Obviously,
I don't agree with this. Incidentally, I don't listen to moonbounce
while driving. However, I live in a mountainous area and signals
tend to be weak, choppy, or suffering from multipath.

>My settings were fine. Never had any complaints about the mic gain.
Did you MEASURE them? I did.

>Sure the radio isn't perfect, but as you said, they all seem to have their
>problems. If you want Motorola, you have to PAY for Motorola.
I see. If I want quality, I should buy Motorola. However,
because I'm a ham on a limited budget, I should tolerate design
flaws, mechanical abomonations, human factors atroscities, and
durability problems. It's funny, but when designing commercial
radios, I had the same dumb line thrown at me by the
military-aerospace crowd. I guess hams are suppose to take
any and all abuse because we're so tolerant.

A major stupidity is how the TM732A handles the cross band
repeat and remote control. In cross band, if the transmitter
is on the air, you can't control the radio. Make the mistake
of setting the frequencies backwards on a busy channel, the
only way to disarm the monster is to unplug the antenna and
punch the magic buttons. Same with remote control, but worse.
You can ONLY get out of remote control with another radio using
touch-tones. The only thing you can do at the radio is a total
reset. I'm sure there's a rational reason why one must effectively
lose control of the radio to use these modes.

One nice feature about the radio I forgot to mention. On the
air cloning. Push the magic buttons and the radio disgourges
it's memories and configuration in the form of touch tones on
the air. I make a tape recording of the tones. To reload
the radio, I push the buttons and play back the tape over another
transmitter to the TM732A. I travel a bit and have a seperate
tape for each major city I visit. Not documented anywhere.
It's interesting that Kenwood would not even mention what I
consider a major feature and convenience in the TM732A and TH78A.

Inspite of all these criticisms, I still like Kenwood. My
experiences with other brands are far worse. I own a variety
of other Kenwood radio products and have never had a catastrophic
failure or major problem that I couldn't easily fix.

--
Jeff Liebermann Box 272 1540 Jackson Ave Ben Lomond CA 95005
408.336.2558 voice wb6ssy@ki6eh.#nocal.ca.usa wb6ssy.ampr.org [44.4.18.10]
408.699.0483 digital_pager 73557,2074 cis [don't]
jeffl@comix.santa-cruz.ca.us scruz.ucsc.edu!comix!jeffl

3440. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 08:53:57 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Mar30.165357.1@ntuvax.ntu.ac.sg>
Source record: 269191
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <CnEFCs.Hso@demon.co.uk>, zawada@softage.demon.co.uk (A Gnome On A Mission) writes:
> Help, has anyone out there heard of a chip XR2206?
>
> It's used in a converter to send SSTVFAX in a shareware program called
> SSTVFAX2. From what I can make out, it seems to be some kind of modem
> chip, but I can't find it in any of the catalogues I have. Can anyone
> help me with any of the following information?

Hi,

Chip by EXAR Corporation is function generator/FSK generator, whatever.
Used to generate the varying frequency required in SSTV and FAX signals.
Write to EXAR, can't remember where I put the address though :) Sorry

Daniel

>
> 1. Has it got an equivalent chip I can use instead?
>
> 2. About how much is it?
>
> 3. Give me an address anywhere (any country), I can order it from.
>
> Thanks in advance.
>
> Mark
> --
>
>
> ---------
> Mark Simpson

3441. Re: Plain old repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 09:00:54 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar30.090054.25104@ke4zv.atl.ga.us>
Source record: 269192

In article <bote.764956814@access1> bote@access1.digex.net (John Boteler) writes:
>gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>Mr. Herman wrote:
>>>Gary: I'll be disappointed if your repeater beeps.
>
>>Sorry, you're disappointed. It does "roger beep" to signal user
>>carrier drop and timer reset. We run near zero tail so remote base
>>operators aren't locked out. We tried it without the beep, but users
>>complained they couldn't get in the machine. They couldn't hear their
>>kerchunk because their receivers weren't recovering fast enough. The
>>beep gives them 300 ms to recover. Users with noiseless squelch radios
>>never knew when the repeater dropped without the beep.
>
>I cannot believe what I am reading.
>
>Instead of giving them training-wheel beeps to tell when
>the repeater has dropped, maybe they should actually
>wait a second to see that the other guy has
>finished transmitting.

Sadly, reality raises it's ugly head. Without the beep, people were
jumping in when an operator merely drew a breath. If the beep didn't
genuinely serve to smooth the flow of conversation, I wouldn't have
it on there.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3442. Re: A novice needs some help!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 09:17:02 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar30.091702.25239@ke4zv.atl.ga.us>
Source record: 269193

In article <940329141512_4@ccm.hf.intel.com> Cecil_A_Moore@ccm.hf.INTel.COM (Cecil A Moore) writes:
>>...tell me if I can buy a pair of ham-radios for me and my
>>friend in some other country and talk whenever we want?
>>Giridhar Tatavarti
>
>Hi Giridhar, Contrary to what you may hear, international schedules
>are difficult to keep unless Mother Nature is cooperating and you
>are running maximum legal power and a multi-element beam antenna.
>We are near the low of a sunspot cycle which has a negative effect
>upon round-the-world communications and you will be competing with
>other amateurs who run the legal maximum power and beam antennas.
>
>You can almost always find *A* foreign amateur radio operator to
>talk to... unfortunately, it may not be *THE* amateur radio operator
>to whom you wish to talk. I do not mean to discourage you, but we
>must be realistic about what is possible at any given moment. Last
>night I could hear no amateurs on SSB above 40 meters.

That's because you didn't tune *high* enough Cecil. :-)

The amateur satellites are extremely predictable, can offer near global communications, don't require maximum legal power, and aren't as much at the whim of the solar cycle. The phone companies quit using high power HF SSB for international circuits years ago. It's time more amateurs learned they don't need that sort of setup either to work stations in other countries.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3443. Digest of Articles -- QST May 93 (Long - 42k)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 10:34:20 UTC
From: wvanhorn@magnus.acs.ohio-state.edu
Message-ID: <2nbkjc$8b4@charm.magnus.acs.ohio-state.edu>
Source record: 269194

Followup-To: rec.radio.amateur.misc

Digest of Articles -- QST, May, 1993

Following are digests of articles printed in the May, 1993 issue of QST. Such digests are being prepared for each issue of QST, and posted periodically. Subsequent issues will be posted one per week until they "catch up" to the current date in mid-1994, thereafter monthly.

It is hoped that other hams will volunteer to post similar digests of the other ham technical publications such as QEX, CQ, 73, COMMUNICATIONS QUARTERLY, RTTY JOURNAL, et al. Especially desirable would be digests of publications in other countries, such as the RSGB RADIO COMMUNICATIONS and ham magazines in Europe, Japan, Australia, and other countries around the world. We English speakers would especially enjoy them if they were translated into our language, but they would also be valuable additions to the world's knowledge if they were posted in the language of origin. Who knows? Some bi-lingual ham somewhere might translate them into English and re-post them.

Worldwide communications are getting better and better. The time has come to make the world's ham press available to all hams throughout the world!

The major value of digests is to give readers sufficient information to decide whether to obtain a copy of the full text. If any U.S. reader wants a copy of an article in QST, please inquire of other hams in your own neighborhood. Many have collections of back issues. Anyone who is unsuccessful in finding a fellow ham with a collection should try every library in the area, especially those at universities and technical colleges. If all else fails, a copy can be obtained from the ARRL Technical Department, 225 Main St., Newington, CT 06111-1494 USA for a fee of $3.00 per copy. Remember, it is both cheaper and quicker to obtain one locally.

Readers in most other countries can obtain copies from their own national ham organizations, sometimes translated into their own languages.

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ARRL as publisher of QST, to the authors of the original articles, and
to W. E. "Van" Van Horne, W8UOF, author of this compilation.

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TECHNICAL ARTICLES (TA)

Title>TA1:Home-Brewing a 10 GHz. SSB/CW Transverter - Part 1
Author>Lau, Zack - KH6CP
Source>QST May 1993, pp. 21-28
Abstract>First of a 2-part construction article describing a 10 GHz. transverter. It utilizes only readily-available parts but to build it requires the builder to have had some experience with VHF/UHF gear and to have access to certain test equipment.

Digest>The author has built a 10 GHz. transverter which, when used in tandem with a 2-meter transceiver, will receive and transmit on "X-band", or 10 GHz. One notable thing about this project is that it uses readily available components, nothing exotic or available only from military surplus.

He has built the transverter as a series of building blocks, each connected with the next through plug connectors and coax jumpers. Thus, each block can be tested independently, or changed in future upgrades. In this first instalment, Mr. Lau supplies wiring diagrams, parts lists including recommended sources, and construction details for the local oscillator building blocks.

Near the beginning of the article, he addresses a question that all interested readers must answer for themselves: "Do I have the VHF/UHF construction experience and the test equipment required to handle this project?" It is his opinion that the construction details are not that difficult and he suggests two commonly-available ham publications that give sufficient background information to allow the average construction-minded ham to build the equipment. But the rub comes in tuning the amplifiers, mixer, and filters. He states that it should be possible to accomplish the task with equipment reasonably available to hams, but optimizing the circuits is much easier if one has access to relatively sophisticated bench instrumentation, including a spectrum analyzer.

In a side-bar with the article, Rus Healy, NJ2L, senior assistant technical editor, recommends that anyone who has not had the experience of building a lower-frequency transverter should do so before undertaking the X-band project.

Conceptually, the transverter is easy enough to understand. On the receiver side, the 10 MHz. signal from the antenna goes through a pre-amplifier, a band-pass filter, and into a mixer where it is heterodyned against a local oscillator signal and converted to 144 MHz. output. On the transmitter side, the r.f. output from the 2-meter rig goes to a mixer where it, also, beats against the local oscillator

signal which converts it up to 10 GHz. From the output of the mixer, the signal goes through a band-pass filter, an amplifier, an optional second band-pass filter, and out to the antenna.

The "local oscillator" is actually made up of a crystal oscillator at 106.499 MHz., followed by a series of multipliers, each of which is a separate building block and contains multiple band-pass and low-pass filters with sufficient amplification to overcome the insertion losses. The first building block contains the crystal oscillator and the 6:1 multiplier. The output of that block is a spectrally-pure 639 MHz. signal. Following is a quadrupler block, the output of which is 2.556 GHz. The last block within the local oscillator chain is another quadrupler with a 10.224 GHz. output frequency.

In next month's issue will be the second, and final, installment. It will describe the preamplifer, mixer, and power amplifier to complete the project.

Title>TA2:Single-Conversiion Microwave SSB/CW Transceivers
Author>Campbell, Rick - KK7B
Source>QST May 1993, pp. 21-28
Abstract>Construction details for a microwave transceiver using receiver and transmitter building blocks described in previous articles, plus other components. The transceiver can be built to operate on any band from 432 through 5760 MHz. On the receiver side, the design uses a crystal-controlled converter to feed an i.f. system at 144 MHz.; that system is, itself, a direct-conversion single-signal receiver. The transmitter side is a phasing-type SSB or CW transmitter.

Digest>This is another article by Mr. Campbell who described the "R2" and "T2" PC-board building blocks in his QST articles in the issues of January and April, 1993. This article describes a microwave transceiver that uses them, plus a number of other building blocks, to make a microwave transceiver.

The first block is a "no-tune transverter" designed to be used outdoors at the antenna, utilizing a circuit board available from Down East Microwave Company, Troy, Maine. For this article he used one made for the 903 MHz. band; similar ones can be obtained from the same source for use on bands from 432 through 5760 MHz. In all cases, the units convert the received microwave signals to the 144 MHz. band, and the 144 MHz. transmitter signals to the microwave band.

Inside the shack, Mr. Campbell's system uses a direct-conversion transceiver with 144 MHz. input and output. The block diagram of the 2-meter transceiver shows, on the receive side, an optional i.f. (144 MHz.) preamp feeding into the r.f. input on the R2 board. A variable-frequency 144 MHz. oscillator output passes through a splitter with one-half of the output going through a 90-degree phase-shift network to the "I" and "Q" inputs of the R2 board. The output of the receiver goes to a headphone jack, or directly to a speaker.

On the transmit side, the other half of the oscillator output passes through a similar 90-degree phase-shift network to the "I" and "Q" inputs of the T2 board. The transmitter is actuated by either a key or a microphone, for CW or SSB operation. Its output goes directly to the output terminal.

The remainder of the article is primarily devoted to the design details of two alternate "local oscillator" modules. The first of these is a crystal controlled VXO circuit utilizing a 20.6 MHz. crystal. The output of the oscillator is made a square wave, rich in odd-harmonics. Following the output are two cascaded 144 MHz. band-pass filters that select the seventh harmonic. The tuning capacitor in the VXO circuit allows frequency to be varied, providing a 50 KHz. operating range at 144 MHz.

The other local oscillator circuit that the author describes is a "premixed VFO". By this, he means that an HF oscillator, in this case with a range of 13.0 to 13.12 MHz., is mixed with a 131 MHz. crystal oscillator to provide the 144 output. The circuitry used in this module is conventional.

The author's final comment is: "This article describes one of my favorite applications for the R2 and T2 boards....With the basic transmitter and receiver circuitry contained on a pair of small printed-circuit boards, the possibilities for custom-built radios are limited only by our imaginations."

Title>TA3:Build the HANDI-Finder!
Author>Leskovec, Bob - K8DTS
Source>QST May 1993, pp. 35-38
Abstract>How to build a very simple hand-held direction finder.

Digest>This construction article gives full details for building a simple hand-held direction finder for use in "Fox-Hunting". It can be used in conjunction with an HT for locating AM or FM transmitters over the frequency range of 45 to 470 MHz. The unit is completely built on a printed-circuit board. It uses only about a dozen components, one of which is an IC. The antenna is a "bow-tie" made of stiff wire that is supported by screws on the PC board. A handle attaches to the board at the center of the "bow-tie", completing the unit.

In operation, the circuit rapidly switches its input from one side of the "bow-tie" to the other at an audio rate. When the transmitter to be found is in line with (i.e. in the same plane of) the antenna, one side of the antenna is closer to it than is the other. It receives the signal a tiny fraction of a second earlier than does the other side. This causes a difference in the phase between the two sides, the result of which is phase-modulation that creates an audio tone in the receiver. The tone is determined by the switching frequency.

If the antenna is rotated so that the transmitter is in a line perpendicular to the antenna plane (i.e. "face-on"), then the signal

reaches both sides simultaneously and there is no phase-shift, hence no audio tone. This causes a sharp null in that direction, indicating the direction of the antenna. Note that it is the audio tone that is nulled, not the carrier. It is much easier to detect a null in the audio than a null in the carrier, hence the sensitivity of this unit is excellent. Of course, the null is bi-directional and the ambiguity must be eliminated by triangulation, which usually means that the hunter must move laterally to determine which direction is the true one.

A kit is available containing all the parts necessary except connectors, battery, and the wire antennas. It can be obtained for $27.95 from North Olmstead Amateur Radio Depot, 29462 Lorain Rd., North Olmstead, OH 44070. A PC board template package can be obtained from the ARRL Technical Department Secretary, 225 Main St., Newington, CT 06111 for a business-size SASE. Address it to Leskovec HANDI-Finder Template.

Title>TA4:Add Tracking Side-Tone to Your ICOM IC-765 Transceiver
Author>Mraz, Michael A. - N6MZ
Source>QST May 1993, pp. 39-42
Abstract>Modifications to an ICOM transceiver to allow CW operators to adjust the sidetone pitch to any desired value while the receiver automatically adjusts the received signal to the same pitch.

Digest>In the ICOM IC-765, the sidetone oscillator is fixed at 700 Hz. To adjust the transmitter to the same frequency as a received signal, it is necessary to tune the received signal to zero beat with the sidetone pitch, which requires the operator to listen to the received station always as a 700 Hz. tone. But many CW operators find that tone, or any fixed tone, unpleasant and want to adjust it.

The author has designed and built a circuit which generates a side-tone that tracks the receiving pitch within 1 or 2 Hertz. This article gives full construction details.

The system that Mr. Mraz designed uses an integrated-circuit function generator to generate an audio tone that tracks the setting on the front panel "CW Pitch" adjusting knob. That knob adjusts a potentiometer which, in turn, causes a varying voltage that can be accessed on the main receiver board. However, the relationship between the knob position and the pitch frequency is non-linear! Consequently, he had to add circuitry to cause an equal and opposite non-linearity in his sidetone generator so that the two tones would precisely track.

The author gives detailed instructions concerning how to perform the necessary "surgery" on the ICOM circuit board. He cautions any would-be follower that, if their transceivers are still in warranty, these modifications would void it.

A kit of parts, including etched and drilled circuit board, for building the unit is available for $49.00, plus $2.00 shipping within the USA from LTA, P.O. Box 77, New Bedford, PA 16140.

Title>TA5:An Introduction to Amateur Television - Part 2
Author>Taggart, Ralph E. - WB8DQT
Source>QST May 1993, pp. 43-46
Abstract>A description of the various equipment necessary or desirable to become active in ATV.

Digest>This is the second installment of this description of amateur television (ATV) activities. In this article, the author describes equipment available and other details required in getting started on the air. What he calls an "entry level" ATV setup comprises a TV camera, an ATV 70-cm. transceiver, a TV camera, microphone, an optional power amplifier, and an antenna.

The equipment that he describes is manufactured by three companies, AEA, PC Electronics, and Wyman Research. AEA is a well-known supplier of a broad line of amateur gear, whereas the other two are small proprietorships, each run by a veteran of ATV activities. The last two companies both supply crystal controlled transceivers with power outputs from 1 to as much as 15 watts PEP. Their video output signals are double-sideband amplitude-modulated (AM).

AEA's latest transceiver produces signals very similar to commercial broadcasting standards. It uses "vestigial sideband (VSB)" AM transmission. This means that the signal is a combination of a single-sideband with a carrier.

Most ATV operators use home-style camcorders for their TV cameras, and home-style TV sets for reception. All of the transceivers described produce video outputs switchable to channels 2, 3, or 4 for viewing. In amateur TV, as well as in commercial TV, the audio is transmitted by FM on a sub-carrier which is 4.5 megahertz above, (or both above and below, in the case of AM video) so that it can be reproduced on a standard home-TV set.

PRODUCT REVIEWS
conductor: James W. Healy, NJ2L

Title>PR1:HAL Communications PCI-4000 Clover-II Data Controller
Author>Ford, Steve - WB8IMY
Source>QST May 1993, pp. 71-73
Abstract>Review of a plug-in computer board made by HAL Communications that acts as a data controller for Clover-II communications. A description of the Clover-II protocol is included.

Digest>Clover is a new digital mode for HF communications. It was developed by Ray Petit, W7GHM, working with HAL Communications Company. That company is producing the PCI-4000 for use in an IBM-compatible computer with an 80286 CPU, or later, to control a radio transceiver in

the Clover Mode.

Clover provides much improved data communications in the noisy environment of HF radio, but occupies only 500 Hz. of band-width. It uses four audio tones, each of which is phase- and/or amplitude-modulated in one of 10 schemes. The format with the highest data rate uses 16-phase, 4-amplitude modulation (16P4A), to transmit at a rate of approximately 750 bits/second. Other formats are more robust in resisting noise and fading, but result in slower throughput. There are ten different formats, in all.

Clover's most interesting feature is its adaptive operating. Under varying conditions of propagation and noise, it adapts the power level, and also the modulation scheme, to obtain the maximum throughput of data. Faced with an increase of error rate or dropouts in the data, it automatically raises the power output or changes the modulation format, or both. When conditions improve, it reverses the sequence.

Clover uses the "Reed-Solomon" coding system which provides forward-error-correcting (FEC). Each block of transmitted text contains "check-bytes" which are used to correct many errors without requiring repeats of the data blocks concerned. This is a major step beyond the older digital modes, AMTOR and PACTOR, which verify the successful reception of data blocks but cannot correct them; they can only ask for repeats.

The reviewer found the PCI-4000 easy to install. He used it with a Kenwood TS-820S and found the results were "surprisingly good". On the air, tuning of the signals is very critical. If the transceivers at the two ends of the link differ in frequency by as much as 15 Hz., the link breaks! Consequently, Clover provides a screen display that includes a frequency indicator. It shows the difference between the two signals in Herz at all times. The display also shows a "Receive/ Transmit Status Table". This continuously reports the modulation format in use, signal-to-noise ratio, tuning error, phase dispersion, error-correction capacity, and transmitter power at both ends of the link!

Mr. Ford found one weakness in Clover; that is its "Listen" mode does not perform as well as does AMTOR and PACTOR. That is, it does not receive well when "listening in" to a QSO between two other stations. HAL Communications is reportedly trying to improve it.

In summary, the reviewer calls the Clover system: "Undoubtedly the most efficient HF digital communications mode yet devised for amateur radio." However, its price is of the order of three or four times the cost of AMTOR and PACTOR. Consequently, it will probably be used primarily for handling large quantities of data transfer on HF bands, such as main-line packet forwarding.

Title>PR2:AlphaLab TriField Meter
Author>Overbeck, Wayne - N6NB

Source>QST May 1993, pp. 73-74
Abstract>A review of a meter designed to measure a.c. magnetic field strength. It was found to be subject to errors so severe as to make it useless in radio work.

Digest>The TriField Meter is designed to measure electromagnetic field strength in view of the widespread furor over purported health effects of low-level a.c. fields. It supposedly measures magnetic and electric fields separately and also has a built-in r.f. probe to detect field strength at frequencies of from 50 MHz. to 3 GHz.

The reviewer found that, in the magnetic field modes, the meter gave readings that were consistently too high. The well-written instruction sheet accompanying the meter explains why: although its readings at 60 Hz. are supposed to be accurate, readings are a function of frequency and higher frequencies will give higher readings. But there is no way to measure the frequency of the field that the user is measuring, so it is not possible even to estimate how much in error the measurements are!

The reviewer's final conclusion was that "...its readings are almost certain to be misleading, creating a false sense of security or - more likely - causing undue alarm. It is not hard to envision groups of concerned citizens armed with these meters patrolling their neighborhoods in search of "radiation" - and finding hazards behind every bush!"

HINTS AND KINKS
conductor: David Newkirk, WJ1Z
Sr. Asst. Technical Editor

Title>HK1:Build a Quick PVC-Supported Quad for About $50
Author>Evans, Clark J. - WA4DLL
Source>QST May 1993, p. 75
Abstract>Construction details for a square loop antenna.

Digest>This short item includes a dimensioned drawing and construction details for a square loop antenna, which the author calls a "single-element quad". The spreaders, each 28 feet long, are made of 1-inch PVC pipe stiffened with dowel sticks along their entire lengths. The dowel sticks are 4-feet long. Eight of them are required to reinforce each of the two spreaders since they are overlapped 3-inches at the splice between adjacent sticks. They are attached to the PVC pipe by nylon-tape wraps about every two feet.

The bottom leg of the square is horizontal. It is broken at the center with an insulator. Coax feedline is attached at that point. In order to keep the weight of the feedline from causing the lower leg to droop, the author reinforces the spreaders with a 17-foot 8-inch length of 3/4" by 3/4" molding between spreader ends.

The author reports that he operates the antenna on 80, 20, 15, and 10 meters through the use of an antenna tuner. As for performance, he reports: "My DX has increased 10-fold".

Title>HK2:Installing a Huskier 160-M Fixed Capacitor in the Ten-Tec Titan
Author>Lynch, Joe - N6CL
Source>QST May 1993, pp. 75-76
Abstract>Step-by-step instructions for replacing a blown capacitor in the Titan amplifier, manufactured by Ten-Tec.

Digest>Mr. Lynch reports that, when operating his Ten-Tec Titan amplifier, the 160-meter fixed capacitor in the plate tank circuit blew out, and its identical replacement also blew out. He replaced it the second time with a capacitor obtained from Ten-Tec that is rated at three times higher working voltage than the originals (15 Kv. vs. 5 Kv.) Since the replacement capacitor is larger than the originals, he had to make a modification to the amplifier to mount it. He gives complete instructions of how to do this, and illustrates it with a photograph.

Title>HK3:Putting Variometry to Work in Matching Networks
Author>Zavarella, Art - W1KK
Source>QST May 1993, p. 76
Abstract>Using a variometer (variable inductor) in ham gear.

Digest>A variometer is an inductor in two parts, one of which can be moved relative to the other. When the two parts are perfectly in line, the turns of wire in the moveable part add to the turns in the other to form a coil with turns count equal to the sum of the two. If the moveable portion is turned by a full 180-degrees, however, then the field created by its turns subtracts from that of the fixed part, reducing the net inductance. Intermediate positions give intermediate inductances. Thus it becomes a continuously variable inductor without coil taps or moveable contacts.

Mr. Zavarella shows photographs of antenna tuners that he has built using variometers.

Title>HK4:When Antennas Should NOT Be Resonant
Author>Aitken, Hugh - W1PN
Source>QST May 1993, p. 76
Abstract>If the ends are not plugged, tubular Yagi elements resonate acoustically in the wind.

Digest>The writer reports that he erected a new tri-band Yagi antenna but failed to put the plastic end-caps on the elements. Now, when the wind blows the open-ended tubing resonates in the manner of organ pipes! The sounds are very annoying to his family, as well as neighbors.

He recommends that others be more careful and seal the ends of all tubing with caps or plugs.

TECHNICAL CORRESPONDENCE
conductor: Paul Pagel, N1FB
Associate Technical Editor

Title>TC1:Expanded-Range DC and AC Voltmeters
Author>Grebenkemper, John - KI6WX
Source>QST May 1993, pp. 77-78
Abstract>Construction of expanded-range a.c. and d.c. voltmeters.

Digest>The writer provides wiring diagrams and parts lists for contructing either a d.c. or an a.c. voltmeter with an expanded range, more properly termed a "suppressed-zero" meter scale. In other words, instead of reading from 0 to 15-volts, the meter reads from 11- to 15-volts, providing better resolution and accuracy over the operating range.

The meters can be accurately calibrated at both ends of the scale with a trim potentiometer to adjust each end.

Parts kits are available from FAR Circuits, 18N640 Field Ct., Dundee, IL 60118-9269. A PC-board and meter-face template package is available from ARRL Technical Department Secretary, 225 Main St., Newington, CT 06111 for a business-size SASE. Address the request to the "Grebenkemper DC and AC Expanded-Range Voltmeter Template".

FEEDBACK (FB)

Title>FB1:QST Apr 1993 Product Reviews
Author>Ford, Steve - WB8IMY and Jeff Bauer -WA1MBK
Source>QST May 1993, pp. 74
Abstract>Errors in Product Reviews in QST April, 1993.

Digest>In the April, 1993 Product Review of the AEA DSP-2232, pp. 65-66, the list price should be $999, not $899. Also the Doppler-shift correction feature has not yet been enabled.

In the same issue's Product Review of the Outbacker antenna, p. 70,the model reviewed was the Perth model, not the JR8. The Perth has a main shaft of 4-foot length with 3-foot whip, whereas the JR8 is 4-feet overall. On 75 meters, the Perth resonates down to 3.6 MHz., as reported, but the JR-8 resonates only between 3.9 and 4.0 MHz.

Title>FB2:Dipoles Above Real Earth
Author>Michaels, Charlie - W7XC
Source>QST May 1993, p. 78
Abstract>Errors in Technical Correspondence item, page 68, QST Nov 1992. Also, Feedback in QST Feb 1993 regarding this same item wrongly changed Equation 1.

Digest>Equations 3-5 of the Michaels letter titled: "Dipoles Above Real Earth" in Technical Correspondence, QST Nov 1992 contained errors. Corrections can be obtained from ARRL's Technical Department Secretary for an SASE. Ask for the Michaels Dipoles Corrections Template.

Also, in QST Feb 1993 Feedback, Michaels advised that an error had been made in Equation 1 of the same 1992 letter. He now states that that was incorrect; Equation 1 as originally published in 1992 is correct.

NEW HAM COMPANION

This section is devoted to articles and short features of special interest to newcomers to the ham radio hobby.

Title>NHC1:And the Most Popular Frequency is...
Author>Mabey, Jay - NU0X
Source>QST May 1993, pp. 60-61
Abstract>A study of frequency distribution of repeaters on the 144 and 430 MHz. bands.

Digest>This summarizes the number of repeaters on each frequency in the 2-meter and 70-centimeter bands throughout the United States and Canada. At last count, there were 6110 2-meter repeaters and 5059 70-centimeter repeaters!

Certain frequencies are much more popular than others. There are 156 repeaters on the single frequency 146.940 MHz. On the 70-centimeter band, things are more spread out. The most popular frequency on that band, 444.500 MHz., has only 23 repeaters.

The article also gives data on the number of "continuous tone-coded squelch systems" (CTCSS). These are systems that require a continuous audio tone to be transmitted by any transceiver that is accessing it. In some cases, they are used to prevent access by anyone other than a small group of members. In other cases, the tone signal required is openly published. On the 2-meter band, there are a total of 694 repeaters using CTCSS, 11 percent of the total. On the 70-centimeter band, there are 1131, or 22 percent.

The author ends the article with a description of the ARRL REPEATER DIRECTORY, of which he is Editor. He says of it: "It is a complete directory of repeaters in the USA and Canada from 10 meters through 23 centimeters."

Title>NHC2:Do You Need an Audio Filter?
Author>Gill, Steven J. - KG7YK
Source>QST May 1993, pp. 62-63
Abstract>Mr. Gill describes what audio filters are and how they are used. He emphasizes their use in CW operations. He also makes mention of digital signal processing (DSP), but does not discuss it in depth.

Title>NHC3:The Doctor is IN p. 64
Author>Various
Source>QST May 1993 - p. 64
Abstract>Questions and answers on topics of primary interest to newcomers.

Digest>In this issue, the questions include: 10-10 numbers, r.f. feedback; the difference between a duplexer and a diplexer; computers for use in ham stations; the illegality of automatic, unattended station operations on HF bands; and what to do if electronic equipment gets water-soaked.

Title>NHC4:A Disguised Flagpole Antenna
Author>Parker, Albert - p. 65
Source>QST May 1993, p. 65
Abstract>A description, with photographs, of a vertical antenna disguised as an attractive flagpole.

Title>NHC5:VHF/UHF Contesting
Author>Ford, Steve - WB8IMY
Source>QST May 1993, pp. 67-69
Abstract>A description of VHF/UHF contests, what they are, and when they take place.

Digest>The author encourages newcomers to participate in VHF/UHF contests and gives hints concerning how to boost one's scores. He also discusses "grid square" designators and includes a map of the USA with grids indicated.

RADIO TIPS (RT)

These are short items, scattered among the articles in the NEW HAM COMPANION section.

Title>RT1:What Is AMTOR?
Author>Ford, Steve - WB8IMY
Source>QST May 1993, p.61
Abstract>A description of the amateur radio mode: AMTOR - AMateur Teleprinting Over Radio.

Title>RT2:Lightning!
Author>Ford, Steve - WB8IMY
Source>QST May 1993, p. 63
Abstract>Hams are warned to protect their radio equipment from the destructive effects of lightning.

Digest>Antennas should have lightning arrestors with low-impedance leads to ground. All equipment should be protected and, preferably, disconnected from the antenna and also the power mains, when lightning conditions occur.

Title>RT3:The Ionosphere
Author>Ford, Steve - WB8IMY
Source>QST May 1993, p. 66
Abstract>A short description of the ionosphere including a diagram of the atmosphere showing the D, E, F1, and F2 layers. Also discusses the effects of ionization on radio propagation.

Title>RT4:Working the World on 10-Meters
Author>Ford, Steve - WB8IMY
Source>QST May 1993, p. 69
Abstract>A description of propagation conditions on 10-meters.

Digest>Directed primarily to Novice or Technician class amateurs with HF priveleges, it describes the 10-meter band as a "real powerhouse". Even in the present declining phase of the sunspot cycle, exciting propagation happens unpredictably, and beginners are encouraged to monitor the band for openings.

Title>RT5:Is Amateur Radio Safe?
Author>Ford, Steve - WB8IMY
Source>QST May 1993
Abstract>Purported hazards of electromagnetic fields, including radio waves.

Digest>This gives a balanced description of the questions that have been raised about the possible hazards of electromagnetic fields, including radio. Some sensible precautions are outlined for amateurs to follow when working with transmitters.

GENERAL INTEREST ARTICLES

Title>GI1:Festing (Notes of a Hamologist"
Author>Apteryx, Ann - W1NG/7
Source>QST May 1993
Abstract>Humor.

Digest>This is a humorous article in which the author compares people-watching at a hamfest with bird-watching. Among the posited "bird-types" are the purple dealhunter (hunticus bargainicus), the wandering buynothing (optex non-purchasicus), and the lesser cheapskate (pricens reducensis).

Title>GI2:PHASE 3D - A Satellite for All -- Part 1
Author>Jansson, Dick - WD4FAB and Tynan, Bill - W3XO
Source>QST May 1993, pp. 49-51
Abstract>A description of amateur satellites launched in the past, their limitations, and the ground equipment needed to use them; a discussion of why so few amateurs are doing so; and a description of the proposed new Phase 3D satellite now being built.

Digest>The two authors are Vice President of Engineering and President, respectively, of Radio Amateur Satellite Corporation (AMSAT). In this article, they discuss the satellites that have been launched over the past 30 years and the ones that are in orbit now.

They describe the different modes and methods of use that have been utilized in the past and speculate on why so few amateurs have actually tried to use them. They conclude that one reason is that many hams perceive that the technology is too difficult and/or the equipment too expensive for them to be interested. Another seems to be that many hams who are active in VHF and UHF are put off by the fact that satellites do not handle FM.

The authors' rebuttal to the first objection is that the technology of operating through satellites is no more difficult or more expensive than other aspects of amateur radio operating. Regarding FM, they point out that if a satellite were designed for FM repeating, the power requirement would be prohibitive and the number of stations that could access the satellite at any one time would be so severely limited as to make it impractical. They make an adequate case that CW and SSB modes are necessary in satellite operations.

Next, they discuss the kind of station equipment that is needed to take full advantage of the current satellites, especially the high-altitude ones. These, specifically OSCARs 10 and 13, provide nearly world-wide communications to amateurs throughout the world. They are in orbits in which the apogee (the point in the orbit that is farthest from earth) is so high that the satellite appears to move very slowly across the sky and stays visible for several hours each day. They make it possible for hams all over the northern hemisphere to communicate with each other.

Finally, they discuss the new Phase 3D satellite that is under construction at this time. Oscars 10 and 13, the present "high-altitude birds", are reaching the ends of their operating lives. The Phase 3D will be the largest and, by far, the most sophisticated one ever launched. Because of its high-powered transmitters and extra-sensitive receivers, it will be possible for hams all over the world to access it using simpler equipment than is required with Oscars 10 and 13. Furthermore, it will be possible for ground-based repeaters to link with other repeaters long distances away via the satellite! The result may be hams communicating with each other over inter-continental distances using HTs!

Next month, in Part 2 of this article, the authors will discuss design details of the Phase 3D satellite and its orbit.

Title>GI3:Inspiration: N2OVA
Author>Lorito, Philip - WB2HDY
Source>QST May 1993, pp. 52-55
Abstract>The true story of how a terminally ill boy became a ham in his final months on earth.

Digest>This is a human-interest story about a young boy who was suffering from a terminal illness. His strongest wish was to become a radio ham.

The author, and many other individuals, as well as the FCC, cooperated to make the boy's dream come true. His name was Jason Longboat, and his ham call was N2OVA. He received his license in early 1992, and died in November of that year, but his last months on earth were made distinctly happier through ham radio.

Title>GI4:Transmitter Hunting: Tracking Down the Fun - Part 2
Author>Moell, Joe - K0OV
Source>QST May 1993, pp. 56-58
Abstract>Second installment of a description of radio direction finding as a competitive activity.

Digest>In this article, Mr. Moell discusses details of organizing "Fox Hunts" and also describes different kinds of direction-finding equipment. In sidebars included with the article, there are discussions of several different types of RDF instruments that use something other than beam antennas to indicate bearing. One of these is a "homing set". The authors state that a homing set uses a pair of vertical antennas and a control box with a "right-left" indicator such as LEDs. However, they do not describe the principle of operation.

Another type is the time-difference-of-arrival (TDOA) system. This uses two antennas that are switched in sequence at an audio rate. It is the same principle as was discussed in the article: "Build the HANDI-finder!" by K8DTS in this issue.

The last type system described is doppler systems. These are usually mounted on vehicles, since they use multiple antennas (typically 4 or 8) which are rapidly sequenced to simulate a rotating antenna. As the putative antenna rotates, the received signal shifts up and down at an audio rate. The receiver detects this as an audio signal, the phase of which indicates the direction of arrival relative to the heading of the vehicle, and is often displayed on a CRT. This system is capable of giving instant display of heading from a short burst of transmitted signal. However, it is much less sensitive than beam antennas and cannot be carried on foot.

3444. a magazine called "Short Wave Magazine"

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 12:51:35 UTC
From: hrsblackwell@hrs.gsfc.nasa.gov
Message-ID: <hrsblackwell-300394075135@macgwy-mac2.gsfc.nasa.gov>
Source record: 269195

Hi,
I was wondering if anyone could tell me about a magazine called
"Short Wave Magazine". Seems to be a British publication. I've been
getting quite a few correspondances about an article on monitoring the
Space Shuttle. The issue in question is March 1994 "Airband Issue".
I'd like to see what the article promised these individuals.

please respond to hrsblackwell@stars.gsfc.nasa.gov

--
Jim Blackwell, N3KWU President Goddard Amateur Radio Club

Goddard High Resolution Spectrograph Science Support
Computer Sciences Corporation
NASA/GSFC Code 681.0
Greenbelt, MD 20771

3445. Re: HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 13:33:40 UTC
From: cravitma@cps.msu.edu
Message-ID: <2nbv3k$p6n@msuinfo.cl.msu.edu>
Source record: 269196

[I tried to do this yesterday, but it obviously didn't work]

On 30 Mar 1994 00:48:08 GMT, strange alien beings caused Marvin Hoffman (HOFFMANMK@CONRAD) to write:
> In <tgmCnG945.69o@netcom.com> tgm@netcom.com writes:

> > John W. Holman (jwh7k@galen.med.Virginia.EDU) wrote:
> > : It will be 90 days on April 6th since the FCC has had my application. This
> > If the ARRL can't help you, call your local congressman. It is
> > an election year, seven months to go till election day. Your

> Chill out guys and gals.....it may not be a perfect world but the people
> in our club who tested around December 27 got their licenses about ten
> days ago.

> I know it frustrating to wait but everyone seems to have to do it. Some
> time back there were postings in this group or rec.radio.amateur.misc
> that the FCC in Gettysburg only issues ham licenses one day per week and
> that there are delays at the VEC and at the FCC.

This is true, but the VEC licensing system requires (I think; I don't have my FCC Rule book in front of me right now) that one way or another, license applications must be acted on within 90 days. All the hysterics here about involving various politicians are, IMNSHO, a little rediculous. Someone said it here before, but I will repeat it again because it has been the best advice to date:

Wait a bit (maybe until after the Easter Weekend) and then give the ARRL/VEC a call and explain to them the situation. At the least, they can tell you when the paperwork went over to the FCC and they will probably be able to help you find out what the snag is.

/Matthew

--
Matthew Cravit, N9VWG | All opinions expressed here are
Michigan State University | my own. I don't speak for MSU
E-Mail: cravitma@cps.msu.ed | and they don't speak for me.
GO/CS -d+@ -p+ c++ !l u+(++) e+(*) s/+ n+(---) h+ f+ !g w+(+++) t++@ r(+) y?

3446. Re: Visiting Canada and the U.S.A.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 13:55:24 UTC
From: miller_p@ix.wcc.govt.nz
Message-ID: <2nc0cc$jbk@golem.wcc.govt.nz>
Source record: 269197

This is to thank the following for responding to my previous posting.

Lawrence Chen VE6LKC/VE6PAQ
Luis Nadeau VE9LN
John Boudreau VE8EV
James Dawe VE6FD
Bob Smits VE7EMD

73 DE ZL1BEZ

Paul G. Miller
Wellington
New Zealand

Internet Email: miller_p@kosmos.wcc.govt.nz
miller_p@ix.wcc.govt.nz
Packet Radio: ZL1BEZ @ ZL2WA.#60.NZL.OC
Telephone: 64 4 386-3168 (2000-1200 UTC)

3447. special event

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 14:03:15 UTC
From: JMG@tntech.edu
Message-ID: <01HAKQWR5H7SFN4HKW@tntech.edu>
Source record: 269198

TTARS, The Tennessee Technological Univeristy Amateur Radio Society is proud to announce a Special Events station. The station will be tested on Friday April 15 and be on the air Saturday April 16 and Sunday April 17. The purpose of the special events station is to demonstrate the effectiveness of low power HF communications on both SSB and CW.

The event will take place in remote sections of Fall Creek Falls state park in Tennessee. We will be testing out the new MFJ 20 meters SSB travel radio, some new QRP CW transceivers and hopefully some other new toys.

For a nice certificate send a 9X12 SASE with QSL card and contact number to:

TTARS
Tennessee Tech. U.
Box 5262
Cookeville, TN 38505

*probably start afternoon of Friday April 15.

Sat. April 16 and Sunday April 17

14:00-16:00Z (7.250-2.270)
(7.055-7.065)

16:00-17:00Z (14.250-14.265)
(14.055-14.065)* if enough ops

17:00-18:00Z (28.350-28.365)

18:00-20:00Z (21.250-21.265)
(21.050-21.065)*

20:00-22:00Z (14.250-14.265)
(10.110-10.115)*

22:00-24:00Z (7.250-7.270)

00:00-02:00Z (3.900-3.915) or
(7.250-7.270)

==========

* we will operate on whichever band has best propogation. We will attempt to stay with the above frequencies as much as possible. The way conditions have been lately, 20 meters

will most likely be our main backup band.

thanks

73

Jeff, AC4HF

3448. ARRL Email Server - periodic announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 14:13:39 UTC
From: mtracy@arrl.org
Message-ID: <1994Mar30.141339.6303@arrl.org>
Source record: 269199

Announcement - ARRL Information Email Server (info@arrl.org)

The services that the ARRL provides via the internet include the
Email Information Server and the Technical Information Service.
The Information Server is an automated mail server that gives you
access to many of information files relating to various facets of
Amateur Radio. You can retrieve any or all of these files by
sending an email message to info@arrl.org here at ARRL HQ.
Each file you request is then mailed to you automatically.

To use it, mail messages to:

info@arrl.org

Each line of the message body should contain a command as shown below.
The subject of your message is not processed and may be omitted. You
may place as many commands in a message as you want. The files you
request will be sent to you in separate messages. Only ASCII text
files are supported.

Valid INFO commands:

reply <address> (may be needed - see below for explanation)
help
index
send FILENAME (example: send prospect.txt)
quit

In the above message example, "help" retrieves a brief set of
instructions for info, "index" retrieves a list of available files
and "prospect.txt" retrieves a text file containing information on
becoming a radio amateur.

Note to users with FTP capability: All of these files are also
available by anonymous ftp to ftp.std.com in the
/pub/hamradio/ARRL/Server-files/info area.

If you want to retrieve several text files with one message, use a
separate line for each "send filename" request.

Your From: field or Reply-to: field in your header should contain a
valid Internet address, including full domain name. If your From:
field does not contain a valid Internet address, the answer will not
reach you. If this is the case, then use the reply command as shown
above. When needed, this command should always be the first command
in your message.

IMPORTANT: Please use the quit command in your message. This will prevent processing errors from message signatures.

PLEASE NOTE!: This is an automated system not capable of handling written requests. Any questions on the info-server or the content of any of its files should be directed to mtracy@arrl.org.

ALSO NOTE!: Do *NOT* reply to messages sent from info@arrl.org - the reply address is redirected to keep bounced messages from endlessly looping. Write a new message to info@arrl.org instead.

The Technical Information Service gives League members on the internet better access to the knowledgeable technical staff here at ARRL HQ. Questions relating to Amateur Radio and related technical topics are welcome. To use this service, send a normal e-mail message to tis@arrl.org with your question spelled out in plain english. For best service, be as specific as possible and keep your line length in messages to a maximum of 80 characters. Due to personnel limitations, priority will be given to questions from League members.

Best Regards,

Michael Tracy, KC1SX, ARRL Technical Information Services Coordinator
(e-mail mtracy@arrl.org)

Sample of files available from INFO: (There are lots more!)

Note - If you are not yet an Amateur Radio operator retrieve the file prospect (send prospect) for information on how to easily get started in this fun hobby.

FILENAME SIZE DATE DESCRIPTION
--- --- --- ---
PROSPECT.TXT 2k 930514 How to get your Amateur Radio license
EXAMS.TXT 52k 930629 Current exam schedule info - updated bi-weekly
EXAMINFO.TXT 9k 921020 Examinations - what to bring - requirements
USERS.TXT 6k 930119 List of HQ Email addresses
ARRLCAT.TXT 39k 930709 Catalog of ARRL Publications - commercial content
JOIN.TXT 2k 930621 How become an ARRL member
SERVICES.TXT 5k 930621 A condensed list of ARRL membership services
TOUR.TXT 28k 930621 An electronic tour of ARRL Headquarters
DIR.HQ 5k 930310 Visiting ARRL HQ - diretions and tour information
HFBANDS 7k 921203 Breakdown of users of HF spectrum
Q-SIGS 1k 921203 ARRL list of Amateur Radio Q-signals
W1AW.SKD 2k 930120 W1AW schedule of transmissions and operation
PRODREV1.TXT 12k 930227 Which rig is best? Part 1 - QST Lab Notes
PRODREV2.TXT 22k 930227 Which rig is best? Part 2 - QST Lab Notes
!LIST.TXT 6k 931120 QST Bibliographies List
RFIGEN.TXT 37k 930120 How to solve an EMI/RFI problem - QST Lab Notes
RFISOURC.TXT 13k 930607 Where to buy filters - EMI-proof telephones etc.
ADDRESS.TXT 16k 930318 Lots and lots of ham/electonic company addresses
KITS.TXT 6k 930430 List of companies that sell kits
BBS.TXT 12k 930601 List of ham-radio land-line bulletin boards

FAQ1.TXT 25k 930707 Introduction to the FAQ and Amateur Radio
FAQ2.TXT 45k 930707 Amateur Radio Orgs, Services and Info Sources
FAQ3.TXT 32k 930707 Amateur Radio Advanced and Technical Questions

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American Radio Relay League, Inc. "Devoted entirely to Amateur Radio"
225 Main Street Tel: 1-203-666-1541
Newington, CT 06111 Fax: 1-203-665-7531

3449. Re: obscenity...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 14:39:14 UTC
From: spikes@sc.hp.com
Message-ID: <2nc2ui$jnc@hpscit.sc.hp.com>
Source record: 269200

Greg Bullough (greg@netcom.com) wrote:
: ...keeping in mind, as you do, that malicious interference is illegal,
xxxxx
: To say nothing of the fact that your carrier may interfere with efforts
xxxxx
: Not to mention that if you really do make a nuisance of yourself, they
xxxxx
: All of which leads me to believe that the above is not an appropriate
xxxxx
: Greg
(AND *OTHERS*)

Guess I goofed again, :) :) :) :) :) :) :)

There. Well, one more... :)

Bill
wb6rzg

(:

3450. Re: STOP SENDING HAMS ON USENET CRAP !!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 14:44:37 UTC
From: brett_miller@ccm.hf.intel.com
Message-ID: <brett_miller.89.000EBED5@ccm.hf.intel.com>
Source record: 269083

In article <764973671snx@bsdihi.atr.bso.nl> dihi@bsdihi.atr.bso.nl (Dick Hissink) writes:

>It happens again and again. Every couple of weeks six tremendous large
>files with AMATEURS ON USENET. This times each part from the six even
>three times. I think al the FCC's and PTT's like it, because it keeps
>my modem so busy....

>AMATEURS ON USENET: Those interested can download the latest updated
>version by ftp form server....

>This saves a lot of unnecessary downloadtimes, my phonebill and I must
>say some irritation.
>What do Y'all think of my idea??

I'm fairly sure it is also posted to rec.radio.info There is no need to post
it here - That's what rec.radio.info. is for.

Brett Miller N7OLQ brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

3451. Re: New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 15:00:50 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.765038350@hpuerca>
Source record: 269201

In <1994Mar29.124149.4266@arrl.org> ehare@arrl.org (Ed Hare (KA1CV)) writes:

>Rev. Michael P. Deignan (kd1hz@anomaly.sbs.com) wrote:

>: In this age of political correctness, its unfair that we have a "DXCC"
>: award for HF operators, but nothing that a no-code tech can aspire to
>: achieve by yacking on two meters.

>In spite of the uselessness of the rest of the post, this concept has
>some merit. Any ideas for good ways to do this?

Tsck, Ed; Luck Hurder has at least ONE way to encourage profitable
use of no-code techs: Public Service Awards. I am glad to see that
the PS nets and volunteer efforts, which of course existed before
the no-code was introduced, welcome the use of vhf/uhf operators
whether they got their tech before or after no-code. My oldest son
got a great deal of amateur radio encouragement at the age of 15
when we got him involved with us at public service events. And he
was not the youngest in the net; that honor went to a YL of 14 who
had come up through novice (took her test same time I did as a
matter of fact). Nor was he the only no-coder: that honor went to
the wife of another OM on the net.

We often used 2 meters for the 'local' link of message nets back
in central TX; I suspect thats true in other places. Shouldn't
be too hard to rack up the hours for a very honorable Public Service
Award (see the pages of QST for details :-).

Cheers & 73
Ed Humphries N5RCK
Hewlett Packard NARC
Atlanta GA

3452. Re: Internet<->Packet and Part 97

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 15:04:15 UTC
From: dbushong@wang.com
Message-ID: <CnHGJ4.I2J@wang.com>
Source record: 269202

Jason.Rimmer@f40.n382.z1.fidonet.org (Jason Rimmer) writes:

>Organization: Eclectic Technologies

>In article <CMzr3E.Go4@newshub.ccs.yorku.ca> edleslie@apogee.ccs.yorku.ca (Ed
>Leslie) writes:
>>From: edleslie@apogee.ccs.yorku.ca (Ed Leslie)
>>Subject: Re: Internet<->Packet and Part 97
>>Date: Mon, 21 Mar 1994 01:35:37 GMT

>>Jason Rimmer (jrimmer@netcom.com) wrote:
>>: My intention here is to set up a internet<->packet gateway. The catch
>is I
>>: want it to be automatic. Once I made that decision I have to deal with
>>: Part 97's rules about third-party traffic. That's where the issue greys...

>>: What are my troubles? I know vulgarities are a problem, but anything
>else?
>>: If it's just vulgarities, I can just write something to screen those out.
>>: What other issues need to be dealt with. Or has that already been done?

>>I think (and I may be speaking way out of turn here) that the general way
>>people around here have approached this issue is to ensure that email text
>>hits the air (i.e. over packet) *ONLY* at the behest of an amateur, so that
>>then the amateur is the one controlling the transmission (and I guess that
>>means the one liable for any infraction, whether they could know that it
>>would happen or not in advance). So, any email transversing the gateway can
>>only be delivered to a land-based bbs, and must be read from there at the
>>request of an amateur operator. With fine tuning, I believe they can tell
>>that if I originated the message over the airwaves, then it can be delivered
>>over the airwaves to it's destination.

>>73 de Ed / VE3ZVZ

>>: ---
>>: Jason Rimmer
>>: Eclectic Technologies
>>: jrimmer@netcom.com

>>: Object technology for the masses...

> That's true, but if I "know" what's not allowed to be transmitted over the
>air, then I can figure out a way to filter that out. i.e. A message comes
>from Internet and the destination is over packet. Once the message is
>received, a program jumps in, scans the message for obscenities (and whatever
>else needs to be caught), and either replaces the offending text, or deletes
>the message entirely. If the message is not deleted, then it forwards it

>over packet, otherwise it sends the message over packet to the addressee of
>the message stating that it was not able to be sent, due to obscenities, etc.
> Does that sound plausible?

Plausible, but as Phil Karn pointed out several years ago, what if
someone sent something like this:

```
#####  ##  #####  #  #  ####  ######  #####
#  #  #  #  #  #  #  #  #  #  #  #  #  #  #
#####  #  #  #  #  #  #  #  #  #  #  #  #  #
#  #  #######  #  #  #  ##  #  #  #  ######  #  #
#  #  #  #  #  #  #  ##  ##  #  #  #  #  #  #  #
#####  #  #  #####  #  #  ####  #  #  #####
```

Substitute your favorite bad word for that. How would you screen all
of those out? And how would you catch b*a*d*w*o*r*d or perhaps b a d
w o r d, or would you prohibit Sandy Takeshita from Japan from using
your gateway?

You would have to concede that your screening was perhaps 99%
effective, or maybe 9%, or maybe even 0.9%. Is that good enough for
you? How about for the FCC?

Ultimately, it's still up to you. But remember, there are jerks out
there who will try to cause trouble for the sake of causing trouble.
Many people who set up systems like this require pre-registration in
order to be allowed to use the gateway. This way, you have some level
of trust in your users.

73,
Dave

--
Dave Bushong, Wang Laboratories, Inc.

3453. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 15:08:33 UTC
From: zlau@arrl.org
Message-ID: <1994Mar30.150833.7038@arrl.org>
Source record: 269203
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <1994Mar26.201156.9246@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:

: >SSB crystal filters are designed for steep skirts for good
: >shape factors. This means that without any equalizing networks
: >(which normally double the complexity and send the cost through
: >the roof), the phase response at the passband edges are *terrible*
: >The fact that the center frequency of the crystal filter is much
: >higher just means that the Q of the parts has to be that much
: >better. The mathematics of the phase and amplitude response
: >tradeoffs are unchanged-- the tradeoffs are identical for a
: >3 kHz audio filter and a 3 kHz SSB filter (assuming ideal
: >parts--with real parts its easier at audio...)

: Apples and oranges. The phasing SSB exciter is using an audio
: *phase shift network*, the filter exciter is using a RF filter.
: Now the AF phasing network may be considered a sort of filter,
: but that's not it's designed purpose, and for sure it's not a
: 3 kHz bandpass response. Instead it has to maintain a constant
: 90 degree phase shift across multiple octaves. That's tougher.

Actually, what I was writing about was Gary's misconception that
phase distortion is somehow much easier to deal with if you
move the center frequency higher. Its actually tougher--just try
and build a crystal frequency with good phase characteristics
and a good shape factor. (Or, try and buy one...) Of course, it
is true that you need an audio filter for a phasing exciter, as
there are limits to how broad you can make the phase shift network.
Fortunately, there is no requirement to transmit 60 Hz hum with
perfect fidelity.

I would agree that it isn't necessary for a phasing rig to have low
phase and amplitude distortion--I'm sure that someone could work
really hard and come up with one that sounded awful and still
managed to reject the opposite sideband.
The dark side of DSP? :-)
But, in practice, the easiest way to make one to work well is
to just go ahead and design for low distortion.

FWIW, one of the fanatical AM types showed off his phasing
receiver at Deerfield NH a few years ago... Guess he didn't
notice the distortion Gary is worried about. Come to think
of it, I don't recall hearing complaints about the Sony
2010's audio quality, which also uses audio phase shift
networks. (go through the archives of the shortwave newsgroup?)

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

3454. reward notice

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 15:09:06 UTC
From: pmarsh@metro.mccneb.EDU
Message-ID: <9403301509.AA16015@metro.mccneb.edu>
Source record: 269204

[Unsigned Public Notice]
A reward is offered for information leading to the arrest of EDDY CURRENT, charged with induction of an 18-year-old coil, named MILLI HENRY, who was found half choked. CURRENT escaped Weston Primary Cell and was missing since Faraday.

Noted in The mini-Journal of Irreproducible Results ("mini-JIR")
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For subscription information, send e-mail to: jir@mit.edu

3455. 6m Equipment?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 15:13:00 UTC
From: Dave.Hockaday%f160.n151.z1@psybbs.durham.nc.us
Message-ID: <765648032.AA04783@psybbs.durham.nc.us>
Source record: 269205

BK>I am looking for good, INEXPENSIVE, 6m equipment. How do the Azden radios
BK>(mobile, HT) compare with some of the more expensive
BK>options that are available
BK>(Kenwood)? Also, what about used equipment? What is available?
BK>Thanks,
BK> Bryan Koen
BK> N0YKN

Hi Bryan! I have the Azden PCS-7500. It has been a very good 6 meter fm
rig. I run it in the house and in my van. It has 20 memories, priority
scanning, 50 watts out, DTMF mic, wide band rx, etc. I get good reports
on it, it works well on the local 6 meter phone patch, and has a good
rx. 73 de WB4IUY

X OLX 2.1 X Press any key to continue or any other key to quit

3456. 6m Equipment?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 15:17:02 UTC
From: Dave.Hockaday%f160.n151.z1@psybbs.durham.nc.us
Message-ID: <765648032.AA04784@psybbs.durham.nc.us>
Source record: 269206

PR>If you have an HF rig, check out Ten Tec's new 6 meter transverter kit
PR>for $99!
PR>73 paul wb8zjl

Paul, is there transverter a kit or a finished product?? Do you know the
IF (28 mhz maybe??)...Hmmm....I wonder about it's application on other
rigs, like the uniden 2510's and such (or converted SSB CB rigs for
that matter...). Very interested, tell me more...:-). 73 de WB4IUY

X OLX 2.1 X I'm in shape ... round's a shape isn't it?

3457. Re: silent 700 pinouts?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 15:18:25 UTC
From: edh@hpuerca.atl.hp.com
Message-ID: <edh.765040291@hpuerca>
Source record: 269209

In <2naam3$p6v@Mercury.mcs.com> pcs@MCS.COM (Peter Salerno) writes:

> A friend of mine wants to use a silent 700 (model 745) to talk to a TNC. The
>serial port on this particular model is a DB15 and not a DB25 connector. Does
>anyone know what the pinout would be for this unit?

Don't know how general the interest is in this, but here goes:

Pin Function Description EIA CCITT
1 <--> SGND AB 102
6 ---> +5
7 ---> +5
9 <--> Ground AA 101
10 ---> +12 PRTS
11 <--- DCD CF 109
12 <--- RCVD BB 104
13 ---> XMTD BA 103
15 ---> DTR CD 108.2

Cheers & 73
Ed Humphries N5RCK
HP NARC Atlanta GA

3458. Can you tell me what these memory chips are?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 16:06:27 UTC
From: zawodny@arbd0.larc.nasa.gov
Message-ID: <2nc823$b2@reznor.larc.nasa.gov>
Source record: 269208
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,uk.misc

Hi,

I have some memory chips that I need more info on. Specifically, I
have these chips:

KM41C1000AJ-8
KM41C1000BJ-8 Is this really different from the AJ?
KM41C4000AJ-8
M5M44410AJ A Mitsubishi chip

I am reasonably sure the first two are 1Mbit x 1 chips. I hope the third is a
4Mbit x 1 chip. I hope the fourth is also a 4Mbit x 1 chip, but fear it is a
1Mbit x 4 instead. I intend to use these chips in having some SIMMs made up
for a PC.

In a somewhat related topic. Do any of these companies that build
SIMMS from "your" chips offer to remove the surface mounted chips from existing
PC boards?

TIA,

--
Joseph M. Zawodny (KO4LW) NASA Langley Research Center
Internet: zawodny@arbd0.larc.nasa.gov MS-475, Hampton VA, 23681-0001
Packet: ko4lw@n4hog.va.usa

3459. But Seriously (was Re: New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 16:18:46 UTC
From: ehare@arrl.org
Message-ID: <1994Mar30.161846.7697@arrl.org>
Source record: 269210

Robert Carpenter (rc@cmr.ncsl.NIst.GOV) wrote:

: Deignan and Hare lament the lack of "awards" available to no-code techs.
: Where have they been?

: Two that I can think of are:

: 1) RCC Rag Chewers Club

Well, although I applaud the encouragement of real contacts with real
conversations, this just seems too easy on VHF simplex or through
a repeater. Keep it around, but we need something more challenging.

: 2) VUCC VHF UHF Century Club 100 grid squares on 6, or 100 on 2 ,
: less on the higher bands. Yes it does require SOME effort, and more
: than a handitalkie, but do we want to dumb-down even the operating awards.

Actually, it requires a LOT of effort with a modest station. The analogy
on HF is that with a 100-watt class station and a dipole, one can
attain DXCC in a year or so of casual operating. Some have even done
it in a single contest weekend, or come real close, at any rate. Perhaps
a 100-watt/dipole combination is a "typical" HF modest station. On VHF,
a 10-watt station with a ground plane might be more typical. How easy
is it to work 100 grids on 2 meters with that combination? Those
who want to pursue the award, including Technicians, can do so,
but it seems that it is really tailored toward the effective weak-signal
station. I don;t propose that we make a no-work award, just one that
has enough meaning to make it worthwhile, yet can still be done
by the typical VHF station/operator. Do remember that my proposing
an idea carries no more weight than anyone else; when it comes to
awards, I do NOT represent ARRL other than as a member.

: 3) Various satellite operating awards.

: So, there are a number of operating awards available to the no-code ham
: ... and I might point out that DXCC CAN be achieved by a no-coder on six
: meters, given another good solar cycle.

And for that reason, I propose we keep it. But it is probably an order
of magnitude harder than DXCC on 20 meters. I just wonder if we want more
operating awards for other types of operation. All in all, it is not an easy
task -- striking a balance between achievement and attainability.

BTW -- I changed the subject to be the same as the change chosen by Greg
Bullough, just to keep the thread intact. (I liked Greg's idea a lot,
BTW BTW.)

73 from ARRL HQ, Ed
--
Ed Hare, KA1CV, ARRL Laboratory, 225 Main, Newington, CT 06111
203-666-1541 ehare@arrl.org
My electronic posts and email do not necessarily represent the policy
of the ARRL, but I can probably get in trouble for them anyway!

3460. Re: TELEPHONE INTERFERENCE SURVEY

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 16:26:04 UTC
From: dtiller@cscsun.rmc.edu
Message-ID: <CnHKBH.EE3@cscsun.rmc.edu>
Source record: 269222

Marc B. Grant (marcbg@netcom.com) wrote:
: Transcribed from printed pages by the Field Services Department
: of the American Radio Relay League, Inc., 225 Main St., Newington, CT
: 06111 (203) 666-1541.
: TELEPHONE INTERFERENCE SURVEY
: February 28, 1994
: Telephone Interference Survey
: Background
: The Federal Communications Commission (FCC) receives 25,000
: complaints per year from individuals who are unable to use their
: telephones because nearby radio stations interfere with the proper
: operation of the telephones.

: Types of Transmitting Stations

: FOB inspected 108 transmitting stations which were involved in the
: telephone interference complaints, as follows:

: Citizens Band 47
: Amateur 27
: AM Broadcast 23
: FM Broadcast 10
: International Broadcast 1

: DT N CB 5 N N Y AT&T (NONE) (FCC AS593M-70230)
: DL Y CB 5 N Y AT&T 1618
: KI N CB 5 N AT&T 720
: BM N CB 7 N N Y AT&T PRINCESS AS 550 Z-71322
: DL N CB 5 Y Y AT&T TRIMLINE 220
: KI N CB 5 N BELL PHONES 100-5800
: AT Y CB 160 N N Y BELL SOUTH 2000
^^^^
: KI N CB 5 N BELL SOUTH 473
: ST N CB 75 N N Y CONAIR PR 1000
^^^^
: LV N CB 57 N N CONAIR SW 2502
^^^^
: TP N CB 5 CONAIR SW204
: SD N CB 12 N FORTEL CORP RECORD A CALL #2140
: MA N CB 6 N GENERAL ELECTRIC 2-9166B
: LV Y CB 5 N N GENERAL ELECTRIC 2-9356
: MA N CB 6 N GENERAL ELECTRIC 2-9420A
: PS Y CB 5 Y Y Y GENERAL ELECTRIC 2-9892A
: BF N CB 5 N Y GENERAL ELECTRIC MEMORY MODEL 21
: MA N CB 6 Y GENERAL ELECTRIC NO 29420A

```
: SD N CB 54 N N GENERAL ELECTRIC SPEAKER PHONE 2-9375F
^^^^
: HU N CB 110 N LONE STAR 912
^^^^
: BS N CB 5 N N LOTEL 5020 DUEL LINE
: BS N CB 5 N N LOTEL 5020 DUEL LINE
: DT Y CB 5 Y N Y NORTHERN TELECOM SYMPHONY 3000
: SD Y CB 12 N NORTHWESTERN BELL BASIC TGT 51450
: KI N CB 5 N PHONEMATE 3900
: NF N CB 7 Y N Y PHONEMATE 3950
: PS Y CB 5 RADIO SHACK 43-384
: AT N CB 160 N Y SEARS 3293 4761550 SR 3000
^^^^
: ST Y CB 75 N N Y SOUTHWESTERN BELL FREEDOM PHONE FC 2570
^^^^
: SJ N CB 26 N Y TELEFONICA TXE-1 HISPANO AMERICAN
^^^^
: SJ N CB 7 N Y TELEFONICA TXE-1 HISPANO AMERICAN
: LV Y CB 5 N N ULTRSONIC 019
: VB Y CB 30 Y UNISONIC 6434
^^^^

Assuming the 5-12 watt CB entries were sideband (ie legal), was anything
done to the illegal CB operators? As a side note, none of the Amateur
stations were over the 1500W limit, although there's no way to prove
they were within the other constraints of their license.
--
David Tiller | Network Administrator | Voice: (804) 752-3710 |
dtiller@rmc.edu | Randolph-Macon College| Fax: (804) 752-7231 |
"Drunk, [Beowulf] slew | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |
no hearth companions." | Ashland, Va 23005 | 77d 31' 32.19" W |
```

3461. Re: Rec.Radio.Amateur.Antennas activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 16:28:04 UTC
From: teacherjh@aol.com
Message-ID: <2nc9ak$1ib@search01.news.aol.com>
Source record: 269211

>>> I have posted two items to a newsgroup, rec.radio.amateur.antennas,
>>> but have never ever seen any other activity on that newsgroup. I have

> Perhaps if you changed it to rec.radio.amateur.antenna (singular)

Where would posts posted to the plural go? The bit bucket?

Jose KD1SB

3462. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 16:34:46 UTC
From: rapp@lmr.mv.com
Message-ID: <Nke1Jc3w165w@lmr.mv.com>
Source record: 269212
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,uk.misc

zawada@softage.demon.co.uk (A Gnome On A Mission) writes:

> Help, has anyone out there heard of a chip XR2206?
>
> It's used in a converter to send SSTVFAX in a shareware program called
> SSTVFAX2. From what I can make out, it seems to be some kind of modem
> chip, but I can't find it in any of the catalogues I have. Can anyone
> help me with any of the following information?
>
> 1. Has it got an equivalent chip I can use instead?
>
> 2. About how much is it?
>
> 3. Give me an address anywhere (any country), I can order it from.
>

It's made by EXAR and is very common. Jameco Electronics (1-800-237-6948)
lists it as part #34972 and sells it for 3.75 in quantity 1. Jameco's
address is 1355 Shoreway Road, Belmont, CA 94002-4100.

Larry W1HJF

L. M. Rappaport & Associates, Inc. rapp@lmr.mv.com voice +1 603 237 8400
Colebrook, NH 03576-0158 CIS 72427,2567 fax +1 603 237 8430

3463. Re: ARRL Letter 24 March 1994

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 16:39:53 UTC
From: ehare@arrl.org
Message-ID: <1994Mar30.163953.8019@arrl.org>
Source record: 269213

Marc B. Grant (marcbg@netcom.com) wrote:

: The ARRL Letter Vol. 13, No. 6 March 24, 1994

: FCC surveys telephone interference, says manufacturers could do better

: The FCC has released the results of a telephone interference survey
: and concluded that since some telephones are "bulletproof," all of them
: could be.

I must point out that the FCC "bullet-proof" telephones were all
of the modified non-electronic type. Although they were indeed immune
in 96% of the cases, it is not nearly as easy to make a telephone
that contains lots of active devices so absolutely immune. It can
be done; it is just not as easy.

: Thirty-five FCC field offices each picked three random cases of
: telephone interference on record and then visited the scene. The
: transmitting stations included 47 citizens band, 27 amateur, 23 AM
: broadcast, 10 FM broadcast, and one international broadcast station (none
: were specifically identified).

Interstingly, even though there were 27 hams involved, not one
let us know, or asked for any of our RFI help. :-)

: Among the FCC's conclusions was that transmitter power did not seem
: to be a significant factor; they said that 10 watts or less caused
: telephone interference in one-third of the cases.

Well, even though a 10-watt signal can cause interference, higher
power would cause interference over a larger area.

: The FCC also said that filters worked only one-third of the time.
: "Manufacturers can design telephones to be interference free," the
: Commission said, citing its bulletproof telephones, which were immune
: from interference "virtually all of the time."

There are many different reasons that filters only work "one-third of
the time." The phyisical location of the filters can be quite important.
While in most cases, it is best to install the filter right at the
phone, one must consider that the filter usually works best when
installed at an RF low-impedance point in the telephone wiring. The
location of the best point can be difficult to find.

Filters are also designed to be optimum over a specific frequency
range. The HF filter installed to correct an interference problem
caused by a VHF station should not be expected to work.

The FCC report also did not indicate whether any combination of
line and hand-set cord filters were tried. All in all, the CORRECT
application of telephone-EMI filters should be expected to work in
more than 33% of the cases.

: If you would like a copy of the survey, which includes a list
: of telephone models checked, send an SASE with two units of first class
: postage to the Technical Information Service at ARRL HQ.

Please also include a specific request for the "EMI/RFI-Telephone-FCC"
Technical Information Service package. An electronic copy of the report
is also available from the ARRL Automated Electronic Mail Server,
info@arrl.org. A copy has been placed on the archives at oak.oakland.edu.

73 from ARRL HQ, Ed
--
Ed Hare, KA1CV, ARRL Laboratory, 225 Main, Newington, CT 06111
203-666-1541 ehare@arrl.org
My electronic posts and email do not necessarily represent the policy
of the ARRL, but I can probably get in trouble for them anyway!

3464. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 16:43:24 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2nca7d$hf2@network.ucsd.edu>
Source record: 269214

In article <slayCnEC6z.KDF@netcom.com> slay@netcom.com (Sandy Lynch) writes:
>Unfortunately - that might be the case. Try listening on the CW bands.
>You will rarely, if ever, hear that kind of language.

You're absolutely right - when I tuned down to the CW bands, I didn't
hear bad language. I didn't hear any language at all - just a bunch
of beeping noises.

I guess they could be called obscene beeping noises, but that's really
in the mind of the beholder.
- Brian

3465. Attention Island Hunters:

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 16:51:46 UTC
From: ve8ev@gov.nt.ca
Message-ID: <1994Mar30.165146.5743@gov.nt.ca>
Source record: 269215

FOR IMMEDIATE RELEASE:

The Inuvik Amateur Radio Club will be running an expedition to
Hendrickson Island in the NWT (Inuvik Region) West IOTA island group.
Ops VE8NC,VE8EV,VE8CF and VE8GC will begin operations from this
not-yet-activated island group by 2300Z 08 April 1994 UTC.
Aound the clock operation on 20 meters and15 meters as well as
some low band and satellite work.
The callsign for the expedition will be VE8YEV.
QSL direct to any of the operators or via the buro.
73
John Boudreau
ve8ev@inukshuk.gov.nt.ca

3466. Re: reward notice

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 16:58:07 UTC
From: kenman@iastate.edu
Message-ID: <2ncb2v$m4@news.iastate.edu>
Source record: 269216

In article <9403301509.AA16015@metro.mccneb.edu> pmarsh@metro.mccneb.EDU (Paul Marsh) writes:
>
>[Unsigned Public Notice]
>A reward is offered for information leading to the arrest of EDDY
>CURRENT, charged with induction of an 18-year-old coil, named MILLI
>HENRY, who was found half choked. CURRENT escaped Weston Primary Cell
>and was missing since Faraday.
>
>Noted in The mini-Journal of Irreproducible Results ("mini-JIR")
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>this document for commercial purposes.
>For subscription information, send e-mail to: jir@mit.edu

According to Sheriff Kirchoff, authorities had assembled a network that dropped CURRENT and now his capacity for additional reactance was impeded.

--
Ken Anderson N0ZEM/AA Kenman@iastate.edu PH: 515.294.8996
126 Soil Tilth Bldg., Iowa State University, Ames, Iowa 50011

3467. Re: Yaesu 5200 Develops new "Feature"?!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 17:15:09 UTC
From: ghader@chinook.halcyon.com
Message-ID: <2ncc2t$eud@nwfocus.wa.com>
Source record: 269227

Re: 5200 shutting off. Check to sse the the remote head is securely seated in the radio or bracket. If it loosens, the rig goes dead.

This happens once in a long while with mine. Espcially the remote bracket, as it's not that rigid and the left end wiggles loose.

Greg Hader
N7NHW FIR 470

3468. Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 17:32:38 UTC
From: tomb@lsid.hp.com
Message-ID: <CnHnEE.496@hpcvsnz.cv.hp.com>
Source record: 269217
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Alan Bloom (alanb@sr.hp.com) wrote:
(concerning the generation of quadrature phase audio signals)

: But the hard part is getting the ampltude and phase matching
: to within a fraction of a dB or degree. As explained above, if you
: do that, the overall amplitude and delay response versus frequency
: will be quite good.

So, just how good is a practical network?

In some recent ARRL pubs (e.g., ARRL Handbook, 1987, pg 18-9) there's
a "matrix" type of phase shift network that claims to be able to give
good performance with loose-tolerance parts. I put this network into
Spice last nite, and thought some might be interested in the
results. Below are four columns plus a frequency column. The
second column is phase of one output channel. The third is that
phase with a constant 235 degrees and a ramp at -.066 degrees/Hz taken out.
The fourth is the magnitude frequency response for that channel.
The fifth is the magnitude frequency response with an additional
5-pole Butterworth low-pass at 3kHz and 5-pole Butterworth high-pass
at 320Hz, to limit the audio passband to the 300Hz-3kHz voice band.

(I hope tabs in the table won't make it unreadable at too many sites.)

freq	phase error	mag	filtered mag
Hz	degrees	degrees	dB	dB
200	-193.5	54.6	2.2	-8.4
230	-203.8	46.4	1.9	-6.1
264	-214.0	38.4	1.6	-4.0
303	-224.4	30.6	1.3	-2.3
348	-234.9	23.1	1.0	-1.2
400	-245.6	15.8	0.7	-.5
459	-256.5	8.8	.5	-.1
527	-267.6	2.3	.3	0
606	-278.8	-3.8	.2	0
696	-290.2	-9.2	.1	0
800	-301.6	-13.8	0	0
919	-313.1	-17.4	0	-.1
1056	-324.5	-19.9	0	-.1
1213	-335.9	-20.9	0	0
1393	-347.1	-20.2	.1	0
1600	-358.4	-17.8	.2	0
1838	-369.5	-13.2	.4	0
2111	-380.4	-6.1	.6	-.1

2425 -391.1 3.9 .8 -.5
2786 -401.7 17.2 1.1 -1.2
3200 -411.8 34.3 1.3 -2.4
3676 -421.5 56.1 1.6 -4.1

Note: I didn't calc the phase error including the Butterworth filters, which are NOT linear phase, but better than the Chebyschev typically approximated in a crystal filter.

The exact meaning of the "phase error" column is certainly open to discussion, but to me it's obvious that it's a very low error, and quite smooth with frequency. And both the magnitude columns show extremely good flatness in the voice band: particularly the one including the out-of-band audio filters.

I didn't include columns about the phase and amplitude difference between the channels, but it's a very close match in both.

(I hope to follow this with another followup about actually achieving 90 degree phase differentials with a finite number of poles and zeros, but that will have to wait for now.)

3469. Internet Callbook

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 17:33:25 UTC
From: gosset@pbr322.UCSD.EDU
Message-ID: <Pine.3.07.9403301125.A26964-9100000@pbr322>
Source record: 269218

Hello everyone:

There is an Internet accessible call sign server sponsored
by the Rhode Island 2x2 Amateur Repeater Association, in the
Anomaly Amateur Radio Server:

telnet ns.risc.net (155.212.2.2) login:hamradio
(BuckMaster and Buffalo Callbooks on line)

73 & DX de XE1RGL.

3470. Re: QSL info for HS0ZAD

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 17:45:10 UTC
From: etjfonte@ci.ua.pt
Message-ID: <CnHnzC.p5@news.ci.ua.pt>
Source record: 269219

Paul K.C. Wang (pwang@tornado.seas.ucla.edu) wrote:

QSL to HS0ZAR I think it is via K3SO ??

--
|---|
Jose' Miguel M.B.Fonte	Universidade de Aveiro - PORTUGAL
	Departamento de Electronica e Telecom.
E-mail : etjfonte@ci.ua.pt	---------------------------------------
	Ham callsign : CT1ENQ "always QRV"

3471. DSP filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 17:55:58 UTC
From: slg@rfc.COMm.harris.COM
Message-ID: <Pine.3.87.9403301258.C44564-0100000@fep01.rfc.comm.harris.com>
Source record: 269220

>DSPs are proving to be peculiar creatures. Some people like them and
>some don't. I found out for $359.00 that I'm one of the ones that
>don't. I never could get used to the sound. Yes, they do reduce white
>noise and ARE extremely effective on heterodynes, but they add a strange
>digital ringing kind of sound of their own.

>The best thing is to listen verrry carefully to one before you buy.
>Don't even think of buying one un-listened to unless you have $$ to
>throw away.

>W7LZP

I don't have any of these problems that you mention, but it took me a day of playing around with it to get used to it. I found that I could pretty much eliminate any unusual sound effects by using my Icom 735's RIT and passband tuning in conjunction with the DSP filter. In other words, just sending "raw" audio to the filter produced mixed results, but by using the rig's features to enhance the audio that the filter receives, the filter performs very well.

By the way, I built the DSP filter kit sold by Quantics. This is a circuit designed by W9GR, and is almost the same filter that is sold ready-to-go by J-comm. Price for the kit is $125 plus $7 shipping. Very high-quality kit. For more info on this kit, see the article "Build Your Own Station Accessories" in QST a couple of issues ago.

73 de KB2PWM (Steve Goldstein)

3472. reward notice

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 18:06:14 UTC
From: jangus@skyld.grendel.com
Message-ID: <765050774snx@skyld.grendel.com>
Source record: 269221

In article <9403301509.AA16015@metro.mccneb.edu> pmarsh@metro.mccneb.EDU writes:

> [Unsigned Public Notice]
> A reward is offered for information leading to the arrest of EDDY
> CURRENT, charged with induction of an 18-year-old coil, named MILLI
> HENRY, who was found half choked. CURRENT escaped Weston Primary Cell
> and was missing since Faraday.
>
> Noted in The mini-Journal of Irreproducible Results ("mini-JIR")
> This is reprinted with permission. You do NOT have permission to copy
> this document for commercial purposes.
> For subscription information, send e-mail to: jir@mit.edu

What gives them the exclusive right to something that has been floating
around Amateur circles for the past 50 years? (or more)

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3473. Looking for Sep 92 QEX article

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 18:17:46 UTC
From: chrism@col.hp.com
Message-ID: <2ncfoa$rdo@hp-col.col.hp.com>
Source record: 269223

Is there anyone out there that could run a copy of an article from the
Sep 92 issue of QEX for me? I am a new ham (still waiting for license).

Thanks,
Chris Magnuson
chrism@col.hp.com

3474. Re: Kill that intermod!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 18:33:18 UTC
From: ehare@arrl.org
Message-ID: <1994Mar30.183318.9204@arrl.org>
Source record: 269224

The ARRL Laboratory wants to start testing the out-of-band intermod performance of VHF FM rigs and publishing the results in our QST Product Reviews. We are already measuring in-band third-order IMD, so the test methods are established. What I would like is some reports on specific out-of-band IMD problems that are being experienced in metro areas, frequencies, locations, etc. Please send the reports to ehare@arrl.org.

Some of the "IMD" problems being reported are probably receiver image problems, so we are also going to measure and report the image rejection. If anyone has reports of image-response interference, I would like to know about that, too.

Thanks,
73 from ARRL HQ, Ed

--
Ed Hare, KA1CV, ARRL Laboratory, 225 Main, Newington, CT 06111
203-666-1541 ehare@arrl.org
My electronic posts and email do not necessarily represent the policy of the ARRL, but I can probably get in trouble for them anyway!

3475. Re: Sonobuoys

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 18:35:33 UTC
From: Kenneth.E.Harker@Dartmouth.Edu
Message-ID: <2ncgpl$ikv@dartvax.dartmouth.edu>
Source record: 269225
Cross-posted to: rec.radio.amateur.misc,rec.radio.scanner

In article <Cn4zo9.9KI@taurus.cs.nps.navy.mil>
rovero@oc.nps.navy.mil writes:

> Please be *extremely careful* with this device. The main battery is
> seawater activated, and there is a inflatable collar float that inflates
> and an antenna that is extended when it enters the water (actually, when
> two pins on the body of the sonobuoy are shorted). You don't want to
> be holding the device when this happens!
>
> The signal is 1W, VHF-FM, transmit only. Old ones had a single channel,
> newer ones can select one of 99 channels (synthesized).

I just got back from a long trip to Dallas for a job interview, so
I haven't had any time to play with the sonobuoys yet (they've been
safely sitting under my bed the whole time). I knew the two pins on
the bottom of the buoy had something to do with activating it, but I
was thinking they might be pressure activated (hitting the water and
all) but the salt-water shorting makes a lot more sense - I'll be
careful to make sure they don't get shorted!
I don't seem to see any channel setting switch on the outsides.
On the small one, there is a switch that sets the life from 1 to 3
hours, and the larger one has something that seems similar, with
settings at 1, 3, and 8. On both of them, the number 4 is printed in
large font around the center of the cylinder and on their bottoms.
Here are some other distinguishing numbers:

Small buoy: Large buoy:

Side: Side:
AN/SSQ-41A AN/SSQ-57A
37695 DVK 26479 N00163-78-C-0037
N00019-71-C-0544 LOT 1 37695
LOT 34 <- ROTATE ->
TO
SET DEPTH
300 60
FEET

Bottom: Bottom:
SSQ 4 LAU-111/A
41A N000163-78-C-0037
Depth Selector MFG. NO. 37695 LOT NO. 01
Press to turn
60<->300

I would like to eventually set these up as a 2m FM rig for packet so I can free up my HT for other uses (1W is more than adequate for me here). I understand these sonobuoys only have TX units in them, so if any recommendations can be made on how I can get an RX unit for 2m or convert one of the buoy's TX units to an RX unit, I would appreciate it. Any advice at all on how to go about converting these radios to 2m use would be greatly appreciated.

==========
Kenneth E. Harker N1PVB Dartmouth College Amateur Packet Radio
kenneth.e.harker@dartmouth.edu Hinman Box 1262 n1pvb@w1et.nh.usa.na
(603) 643-6549 Hanover, NH 03755 or n1pvb-5 on 144.99
==========
(PGP Public Key now available on request)

3476. Re: HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 18:51:44 UTC
From: fuat@tintin.cc.columbia.edu
Message-ID: <2ncho0$mgl@apakabar.cc.columbia.edu>
Source record: 269226

In article <2nai88$3c6@lester.appstate.edu>,
Marvin Hoffman <HOFFMANMK@CONRAD> wrote:
>Chill out guys and gals.....it may not be a perfect world but the people
>in our club who tested around December 27 got their licenses about ten
>days ago.
>
>I know it frustrating to wait but everyone seems to have to do it. Some
>time back there were postings in this group or rec.radio.amateur.misc
>that the FCC in Gettysburg only issues ham licenses one day per week and
>that there are delays at the VEC and at the FCC.

Yeah, chill out. So what if it takes less time to get a driver
license, handgun permit, etc. We don't want the FCC to be too hasty
here assigning these callsigns.

--Fuat (9.5 weeks and counting)

P.S. :-)

Columbia University fuat@columbia.edu
703 Watson Labs 212-854-4804
612 W115th Street 212-662-6442 (Fax)
New York, NY 10025

3477. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 19:16:33 UTC
From: destree@unr.edu
Message-ID: <1994Mar30.191633.19995@news.unr.edu>
Source record: 269132

Jeffrey D. Angus (jangus@skyld.grendel.com) wrote:

: In article <2n73kp$o6i@vixen.cso.uiuc.edu> dhughes@prairienet.org writes:
: > I just passed my no-code test last week, and have been listening to some
: > ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
: > of the most disgusting language I've encountered anywhere. One guy was

I have never heard any direct obscenities on the HF bands, but I
do know that they exist. I have heard a few EXTREMELY RUDE operators,
who, when questioned about excessive bandwidth and splatter, were rude to
the point of near swearing.

Along the same lines, to my knowlege there was only one time that
I swore on the air. I had just wrecked my car, smashing into the side of
a mountain cliff. It was about 7 AM, and I autopatched my dad to come
help me. I wasn't hurt, but I was still shaken up.

Dad: "What happened?"

Me: "Well, I'm okay but the car is a little fu***d up."

I didn't realize it at the time I did it. Several hours later it
hit me, and I felt terrible! I never had anyone call or write me
regarding it, so I assume either anyone listening understood that I was
still in shock, or nobody was listening. In either case, I now keep it in
mind every time I key the mike.

Louis

BTW: To all the foul mouthed hams that are out there...there is
still plenty of room on the good old 11 meter (Childrens
Band). Take it down there, and let's keep it clean on
the ham bands!
--
Louis A. Destree University of Nevada, Reno
destree@equinox.unr.edu <> destree@equinox.bitnet Electrical Engineering
Amateur Radio: N7XNX Bike: 1980 Honda CB750C
"When things go from bad to worse, the cycle will repeat itself!"

3478. Re: STOP SENDING HAMS ON USENET CRAP !!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 19:41:32 UTC
From: brett_miller@ccm.hf.intel.com
Message-ID: <brett_miller.90.0013B1C5@ccm.hf.intel.com>
Source record: 269146

In article <1994Mar30.214549.1792@unet.net.com> larson@loren.net.com (Alan Larson) writes:

> Why do you download it each time?

Many net users do not have real on-line access, they have to download the
messages to read them. Some my have online access, but would have HUGE phone
bills if they sat and read through the messages. I know, cuz I've been there.
It's great to have a direct Internet connection.

Brett Miller N7OLQ brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

3479. Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 19:47:45 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar30.194745.28963@ke4zv.atl.ga.us>
Source record: 269165
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Well at worst I've stirred up an interesting discussion. :-)

In article <CnG3Jt.Htw@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:

>The audio phase shift network is the interesting (read difficult) part
>of the system. It must maintain a 90 degree phase difference and
>excellent amplitude matching between the two outputs over something like
>a 10:1 frequency range (300 Hz - 3000 Hz). It generally does that by
>causing each of the two outputs to have a constantly-rising phase shift
>versus frequency characteristic, like thus:
> / /
>Phase Shift / /
> / /
> 720 deg / /
> / /
> / /
> 540 deg / /
> / /
> / /
> 360 deg / /
> I / /
> / / Q
> 180 deg / /
> / /
> / /
> 0 deg ___/_/
> | | | | |
> 300 600 1200 2400 4800 Hz
> Frequency
>

Now this chart illustrates the problem I've been talking about. As
we can see, the difference in delay with frequency is quite marked.
Sure the phase delay increases *smoothly* with frequency delta, but
the magnitude of the error rapidly climbs with increasing frequency
delta. This is our old friend click-boom. From 600 Hz to 2400 Hz delay
decreases by almost 20%, or about 0.2 ms. That much delay difference
is clearly audible.

If we look at Tom Bruhns' chart for a more complex matrix network:

phase filtered
>freq phase error mag mag
>Hz degrees degrees dB dB
>200 -193.5 54.6 2.2 -8.4

>400 -245.6 15.8 0.7 -.5
>527 -267.6 2.3 .3 0
>606 -278.8 -3.8 .2 0
>696 -290.2 -9.2 .1 0
>800 -301.6 -13.8 0 0
>1056 -324.5 -19.9 0 -.1
>1213 -335.9 -20.9 0 0
>1600 -358.4 -17.8 .2 0
>2111 -380.4 -6.1 .6 -.1
>2425 -391.1 3.9 .8 -.5
>2786 -401.7 17.2 1.1 -1.2
>3676 -421.5 56.1 1.6 -4.1

Now this is much better. The ends are horrible of course, but in the region 600-2400 Hz there is only a delay delta of 0.014 ms. That's hardly audible at all to someone with *good* ears. I'd note that this matrix phase shift network is considerably more complex than typical networks found in older phasing type equipment. And as Richard Karlquist noted, that's all for naught anyway unless the IF filtering of the receiver has correspondingly flat phase delay. Good RF filters can be as flat away from their edges as the matrix above, and RF filters work both ways.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3480. Re: Question on Kenwood 732 A

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 19:48:47 UTC
From: brett_miller@ccm.hf.intel.com
Message-ID: <brett_miller.91.0013D0B8@ccm.hf.intel.com>
Source record: 269124

In article <811@comix.UUCP> jeffl@comix.UUCP (Jeff Liebermann) writes:

>>Sure the radio isn't perfect, but as you said, they all seem to have their
>>problems. If you want Motorola, you have to PAY for Motorola.
>I see. If I want quality, I should buy Motorola. However,
>because I'm a ham on a limited budget, I should tolerate design
>flaws, mechanical abomonations, human factors atroscities, and
>durability problems. It's funny, but when designing commercial
>radios, I had the same dumb line thrown at me by the
>military-aerospace crowd. I guess hams are suppose to take
>any and all abuse because we're so tolerant.

I guess you could say we are at the bottom of the radio food chain.

Brett Miller N7OLQ brett_miller@ccm.hf.intel.com
Intel Corp.
American Fork, UT

3481. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 19:55:45 UTC
From: dsharp@netcom.com
Message-ID: <dsharpCnHu0x.IDp@netcom.com>
Source record: 269144

Brian Kantor (brian@nothing.ucsd.edu) wrote:

> You're absolutely right - when I tuned down to the CW bands, I didn't
> hear bad language. I didn't hear any language at all - just a bunch
> of beeping noises.

> I guess they could be called obscene beeping noises, but that's really
> in the mind of the beholder.

The beauty of the CW bands is that all the obsenity is being *beeped* out.
That's what you're hearing :-)

--
Dave Sharp - NU8H Fairborn, Ohio dsharp@netcom.com

Made from only the freshest electrons and 100% pure ASCII to
insure that you have the best possible newsreading experience.

3482. QRZ Question...

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 20:04:07 UTC
From: dfrandin@smtphost.horizons.COM
Message-ID: <9402307650.AA765057847@smtphost.horizons.com>
Source record: 269133

I run a Maximus telephone BBS for our ham club, and we've installed a CD drive and the QRZ callsign CD. I attempted to use the QRZ.EXE search engine that is included w/ the CD w/o luck. What happens is this: When redirecting I/O to/from QRZ.EXE and the com port using the required syntax ie:

UsrRemote F:\QRZ_<com1_>com1 Worthy "Callbook"

The program starts fine, except for the following: None of the keys pressed for menu item selection is echoed, and you need to press carriage return twice to register the menu selection you typed. Other than these anomalies, the program works fine. To avoid confusing the user, we wrote a quickie callsign-only search engine to allow use of the callbook, but the users are clamoring for the complete search capability of the QRZ program. I contacted the author of QRZ but he could not duplicate the problem due to not having a Maximus installation to evaluate. He claims that QRZ.EXE works fine w/ most BBS "door" setups, so I suspect that the problem is with Maximus. Does anyone on the net have any experience with Maximus and QRZ???????? Please email any ideas, replies, to me, as I'm only getting the newsgroup digest, and might miss any newsgroup posts.....

Thanks in advance,

Dave Frandin, WA6QNW

dfrandin@horizons.com

3483. SUMMARY:2m HT Recomendati

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 20:33:00 UTC
From: steve.allen@brent.uucp
Message-ID: <23095.553.uupcb@brent.uucp>
Source record: 269128

harland@otter.mech.ubc.ca (Harland MacKenzie) writes:

>Summary of 2m HT recomendations:
>First the specific features that people use/like is laid out
>then I will list responses by manufacturer.

>Responses to date: 14

[etc.]

Thanks, Harland. Good work. Very much appreciated, even though I'm
not in the market for a ht.
-Steve N2WSA

. QMPro 1.51 . This information for entertainment purposes only

---
The Brentwood BBS! 12 Nodes (914)-381-1600

3484. Re: TELEPHONE INTERFERENCE SURVEY

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 20:53:09 UTC
From: ehare@arrl.org
Message-ID: <1994Mar30.205309.11051@arrl.org>
Source record: 269129

David Tiller (dtiller@cscsun.rmc.edu) wrote:

: FCC survey deleted

: Assuming the 5-12 watt CB entries were sideband (ie legal), was anything
: done to the illegal CB operators? As a side note, none of the Amateur
: stations were over the 1500W limit, although there's no way to prove
: they were within the other constraints of their license.

:-). I had thought of that myself. Unfortunately, the survey
report didn't say. But I bet the CBers were sure sweating bullets
or dropping bricks over it for a bit.

Ed
--
Ed Hare, KA1CV, ARRL Laboratory, 225 Main, Newington, CT 06111
203-666-1541 ehare@arrl.org
My electronic posts and email do not necessarily represent the policy
of the ARRL, but I can probably get in trouble for them anyway!

3485. Re: CALLBOOK ON INTERNET

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 20:54:45 UTC
From: whs70@dancer.cc.bellcore.com
Message-ID: <2ncoul$1f3@dancer.cc.bellcore.com>
Source record: 269130

In article <CnErML.41F@eskimo.com>, Bill Turner <wrt@eskimo.com> wrote:
>In article <1994Mar28.133651.340@pacs.sunbelt.net>,
>DORR DEPEW <ddepew@CHM.TEC.SC.US> wrote:
>>I have heard that there are several Callbook databases available
>>through the net, but have been unable to locate any. If you have
>>one that you like to use, please let me know by E-Mail. Thanks.
>>N4QIX
>
>I know of one: telnet to callsign.cs.buffalo.edu 2000 and do the usual
>readmes, etc. This is FCC data only, so no furriner info available. If
>anyone knows of others, I'd like to know about 'em too.
>Bill, W7LZP

I've used the buffalo.edu callsign server to also obtain Canadian
ham data.

73s
Bill K2UNK

3486. Is there Canadian Info Available?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 21:05:11 UTC
From: harlie@renzland.org
Message-ID: <CnHx8p.Hnw@scilink.org>
Source record: 269131

I'm extremely impressed with the volume of ham material
(programs/info) available here on the net. However all of
this is for the U.S. Most of this is still of great utility,
but is there any Canadian-specific material out there?
Specifically question-pools, exam programs and the like as
I'm just getting into ham and will be writing my exam
soon :)

Thanks much,
B.S. Hall

3487. Re: Voice mail on a repeater?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 21:21:30 UTC
From: levin@bbn.com
Message-ID: <LEVIN.94Mar30162130@powell.bbn.com>
Source record: 269164

In article <bote.764956634@access1> bote@access1.digex.net (John Boteler) writes:
jherman@uhunix3.uhcc.Hawaii.Edu (Jeffrey Herman) writes:
>Are there any repeaters left in this country that just repeat, including
>no musical tones or beeps when you drop your carrier? I miss the old

Try the 147.180 repeater in Silver Spring, Maryland.

Or 147.045 in Nashua, NH. Or 145.23 in Boston. There are lots around
here that don't beep.

In fact that is some sort of religious issue; the people on the home
machine (147.045) are beep haters; but there's one in the next town
(at 146.73) for those who really like it (plus it has an autopatch)

/JBL
=
Nets: levin@bbn.com | "GO TO JAIL. Go directly to jail. Do not pass
POTS: (617)873-3463 | Go. Do not collect $200."
KD1ON (@KB4N.NH.USA) | -- Parker Brothers

3488. Re: STOP SENDING HAMS ON USENET CRAP !!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 21:45:49 UTC
From: larson@loren.net.com
Message-ID: <1994Mar30.214549.1792@unet.net.com>
Source record: 269087

In article <764973671snx@bsdihi.atr.bso.nl> dihi@bsdihi.atr.bso.nl (Dick Hissink) writes:
>It happens again and again. Every couple of weeks six tremendous large
>files with AMATEURS ON USENET. This times each part from the six even
>three times. I think al the FCC's and PTT's like it, because it keeps
>my modem so busy....
>
>ok, ok, I know it is a lot of work to keep this list updated and, ok it
>is usefull to know who you can reach by usenet. But why not this alternative:
>
>AMATEURS ON USENET: Those interested can download the latest updated
>version by ftp form server....
>
>This saves a lot of unnecessary downloadtimes, my phonebill and I must
>say some irritation.
>What do Y'all think of my idea??

I think your idea will not work for the majority of readers who do not
have FTP access.

I *LIKE* having the stuff posted every now and then. It sort of helps
keep out the stupid FAQ type questions.

Why do you download it each time?

Alan

3489. RE: WANTED: List of Cellular Freqs, Channels, etc.

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 22:04:14 UTC
From: scott migaldi <scottm@chop.isca.uiowa.edu>
Message-ID: <765065385-0-11592@gremlin.isca.uiowa.edu>
Source record: 269134

Mike I will be glad to help. First, I am assuming you require the channelization for the US standard analog system (EAMPS). Secondly that you can use a spreadsheet to generate the complete list from my formula.
EAMPS has 832 channels the reverse channel (Mobile TX) is from 824.04 to 848.97 MHz and the Forward channel (Mobile RX) is 869.04 to 893.97 MHz. It should be obvious that this indicates a 45 MHz duplex spacing. The formulas to generate the list are as follows

For Channels 1 to 799:

Reverse Frequency = 825.00 MHz - (.03 * Chan. Number)
Forward Frequency = 870.00 MHz - (.03 * Chan. Number)

For Channels 991 to 1023

Reverse Frequency = 825.00 MHz - (.03 * (1023 - Chan. Number))
Forward Frequency = 870.00 MHz - (.03 * (1023 - Chan. Number))

I know what you are thinking, He said 832 channels yet he has channel 991 to 1023 which are lower in frequency than chan 1 to 799. The reason is because the expansion of cellular has been so great that new frequencies became available a new channel plan was created and well you know the FCC they have trouble counting so we have a screwing channel to frequency assignment. As for the frequency assignment for each cell in your area. Well I do not have access to that type of information and if I did I could not give it you. You can try to contact the cellular carriers in your area but they probably will not givit to you. Good luck
---
_____
The opinions in this post are mine and my cat's, not my employer's.
scottm@csg.mot.com (Scott F. Migaldi)

3490. Re: Rec.Radio.Amateur.Antennas activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 22:14:46 UTC
From: greg@core.rose.hp.com
Message-ID: <CnI0GM.C62@icon.rose.hp.com>
Source record: 269091

Teacherjh (teacherjh@aol.com) wrote:
: >>> I have posted two items to a newsgroup, rec.radio.amateur.antennas,
: >>> but have never ever seen any other activity on that newsgroup. I have
:
: > Perhaps if you changed it to rec.radio.amateur.antenna (singular)
:
: Where would posts posted to the plural go? The bit bucket?
:
: Jose KD1SB
:

No, actually. comp.* plurals go to the bit bucket, but rec.radio.* plurals
get bled off to ground. An interesting reaction occurs when someone dumps
the a full bit bucket onto the ground, where the comp.* and rec.radio.*
plurals mix. I think they call it "packet".

:-)

Greg KD6KGW

:-)

Greg KD6KGW

3491. Talking to seismic packages over a radio link

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 22:17:47 UTC
From: sak@igloo.essc.psu.edu
Message-ID: <SAK.94Mar30171748@igloo.essc.psu.edu>
Source record: 269135
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,comp.sys.palmtops

Hi all, a novice question on radios and radio-modem links.

I have an experiment where a bunch of seismic packages (refteks) are scattered over the Antarctic ice sheet. They are all within about 40 km of a central site. I would like to interrogate them about their state-of-health from this central site. I don't need a high-speed link (I am not downloading seismic data over the radio, just some relatively small strings of data).

The refteks usually are interrogated by walking up to them, hooking up a little hand-terminal with an rs-232c connection and sending queries and getting back answers. This is a full-duplex connection.

I would like to use VHF radios at approx 10W and a good antenna/tower to get the distance, and get the same functionality, but from the comfort and luxury of my central hut.

My questions:

1. Are there radio transceivers out there that will operate in full-duplex. i.e. transmit *and* receive at the same time, over two different frequencies?

2. Are there modems out there that will work seamlessly with above radios?

3. Are the modems "intelligent". i.e., I want to be able to say "station 6, tell me foo", and only the modem at station 6 passes on the request to the seismic package, and replies with the response. I can't program the refteks to "know their name" --- the refteks are off-the-shelf.

4. I also need to be able to say "all stations, start recording NOW", without having to cycle through "station 1, start", "station 2, start", and on down the list. This is a timing matter. I want to have all the stations turn on at the same time to record an event.

5. And finally, how much approx for each radio/modem? And any pointers on who sells these things would be much appreciated.

6. Some people have said that I can't expect to just walk into Bob's Radios and walk out with a radio. That there are all sorts of FCC this-n-that before anybody will sell me anything. Is that the case? Please note that this is a *solely* Antarctic project, and will not be used in the US.

I appreciate any and all help you can give me. I am not
radio-literate, or modem-litereate, for that matter, so excuse the
ignorance of my questions.

Any and all help gratefully accepted.

Cheers, Sridhar.

--

****
Sridhar Anandakrishnan TEL: (814) 865-7042
Earth System Science Center (814) 863-1700
Penn State University FAX: (814) 865-3191
University Park, PA 16802 email: sak@essc.psu.edu
****

3492. Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 22:22:11 UTC
From: jjw@seastar.org
Message-ID: <CnI0t1.DJ@seastar.org>
Source record: 269136
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

As quoted from <CnG3Jt.Htw@srgenprp.sr.hp.com> by alanb@sr.hp.com (Alan Bloom):

> In another thread, I claimed that phasing-type single-sideband generators
> sound better than filter-type generators because phasing exciters have
> flatter amplitude and delay response. Gary Coffman disputed that. Rather
> than respond to Gary's long replies in detail, I'll just summarize how
> phasing-type SSB exciters work:
> _______ _____________ I ________
> Audio | Audio | | Phase-shift |----------- Mixer ->| |
> Input --| Filter|-->| Network | Q | | Summer |--> SSB Out
> |_______| |_____________|--- Mixer --------->|________|
> | |
> _____________ | ____|____
> | RF Oscillator |--+->| +90 deg |
> |_____________| |_________|
>
> I and Q are two audio outputs with a constant phase difference between
> them of 90 degrees. The input filter limits the audio frequency response
> to the range of the phase-shift network. The "+90 deg" box can be switched
> to -90 degrees to get the opposite sideband. (The output of each mixer is
> a DSB signal.)
>
> The audio phase shift network is the interesting (read difficult) part
> of the system. It must maintain a 90 degree phase difference and
> excellent amplitude matching between the two outputs over something like
> a 10:1 frequency range (300 Hz - 3000 Hz). It generally does that by
> causing each of the two outputs to have a constantly-rising phase shift
> versus frequency characteristic, like thus:
<much deleted>

So, the audio phase shift is the only 'interesting' part...
How, pray tell, can one having only the usual ham test gear (scope,
probably, dmm, maybe power supply) make the RF phase shift be 90
degrees and the same amplitude at, say 12MHz?
My dual-trace scope is not perfectly calibrated, so that's
out. Generating 48MHz and using flip-flops to get 12MHz in quadrature
doesn't work well in reality (theory is great, but unless your 48MHz
signal is *exactly* 50% duty cycle it has a *strong*component at just
under half of 48MHz, usually near 22MHz. Flip-flops, like all
non-linear devices, are very good as mixers, and the 22MHz mixes with
the 12MHz to make some *interesting* spurs. Filtering out these spurs
usually trashes the 90 degree and equal amplitude you got in the first
place, leaving you back at square one.)(yes, i do know about this.
i've tried it. repeatedly. i KNOW phasing sounds better, and i

WANTED it to work *sigh*). Generate it in quadrature with a dual DDS
and two DACs? Then you must filter the DACs outputs through two
different filters, introducing slightly different phase and amplitude
errors.
I wanted it to work. Really. I've listened to DC receivers
and to crystal filtered super-hets and the difference is amazing.
However, I also want to be able to build a receiver and actually *use*
it, not spend eternity designing the 'perfect' one.
One other interesting thing re: phasing vs filtering: you'll
need *some* additional filtering to do a transmitter anyway (for SSB
at least). This filter will cost you $$, and if you already have to
spend the $$ why not use it for the receiver too? That rather neatly
explains why darned few commercial ham rigs use phasing any more.
--
While (its_not_working()) John Welch, N9JZW
mess_with_it(); jjw@seastar.org

3493. Re: The word HAM

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 22:27:01 UTC
From: Cecil Moore <cecilmoore@delphi.com>
Message-ID: <5uzsZRN.cecilmoore@delphi.com>
Source record: 269093

We have a number of British-born hams here at Intel. They all agree that "ham" is an ancient English idiom for any kind of amateur in any field. That fits perfectly with what I was told by my Elmer in the early '50s. The application of "ham" to actors was for the same reason... amateur actors tend to overact. The origin of the pronounciation is the first syllable of the old-English pronounciation of amateur.

73, KG7BK, CecilMoore@Delphi.Com

3494. Re: But Seriously (was Re: New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 22:39:11 UTC
From: cravitma@cps.msu.edu
Message-ID: <2ncv2f$hfa@msuinfo.cl.msu.edu>
Source record: 269137

On Wed, 30 Mar 1994 16:18:46 GMT, strange alien beings caused Ed Hare (KA1CV)
(ehare@arrl.org) to write:
> : 1) RCC Rag Chewers Club

> Well, although I applaud the encouragement of real contacts with real
> conversations, this just seems too easy on VHF simplex or through
> a repeater. Keep it around, but we need something more challenging.

What about the ARRL friendship award or something similar? Ed or
someone can fill in the details which I don't recall off the top of my
head, but I think it involved contacting 26 hams whose suffixes each
started with a different letter and exchanging RST, QTH and "one other
interesting piece of information." Something like that, anyway.

> 73 from ARRL HQ, Ed

73,
/Matthew

--
Matthew Cravit, N9VWG | All opinions expressed here are
Michigan State University | my own. I don't speak for MSU
E-Mail: cravitma@cps.msu.ed | and they don't speak for me.
GO/CS -d+@ -p+ c++ !l u+(++) e+(*) s/+ n+(---) h+ f+ !g w+(+++) t++@ r(+) y?

3495. Anyone out there?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 23:00:00 UTC
From: richard@mole.demon.co.uk
Message-ID: <9403310614.aa21198@post.demon.co.uk>
Source record: 269138

Hi!

Is there anyone on this group, or are you all too busy doing packet to bother with terresrial comms?

I want to get going with packet, so I'd like to do some discussion with others who've done the thing!

Cheers,

Richard Smith
Hardware & Systems Executive - NorthEast Macintosh User Group - UK
Administration: (+44) 0287 638935
Sysop - NEMUG BBS (+44) 0729 824092 weekdays 18:00-24:00GMT; weekends 24Hrs

* My opinions are not necessarily the opinions or policy of the NorthEast Macintosh User Group. I cannot be held responsible for accident, injury or loss occurring as a result of anything I write.

3496. IPS Daily Report - 30 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 23:29:58 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar30.232958.18588@ips.oz.au>
Source record: 269139
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 30/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 30 MARCH AND FORECAST UP TO 2 APRIL

No warning is current.

1A. SOLAR SUMMARY
Activity: low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 086/029

1B. SOLAR FORECAST
31 March 01 April 02 April
Activity Low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 085/027

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth: not availiable.

Estimated Indices : A K Observed A Index 29 March
Learmonth -- ---- ----
Fredericksburg 10 06
Planetary 10 06

Observed Kp for 29 March: 2122 2122

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
31 Mar 07 Quiet to unsettled.
01 Apr 08 Quiet to unsettled.
02 Apr 09 Unsettled.

2C. MAGNETIC COMMENT
No observations were possible due to equipment failure at Learmonth.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND

DATE LOW MIDDLE HIGH
30 Mar normal normal normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
31 Mar normal normal normal
01 Apr normal normal fair
02 Apr normal normal fair
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were about 15% above predicted monthly values

Observed T index for 30 March: 54

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
31 Mar 55 10 to 15% above predicted monthly values.
01 Apr 50 About 10% above predicted monthly values.
02 Apr 50 About 10% above predicted monthly values.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331 |PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329 |West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330 |AUSTRALIA

3497. Re: 2N2222 vs 2N2222A (was HAMS and hams)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-30 23:47:23 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-300394184723@k4dii.ksc.nasa.gov>
Source record: 269140

In article <9402257646.AA764631129@smtpgty.anatcp.rockwell.com>,
William_A._Kirsanoff@smtpgty.anatcp.rockwell.COM (William A. Kirsanoff)
wrote:
> I say (now on the real subject): The "A" devices have a different gain
> characteristic, (hFE @ 10v 10ma 50-325 for the 2222, 75-325 for the "A")

Wm. A.-

Your numbers didn't look right to me, so I checked an old Motorola data
book. I think your data for hFE (DC gain) is actually correct for hfe (ac
gain).

Either way, they're a good transistor!

73, Fred, K4DII

3498. Re: FT-530 RX Performance

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 00:22:18 UTC
From: ab718@FreeNet.Carleton.CA
Message-ID: <CnI6D7.6v5@freenet.carleton.ca>
Source record: 269141

In a previous article, peterl@hood.uucp (Peter Lee) says:

> =>The RX VCO does lock from 110-180 MHz, 300-500 MHz and 800-950 MHz.
> =>TX VCO unlocks above ~463 MHz and is inop in 800+. Your
> =>mileage may vary. Someone once did post how to RX from about 770 to
> =>800 (who wants this?)
>
>Well, I have the mod, however, exactly which soldier pad is it? It's hard
>to tell because the pads aren't all numbered, and are really close.
>

Do you, or anyone reading this, where I can get a DC connector for the HT?

Thanks
Daniel
VE3DCL

--

3499. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 00:43:45 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar31.004345.251@ke4zv.atl.ga.us>
Source record: 269142
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

In article <1994Mar30.150833.7038@arrl.org> zlau@arrl.org (Zack Lau (KH6CP)) writes:
>Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
>
>: Apples and oranges. The phasing SSB exciter is using an audio
>: *phase shift network*, the filter exciter is using a RF filter.
>: Now the AF phasing network may be considered a sort of filter,
>: but that's not it's designed purpose, and for sure it's not a
>: 3 kHz bandpass response. Instead it has to maintain a constant
>: 90 degree phase shift across multiple octaves. That's tougher.
>
>Actually, what I was writing about was Gary's misconception that
>phase distortion is somehow much easier to deal with if you
>move the center frequency higher. Its actually tougher--just try
>and build a crystal frequency with good phase characteristics
>and a good shape factor. (Or, try and buy one...) Of course, it
>is true that you need an audio filter for a phasing exciter, as
>there are limits to how broad you can make the phase shift network.
>Fortunately, there is no requirement to transmit 60 Hz hum with
>perfect fidelity.
>
>I would agree that it isn't necessary for a phasing rig to have low
>phase and amplitude distortion--I'm sure that someone could work
>*really* hard and come up with one that sounded awful and still
>managed to reject the opposite sideband.
> The dark side of DSP? :-)
>But, in practice, the easiest way to make one to work well is
>to just go ahead and design for low distortion.

Well if you look at the table Tom posted, you'll see that even a
matrix network audio phase shifter (published in the ARRL Handbook)
has lousy phase response at the edges too, and a simple first order
network is worse. The Dome networks and B&W networks used in older
designs were even worse. Now compare that to the phase response of
a Collins mechanical filter. Except at the *edges* it's phase response
is flatter. And as you noted, we can cut off the edges with a pre-filter
in either case. Bill Orr notes in his Radio Handbook that while 60 db
opposite sideband rejection is easy with a filter, it's difficult to do
as well as 40 db with a phasing network because of balance problems,
especially near the edges, which shows up as *distortion product aliases
in the passband*.

>FWIW, one of the fanatical AM types showed off his phasing
>receiver at Deerfield NH a few years ago... Guess he didn't
>notice the distortion Gary is worried about. Come to think

>of it, I don't recall hearing complaints about the Sony
>2010's audio quality, which also uses audio phase shift
>networks. (go through the archives of the shortwave newsgroup?)

Better still consult the Hi Fi magazines. The Sony 2010, and
a few other AM receivers, have been *panned* for their poor
implementation of synchronous detection. Differential phase
distortion is a hot topic with the high end folks now, probably
because they've licked almost all the other problems. In
rec.radio.shortwave the 2010 was panned because it's synchronous
detector isn't really synchronous. It's actually a form of ISB
instead of correlating upper and lower sidebands as a true sync
detector does.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3500. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 01:48:31 UTC
From: bote@access1.digex.net
Message-ID: <bote.765078469@access1>
Source record: 269143

jayk@fc.hp.com (Jay Kesterson K0GU) writes:
>Dan Hughes (dhughes@prairienet.org) wrote:
>: ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
>: of the most disgusting language I've encountered anywhere. One guy was

>Is that the only contact you listened too?? It doesn't take much SWLing
>to notice that isn't the normal contact on the ham bands.

True.

Also, if you don't like what you are hearing, keep
on spinning that tuning dial. You will find someone
to talk to.

--

rec.nude: your exit to good living along the Information Toll Road.
finger bote@access.digex.net for PGP key and an operator will help you.
Only 4 days until Opening Day! How 'bout them Os!!

3501. Hot Water 100

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 02:01:01 UTC
From: drumm@cnsvax.uwec.edu
Message-ID: <1994Mar30.200102.13806@cnsvax.uwec.edu>
Source record: 269118
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Hi all. My first post in this group.

I wanted to get a working radio going so fast that I didn't shop around.

I bought an old heath kit HW100 for $150.00 I guess it doesn't matter
much now, but is this average going price or did I get ripped off.

Danny,
N9VOX
.....
General Exam in two weeks, wish me luck (or at least time to study)

3502. Re: Help!! Information on Hallicrafter equipment..

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 02:11:02 UTC
From: miked70895@aol.com
Message-ID: <2ndbfm$8eg@search01.news.aol.com>
Source record: 269120

In article <2n5aog$9tb@risky.ecs.umass.edu>, obiliset@honey.ecs.umass.edu (Sashi V Obilisetty) writes:

Hello Sashi,
You can writ to Infotronix P.O. Box 2045 Waterbury,CT. 06722.
His name is Walt Belsito.He has a lot of material of the type you are looking for.
Take care. Mike N1chp

3503. HDN Releases Question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 02:24:05 UTC
From: Cecil_A_Moore@ccm.hf.INTel.COM
Message-ID: <940330182405_3@ccm.hf.intel.com>
Source record: 269119

Text item: Text_1

The HDN release information was posted on info-hams on Mar. 26.
It said that DSPMORSE.ZIP was located in HAMSRC. I FTPed to both
ftp.fidonet.org and ftp.halcyon.com and found no files in the
HAMSRC directory. I am a novice at Internet stuff... did I do
something wrong? Where is DSPMORSE.ZIP?

Lee, (ab5sm) I can't figger out your email address from the header...
help?

73, Cecil, kg7bk@indirect.com
(I do not speak for Intel on Internet)

3504. Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 02:25:52 UTC
From: jangus@skyld.grendel.com
Message-ID: <765080752snx@skyld.grendel.com>
Source record: 269145

In article <1994Mar30.191633.19995@news.unr.edu> destree@unr.edu writes:

> Along the same lines, to my knowlege there was only one time that
> I swore on the air. I had just wrecked my car, smashing into the side of
> a mountain cliff. It was about 7 AM, and I autopatched my dad to come
> help me. I wasn't hurt, but I was still shaken up.

I stopped wearing a VOX headset in traffic for this reason. I used to drive to Mission Viejo from Torrance every morning. One fine day while somewhere near Costa Mesa some scumbag in a Porche cutt me off causing me to have to lock up the brakes on a 1 ton crew cab. Needless to say, I made some choice comments about his parentage and sexual habits an so on. Then I heard the squelch tail from the repeater. (oops). Then I heard someone else inquire as to who just said that. I said, "You really don't expect me to identify after that do you?" They agreed and we talked for about 20 minutes about various bad drivers. I did ID on the second turn around, but I switched to PTT operation from then on.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NOAM | "You have a flair for adding
Internet: jangus@skyld.grendel.com | a fanciful dimension to any
US Mail: PO Box 4425 Carson, CA 90749 | story."
Phone: 1 (310) 324-6080 | Peking Noodle Co.

3505. This Week on Spectrum 04/02/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 03:42:41 UTC
From: spectrum@starcomm.overleaf.com
Message-ID: <2ndgrh$49i@starcomm.overleaf.com>
Source record: 269147
Cross-posted to:
rec.radio.shortwave,rec.radio.amateur.misc,rec.radio.scanner,rec.video.satellite,rec.radio.cb,alt.radio.scanner,alt.radio.pirate

This week on Spectrum we will feature those Mexican boarder blaster radio stations. Our guest is Mike Venditti. Mike was one of the guiding forces behind station XERF and has a unique perspective on the south of the boarder radio scene.

Next week Spectrum will feature a look at TV/FM dxing with Joe Eisenberg. Joe is an expert at chasing the troppo and E skip. He will be bringing his bag of classic airchecks with him. Don't forget to tune in on April 9'th.

Saturday April 16'th Spectrum will look at the world of weather satellite monitoring and weather fax.

We will do our listener appreciation day on April 23'rd with answers to your paper mail, e-mail and phone calls.

Don't forget April 30'th Spectrum will be broadcasting live from the Dayton hamfest. Larry Steal and I will be on the scene giving you the total Dayton report.
--
Spectrum airs live Sunday at 0300 UTC (2200 EST Saturday) on:

WWCR, 5810 KHz, Nashville, TN (World Wide)
WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
KHNC, 1360 AM, Denver, CO (Denver Area)
Omega Radio Network, Galaxy III, X17, 5.8 MHz WIDE audio. (Satellite)

Spectrum is rebroadcast:

Sunday at 1500 EST, on WIFI, 1460 AM, Philadelphia, PA (Philadelphia Area)
Monday at 0400 UTC (2300 EST Sunday),
on WWCR, 7435 KHz, Nashville, TN (World Wide)

--
Spectrum, "The Communications Magazine You Read With Your Ears."
Box 722, Holmdel, NJ, 07733-0722, USA
spectrum@overleaf.com, askspectrum@attmail.com, spectrumshow@genie.geis.com
+1 800-787-SPECTRUM, +1 908-671-4209

3506. Re: The FCC Rule Book

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 03:52:59 UTC
From: rholobau@cs.umr.edu
Message-ID: <1994Mar31.035259.4268@umr.edu>
Source record: 269148

THanks to all the e-mailed me....Randy Holobaugh

```
*******************************************************************************
** Randall W. Holobaugh ** But Jesus beheld them, and said unto them, **
** rholobau@cs.umr.edu ** With men this is impossible, but with God **
** University of ** all things are possible. **
** Missouri-Rolla ** Matthew 20:26 **
*******************************************************************************
```

3507. Welcome to rec.radio.info!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 04:00:13 UTC
From: rec-radio-info@ve6mgs.ampr.ab.ca
Message-ID: <rec.radio.info-welcome_765086411@ve6mgs.ampr.org>
Source record: 269149
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.cb,rec.radio.noncomm,rec.radio.scanner,rec.radio.info,news.answers,rec.answers

```
Archive-name: radio/rec-radio-info/welcome
Last-modified: $Date: 1994/01/02 22:00 $
Version: $Revision: 1.06 $

*** Welcome to rec.radio.info! ***

Welcome to rec.radio.info, a group that aims to provide a noise-free source
of information and news for the entire rec.radio hierarchy.

Two introductory articles about rec.radio.info are posted to the group and
to news.answers every two weeks. You are now reading the first article, which
explains what rec.radio.info is, and answers some Frequently Asked Questions.
The second article is titled "Submission Guidelines", and you only need to
read it if you want to submit an article to rec.radio.info.

You can skip to the next section of this article by searching for the next
" -- " string. The sections available are:
- What is the purpose of rec.radio.info?
- Why are messages almost always cross posted to rec.radio.info?
- What is a 'follow-up', and what does 'moderated' mean?
- OK, so now I know what 'moderated' means. Tell me more.
- What type of material is considered inappropriate?
- I do not have access to news, how can I get the information posted to
rec.radio.info?
- Will the material appearing in rec.radio.info be archived somewhere?
- I have a regular posting with timely information, is there a way to
speed up it's delivery, or automate for more convenience?

-- What is the purpose of rec.radio.info?

The purpose or charter of rec.radio.info is to provide the Usenet community with
a resource for information, news, and facts about any and all things radio.

All the other rec.radio groups are intended for discussions and general chit
chat about radio. Rec.radio.info will contain informational, factual articles
only. Follow-ups are redirected to an appropriate other group, and further
discussion (if any) will not take place in rec.radio.info.

In order to ensure that rec.radio.info contains only appropriate articles, it
was decided to create the group as a moderated newsgroup.

-- Why are messages almost always cross posted to rec.radio.info?

It provides a "tag" for each article to be assembled into a filtered
presentation in rec.radio.info (even with cross-posting, only one message, with
```

a unique Message-ID, is propogated across the net). This tag also facilitates a pre-existing method of dropping or cancelling the articles locally within the discussion groups if you don't want to see them. This accommodates individuals who want to separate the bulletins from the discussions, discussions from the bulletins, as well as those who are adamant about not reading another newsgroup and wanted to see everything all in one basket.

With the total size of Usenet (in number of newsgroups and total traffic) doubling every year or so, this is no insignificant contribution to reducing information noise and chaos. Making the discussion groups a catch-all, and making extra newsgroups filters on that catch-all, is also the most realistic way to implement such a scheme (It's not intuitively obvious what the charter, contents, and general appropriate topics for each and every newsgroup are. Seeing FAQ's and charter/intro postings in the home newsgroup is beneficial for new readers).

By cross-posting one only is adding a few tens of bytes to each bulletin (to specify the extra group on the Newsgroups line), but are adding the capability for very powerful filtering features available on most news servers, listservers and readers. Your local news guru could probably explain these features in more detail.

In rn, for example, according to Leanne Phillips in her rn kill-file FAQ, add a line of the form:
/Newsgroups:.*[,]rec\.radio\.info/h:j
either in ~/News/KILL (if you don't want to see rec.radio.info articles anywhere) or ~/News/rec/radio/amateur/misc/KILL (if you don't want to see them just in rec.radio.amateur.misc). The latter method means your kill file will only be consulted during rec.radio.amateur.misc (and hence runs more efficiently), and will probably work for most people.

In nn, according to Bill Wohler in his nn FAQ, add a line of the form:
rec.radio.info:!s/:^
in ~/.nn/kill (if you don't want to see rec.radio.info articles anywhere), or put the following lines:
sequence
rec.radio.info
rec.radio.
at the end of ~/.nn/init in order to see all the rec.radio.info bulletins first, then read the remaining rec.radio.* without the bulletins.

-- What is a 'follow-up', and what does 'moderated' mean?

If you are new to Usenet and are not familiar with the terminology, you might want to read the general introductory articles found in the newsgroup news.announce.newusers. Doing so will make your life on the net much easier, and will probably save you from making silly beginner's mistakes.

If you think that at this moment you are reading an echo, a conference, or a bulletin board, I'd also strongly suggest a trip over to news.announce.newusers.

For the rest of this article, I will assume you have a basic knowledge of Usenet terminology and mechanics.

A moderated group means that any article that needs to be posted to the group has to be accepted by the moderator of the group. Since we need to ensure that followups to an article (discussion) do not show up in the rec.radio.info newsgroup, the `Followup-To:' header line contains a newsgroup that is appropriate for disussions about the specific article.

-- OK, so now I know what 'moderated' means. Tell me more.

Rec.radio.info is a moderated newsgroup, which means that all articles submitted to the group will have to be approved by the moderator first.

The current moderator of the group is Mark Salyzyn. Submissions to rec.radio.info can be posted, or e-mailed to:

rec-radio-info@ve6mgs.ampr.ab.ca

Comments, criticisms, suggestions or questions about the group can be e-mailed to:
rec-radio-request@ve6mgs.ampr.ab.ca

But before you do so, please be sure to check out the "Submission Guidelines" article.

The influence of the moderator should be minimal and of an administrative nature, consisting chiefly of weeding out obviously inappropriate articles, while making sure correct headers etc. are used for the appropriate ones.

-- What type of material is considered inappropriate?

There are three broad categories of articles which will be rejected by the moderator:

1) Requests for information: rec.radio.info is strictly a one-way street. I receive information in my mailbox; I then post it to rec.radio.info. Requests for specific information belong in the normal discussion newsgroups. If your request gets answered, you might consider passing the answer on to rec.radio.info, though. Especially if you can edit it into a informational, rather than a discussion, format.

2) Obvious discussion articles, or articles that appear unsubstantiated.

3) Commercial stuff: a relatively unbiased test of a radio product would be accepted, but any hint of for-profit might be reason for rejection. For three reasons: This is not the purpose of the list, for-profit is a controversial topic, and this list may be passed onto Amateur Packet Radio (where for-profit is prohibited except under certain provisos).

rec.radio.swap (or possibly comp.newprod) may be more deserving of the posting in any matter.

Similarly, copyrighted material generally cannot be used. If it's TRULY worthwhile to the net, I would recommend obtaining permission from the copyright holder. Please note the source, and if permission was given. I

reserve the right to make the final decision concerning appropriateness in all situations. In most cases, a brief summary of, or pointer to, the copyrighted information may be all I can allow.

-- I do not have access to news, how can I get the information posted to rec.radio.info?

brian@UCSD.EDU (Brian Kantor) has kindly supplied a mail list server for rec.radio.info. Non of the articles will be digested, due to their size, so you will receive individual mailings for every article posted to the group.

Mail sent to radio-info@ucsd.edu will be forwarded to the moderator and thus is an alias to rec-radio-info@ve6mgs.ampr.ab.ca

To subscribe and unsubscribe via the listserver; the format for that is

sub address radio-info
unsub address radio-info

where 'address' is your full mailing address. Send this request to

listserv@ucsd.edu

Note that the server will automatically delete any address that bounces mail. If you leave the address portion blank, it will try to deduce your address from the mail headers. This may not work if you are on bitnet, milnet or some other non-Unix host, so it is recommended to put your return address in any case. For example:

sub mymailbox@myhost.mydomain.mil radio-info
or
sub MEMEME01@DMBHST.bitnet radio-info

or something like that.

-- Will the material appearing in rec.radio.info be archived somewhere?

Yes. Still firming up details at the moment but here is a preliminary list:
- unbc.edu as maintained by Lyndon Nerenberg <lyndon@unbc.edu>
- nic.funet.fi maintained by Risto Kotalampi <rko@cs.tut.fi>
saved to /pub/dx/text/rec.radio.info currently stored as numbered files.

Effectively this means that anything you post to rec.radio.info will be permanently stored, so your work will not be lost.

-- I have a regular posting with timely information, is there a way to speed up it's delivery, or automate for more convenience?

Yes, there is! It may take a bit of chatter with the moderator, but we are willing to take responsible people and provide them the means of posting the articles directly from their site. We will try everything we can as we fully realize that DX (distant signal) and astronomical data can be somewhat transitory. We are also willing to allow regular posters of information the same courtesy, even if the information is not as time critical.

We refer to this as self-moderation, which is partly based on the model for news.answer. This requires co-operation and good will to be beneficial to the community in the rec.radio hierarchy.

I suggest reading the posting guidelines for more information. I am open to suggestions.

I thank the following individuals for their input into this article:
rec.music.info moderator Leo Breebaart rec-music-info@cp.tn.tudelft.nl
rec.radio.broadcasting moderator Bill Pfeiffer wdp@gagme.chi.il.us
Paul W. Schleck, KD3FU pschleck@unomaha.edu
Ian Kluft, KD6EUI ikluft@uts.amdahl.com

--
Mark Salyzyn -- Moderator rec.radio.info
Submissions to: rec-radio-info@ve6mgs.ampr.ab.ca
Administrivia to: rec-radio-request@ve6mgs.ampr.ab.ca
* Requests for information do *not* belong in rec.radio.info *

3508. Re: METEOR SCATTERING - Companies involved...?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 04:21:44 UTC
From: jdelancy@tecnet1.jcte.jcs.mil
Message-ID: <9403310421.AA20171@tecnet1.jcte.jcs.mil>
Source record: 269150

>Can anyone tell me of companies or organizations involved in communications
>using meteor scattering techniques?
>
>Warren Doud
>doud@galileo.tracor.com
>
ALASCOM (Alaska Communications) the "ma bell" of the last frontier
provides meteor burst/scattering facilities for the Air Force. they
had an 800#, ask for Jim Larsen in marketing.

jd

3509. Re: HELP: Anyone know what a XR2206 chip is?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 04:28:36 UTC
From: Dean Aldridge <aldridged@ccc.govt.nz>
Message-ID: <2ndjhk$hb7@idril.ccc.govt.nz>
Source record: 269151
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,uk.misc

zawada@softage.demon.co.uk (A Gnome On A Mission)

The XR2206 is a function generator. I've seen examples of it giving sinewaves, sawtooths and square waves. I think there are a few places you can get them. I'm not sure if they've been deleted or not because I've seen them in some pretty old schematics. I live in New Zealand but I can't suggest any American outlets, except maybe try Paia or Digikey (ie: the biggies). I know you can get them from "Farnell Electronics", Private Bag, Market Rd, Auckland, New Zealand, or in Australia there are several companies that could probably help, like Dick Smith Electronics or Rod Irving Electronics (sorry don't have a contact number for them).

Good luck in your search

Dean

3510. Daily Summary of Solar Geophysical Activity for 30 March

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 05:00:28 UTC
From: oler@rho.uleth.ca
Message-ID: <9403310500.AA06784@rho.uleth.ca>
Source record: 269152
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.info

/\

DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

30 MARCH, 1994

/\

(Based In-Part On SESC Observational Data)

SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 30 MARCH, 1994

NOTE: The very intense stratospheric warming covers the polar region at
10 HPA and the mean zonal wind at 60N is weakening. The temperature
gradient is reversed between 60N and the pole in the middle and upper
stratosphere from 30 HPA upwards. Final warming is in progress.

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 089, 03/30/94
10.7 FLUX=086.3 90-AVG=102 SSN=048 BKI=1123 3333 BAI=011
BGND-XRAY=A5.5 FLU1=1.3E+06 FLU10=1.2E+04 PKI=1114 3333 PAI=012
BOU-DEV=007,008,011,037,034,020,026,030 DEV-AVG=021 NT SWF=00:000
XRAY-MAX= C1.7 @ 0813UT XRAY-MIN= A3.0 @ 0705UT XRAY-AVG= A9.7
NEUTN-MAX= +001% @ 2310UT NEUTN-MIN= -003% @ 1310UT NEUTN-AVG= -0.3%
PCA-MAX= +0.2DB @ 2215UT PCA-MIN= -0.3DB @ 0605UT PCA-AVG= +0.0DB
BOUTF-MAX=55341NT @ 0820UT BOUTF-MIN=55305NT @ 1901UT BOUTF-AVG=55330NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+073,+000,+000
GOES6-MAX=P:+120NT@ 1819UT GOES6-MIN=N:-077NT@ 0658UT G6-AVG=+091,+020,-036
FLUXFCST=STD:085,085,085;SESC:085,085,085 BAI/PAI-FCST=010,010,010/010,010,010
KFCST=2104 5011 2104 5011 27DAY-AP=027,004 27DAY-KP=3456 4122 1112 1111
WARNINGS=
ALERTS=
!!END-DATA!!

NOTE: The Effective Sunspot Number for 29 MAR 94 was 47.5.
The Full Kp Indices for 29 MAR 94 are: 2+ 1o 2- 2- 2- 1+ 2- 2o
The 3-Hr Ap Indices for 29 MAR 94 are: 10 4 7 7 7 5 7 8
Greater than 2 MeV Electron Fluence for 30 MAR is: 3.0E+07

SYNOPSIS OF ACTIVITY

Solar activity was low due to an optically uncorrelated
C1.7 flare at 30/0813Z. Region 7695 (S15W23) is decaying slowly.
New Region 7698 (S16E02) emerged on the disk.

Solar activity forecast: solar activity is expected to be
very low, but there is an outside chance of an isolated C flare.

The geomagnetic field was quiet until 30/0900Z and mostly
unsettled afterwards.

Geophysical activity forecast: the geomagnetic field is
expected to be quiet to unsettled.

Event probabilities 31 mar-02 apr

Class M 01/01/01
Class X 01/01/01
Proton 01/01/01
PCAF Green

Geomagnetic activity probabilities 31 mar-02 apr

A. Middle Latitudes
Active 15/15/15
Minor Storm 10/10/10
Major-Severe Storm 05/05/05

B. High Latitudes
Active 15/15/15
Minor Storm 10/10/10
Major-Severe Storm 05/05/05

HF propagation conditions were normal over all regions.
Normal conditions will persist over at least the next 3 days.
Fair propagation will exist for the high and polar latitudes,
good propagation over the middle latitudes, and good to very
good propagation for the low and equatorial latitudes.
Occasional night-sector minor signal degradation may affect
some transauroral paths.

COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS
==========

REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 30/2400Z MARCH

NMBR LOCATION LO AREA Z LL NN MAG TYPE
7695 S15W23 057 0010 BXO 07 009 BETA
7696 S16W62 096 0010 BXO 02 003 BETA
7698 S16E02 032 0020 CRO 03 006 BETA
7694 N11W37 071 PLAGE
7697 N12W08 042 PLAGE
REGIONS DUE TO RETURN 31 MARCH TO 02 APRIL
NMBR LAT LO
NONE

LISTING OF SOLAR ENERGETIC EVENTS FOR 30 MARCH, 1994

BEGIN MAX END RGN LOC XRAY OP 245MHZ 10CM SWEEP
NONE

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 30 MARCH, 1994

BEGIN MAX END LOCATION TYPE SIZE DUR II IV
30/B1104 B1255 S21W53 DSF

INFERRED CORONAL HOLES. LOCATIONS VALID AT 30/2400Z

ISOLATED HOLES AND POLAR EXTENSIONS
EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN
72 N25W42 N12W59 N15W62 N28W48 082 ISO POS 003 10830A
73 S50E86 S52E36 S31W09 S21E01 352 EXT NEG 044 10830A

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

Date Begin Max End Xray Op Region Locn 2695 MHz 8800 MHz 15.4 GHz
------ ---- ---- ---- ---- -- ------ ------ --------- --------- ---------
29 Mar: 0612 0623 0630 B3.1 SF 7697 N10E19
0905 0910 0915 B2.8 SF 7696 S18W40
1539 1550 1612 B6.1 SF 7697 N10E13

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

C M X S 1 2 3 4 Total (%)
-- -- -- -- -- -- -- -- --- ------
Region 7696: 0 0 0 1 0 0 0 0 001 (33.3)
Region 7697: 0 0 0 2 0 0 0 0 002 (66.7)
Uncorrellated: 0 0 0 0 0 0 0 0 000 (0.0)

Total Events: 003 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

Date Begin Max End Xray Op Region Locn Sweeps/Optical Observations
------ ---- ---- ---- ---- -- ------ ------ ---
NO EVENTS OBSERVED.

NOTES:
All times are in Universal Time (UT). Characters preceding begin, max,
and end times are defined as: B = Before, U = Uncertain, A = After.
All times associated with x-ray flares (ex. flares which produce
associated x-ray bursts) refer to the begin, max, and end times of the
x-rays. Flares which are not associated with x-ray signatures use the
optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II = Type II Sweep Frequency Event
III = Type III Sweep
IV = Type IV Sweep
V = Type V Sweep
Continuum = Continuum Radio Event
Loop = Loop Prominence System,

Spray = Limb Spray,
Surge = Bright Limb Surge,
EPL = Eruptive Prominence on the Limb.

** End of Daily Report **

3511. Re: HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 05:23:41 UTC
From: flanagan@niagara.Tymnet.COM
Message-ID: <2ndmot$olt@tymix.Tymnet.COM>
Source record: 269153

We are swamped by so many forms that we often forget to even read them....

FCC Form 610-Instructions
November 1993

INSTRUCTIONS FOR APPLICATION FORM 610 FOR AMATEUR OPERATOR/PRIMARY STATION LICENSE

[...]
If you have not received a response from us within 90 days, write to
Federal Communications Commission, 1270 Fairfield Road, Gettysburg, PA
17325-7245. Include a photocopy of your completed FCC Form 610, or
the following information:

1. Your name, address, and date of birth;
2. Your station call sign and operator class;
3. The date that you filed FCC Form 610;
4. The purpose of the FCC Form 610 you filed;
5. The name of the coordinating VEC;
6. The location of the test site (city and state)
and the date of the examination.
[...]

--
Dick Flanagan, W6OLD w6old@n6qmy.#nocal.ca.usa.na
Libelle Productions, Minden, NV, USA dick@libelle.com
Voice: +1 702 782 0806 GEnie: FLANAGAN

3512. Re: The FCC Rule Book

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 05:25:58 UTC
From: ddtodd@ucdavis.edu
Message-ID: <ddtodd.11.00156F71@ucdavis.edu>
Source record: 269154

In article <1994Mar31.035259.4268@umr.edu> rholobau@cs.umr.edu (Randall W Holobaugh) writes:
>From: rholobau@cs.umr.edu (Randall W Holobaugh)
>Subject: Re: The FCC Rule Book
>Date: Thu, 31 Mar 1994 03:52:59 GMT

>THanks to all the e-mailed me....Randy Holobaugh

Does that mean you got one? What's the end of the story?

please tell,
Dan

3513. HDN Releases

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 06:16:08 UTC
From: Lee.Laird@f7009.n124.z1.fidonet.org
Message-ID: <765184769.F00002@ocitor.fidonet>
Source record: 269166

```
The following files were processed Thursday 3-31-94:

HAMNEWS [ HAM: Bulletins and Newsletters ]
---------------------------------------------------------------------
HOD003.ZIP ( 64193 bytes) Ham on Disk #3

---------------------------------------------------------------------
64193 bytes in 1 file(s)

Total of 64193 bytes in 1 file(s)

Files are available via Anonymous-FTP from ftp.fidonet.org
IP NET address 140.98.2.1 for seven days. They are mirrored
to ftp.halcyon.com and are available for 60-90 days.

Directories are:
pub/fidonet/ham/hamnews (Bulletins)
/hamant (Antennas)
/hamsat (Sat. prg/Amsat Bulletins)
/hampack (Packet)
/hamelec (Formulas)
/hamtrain (Training Material)
/hamlog (Logging Programs)
/hamcomm (APLink/JvFax/Rtty/etc)
/hammods (Equip modification)
/hamswl (SWBC Skeds/Frequencies)
/hamscan (Scanner Frequencies)
/hamutil (Operating aids/utils)
/hamsrc (Source code to programs)
/hamdemo (Demos of new ham software)
/hamnos (TCP/IP and NOS related software)

Files may be downloaded via land-line at (214) 226-1181 or (214) 226-1182.
1.2 to 16.8K, 23 hours a day .

When ask for Full Name, enter: Guest;guest <return>

lee - ab5sm
Ham Distribution Net

* Origin: Ham Distribution Net Coordinator / Node 1 (1:124/7009)
```

3514. Re: STOP SENDING HAMS ON USENET CRAP !!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 06:18:11 UTC
From: dave@eram.esi.com.au
Message-ID: <2ndpv3$5fj@eram.esi.com.au>
Source record: 269155

In article <764973671snx@bsdihi.atr.bso.nl>,
dihi@bsdihi.atr.bso.nl (Dick Hissink) writes:

| It happens again and again. Every couple of weeks six tremendous large
| files with AMATEURS ON USENET. This times each part from the six even

Every couple of weeks? I doubt it.

| AMATEURS ON USENET: Those interested can download the latest updated
| version by ftp form server....

Excuse me, but USENET does not necessarily imply access to FTP etc.

| What do Y'all think of my idea??

I could go along with reducing the frequency of the postings, or perhaps
confining them to rec.radio.info. I guess you get this via a mailing list,
right?

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2AAB.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

3515. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 06:57:05 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CnIon5.K1q@news.Hawaii.Edu>
Source record: 269156

In article <2nadnh$1a6@hplvec.lvld.hp.com> scott@lvld.hp.com (Scott Turner) writes:
>
>(PS - Does anybody in Hawaii ever work 75 phone? I'd love to get my
>last state on the band, but I've never even heard a Hawaiin station, let
>alone been able to contact one!)

Scott: We don't have phones out here - the sharks kept eating the phone
lines between here and you folks. We only have CW.

You'll get the natives angry if you misspell `Hawaiian' - when they get
mad they start eating white people... ;)

Jeff NH6IL

3516. Re: Plain old repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 07:21:46 UTC
From: mjsilva@ted.win.net
Message-ID: <223@ted.win.net>
Source record: 269157

In article <2nadq2$hfn@crcnis1.unl.edu>, Gary McDuffie Sr (mcduffie@unlinfo.unl.edu) writes:
>bote@access1.digex.net (John Boteler) writes:
>
> >gary@ke4zv.atl.ga.us (Gary Coffman) writes:
> >>Mr. Herman wrote:
> >>>Gary: I'll be disappointed if your repeater beeps.
>
> >>Sorry, you're disappointed. It does "roger beep" to signal user
> >>carrier drop and timer reset. We run near zero tail so remote base
> >>operators aren't locked out. We tried it without the beep, but users

Other stuff deleted...

>Okay... I'll bite. Have we quit building full duplex remote bases now?
>The remote shouldn't care if there is a zero tail or a 20 second tail.
>What gives?
>

Our full-duplex radios allow transmitting on one band while receiving on the other band. I don't know of any frequency-agile rigs that can simultaneously transmit and receive on the same band. That would require a repeater-type duplexer that was electronically tunable and *tiny*. Remote basing requires simultaneous transmission and reception for each direction, so full duplex remote basing would require the rig to be transmitting two signals and receiving two signals all at the same time. When remoting to a repeater, I have to wait for the repeater to stop transmitting so the remote stops transmitting, so it is in a position to receive my signal and turn around.

73,
Mike, KK6GM

3517. Re: STOP SENDING HAMS ON USENET CRAP !!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 09:38:14 UTC
From: al434@FreeNet.Carleton.CA
Message-ID: <CnIw3q.23B@freenet.carleton.ca>
Source record: 269158

In a previous article, dihi@bsdihi.atr.bso.nl (Dick Hissink) says:

>ok, ok, I know it is a lot of work to keep this list updated and, ok it
>is usefull to know who you can reach by usenet. But why not this alternative:
>
>AMATEURS ON USENET: Those interested can download the latest updated
>version by ftp form server....

A lot of us out here do not have full blown access, with ftp, to
Internet and find it very helpful and useful to have the articles posted
from time to time. 73. . . David.
--
****
David George.....Internet: al434@freenet.carleton.ca
VE3UOL.....QTH: Dunrobin, Ontario, Canada.
****

3518. Re: Can you tell me what these memory chips are?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 12:30:49 UTC
From: axg@crosfield.co.uk
Message-ID: <1994Mar31.123049.2507@crosfield.co.uk>
Source record: 269159
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,uk.misc

In article <2nc823$b2@reznor.larc.nasa.gov> zawodny@arbd0.larc.nasa.gov (Joseph M Zawodny) writes:
>Hi,
>
> I have some memory chips that I need more info on. Specifically, I
>have these chips:
>
> KM41C1000AJ-8
> KM41C1000BJ-8 Is this really different from the AJ?
> KM41C4000AJ-8
> M5M44410AJ A Mitsubishi chip
>
>I am reasonably sure the first two are 1Mbit x 1 chips. I hope the third is a
>4Mbit x 1 chip. I hope the fourth is also a 4Mbit x 1 chip, but fear it is a
>1Mbit x 4 instead. I intend to use these chips in having some SIMMs made up
>for a PC.

You are right - the first 2 are Samsung 1M x 1 DRAM's 80ns - the BJ is likely to be a mask revision or a die shrink to improve speed performance

The 3rd is a Samsung 4M x 1 DRAM 80ns

The 4th is 4M x 1 but you may have the pt no wrong - it should be M5M44100AJ

FYI the Mitsubishi 1M x 4 DRAM would be M5M44400AJ

--
==========
Albert Gilchrist Component Engineering Phone : +44 442 230000 Ext: 3671
Crosfield Electronics Ltd Fax : +44 442 232301
Hemel Hempstead HERTS HP2 7RH UK Email : axg@crosfield.co.uk

3519. Re: Talking to seismic packages over a radio link

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 12:36:34 UTC
From: rapp@lmr.mv.com
Message-ID: <N8X2Jc3w165w@lmr.mv.com>
Source record: 269160
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,comp.sys.palmtops

sak@igloo.essc.psu.edu (Sridhar Anandakrishnan) writes:

> Hi all, a novice question on radios and radio-modem links.
>
> I have an experiment where a bunch of seismic packages (refteks) are
> scattered over the Antarctic ice sheet. They are all within about 40
> km of a central site. I would like to interrogate them about their
> state-of-health from this central site. I don't need a high-speed
> link (I am not downloading seismic data over the radio, just some
> relatively small strings of data).
>

I have some good news for you! Yes, you can do it with off-the-shelf equipment, and even better news: There's a guy at McMurdo (Antarctica) who's done it! You want to get ahold of Al Oxton <oxton@atsvax.rsmas.miami.edu>. (or oxton@mcmurdo.gov) Tell him I gave you his name. He did something similar up here in New Hampshire using commercial radios with packet controllers. I was involved with the project just a little bit, but it was so many years ago, I've forgotten most of it. You don't need full duplex, btw.

Larry

L. M. Rappaport & Associates, Inc. rapp@lmr.mv.com voice +1 603 237 8400
Colebrook, NH 03576-0158 CIS 72427,2567 fax +1 603 237 8430

3520. Re: dual band HT advice

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 12:38:00 UTC
From: clinton.peebles@kbsbbs.com
Message-ID: <9404020846281940@kbsbbs.com>
Source record: 269161

To: cropley@cbnewsf.cb.att.com

C> Please follow up with a post. I to am interested in getting an HT.

C> Q. Are dual banders (say a 2m and 70cm) poor performers due to any
C> compromises that are need to rx/tx on dual bands with 1 antenna?

The March/94 issue of QST reviews dual band hand helds. I have the Icom
IC-W21AT and have no complaints about it at all.

Clinton VE7KNL

* QMPro 1.52 * A man's home is his coffin. - Al Bundy

3521. Re: HDN Releases Question

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 13:15:40 UTC
From: ab5sm@netcom.com
Message-ID: <ab5smCnJ664.E00@netcom.com>
Source record: 269162

Cecil A Moore (Cecil_A_Moore@ccm.hf.INTel.COM) wrote:

: Text item: Text_1

: The HDN release information was posted on info-hams on Mar. 26.
: It said that DSPMORSE.ZIP was located in HAMSRC. I FTPed to both
: ftp.fidonet.org and ftp.halcyon.com and found no files in the
: HAMSRC directory. I am a novice at Internet stuff... did I do
: something wrong? Where is DSPMORSE.ZIP?

: Lee, (ab5sm) I can't figger out your email address from the header...
: help?

: 73, Cecil, kg7bk@indirect.com
: (I do not speak for Intel on Internet)

the two internet sites listed in the announcements have been spotty
but i am working on getting an FTP host permanently and will eliminate
the current problem of files not arriving soon enough or having been
removed by the time someone tries to ftp them.

in the meantime .. i will place the files on hold for those that e-mail
me with a specific request in the appropriate directory.

dspmorse.zip can be retrieved at ftp.netcom.com in /pub/ab5sm/hamsrc

please let me know when you have it so i can remove it from the directory
and i hope to have the ftp site problem resolved soon

thanks for your post and interest in the Ham Distribution Net.

lee - ab5sm Intenet: ab5sm@netcom.com
ab5sm@p4txnp.uscourts.gov

--
ab5sm@netcom.com

3522. Re: HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 13:18:51 UTC
From: isoper@matrix.cs.wright.edu
Message-ID: <1994Mar31.091851.1@matrix.cs.wright.edu>
Source record: 269163

>>I know it frustrating to wait but everyone seems to have to do it. Some
>>time back there were postings in this group or rec.radio.amateur.misc
>>that the FCC in Gettysburg only issues ham licenses one day per week and
>>that there are delays at the VEC and at the FCC.
>
> Yeah, chill out. So what if it takes less time to get a driver
> license, handgun permit, etc. We don't want the FCC to be too hasty
> here assigning these callsigns.

The priority level of ham license issance versus the other types is
driven by the shear number of people the FCC does not serve. i.e.
there would be an awful lot of voters upset if it took 9 weeks to
get a drivers lince for example. Further more, gun owners, vehicle
operators form a larger economic community than hams (money talks
bs walks as one employee at D.C. ham store once told me.)

73 Wes WB8CEH

3523. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 14:35:25 UTC
From: zlau@arrl.org
Message-ID: <1994Mar31.143525.7073@arrl.org>
Source record: 269167
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
:
: >FWIW, one of the fanatical AM types showed off his phasing
: >receiver at Deerfield NH a few years ago... Guess he didn't
: >notice the distortion Gary is worried about. Come to think
: >of it, I don't recall hearing complaints about the Sony
: >2010's audio quality, which also uses audio phase shift
: >networks. (go through the archives of the shortwave newsgroup?)

: Better still consult the Hi Fi magazines. The Sony 2010, and
: a few other AM receivers, have been *panned* for their poor
: implementation of synchronous detection. Differential phase
: distortion is a hot topic with the high end folks now, probably
: because they've licked almost all the other problems. In
: rec.radio.shortwave the 2010 was panned because it's synchronous
: detector isn't really synchronous. It's actually a form of ISB
: instead of correlating upper and lower sidebands as a true sync
: detector does.

So what?

The point is, does the audio phase shift networks used in the 2010
cause a noticeable degradation in audio quality as perceived by
the users of the radio? And, since we are primarily talking
about SSB, as opposed to AM, there is *no* benefit to having
a detector that can correlate the upper and lower sidebands--we
only have one sideband to work with on receive.

--
Zack Lau KH6CP/1 2 way QRP WAS
8 States on 10 GHz
Internet: zlau@arrl.org 10 grids on 2304 MHz

3524. Examination Opportunities Scheduled 3/31/94 to 6/27/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 14:49:54 UTC
From: bjahnke@arrl.org
Message-ID: <2534@bjj>
Source record: 269168
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

AMATEUR RADIO EXAMINATION OPPORTUNITIES

****

Special Note: Amateur Radio licenses usually arrive between 8 and 10 weeks after the test session. The FCC considers their processing time to be 90 days--from the date they receive the application. The FCC usually receives the application one to two weeks after the test session (once the VE Team and the coordinating VEC have completed their processing).

Note: Codeless Technician to Technician w/HF upgraders (who pass a Morse code test) will not receive a new license from the FCC. The existing Technician license plus the CSCE conveying the Morse code test credit is the only documentation issued for use of the additional HF privileges.

****

The following test session information is provided by the ARRL/VEC for the upcoming six to eight week period. For further information, please contact the test session CONTACT PERSON at the telephone number provided. If necessary, you may contact the ARRL/VEC at 203-666-1541 x282 for additional information. Electronic mail may be forwarded to the ARRL/VEC via USENET at "bjahnke@arrl.org" or via MCI Mail to MCI ID: 653-2312 or 215-5052.

Although the test session information presented here does not indicate whether walk-ins are accepted or not, most test sessions do allow walk-ins. We encourage you, however, to always contact the CONTACT PERSON at the telephone number provided so that the VE Team is aware that you be attending the test session.

STILL NEED TO PREPARE FOR YOUR EXAM?

If you would like information on how to become licensed; or how to locate Amateur Radio clubs, instructors, licensing classes and/or Novice examiners in your area; please contact the ARRL Educational Activities Department (EAD) at 203-666-1541 x219. The EAD can also provide information on recommended study materials. Electronic mail may be forwarded to the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to MCI ID: 215-5052.

EXAM LISTINGS - DEFINITION OF FIELDS

STATE
Test Date,VEC,City,,Contact Phone,Contact Person

The SECOND field in the following listing specifies the VEC
which is coordinating this examination. This single-character
designator denotes the VEC as defined below. An "A" (for example)
indicates that this examination is coordinated by the ARRL/VEC.

For further information on any examinations listed, or if you do not
find any examinations listed for your area, you may contact
any of the coordinating VECs below.

A = ARRL/VEC, 225 Main St, Newington, CT 06111; (d) 203-666-1541
The 1994 test fee is $5.75.

X = Anchorage ARC, 2628 Turnagain Parkway, Anchorage, AK 99517;
(d) 907-786-8121, (n) 907-243-2221 (or) 907-276-5121
(or) 907-274-5546

C = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
205-536-3904

N = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
704-596-2168

D = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
708-486-8019

E = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.

G = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
818-892-2068, 805-822-1473.

J = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368;
504-737-2315. Test fee for 1994 is $5.00.

K = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
808-235-4132

L = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
(d) 301-572-5124, 301-317-7819, (n) 301-588-3924

M = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
414-774-6999. Test fee for 1994 is $5.00.

H = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
301-724-0674

P = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313

R = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926

S = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
408-255-9000

T = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
919-841-7576

W = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
Knoxville, TN 37912-2500; 615-688-7771.
The 1994 test fee is $5.75.

5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
The 1994 test fee is $5.75.

EXAMINATION OPPORTUNITIES IN YOUR AREA:

ALASKA
04/06/94,X,Anchorage,,907-243-2221,Roger Hansen
04/20/94,A,Eagle,,907-547-2296,Jeff Worner
04/20/94,X,Eagle River,,907-243-2221,Roger Hansen
05/04/94,X,Anchorage,,907-243-2221,Roger Hansen
05/18/94,X,Eagle River,,907-243-2221,Roger Hansen
06/01/94,X,Anchorage,,907-243-2221,Roger Hansen
06/15/94,X,Eagle River,,907-243-2221,Roger Hansen

ALABAMA
04/07/94,A,Pell City,,205-594-5687,Ernie Cone
04/09/94,A,Fort Payne,,205-657-5204,Albert Bible
04/30/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
05/05/94,A,Pell City,,205-594-5687,Ernie Cone
05/14/94,A,Fort Payne,,205-657-5204,Albert Bible
05/14/94,A,Talladega,,205-362-2377,Larry E Byrd
05/19/94,A,Decatur,,205-353-8266,Richard W Navarre
05/28/94,A,Montgomery,,205-269-4201,Leroy Bell Jr
06/02/94,A,Pell City,,205-594-5687,Ernie Cone
06/11/94,A,Fort Payne,,205-657-5204,Albert Bible
06/25/94,A,Montgomery,,205-269-4201,Leroy Bell Jr

ARKANSAS
04/05/94,A,Crossett,,318-281-2900,Eugene S Winfree
04/05/94,W,Trumann,,501-483-6530,Al Fisher
04/07/94,A,Bella Vista,,501-855-6384,Raymond Traynor
04/09/94,A,Conway,,5013291451,Glenn A King
04/09/94,A,Little Rock,,501-666-6337,William L James
04/09/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
04/12/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
04/16/94,A,Gasseville,,501-430-5123,Gerald Gaige
04/23/94,A,N Little Rock,,501-888-7517,Chuck Jamison
05/10/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
05/14/94,A,Little Rock,,501-753-2207,Dora Anna Graziani
05/14/94,A,Russellville,,501-641-2022,Ben Hillis
05/14/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
05/17/94,A,Conway,,5013291451,Glenn A King
05/21/94,A,Gasseville,,501-430-5123,Gerald Gaige
05/21/94,A,N Little Rock,,501-888-7517,Chuck Jamison
06/04/94,A,Conway,,5013291451,Glenn A King
06/11/94,A,Little Rock,,501-666-6337,William L James

06/11/94,W,West Memphis,,501-735-4060,Rev Richard Gregory
06/14/94,A,Jacksonville,,501-982-6511,Vernon A Oberle
06/18/94,A,Gasseville,,501-430-5123,Gerald Gaige
06/18/94,A,N Little Rock,,501-888-7517,Chuck Jamison

ARIZONA
04/01/94,A,Sun City,,602-972-8733,Ray Summer
04/02/94,A,Kingman,,602-565-4615,Evert B Skough
04/02/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R
04/06/94,A,Tempe,,602-838-1215,Roger Hightower
04/09/94,A,Safford,,602-428-6754,Philip Madsen
04/09/94,A,Tempe,,602-838-1215,Roger Hightower
04/16/94,A,Cottonwood,,602-634-3226,Viola Chambers KA7MVK
04/16/94,A,Flagstaff,,602-774-8308,Bill Sinton
05/07/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R
05/21/94,A,Tempe,,602-838-1215,Roger Hightower
06/04/94,A,Phoenix,,602-972-8733,Ray Sumner, NW7R

CALIFORNIA
03/31/94,A,Palm Springs,,619-321-2775,Delmont Ziegler, KC6JPH
04/01/94,A,Bakersfield,,805-328-5055,Glenn Ricketson
04/02/94,A,Apple Valley,,619-240-4546,Raymond Key
04/02/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
04/02/94,A,Los Angeles,,213-778-6226,Ali Hassan
04/02/94,A,Ontario,,909-391-4254,Bob Malaby
04/04/94,A,Lancaster,,805-948-1865,Adrienne J Sherwood
04/09/94,A,Camarillo,,805-388-2488,George Kreider
04/09/94,A,Fontana,,909-823-6818,Louis Johnson
04/09/94,A,Oakdale,,209-883-2968,Chet Jensen
04/09/94,A,Santa Rosa,,707-527-0981,Dave New
04/09/94,A,Sonora,,209-962-7146,Carl H Croci
04/09/94,A,Torrance,,310-328-0817,Joe Lanphen, WB6MYD
04/10/94,A,Clearlake,,707-994-9620,Chris Lutman
04/16/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
04/16/94,A,Downey,,213-923-5598,Wesley Printz
04/16/94,A,Long Beach,,310-431-8998,Ken Newkirk
04/16/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
04/17/94,A,Oakland,,510-317-0125,Joel C Bautista
04/23/94,A,Pasadena,,818-244-2763,Alfred R Fernandez
04/23/94,A,Weed,,916-926-2535,Irv Astmann
04/27/94,A,San Diego,,619-222-4043,Rod McLennan
04/30/94,A,Culver City,,310-459-0337,Scott V Swanson
04/30/94,A,Fairfield,,916-662-0801,Gerald D Newton
05/04/94,A,El Segundo,,310-336-0274,Richard D Pruitt
05/05/94,A,El Segundo,,310-336-0274,Richard D Pruitt
05/07/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
05/07/94,A,Los Osos,,805-528-0647,Charles Wilson
05/07/94,A,Ontario,,909-391-4254,Bob Malaby
05/07/94,A,Yuba City,,916-673-0868,Homer Oliver
05/08/94,A,Clearlake,,707-994-9620,Chris Lutman
05/14/94,A,Atascadero,,805-238-2950,Laverne S Moore

05/14/94,A,Eureka,,707-826-0767,Irma D Ruegg
05/14/94,A,Fontana,,909-823-6818,Louis Johnson, K6UMX
05/14/94,A,Petaluma,,707-762-9414,Dale Westerterp WB6TMS
05/14/94,A,Redding,,916-243-6339,Kenna Pine
05/14/94,A,Turlock,,209-883-2968,Chet Jensen
05/15/94,A,Oakland,,510-658-3652,Steve Dorst N6VMK
05/15/94,A,Thousand Oaks,,805-375-1385,Marco Treganza, KC6WQR
05/21/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
05/21/94,A,Hercules,,415-467-2467,William C Eugenio
05/21/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
05/28/94,A,Fairfield,,916-662-0801,Gerald D Newton
06/04/94,A,Apple Valley,,619-240-4546,Raymond Key
06/04/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
06/04/94,A,Lancaster,,805-948-1865,Adrienne J Sherwood
06/04/94,A,Novato,,415-883-9789,Logan Z Edwards
06/04/94,A,Ontario,,909-391-4254,Bob Malaby
06/04/94,A,Ridgecrest,,619-375-7245,Lloyd Brubaker
06/07/94,A,Culver City,,213-292-6423,C Lutz
06/08/94,A,Lake Isabella,,619-379-2947,Thomas Corso
06/11/94,A,Clearlake,,707-994-9620,Chris Lutman
06/11/94,A,Fontana,,909-823-6818,Louis Johnson
06/11/94,A,Merced,,209-383-2166,Mike Siegel
06/18/94,A,Cupertino,,408-984-8353,ARRL Info Hotline
06/18/94,A,Long Beach,,310-431-8998,Ken Newkirk
06/18/94,A,Moccasin,,209-962-7146,Carl Croci
06/18/94,A,Oakhurst,,209-683-8772,Robert Tauxe, W6JTA
06/18/94,A,Stockton,,209-465-7496,Mark Tollini W6DKI
06/25/94,A,Culver City,,310-459-0337,Scott V Swanson
06/25/94,A,Fairfield,,916-662-0801,Gerald D Newton

COLORADO
03/31/94,A,Lakewood,,303-366-9689,Glenn Schultz
04/02/94,A,Boulder,,303-530-2903,Barbara McClune
04/05/94,A,Englewood,,303-840-9567,Fred Gilmore
04/09/94,A,Denver,,303-360-7293,Glenn Schultz
04/09/94,A,Durango,,303-247-5043,Darrell Brown
04/09/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
04/09/94,A,Greeley,,303-353-3577,Richard S Hubbard
04/11/94,A,Windsor,,303-484-3989,Don St John
04/23/94,A,Canon City,,719-784-0945,Marilyn Redman WD5AAR
04/23/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
04/24/94,A,Steamboat Spgs,,303-879-7063,Marty Rosenzweig
05/07/94,A,Grand Junction,,303-245-2973,E.D. Percifield
05/09/94,A,Boulder,,303-530-2903,Barbara McClune
05/11/94,A,Windsor,,303-484-3989,Don St John
05/14/94,A,Denver,,303-360-7293,Glenn Schultz
05/14/94,A,Fort Collins,,303-484-8315,J Trenton Hays
05/14/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
05/28/94,A,Longmont,,303-651-1075,Randal or Jan Abbott
06/11/94,A,Denver,,303-360-7293,Glenn Schultz

06/11/94,A,Glenwood Springs,,303-945-6653,Robert Cutter
06/13/94,A,Boulder,,303-530-2903,Barbara McClune
06/25/94,A,Longmont,,303-651-1075,Randal or Jan Abbott

CONNECTICUT
04/09/94,A,Fairfield,,203-261-3915,Joe A Cassidy
04/10/94,A,Milford,,203-933-5125,Gary Burlock, N1BM
04/10/94,A,Southington,,203-621-6191,Steve B Moss N1GCV
04/12/94,A,Portland,,203-635-5289,Wayne K Irwin
04/12/94,A,Thomaston,,203-283-1044,Steven Dziadik
04/14/94,A,Farmington,,203-621-3222,John McLaughlin
04/16/94,A,Coventry,,203-742-5422,Mark Ireland
04/21/94,A,West Hartford,,203-529-3743,Paul Lombardo
04/27/94,A,Shelton,,203-735-9476,Leroy Thomas
05/01/94,A,Milford,,203-933-5125,Gary Burlock, N1BM
05/10/94,A,Thomaston,,203-283-1044,Steven Dziadik
05/12/94,A,Farmington,,203-621-3222,John McLaughlin
05/14/94,A,Brookfield,,203-790-7987,Ann Ross Elton
05/14/94,A,Coventry,,203-742-5422,Mark Ireland
05/14/94,A,Portland,,203-635-5289,Wayne K Irwin
05/19/94,A,West Hartford,,203-529-3743,Paul Lombardo
05/21/94,A,Gales Ferry,,203-376-2216,Rick George
05/25/94,A,Shelton,,203-735-9476,Leroy Thomas
06/04/94,A,Brookfield,,203-438-0218,Frank Sileo
06/11/94,A,Coventry,,203-742-5422,Mark Ireland
06/14/94,A,Portland,,203-635-5289,Wayne K Irwin
06/14/94,A,Thomaston,,203-283-1044,Steven Dziadik
06/22/94,A,Shelton,,203-735-9476,Leroy Thomas

DELAWARE
04/10/94,A,Wilmington,,302-695-3344,Chet Thayer
05/14/94,A,Dover,,302-697-6178,Robert W Baker
05/14/94,A,Wilmington,,302-478-2757,Gisele Walls, K3WAJ
06/11/94,A,Dover,,302-697-6178,Robert W Baker
06/18/94,A,Wilmington,,302-478-2757,Gisele Walls, K3WAJ

FLORIDA
04/05/94,A,New Port Richey,,813-849-1224,Fred Marchman
04/05/94,A,Tallahassee,,904-875-2588,Jennifer Erdman
04/08/94,A,Homestead,,305-255-1057,Joe Chwick AC4TV
04/09/94,A,Miami,,305-665-5812,Paul C Hunt
04/09/94,A,Port Charlotte,,813-625-3915,Jim Hope
04/12/94,A,Plantation,,305-753-8713,Stephen W Strong Kc4VTF
04/13/94,A,Ft Myers,,813-693-2956,Paul McCreery
04/13/94,A,Hollywood,,305-920-6960,Russel Sweeten
04/13/94,A,West Palm Beach,,407-746-3928,James G Dover
04/16/94,A,Englewood,,813-697-7946,John Fogle
04/16/94,A,Lake Worth,,407-582-7617,T Graf Buckenmaier
04/16/94,A,Melbourne,,407-724-6183,William Newkirk
04/16/94,A,Palm Coast,,904-446-5769,Thomas E Holley, Sr
04/16/94,A,Panama City,,904-785-3547,James McQuagge

04/18/94,A,Clearwater,,813-586-4329,Daniel Campbell
04/19/94,A,Dade City,,904-583-2856,Edward Franklin, Jr
04/21/94,A,Vero Beach,,407-567-3979,Roger K Snyder
04/23/94,A,Fort Pierce,,407-466-5648,Bill Shisler
04/25/94,A,Cocoa Bch,,407-632-0527,David D Pedigo
04/28/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
05/03/94,A,New Port Richey,,813-849-1224,Fred Marchman
05/03/94,A,Tallahassee,,904-875-2588,Jennifer Erdman
05/11/94,A,Hollywood,,305-920-6960,Russel Sweeten
05/13/94,A,Homestead,,305-255-1057,Joe Chwick AC4TV
05/14/94,A,Bradenton,,813-756-2823,Franklin F Morton
05/14/94,A,De Land,,904-734-2021,Bill Creighton, N4IPM
05/14/94,A,Miami,,305-665-5812,Paul C Hunt
05/14/94,A,Port Charlotte,,813-625-3915,Jim Hope
05/14/94,A,Springhill,,904-597-1399,Gerard Macari
05/14/94,A,Valparaiso,,904-243-9720,Bill Hord
05/17/94,A,Dade City,,904-583-2856,Edward Franklin, Jr
05/19/94,A,Vero Beach,,407-567-3979,Roger K Snyder
05/21/94,A,Englewood,,813-697-7946,John Fogle
05/21/94,A,Lake Worth,,407-582-7617,T Graf Buckenmaier
05/21/94,A,Melbourne,,407-724-6183,William Newkirk
05/26/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
05/28/94,A,Fort Pierce,,407-466-5648,Bill Shisler
06/04/94,A,Bradenton,,813-756-2823,Franklin F Morton
06/07/94,A,New Port Richey,,813-849-1224,Fred Marchman
06/07/94,A,Tallahassee,,904-875-2588,Jennifer Erdman
06/08/94,A,Hollywood,,305-920-6960,Russel Sweeten
06/10/94,A,Homestead,,305-255-1057,Joe Chwick AC4TV
06/11/94,A,Miami,,305-665-5812,Paul C Hunt
06/11/94,A,Port Charlotte,,813-625-3915,Jim Hope
06/16/94,A,Vero Beach,,407-567-3979,Roger K Snyder
06/18/94,A,Englewood,,813-697-7946,John Fogle
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06/18/94,A,Melbourne,,407-724-6183,William Newkirk
06/21/94,A,Dade City,,904-583-2856,Edward Franklin, Jr
06/23/94,A,Pensacola,,904-455-3787,Le-ann M Slayton
06/25/94,A,Fort Pierce,,407-466-5648,Bill Shisler

GEORGIA
03/31/94,A,Macon,,912-788-5883,Gregory L Bridges
04/03/94,A,Lavonia,,706-356-1748,Barney M Barningham Sr, KD4MNO
04/04/94,A,Athens,,706-548-6540,Wilder P Scott
04/04/94,A,Marietta,,404-993-9758,Delaine L McCarthy
04/09/94,A,Fort Gordon,,706-798-5060,Carroll Norton
04/10/94,A,Cartersville,,404-975-1309,Mark Swicord
04/21/94,A,Atlanta,,,Lee McDaniel
04/26/94,A,Dahlonega,,706-865-2141,J Allen Seabolt
04/30/94,W,Dalton,,706-259-5625,Bert Coker
05/02/94,A,Marietta,,404-993-9758,Delaine L McCarthy
05/02/94,W,Rock Springs,,706-866-1200,Alan Painter

05/08/94,A,Cartersville,,404-975-1309,Mark Swicord
05/14/94,W,Augusta,,404-798-1918,Ed Butorajac
06/05/94,A,Lavonia,,706-356-1748,Barney M Barningham Sr, KD4MNO
06/06/94,A,Marietta,,404-993-9758,Delaine L McCarthy
06/11/94,A,Fort Gordon,,706-798-5060,Carroll Norton
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06/25/94,W,Dalton,,706-259-5625,Bert Coker

HAWAII
05/10/94,A,Kailua Kona,,808-325-5475,Bill Schreiber
06/04/94,A,Wailuku,,808-572-1440,William Heyde

IOWA
04/16/94,A,Ames,,515-292-4504,FS Hird
04/16/94,A,Cedar Rapids,,319-373-9628,Robert A Brus
04/29/94,A,Sioux City,,402-494-6070,Michael Nickolaus NF0N
04/30/94,A,Council Bluffs,,712-322-1454,Lorraine Bogle
05/28/94,A,Dubuque,,319-557-9149,Carl E Clark
06/10/94,A,Sioux City,,402-494-6070,Michael Nickolaus NF0N
06/11/94,A,Clinton,,319-242-9486,Roger Gorzney
06/18/94,A,Council Bluffs,,712-322-1454,Lorraine Bogle

IDAHO
04/06/94,A,Athol,,208-683-2094,Robert Swain
04/09/94,A,Boise,,208-343-9153,Lem Allen
04/23/94,A,Pocatello,,208-237-4910,James Luderman
05/04/94,A,Athol,,208-683-2094,Robert Swain
06/01/94,A,Athol,,208-683-2094,Robert Swain
06/25/94,A,Pocatello,,208-237-4910,James Luderman

ILLINOIS
04/02/94,A,Belleville,,618-588-4477,Kenneth R Davis, KF9IA
04/06/94,A,La Grange Park,,708-354-5481,Karl Weisshappel
04/09/94,A,Mt Vernon,,618-244-7987,L C McDuffle
04/09/94,A,Oak Forest,,708-448-0580,David Brasil, NF9N
04/10/94,A,Hazel Crest,,708-720-0640,Jerome P Bette N9BMT
04/11/94,A,Hanover Park,,708-483-8523,William Rudd
04/13/94,A,Chicago,,312-465-0981,Michael Leibovitz
04/13/94,A,Galesburg,,309-342-9143,Brent Zhorne
04/14/94,A,Antioch,,708-395-0999,Anthony Viverito
04/14/94,A,Beardstown,,217-245-2061,Tim Childers
04/17/94,A,Danville,,317-793-3573,Betty Collins
04/17/94,A,Sullivan,,217-873-5287,Ralph Zancha
04/19/94,A,Burr Ridge,,708-325-3840,Roger Adams
04/21/94,A,Athens,,217-544-5374,Gary Britz KF9OI
04/23/94,A,Chicago,,312-233-0605,Harold Pritchard Jr
05/01/94,A,Paris,,217-463-2213,Robert Nelson
05/07/94,A,Belleville,,618-588-4477,Kenneth R Davis, KF9IA
05/11/94,A,Chicago,,312-465-0981,Michael Leibovitz
05/12/94,A,Antioch,,708-395-0999,Anthony Viverito
05/12/94,A,Beardstown,,217-245-2061,Tim Childers

05/14/94,A,Dixon,,815-284-6380,Charles W Randall
05/14/94,A,Galesburg,,309-342-9143,Brent Zhorne
05/14/94,A,Oak Forest,,708-448-0580,David Brasil, NF9N
05/14/94,A,Robinson,,618-546-1450,Warren Jennings
05/14/94,A,Sandoval,,618-532-6606,Alva L King, Jr
05/14/94,A,Springfield,,217-529-0666,Richard F Drew
05/19/94,A,Athens,,217-544-5374,Gary Britz KF9OI
05/26/94,A,Zion,,708-265-0710,Michael T McGue
05/28/94,A,Chicago,,312-233-0605,Harold Pritchard Jr
06/04/94,A,Belleville,,618-588-4477,Kenneth R Davis, KF9IA
06/08/94,A,Chicago,,312-465-0981,Michael Leibovitz
06/08/94,A,Galesburg,,309-342-9143,Brent Zhorne
06/09/94,A,Antioch,,708-395-0999,Anthony Viverito
06/09/94,A,Beardstown,,217-245-2061,Tim Childers
06/11/94,A,Mt Vernon,,618-244-7987,L C McDuffle
06/11/94,A,Oak Forest,,708-448-0580,David Brasil, NF9N
06/19/94,A,Athens,,217-544-5374,Gary Britz KF9OI
06/25/94,A,Chicago,,312-233-0605,Harold Pritchard Jr

INDIANA
04/02/94,A,Muncie,,317-288-0481,Peggy Coulter
04/09/94,A,Chesterton,,219-762-2887,William Peterson
04/10/94,A,Terre Haute,,812-466-2122,Fred Mahalek
04/12/94,A,Ft Wayne,,219-724-4721,Willis Bolin
04/13/94,A,Indianapolis,,317-259-7610,Peter J Zinkan
04/16/94,A,Fishers,,317-846-2979,John Deegan
04/16/94,A,Franklin,,317-736-6320,Eugene McMarty
04/16/94,W,New Albany,,812-246-6377,Dick Truax
04/20/94,A,Indianapolis,,317-259-7610,Pete Zinkan
04/23/94,A,Highland,,219-923-8308,Charles Sufana
04/23/94,A,Indianapolis,,317-578-0859,Joe Cirillo
04/28/94,A,Angola,,219-475-5897,William Brown
04/29/94,A,Chesterton,,219-762-2887,William Peterson
05/07/94,A,New Castle,,317-288-0481,Peggy Coulter
05/14/94,A,Chesterton,,219-762-2887,William Peterson
05/14/94,A,Huntington,,219-468-2624,Heath A Pressler
05/14/94,A,Mishawaka,,219-259-9445,Dan Caesar
05/20/94,A,Highland,,219-923-8308,Charles Sufana
05/21/94,A,Anderson,,317-754-7167,Everett Riley
05/21/94,A,Franklin,,317-736-6320,Eugene McMarty
06/04/94,A,Muncie,,317-288-0481,Peggy Coulter
06/05/94,A,Terre Haute,,812-466-2122,Fred Mahalek
06/11/94,A,Chesterton,,219-762-2887,William Peterson
06/18/94,A,Franklin,,317-736-6320,Eugene McMarty
06/18/94,W,New Albany,,812-246-6377,Dick Truax
06/19/94,A,Auburn,,219-665-6777,Sandra K Parker
06/19/94,A,Crown Point,,312-294-2793,Charles Sufana
06/25/94,A,Indianapolis,,317-291-3569,Joseph A Cirillo

KANSAS
03/31/94,A,Winfield,,316-775-0300,Leanna R Gordon

04/09/94,A,Topeka,,913-267-6455,Milo McNall
04/14/94,A,Salina,,913-827-6054,Robert Davis
04/17/94,A,Garden City,,316-276-7474,James Douglass
04/19/94,A,Andover,,316-775-0300,Leanna R Gordon
04/20/94,A,Andover,,316-775-0300,Leanna R Gordon
05/14/94,A,Independance,,316-331-3544,John Campbell
05/18/94,A,Andover,,316-775-0300,Leanna R Gordon
06/11/94,A,Topeka,,913-267-6455,Milo McNall
06/15/94,A,Andover,,316-775-0300,Leanna R Gordon

KENTUCKY
04/09/94,W,Middlesboro,,606-248-0046,Andrew A Pitt
04/14/94,A,Vanceburg,,606-564-9838,Bob Drake, N4VGI
05/03/94,A,Glasgow,,502-651-8543,Charles F. Rice
05/08/94,A,Maysville,,606-564-8540,Mr Shirley K Fulton
05/14/94,W,Middlesboro,,606-248-0046,Andrew A Pitt
06/11/94,W,Middlesboro,,606-248-0046,Andrew A Pitt

LOUISIANA
04/07/94,A,Minden,,318-377-5019,George Winford
04/09/94,A,Lafayette,,318-367-3901,Lionel A Oubre
04/17/94,A,Lacombe,,504-674-2563,Eulon T Passman, Jr
04/24/94,A,Harvey,,504-347-5808,Danny Cristina N5OMG
05/01/94,5,New Orleans,,504-737-2315,Angelo Glorioso
05/07/94,A,Lafayette,,318-367-3901,Lionel A Oubre
05/14/94,A,West Monroe,,318-396-3507,Donald C Frantom, Sr
06/04/94,A,Lafayette,,318-367-3901,Lionel A Oubre
06/26/94,5,New Orleans,,504-737-2315,Angelo Glorioso

MASSACHUSETTS
04/05/94,A,Lexington,,617-862-4880,William R Weiss
04/08/94,A,Northffield,,413-498-2838,John Paparazzi
04/09/94,A,Marlboro,,508-485-7006,Robert Levine
04/10/94,A,Framingham,,508-877-0563,Richard Marshall
04/10/94,A,Gloucester,,508-922-3307,Albert Hamilton
04/13/94,A,Billerica,,508-851-2886,Bruce Anderson
04/16/94,A,Marion,,508-991-4291,David W Dextradeur
04/17/94,A,Southwick,,413-566-3010,Yorke Phillips
04/20/94,5,Cambridge,,617-253-3776,Nick Alterndburnd
04/22/94,A,Holyoke,,413-245-3228,Jim Mullen
04/23/94,A,Taunton,,508-821-3047,Robert Bowen
04/24/94,A,Pittsfield,,413-447-8377,Charles Lowery
04/27/94,A,Lunenburg,,508-534-9377,Tom Duffy
04/30/94,A,Worcester,,508-831-5435,Robert M Taylor
05/08/94,A,Gloucester,,508-922-3307,Albert Hamilton
05/11/94,A,Billerica,,508-851-2886,Bruce Anderson
05/11/94,A,Fall River,,508-679-8527,Carol Walsh KA1ZFV
05/14/94,A,Marlboro,,508-485-7006,Robert Levine
05/18/94,5,Cambridge,,617-253-3776,Nick Alterndburnd
05/18/94,A,Lunenburg,,508-534-9377,Tom Duffy
05/27/94,A,Holyoke,,413-245-3228,Jim Mullen

06/08/94,A,Billerica,,508-851-2886,Bruce Anderson
06/11/94,A,Marlboro,,508-485-7006,Robert Levine
06/12/94,A,Gloucester,,508-922-3307,Albert Hamilton
06/15/94,A,Lunenburg,,508-534-9377,Tom Duffy
06/22/94,5,Cambridge,,617-253-3776,Nick Alterndburnd
06/24/94,A,Holyoke,,413-245-3228,Jim Mullen
06/25/94,A,Gloucester,,508-922-3307,Albert Hamilton

MARYLAND
04/03/94,5,Landover,,301-773-2898,Freddie Battle
04/09/94,L,Davidsonville,,301-761-7115,Nancy Alley, NT3Z
04/16/94,L,Laurel,,301-572-5124,John Creel, WB3GXW
04/21/94,A,Towson,,410-426-8255,Robert C Kennick
04/24/94,A,Hagerstown,,301-714-0688,W. Page Pyne, WA3EOP
04/25/94,A,Hagarstown,,301-714-0688,W Page Pyne, WA3EOP
05/01/94,5,Landover,,301-773-2898,Freddie Battle
05/01/94,A,Palmer Park,,301-773-2898,Freddie Battle
05/14/94,L,Davidsonville,,301-761-7115,Nancy Alley, NT3Z
05/14/94,A,Frederick,,301-845-2670,Richard Ogden
05/21/94,L,Laurel,,301-572-5124,John Creel, WB3GXW
05/28/94,A,Port Deposit,,410-378-2771,Louis Busby
06/05/94,5,Landover,,301-773-2898,Freddie Battle
06/11/94,L,Davidsonville,,301-761-7115,Nancy Alley, NT3Z
06/18/94,L,Laurel,,301-572-5124,John Creel, WB3GXW

MAINE
04/19/94,A,Presque Isle,,207-455-8333,Wilburn A Scott
04/29/94,A,Alfred,,207-985-4825,John V DiLiddo
06/24/94,A,Alfred,,207-985-4825,John V DiLiddo

MICHIGAN
04/02/94,A,Port Huron,,810-364-9640,L T Switzer
04/02/94,A,Saginaw,,517-624-9094,Ed King
04/04/94,A,Grayling,,517-348-8663,Marty A Van De Ven
04/08/94,A,Grand Rapids,,616-458-6000,John W Wittmann
04/09/94,A,Ann Arbor,,313-662-6663,Claybourne Mitchell
04/09/94,A,Charlotte,,517-645-2378,Mark Korroch
04/09/94,A,Flint,,810-743-3980,Tom Sanders N8DYN
04/09/94,A,Houghton,,906-337-2542,George R Thurner
04/09/94,A,Port Huron,,810-364-9640,Leon T Switzer
04/10/94,A,Grosse Pte Woods,,313-294-1567,Donald Olszewski
04/16/94,A,Bay City,,517-893-3475,Donald La Brenz II
04/16/94,A,Flint,,810-634-6077,Bill Coale
04/16/94,A,Howell,,313-437-2277,Kenneth W Meier
04/16/94,A,Manistee,,616-723-2119,Elmer Stamp
04/18/94,A,Grand Haven,,616-846-3385,Alan Groenleer
04/21/94,A,Oak Park,,810-544-4114,Mark Sherman
04/23/94,A,Allegan,,616-673-5340,Bryan Lane
04/23/94,A,Corunna,,517-288-6844,Aubrey M Clarke
04/24/94,A,Stevensville,,616-471-5869,Ken Simpson, KU8Y
04/27/94,A,Trenton,,313-676-6248,Motor City Radio Club

05/13/94,A,Grand Rapids,,616-458-6000,John W Wittmann
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05/14/94,A,Dearborn,,313-676-6248,Motor City Radio Club
05/14/94,A,Lansing,,517-484-4855,Peter Lycos, KM8K
05/15/94,A,Stevensville,,616-471-5869,Ken Simpson, KU8Y
05/21/94,A,Flint,,810-634-6077,Bill Coale
05/21/94,A,Howell,,313-437-2277,Kenneth W Meier
05/21/94,A,Kalamazoo,,616-327-2529,Wray I Marshall
05/21/94,A,Traverse City,,616-946-5312,Chuck Mellberg
05/28/94,A,Corunna,,517-288-6844,Aubrey M Clarke
06/04/94,A,Harvey,,906-249-3837,Richard Schwenke
06/18/94,A,Allegan,,616-673-5340,Bryan Lane
06/18/94,A,Flint,,810-634-6077,Bill Coale
06/18/94,A,Howell,,313-437-2277,Kenneth W Meier
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MINNESOTA
04/02/94,A,St Paul,,612-222-7253,John Bellows
04/02/94,A,Willmar,,612-243-4326,Allen A Hertzberg
04/06/94,A,Crosslake,,,Jay Andolshek KA0DYN
04/07/94,A,Rochester,,507-288-6121,Richard J Baker
04/08/94,A,Rochester,,507-288-6121,Richard J Baker
04/09/94,A,Fergus Falls,,218-736-4448,William Morgan
04/09/94,A,N Branch,,612-444-9814,Bradley Fern
04/09/94,A,Waite Park,,612-252-0783,Leonard E Carlson
04/16/94,A,Cottage Grove,,612-459-8678,David Harrell
05/01/94,A,Bemidji,,218-243-2002,Gurnee Bridgman
05/07/94,A,St Paul,,612-222-7253,John Bellows
05/12/94,A,Roseville,,612-635-7725,Edward Stafford
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06/04/94,A,St Paul,,612-222-7253,John Bellows
06/11/94,A,N Branch,,612-444-9814,Bradley Fern
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04/16/94,A,Cape Girardeau,,314-264-2791,John E Clark
04/23/94,A,St Louis,,314-647-3223,Ronald Lemons
05/05/94,A,Jefferson City,,314-635-3362,Alan Braun
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05/10/94,A,Columbia,,918-423-5716,Dewey Bennett
05/21/94,A,Cape Girardeau,,314-264-2791,John E Clark
05/28/94,A,Columbia,,918-423-5716,Dewey Bennett
05/28/94,A,St Louis,,314-647-3223,Ronald Lemons
06/02/94,A,Jefferson City,,314-635-3362,Alan Braun
06/06/94,A,Jackson,,314-866-2622,Gerald Grasso
06/14/94,A,Columbia,,918-423-5716,Dewey Bennett

06/18/94,A,Cape Girardeau,,314-264-2791,John E Clark
06/18/94,A,Springfield,,417-866-8576,William L Forrest
06/18/94,A,St Louis,,314-647-3223,Ronald Lemons

MISSISSIPPI
03/31/94,A,Forest,,601-625-8088,Jack Rankin
04/10/94,A,Magee,,601-847-3960,John Statham
04/10/94,A,Mississippi St,,601-323-8389,Jimmy Akers, W5VZF
04/14/94,A,Ocean Springs,,601-875-0222,Stan Hecker
04/19/94,A,Nettleton,,601-963-1221,Scotty King
05/12/94,A,Ocean Springs,,601-875-0222,Stan Hecker
06/09/94,A,Ocean Springs,,601-875-0222,Stan Hecker
06/12/94,A,Laurel,,601-764-2708,John Vanderslice

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04/05/94,A,Great Falls,,406-452-7289,George Forsyth
05/03/94,A,Great Falls,,406-452-7289,George Forsyth
05/21/94,A,Billings,,406-656-6987,Donald Whitcomb
06/07/94,A,Great Falls,,406-452-7289,George Forsyth

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04/09/94,W,Marion,,704-724-4007,Cecil D Potter
04/09/94,A,Raleigh,,919-846-1848,Paul Sobon
04/09/94,A,Wilmington,,919-791-0484,Sam Franklin
04/16/94,A,Greenville,,919-752-3901,B. Simon Jaworski
04/16/94,A,Smithfield,,919-554-2154,David Hockaday
04/16/94,W,Spindale,,704-245-6334,AB Brackett
04/23/94,W,Asheville,,704-684-1543,Lewis Linn
05/14/94,A,Carrboro,,919-489-0909,David Snyder, N2MLU
05/14/94,A,Durham,,919-544-5729,Terrence J Murphy
05/14/94,A,Fayetteville,,910-497-6589,Frederick New
05/15/94,W,Asheville,,704-684-1543,Lewis Linn
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05/28/94,A,Rocky Mount,,919-442-6131,Bill Thomas
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05/17/94,A,Minot,,701-839-6635,Gerald Cushing
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04/09/94,A,Meredith,,603-524-6567,Dick Christopher
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05/07/94,A,Rochester,,508-991-4291,David W Dextradeur
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04/04/94,A,Sayreville,,908-442-9215,George Miller
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04/09/94,A,Cranford,,201-228-2895,Arnold J Knadle
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04/16/94,A,Bayonne,,201-435-5953,Robert Tarantula
04/16/94,A,Jackson,,908-849-9153,Dave McCauley
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04/17/94,A,Silver City,,505-536-2279,Pat Kelsey, AB5RB
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05/22/94,A,Staten Island,,718-351-5764,Richard Dyrack
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04/03/94,A,LaGrange,,216-647-5116,Ola Slone
04/05/94,A,Canfield,,216-755-1000,Rich Marsteller
04/08/94,A,Delta,,419-822-5449,Elmer Zieroff
04/09/94,A,Hamilton,,513-868-7012,Theodore Wilson
04/09/94,A,Maumee,,419-693-3023,Ross H Mergenthaler
04/09/94,A,Miamisburg,,513-866-6720,Rick Gore AA8GV
04/09/94,A,Mount Vernon,,614-625-5504,Michael W White
04/09/94,A,Warren,,216-898-5579,Tom Finta aa8kz
04/10/94,A,Cleveland Hts,,216-321-5567,Fred Taub
04/15/94,A,East Liverpool,,216-386-5020,Marcus Morlan
04/16/94,A,Lebanon,,513-746-2092,Sherman E Winkle
04/16/94,A,Mansfield,,419-522-2593,Dwayne Meadows
04/16/94,A,Wooster,,216-669-3698,Jack A Bly
04/17/94,A,Chillicothe,,614-775-8505,Dave Hawkins
04/17/94,A,Elyria,,216-647-5116,Ola Sloane
04/23/94,A,Akron,,216-836-8869,Tony Mortimer
04/30/94,A,Dayton,,513-426-8717,Charles Gauder
04/30/94,A,Wellston,,614-286-2470,Ron Erb
05/01/94,A,LaGrange,,216-647-5116,Ola Slone
05/03/94,A,Canfield,,216-755-1000,Rich Marsteller
05/03/94,A,Clyde,,419-684-7822,John W Faggionato
05/07/94,A,Cincinnati,,513-891-7556,Herbert C Blasberg
05/07/94,A,Westerville,,614-861-6916,William Tabor
05/08/94,A,Marion,,614-499-3565,Stephen Eckard
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05/14/94,A,Greenville,,513-548-3010,Leon Harshbarger N8QAL
05/14/94,A,Hamilton,,513-868-7012,Theodore Wilson
05/14/94,A,Maumee,,419-693-3023,Ross H Mergenthaler
05/14/94,A,Van Wert,,419-795-5763,Robert E High
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05/19/94,A,Youngstown,,216-534-1394,James Viele

05/21/94,A,Lebanon,,513-746-2092,Sherman E Winkle
05/28/94,A,Canton,,216-453-5896,Richard Stellarini
06/02/94,A,Canfield,,216-755-1000,Rich Marsteller
06/04/94,A,Cincinnati,,513-891-7556,Herbert C Blasberg
06/04/94,A,Mentor,,216-256-0320,R Scott Farnham
06/05/94,A,LaGrange,,216-647-5116,Ola Slone
06/07/94,A,Canfield,,216-755-1000,Rich Marsteller
06/11/94,A,Columbus,,614-861-6916,William T. Tabor
06/11/94,A,Hamilton,,513-868-7012,Theodore Wilson
06/11/94,A,Maumee,,419-693-3023,Ross H Mergenthaler
06/11/94,A,West Union,,513-544-3763,Jerry Paquette
06/12/94,A,Cleveland Hts,,216-321-5567,Fred Taub
06/14/94,A,Tiffin,,419-447-9515,Gregg Fletchner
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04/21/94,A,Tulsa,,918-272-3081,Georgia McReynolds
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04/10/94,A,Portland,,503-642-5803,Edith Litvin
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04/16/94,A,Meadville,,814-724-1413,James Cihon
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04/09/94,W,Rockwood,,615-354-4281,Richard Spillee
04/09/94,A,Smyrna,,615-893-9497,Andy Green
04/10/94,W,Jasper,,615-942-5116,Charles Wooten
04/11/94,W,Maryville,,615-982-5839,Carroll Peabody
04/16/94,W,Johnson City,,615-743-5144,Charles Hensley
04/16/94,W,Knoxville,,615-688-7771,Ray Adams

04/16/94,W,Memphis,,901-795-5923,Stan Moore
04/21/94,W,Jamestown,,615-879-8626,Mike Ledbetter
04/23/94,W,Memphis,,901-795-5923,Stan Moore
04/24/94,A,Sparta,,615-761-5007,Charles A Nielsen Sr
04/28/94,W,Memphis,,901-795-5923,John Hall
05/07/94,A,Cookeville,,615-537-6537,George Droke
05/08/94,W,Jasper,,615-942-5116,Charles Wooten
05/09/94,W,Athens,,615-263-9300,Evan Ray
05/10/94,A,Crossville,,615-456-2630,Ken Matthew WD4CQA
05/14/94,W,Paris,,901-247-5489,Mackie Gallimore
05/21/94,A,Columbia,,615-381-6814,Charles Miller
05/21/94,W,Greeneville,,615-638-7056,Jack Creed
05/21/94,W,Knoxville,,615-688-7771,Ray Adams
05/21/94,W,Memphis,,901-795-5923,Stan Moore
05/26/94,W,Memphis,,901-795-5923,John Hall
05/28/94,W,Memphis,,901-795-5923,Stan Moore
05/29/94,A,Sparta,,615-761-5007,Charles A Nielsen Sr
06/04/94,W,Knoxville,,615-688-7771,Ray Adams
06/08/94,W,Maryville,,615-982-5839,Carroll Peabody
06/12/94,W,Jasper,,615-942-5116,Charles Wooten
06/18/94,W,Johnson City,,615-743-5144,Charles Hensley
06/18/94,W,Knoxville,,615-688-7771,Ray Adams
06/18/94,W,Memphis,,901-795-5923,Stan Moore
06/25/94,W,Memphis,,901-795-5923,Stan Moore
06/25/94,W,Paris,,901-247-5489,Mackie Gallimore
06/26/94,A,Sparta,,615-761-5007,Charles A Nielsen Sr

TEXAS
04/02/94,A,Brownsville,,210-542-7449,Bob Austin N5VCG
04/02/94,A,El Paso,,915-544-5863,Gorden L Howard
04/02/94,A,Orange,,409-886-7159,Paul Clark
04/03/94,A,McKinney,,903-455-2746,Charles Borneman
04/09/94,A,Houston,,713-488-4426,James Heil
04/09/94,A,Manchaca,,512-327-6184,Jim Greenwood
04/09/94,A,Midland,,915-520-5955,Bryant W Saxon
04/12/94,A,Houston,,713-682-6897,Cass Germany
04/16/94,5,Austin,,512-327-6184,Jim Greenwood
04/16/94,A,Houston,,713-544-4829,Darrel Glueck KB5UCH
04/20/94,A,Katy,,713-391-4124,Philip E Burrow
04/21/94,A,San Antonio,,210-673-8852,Leslie Dale
04/23/94,A,Abilene,,915-672-8889,Peggy Richard
04/23/94,5,Dallas,,214-480-1903,Bill Warner
04/23/94,A,Tomball,,713-351-8930,Paul Frantz
04/30/94,A,Waco,,817-859-5374,Alma P Lang
05/07/94,A,Austin,,512-345-7281,Larry C Gunter
05/07/94,A,McGregor,,817-859-5374,James M Lang
05/10/94,A,Houston,,713-682-6897,Cass Germany
05/14/94,A,Grangerland,,713-592-2257,Sam Neal
05/14/94,A,Houston,,713-488-4426,James Heil
05/14/94,A,Laredo,,210-723-9624,C J De La Garza

05/14/94,A,McGregor,,817-859-5374,James M Lang
05/14/94,A,Midland,,915-520-5955,Bryant W Saxon
05/19/94,A,San Antonio,,210-673-8852,Leslie Dale
05/21/94,5,Austin,,512-327-6184,Jim Greenwood
05/28/94,5,Dallas,,214-480-1903,Bill Warner
05/28/94,A,Tomball,,713-351-8930,Paul Frantz
06/04/94,A,El Paso,,915-544-5863,Gorden L Howard
06/04/94,A,Orange,,409-886-7159,Paul Clark
06/11/94,A,Houston,,713-488-4426,James Heil
06/11/94,A,Midland,,915-520-5955,Bryant W Saxon
06/14/94,A,Houston,,713-682-6897,Cass Germany
06/16/94,A,San Antonio,,210-673-8852,Leslie Dale
06/18/94,5,Austin,,512-327-6184,Jim Greenwood
06/25/94,5,Dallas,,214-480-1903,Bill Warner
06/25/94,A,Tomball,,713-351-8930,Paul Frantz

UTAH
04/02/94,A,Salt Lake City,,801-582-2438,Gordon R Smith
04/10/94,A,Manilla,,307-874-6113,George A Baer
05/11/94,A,Brigham City,,801-257-3021,Robert A Anderson
05/28/94,A,St George,,801-628-9074,Clark Braten
06/04/94,A,Salt Lake City,,801-582-2438,Gordon R Smith

VIRGINIA
04/02/94,A,Virginia Beach,,804-424-4351,Bill Verebely
04/09/94,L,Alexandria,,703-455-1510,Frank Mackey
04/09/94,A,Harrisonburg,,703-856-8012,Marshall Cooper
04/09/94,A,Richmond,,804-798-5048,Rick Cook
04/10/94,5,Virginia Beach,,804-424-4764,Bill Verebely
04/17/94,A,Lexington,,703-464-7541,Gary Gearhart
04/27/94,A,Lynchburg,,804-386-4653,William L Dail
04/30/94,A,Williamsburg,,804-253-2811,Andrew Swanson
05/07/94,A,Sterling,,703-450-2304,Michael Weber
05/14/94,L,Alexandria,,703-455-1510,Frank Mackey
05/14/94,A,Charlottesville,,804-973-1094,John D Gray
05/14/94,A,Culpeper,,703-547-3089,Bill Brown
05/14/94,A,Herndon,,703-450-2304,Michael E Weber
05/21/94,W,Roanoke,,703-366-6266,Fred L Horton
05/28/94,5,Gloucester,,804-484-2857,Fran Sterling
06/04/94,A,Virginia Beach,,804-468-9166,Judy Rogers
06/11/94,L,Alexandria,,703-455-1510,Frank Mackey
06/11/94,A,Harrisonburg,,703-856-8012,Marshall Cooper
06/11/94,A,Richmond,,804-798-5048,Rick Cook
06/18/94,A,Fredricksburg,,703-373-7076,Carolyn Cavanagh, AC4SK

VERMONT
04/09/94,A,Bolton,,802-878-6454,Ralph T Stetson III
05/13/94,A,Bolton,,802-878-6454,Ralph T Stetson III
05/21/94,A,Montpelier,,802-433-6172,Bob McCorkle
06/10/94,A,Bolton,,802-878-6454,Ralph T Stetson III

WASHINGTON
04/02/94,A,Ephrata,,509-754-3847,W J Edwards
04/02/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr
04/02/94,A,Vancouver,,206-892-7291,Wayne Schuler
04/10/94,A,Tukwila,,206-523-9117,Harry Lewis
04/12/94,A,Everett,,206-355-7759,L R Luchi
04/16/94,A,Spokane,,509-536-7576,Mary Moore
04/16/94,A,Sultan,,206-793-0319,Ernie Allsop
04/17/94,A,College Place,,509-525-7003,Mable Babbitt
04/23/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
04/23/94,A,Marysville,,206-335-5158,Loren Hole
04/27/94,A,Everett,,206-542-0285,Dwayne E Broderson
05/05/94,A,Wenatchee,,509-884-8140,Cliff Bennett
05/07/94,A,Ephrata,,509-754-3847,W J Edwards
05/07/94,A,Omak,,509-476-2303,Dominic S I Lindauer
05/07/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr
05/08/94,A,Tukwila,,206-523-9117,Harry Lewis
05/10/94,A,Everett,,206-355-7759,L R Luchi
05/21/94,A,Aberdeen,,206-249-6373,Nick Bender
05/21/94,A,Sultan,,206-793-0319,Ernie Allsop
05/25/94,A,Everett,,206-542-0285,Dwayne E Broderson
05/28/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
05/28/94,A,Marysville,,206-335-5158,Loren Hole
06/04/94,A,Ephrata,,509-754-3847,W J Edwards
06/04/94,A,Seattle,,206-282-1438,Michael J Mitchell Jr
06/12/94,A,Tukwila,,206-523-9117,Harry Lewis
06/14/94,A,Everett,,206-355-7759,L R Luchi
06/18/94,A,Sultan,,206-793-0319,Ernie Allsop
06/18/94,A,Tacoma,,206-845-7652,Jerry Seligman
06/19/94,A,College Place,,509-525-7003,Mable Babbitt
06/22/94,A,Everett,,206-542-0285,Dwayne E Broderson
06/25/94,A,Bremerton,,206-698-9205,David H Kleinschmidt
06/25/94,A,Marysville,,206-335-5158,Loren Hole

WISCONSIN
03/31/94,A,Onalaska,,608-783-8028,Rick Williams
04/02/94,A,Racine,,414-658-8390,William Firchow
04/09/94,A,Ashland,,715-682-2162,Robert F Clark
04/09/94,A,Madison,,608-832-6631,Mark Jenks
04/09/94,A,Wisconsin Rapids,,715-422-3595,Gene Santoski
04/12/94,A,Marinette,,715-732-2496,Terry Dobrzenski
04/23/94,A,Park Falls,,715-762-4948,Art Dunham
05/07/94,A,Manitowoc,,414-788-3823,Larry Siebers
05/07/94,A,Racine,,414-658-8390,William Firchow
05/14/94,A,Madison,,608-832-6631,Mark Jenks
05/14/94,A,Medford,,715-748-4054,Tom Hrdina N9GEN
06/11/94,A,Appleton,,414-788-3823,Larry Siebers
06/11/94,A,Madison,,608-832-6631,Mark Jenks

WEST VIRGINIA
04/10/94,A,Clarksburg,,304-624-5186,Joseph R Chiado
04/16/94,A,Martinsburg,,301-834-8831,Lester M. Reynolds

05/10/94,A,Fairmont,,304-366-0132,Robert Robinson
05/14/94,A,Chapmanville,,304-946-2858,Johnny Pack
05/14/94,A,Charleston,,304-744-8613,Calvin Basham
05/14/94,A,Glenville,,304-462-7560,David G Ramezan

WYOMING
04/09/94,A,Laramie,,307-742-2077,Fred Crowell
04/30/94,A,Cheyenne,,307-637-8634,Wilson Sellner
05/10/94,A,Rock Springs,,307-382-5406,Wayne M Sutherland
05/28/94,A,Cody,,307-568-2349,Jerry Pyle

EXAMINATION OPPORTUNITIES OUTSIDE THE UNITED STATES:

05/14/94,A,American Samoa,,684-699-2420,Michael Homsany
05/07/94,A,Athens Greece,,301-807-0813,Gary L Memory
04/03/94,A,Leeds England,,144-423-870,Mike Parker N6SVL
06/19/94,A,Adelup Guam,,627-646-7611,Harry Y Taguchi
04/17/94,A,Saipan,,670-234-6323,David Hardt

PUERTO RICO
04/30/94,A,San Juan,,809-789-4998,Victor Madero
05/28/94,A,San Juan,,809-789-4998,Victor Madero
06/25/94,A,San Juan,,809-789-4998,Victor Madero

US VIRGIN ISLANDS
04/09/94,A,St Croix,,809-778-3156,Frank Jaeger
05/14/94,A,ST Thomas,,809-774-4740,Ronald A Hall Sr

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3525. US License Examination Opportunities Scheduled 3/31/94 to 6/27/94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 14:50:58 UTC
From: bjahnke@arrl.org
Message-ID: <2536@bjj>
Source record: 269169
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

AMATEUR RADIO EXAMINATION OPPORTUNITIES

****

Special Note: Amateur Radio licenses usually arrive between 8 and 10 weeks after the test session. The FCC considers their processing time to be 90 days--from the date they receive the application. The FCC usually receives the application one to two weeks after the test session (once the VE Team and the coordinating VEC have completed their processing).

Note: Codeless Technician to Technician w/HF upgraders (who pass a Morse code test) will not receive a new license from the FCC. The existing Technician license plus the CSCE conveying the Morse code test credit is the only documentation issued for use of the additional HF privileges.

****

The following test session information is provided by the ARRL/VEC for the upcoming six to eight week period. For further information, please contact the test session CONTACT PERSON at the telephone number provided. If necessary, you may contact the ARRL/VEC at 203-666-1541 x282 for additional information. Electronic mail may be forwarded to the ARRL/VEC via USENET at "bjahnke@arrl.org" or via MCI Mail to MCI ID: 653-2312 or 215-5052.

Although the test session information presented here does not indicate whether walk-ins are accepted or not, most test sessions do allow walk-ins. We encourage you, however, to always contact the CONTACT PERSON at the telephone number provided so that the VE Team is aware that you be attending the test session.

STILL NEED TO PREPARE FOR YOUR EXAM?

If you would like information on how to become licensed; or how to locate Amateur Radio clubs, instructors, licensing classes and/or Novice examiners in your area; please contact the ARRL Educational Activities Department (EAD) at 203-666-1541 x219. The EAD can also provide information on recommended study materials. Electronic mail may be forwarded to the ARRL EAD via USENET at "rwhite@arrl.org" or via MCI Mail to MCI ID: 215-5052.

EXAM LISTINGS - DEFINITION OF FIELDS

STATE
Test Date,VEC,City,,Contact Phone,Contact Person

The SECOND field in the following listing specifies the VEC
which is coordinating this examination. This single-character
designator denotes the VEC as defined below. An "A" (for example)
indicates that this examination is coordinated by the ARRL/VEC.

For further information on any examinations listed, or if you do not
find any examinations listed for your area, you may contact
any of the coordinating VECs below.

A = ARRL/VEC, 225 Main St, Newington, CT 06111; (d) 203-666-1541
The 1994 test fee is $5.75.

X = Anchorage ARC, 2628 Turnagain Parkway, Anchorage, AK 99517;
(d) 907-786-8121, (n) 907-243-2221 (or) 907-276-5121
(or) 907-274-5546

C = Central Alabama VEC, 1215 Dale Dr SE, Huntsville, AL 35801;
205-536-3904

N = Charlotte VEC, 227 Bennett Ln, Charlotte, NC 28213;
704-596-2168

D = Great Lakes ARC VEC Inc., PO Box 273, Glenview, IL 60025;
708-486-8019

E = Golden Empire ARS, PO Box 508, Chico, CA 95927; No phone.

G = Greater Los Angeles ARG, 9737 Noble Ave, Sepulveda, CA 91343;
818-892-2068, 805-822-1473.

J = Jefferson ARC, PO Box 24368, New Orleans, LA 70184-4368;
504-737-2315. Test fee for 1994 is $5.00.

K = Koolau ARC, 45-529 Nakuluai St, Kaneohe, HI 96744;
808-235-4132

L = Laurel ARC Inc., PO Box 3039, Laurel, MD 20709-0039;
(d) 301-572-5124, 301-317-7819, (n) 301-588-3924

M = The Milwaukee RAC Inc., 1737 N 116th St, Wauwatosa, WI 53226;
414-774-6999. Test fee for 1994 is $5.00.

H = Mountain ARC, PO Box 10, Burlington, WV 26710; 304-289-3576,
301-724-0674

P = PHD ARA Inc., PO Box 11, Liberty, MO 64068; 816-781-7313

R = Sandarc-VEC, PO Box 2446, La Mesa, CA 91943-2446; 619-465-3926

S = Sunnyvale VEC ARC, PO Box 60307, Sunnyvale, CA 94088-0307;
408-255-9000

T = Triad Emergency ARC, 3504 Stonehurst Pl, High Point, NC 27265;
919-841-7576

W = Western Carolinas ARS VEC, 5833 Clinton Hwy - Suite 203,
Knoxville, TN 37912-2500; 615-688-7771.
The 1994 test fee is $5.75.

5 = W5YI-VEC, PO Box 565101, Dallas, TX 75356-5101; 817-461-6443
The 1994 test fee is $5.75.

EXAMINATION OPPORTUNITIES OUTSIDE THE UNITED STATES:

05/14/94,A,American Samoa,,684-699-2420,Michael Homsany
05/07/94,A,Athens Greece,,301-807-0813,Gary L Memory
04/03/94,A,Leeds England,,144-423-870,Mike Parker N6SVL
06/19/94,A,Adelup Guam,,627-646-7611,Harry Y Taguchi
04/17/94,A,Saipan,,670-234-6323,David Hardt

PUERTO RICO
04/30/94,A,San Juan,,809-789-4998,Victor Madero
05/28/94,A,San Juan,,809-789-4998,Victor Madero
06/25/94,A,San Juan,,809-789-4998,Victor Madero

US VIRGIN ISLANDS
04/09/94,A,St Croix,,809-778-3156,Frank Jaeger
05/14/94,A,ST Thomas,,809-774-4740,Ronald A Hall Sr

*EOF

3526. Re: DX reflector?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 15:44:00 UTC
From: gbrown@unlinfo.unl.edu
Message-ID: <2ner40$9cb@crcnis1.unl.edu>
Source record: 269170

cchris@f40.n382.z1.fidonet.org (cchris) writes:

>Organization: The University of South Dakota Computer Science Dept.
>Reply-To: cchris@charlie.usd.edu

>I just read in 'THE DX BULLETIN" about subscribing to something called the DX
>reflector. The administrator's address was given as dx-REQUEST@unbc.edu but
>this does not appear to work. Does anyone know anything about this or how to
>get a message to the administrator? If so, I would appreciate some info via
>E-mail. Thanks.
>Chris, AC0M
>cchris@charlie.usd.edu

A message on the DX reflector replied to other's asking the same
question. It noted that the subscription process is manual (not
machine/automatic as in other lists) and the administrator has been
seriously backlogged. Bottom line was "be patient".

Greg WB0RTK gbrown@unlinfo.unl.edu

3527. passive satellites

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 15:49:59 UTC
From: parnoul@chouette.saclay.cea.fr
Message-ID: <1994Mar31.154959.1752@nenuphar.saclay.cea.fr>
Source record: 269171

Hi there,

A colleague just realized that the news posting outside the company is
up again and running, we have been quiet for some reason for more than
one year... Reading the news was fine though.

Following is an idea I'd like to have some feedback from the EME'ers
for instance.
Do you think the big telecom satellites operating geosynchonously(sp?)
above the equator could be used as passive satellites for ham contacts ?

The reflecting surface should not be neglectable considering the huge
solar panels, at least the satellite body should provide echos back
to earth.

I heard that the first ham "satellites" were aluminium covered ballons,
reflecting some of the VHF power.

The geosync. satellites are much further away, maybe the big guns in EME
have a chance to hear something back ?

The input stages of the mentionned satellites operating on whatever freq.
might not appreciate the strong field shooting at them... Any regulations
on that point ?

What do you think ?

73 de f5hnk/Patrick

RYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRY

Patrick Arnoul F5HNK Email: parnoul@gaap.saclay.cea.fr
French Atomic Commission (C.E.A)
Centre d'Etudes de Saclay Phone: (33) 1 69 08 82 91
DTA/LETI/DEIN Bat 528
F-91191 GIF SUR YVETTE CEDEX Fax: (33) 1 69 08 83 95

THE QUICK BROWN FOX JUMPED OVER THE LAZY DOG'S BACK THE QUICK BRWON FOX JUMPED O

3528. Re: But Seriously

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 16:04:21 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar31.160421.3510@ke4zv.atl.ga.us>
Source record: 269172

In article <gregCnFxoC.JIF@netcom.com> greg@netcom.com (Greg Bullough) writes:
>The subject is 'what kind of award makes sense for no-code techs?'
>At risk of sounding a bit patronizing, I'd look really hard at the
>Boy Scout merit-badge and ranking model.

It *is* a bit patronizing to think that adults require merit badges,
but such is life. Any voluntary concept that encourages people to
experiment and try new things can't be all bad.

>So, we can start by listing some things that are worth-while for the
>new ham to try, by which s/he'll learn. And some categories to put
>those things in (e.g. Technical, Operational, Experimental, Organizational).
>
>And yes, I think a couple of repeater contacts ought to be worth something,
>but not in and of itself. Here's a partial list of things that might
>score points toward the, Personal Frontiers award:
>
> 1. Technical
> a. Complete a home-brew antenna project
> b. Install a mobile rig in your car
> c. Find a cable-TV leak

Good, good, good.

> d. Build a code-practice oscillator

Not relevant to the code test free licensee. Better would be some
station accessory that's really useful to the code test free licensee
such as a Baycom kit.

> e. Build an HF receiver kit

Not really relevant to the code test free licensee. Better would be a UHF
transmitter or receiver project.

> 2. Operational
> a. Complete a VHF or UHF simplex QSO of more than
> <pick a figure> miles

Smacks of Dxing, but Ok.

> b. Complete a VHF or UHF QSO on SSB or CW

Or ATV, packet, satellite, etc.

> c. Participate in a fox-hunt
> d. Check into a VHF or UHF traffic net
> e. Handle a piece of traffic from a PBBS

Good, good, good.

> f. Sign up for an upgrade class
> g. Get up to 5 words per minute.

Neither relevant to the code test free licensee.

> 3. Organizational
> a. Attend a meeting of a local ham club
> b. Provide amateur radio communications at a public event,
> under sponsorship of a local amateur radio group
> c. Participate in RACES or ARES activities during
> an emergency
> d. Attend a ham-fest...

All good.

>I'm sure there are more that can be added. The idea is to figure out the things
>that new hams can be doing to grow and develop in the hobby/service and
>both suggest them and recognize an effort towards giving them a try. The list
>of items has to be big enough so that the issue of 'but we haven't had a
>natural disaster this year' doesn't really hamper getting a certificate.
>
>I'd limit the award to the first couple of years after licensing, and
>also to Novice and Technician classes. The idea is to get NEW hams expanding
>their horizons, trying new things, and into the various organizations.

Wouldn't hurt to get some of the old duffers to try a few new things too.
Many have fallen into a rut. I wouldn't limit this to just new hams. Make
it something *all* hams can do together. But lay off the Morse and "upgrade"
stuff. The Tech license isn't a way station, it's an end to itself intended
to fill the VHF/UHF bands with activity. Let's concentrate on that and let
those who want HF follow the Novice track to General. There are already
plenty of HF awards.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3529. Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 16:19:17 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1994Mar31.161917.3657@ke4zv.atl.ga.us>
Source record: 269173

In article <CnI0t1.DJ@seastar.org> jjw@seastar.org (John Welch) writes:
> <much deleted>
>
> So, the audio phase shift is the only 'interesting' part...
>How, pray tell, can one having only the usual ham test gear (scope,
>probably, dmm, maybe power supply) make the RF phase shift be 90
>degrees and the same amplitude at, say 12MHz?

This is the easy part. There are three main ways to do it. The most straight forward way is a quarterwave transmission line, distributed or lumped. A second way is to use two loosely coupled LC tanks arranged so they're in quadrature phase. A third way is to use a RL lag network in one leg and a RC lead network in the other. Each will give 45 degrees of phase shift when R=L=C with a net shift between the two of 90 degrees. Since the RF is a pure tone at one frequency, getting an accurate phase shift is fairly trivial.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

3530. HELP! The FCC will not is

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 17:15:00 UTC
From: mario.campos@nitelog.com
Message-ID: <cb.17029.2099.0ND0488A@nitelog.com>
Source record: 269174

JWH>It will be 90 days on April 6th since the FCC has had my application. This
JWH>my first ham license, I have _not_ had a ham license canceled by the FCC.

Call your US Congressman's office - relate your saga to the "gopher" in
his/her office. You should be able to get an answer within a short time!

Message written at 9:03am, on Thursday, March 31, 1994.

3531. Re: Plain old repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 17:32:58 UTC
From: hammock@kelvin.jpl.nasa.gov
Message-ID: <2nf1ga$9rf@lo-fan.jpl.nasa.gov>
Source record: 269175

In article <223@ted.win.net> mjsilva@ted.win.net (Michael Silva) writes:
>
>In article <2nadq2$hfn@crcnis1.unl.edu>, Gary McDuffie Sr (mcduffie@unlinfo.unl.edu) writes:
>>bote@access1.digex.net (John Boteler) writes:
>>Okay... I'll bite. Have we quit building full duplex remote bases now?
>>The remote shouldn't care if there is a zero tail or a 20 second tail.
>>What gives?
>>
>
>Our full-duplex radios allow transmitting on one band while receiving
>on the other band. I don't know of any frequency-agile rigs that can
>simultaneously transmit and receive on the same band. That would
>require a repeater-type duplexer that was electronically tunable and
>*tiny*. Remote basing requires simultaneous transmission and reception
>for each direction, so full duplex remote basing would require the rig
>to be transmitting two signals and receiving two signals all at the
>same time. When remoting to a repeater, I have to wait for the repeater
>to stop transmitting so the remote stops transmitting, so it is in a
>position to receive my signal and turn around.

It seems to me that Mike KK6GM is talking about using dual band radio such as the ones made by Alinco and Icom which can be remotely control. These radios are not remote bases in the since that most people think of remote bases. They are nothing more than half-duplex cross band repeaters. It is interesting to note, that the person who uses such a system loses control of the repeater until such time as signal on the oter input goes away. A true remote base would use a pair of frequencies for up link and down link from the remote system so that the user of the remote base can cause the remote transceiver to turnaround at any time.

Randy Hammock KC6HUR

3532. Need Best Price for FT530!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 17:42:41 UTC
From: tim@unislc.slc.unisys.com
Message-ID: <1994Mar31.174241.24639@unislc.slc.unisys.com>
Source record: 269176

[Article crossposted from rec.radio.swap]
[Author was Tim Morrison]
[Posted on Thu, 31 Mar 1994 17:35:23 GMT]

Does anyone have what they consider the best deal around
for a new FT530? Catalogs? Mail order? anything? Any help here
is most appreciated.

Tim.

3533. Re: STOP SENDING HAMS ON USENET CRAP !!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 18:04:36 UTC
From: dave@llondel.demon.co.uk
Message-ID: <765162276snx@llondel.demon.co.uk>
Source record: 269177

What might be better is a changes file each month with a pointer to the full file for those who want it.

Failing that, how about posting with the same message IDs every month so all I have to do is keep the IDs on file to avoid getting the list every time. Not sure how long sites normally keep message IDs so not sure if it would work.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

3534. ARLB029 Tornadoes bring out hams

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 18:10:19 UTC
From: owner-w1aw-list@netcom.com
Message-ID: <$arlb029.1994@ampr.org>
Source record: 269078
Cross-posted to: rec.radio.amateur.misc,rec.radio.info

SB QST @ ARL $ARLB029
ARLB029 Tornadoes bring out hams

ZCZC AG93
QST de W1AW
ARRL Bulletin 29 ARLB029
From ARRL Headquarters
Newington CT March 30, 1994
To all radio amateurs

SB QST ARL ARLB029
ARLB029 Tornadoes bring out hams

Tornadoes bring out hams

Members of the ARRL Amateur Radio Emergency Service have been extremely active and visible during and following tornadoes that struck several southeastern states on Sunday, March 27.

In Alabama, more than 70 amateurs in 10 counties participated in the state's 2-meter weather spotting net, as well as in damage assessment following the storms, according to Herb Griffin, N4ZOV, president of the Calhoun County Amateur Radio Association, an ARRL Special Services Club. The National Weather Service in Birmingham received the reports via W4CUE, repeater station of the Birmingham Amateur Radio Club.

Carol Boothe, KE4HJU, was cited by Griffin and others for yeoman service as net control on the 2-meter net, conducted through repeater station WB4GNA, with its wide coverage from the highest point in Alabama, atop Mt. Cheaha.

In Georgia, where the state's ARES net was activated Sunday afternoon following reports of tornadoes in Alabama, amateurs manned ARES nets in 12 counties in the storm's expected path. Local 2-meter net reports were funneled to the Georgia ARES Net on 3975 kHz, with liaisons to both Alabama and South Carolina. From there spotting reports were relayed to state Red Cross Headquarters in Atlanta.

Georgia ARRL Section Emergency Coordinator Dot Fennell, KA4HHE, told an interviewer for WJCL-TV in Savannah about Amateur Radio's role in storm communications. ''Doppler radar is wonderful,'' she said, ''but the human eye is the best weather instrument.''

The ARRL welcomes reports and photos from amateurs involved in these operations.
NNNN
/EX

3535. Re: STOP SENDING HAMS ON USENET CRAP !!!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 18:30:02 UTC
From: teacherjh@aol.com
Message-ID: <2nf4ra$ka3@search01.news.aol.com>
Source record: 269079

People have such different levels of access to different parts of the internet that no one method will satisfy all. However, the best solution I can come up with would be to put the actual postings in one usenet group, and have a short message in all the others pointing to that usenet area (and an ftp site also) where they can get the info. Maybe the same should be done for the FAQ lists... instead of periodic large postings everywhere, one periodic large posting in one newsgroup, and a short posting everywhere shoing how to get it from the newsgroup, and how to get it from an ftp site.

btw, where do they get the "hams on usenet" info? does somebody read evey post and look for a callsign at the bottom?

Jose KD1SB

3536. Re: Plain old repeaters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 18:38:54 UTC
From: phr@netcom.com
Message-ID: <phrCnJL4v.C0n@netcom.com>
Source record: 269080

In article <223@ted.win.net>, Michael Silva <mjsilva@ted.win.net> wrote:
>Our full-duplex radios allow transmitting on one band while receiving
>on the other band. I don't know of any frequency-agile rigs that can
>simultaneously transmit and receive on the same band. That would
>require a repeater-type duplexer that was electronically tunable and
>*tiny*. Remote basing requires simultaneous transmission and reception
>for each direction, so full duplex remote basing would require the rig
>to be transmitting two signals and receiving two signals all at the
>same time. When remoting to a repeater, I have to wait for the repeater
>to stop transmitting so the remote stops transmitting, so it is in a
>position to receive my signal and turn around.

Cellular phones do this all the time, including pocket sized ones.
In fact some of them are smaller than any ham HT that I know of.

3537. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 18:50:33 UTC
From: jfw@ksr.com
Message-ID: <2nf61p$b25@hopscotch.ksr.com>
Source record: 269081

dhughes@prairienet.org (Dan Hughes) writes:
>I just passed my no-code test last week, and have been listening to some
>ham chatter on my SW receiver. Saturday night on 3910 kHz I heard some
>of the most disgusting language I've encountered anywhere. One guy was
>spouting one obscentity after another, and three other guys were laughing
>at his inept signal and giving it right back to him. All but the
>instigator were regularly giving their calls. Is this pretty much what I
>have to look forward to?

Yes. That's what you get for taking the no-code test. ;-)

On a slightly more serious note, yeah, there's an abundance of turkeys on ham radio, just like every other walk of life. Had you tuned to 3913, you might well have heard people discussing philosophy, or doing disaster-relief communications. If you ever choose to learn Morse code (which, of course, you'll need anyway to use 80 meters as anything except an emetic :-), the CW subbands tend to be somewhat more civilized; your average jerk just doesn't want to go to that much effort for so little instant gratification (of course, that means that the above-average jerks show up there from time to time).

Welcome to reality. And welcome to ham radio, too. ;-)

John, WB7EEL/1

3538. IGNORE WORLD FTP POSTING

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 18:55:10 UTC
From: wy1z@netcom.com
Message-ID: <wy1zCnJLvy.B2p@netcom.com>
Source record: 269082
Cross-posted to: rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.scanner,alt.radio.scanner

```
The periodic reminder posting for World is still floating around, but
shouldn't be.

This is being looked into.

Anyway, please ignore it. The correct location of the files is
oak.oakland.edu:/pub/hamradio

The World posting will hopefully be killed off soon.

Sorry for any inconvenience this may cause.

Scott

--
================================================================================
| Scott Ehrlich Amateur Radio: wy1z AMPRnet: wy1z@wa1phy.ampr.org |
| Internet: wy1z@neu.edu BITnet: wy1z@NUHUB AX.25: wy1z@wa1phy.ma.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| oak.oakland.edu:/pub/hamradio |
================================================================================
```

3539. Re: New Award Announcement

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 19:01:29 UTC
From: jfw@ksr.com
Message-ID: <2nf6m9$b4f@hopscotch.ksr.com>
Source record: 269084

ehare@arrl.org (Ed Hare (KA1CV)) writes:
>Rev. Michael P. Deignan (kd1hz@anomaly.sbs.com) wrote:
>: In this age of political correctness, its unfair that we have a "DXCC"
>: award for HF operators, but nothing that a no-code tech can aspire to
>: achieve by yacking on two meters.
>In spite of the uselessness of the rest of the post, this concept has
>some merit. Any ideas for good ways to do this?

Well, there's always RCC. More seriously, there's always grid-chasing and other similar activities. (Do satellite contacts count for WAS? WAC? I'm not into paper chasing, so I don't know offhand.)

Having missed the opriginal article, for reasons one might guess, if the idea is to make it possible to acquire several square meters worth of awards for sitting in one's chair like the standard DX hound, do we really want to encourage this? At least grid-square chasing gets one out in the sunlight now and then ;-).

John, WB7EEL

3540. BBC HF Propagation papers ?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 19:15:18 UTC
From: rbloom@netcom.com
Message-ID: <rbloomCnJMtI.A8r@netcom.com>
Source record: 269085

I am looking for some BBC technical reports, in all their
gory detail on the Fricker FoF2 and mode-find algorithms.
In the journal articles there are references to BBC
"pamphlets" which were "readily available" in the mid-'80s.
Any ideas?

Ron
WA6MQC

3541. Was obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 19:28:05 UTC
From: hill@uncc.edu
Message-ID: <CnJnEu.4oD@unccsun.uncc.edu>
Source record: 269086

In article KDF@netcom.com, slay@netcom.com (Sandy Lynch) writes:

> PS: There are plenty of Extra Class licensees who are guilty of the
> transgressions you mention. You should NOT infer that I am saying
> anything about "no coders". I've lived in Japan for many, many
> years where 92% of all licensed amateur stations belong to "no coders".
> They are pretty good - but, there are the bad apples in every barrel.
>

The 92% figure made me curious. Does anyone know the percentage
breakdown for the various classes world wide and in the US?

Jerre

3542. NEED EXTRA CASH? READ THIS!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 19:45:50 UTC
From: 01jabush@leo.bsuvc.bsu.edu
Message-ID: <1994Mar31.144550.28694@bsu-ucs>
Source record: 269088
Cross-posted to: rec.photo,rec.radio.amateur.misc

If you're like most people I know, you could use some extra cash. I am providing to you the unique opportunity to do so at little cost and effort. By working 1-2 hours per week you can earn an unlimited income. E-mail me now for more detailed information on this once-in-a-lifetime opportunity. You get out of life, what you put into it!

3543. Re: RF and AF speech processors. Was: FT-990 vs TS-850

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 19:57:50 UTC
From: alanb@sr.hp.com
Message-ID: <CnJosF.My3@srgenprp.sr.hp.com>
Source record: 269089
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment

Kok Chen (kchen@apple.com) wrote:
: zlau@arrl.org (Zack Lau (KH6CP)) writes:

: >If you clip an ideal DSB waveform (1 kHz modulation), aren't there
: >two tones spaced 1 kHz apart that could generate IMD products at
: >1.5 kHz and 1.5 kHz (receiver output)? What if you had a significant
: >amount of carrier leakthrough that was cleaned up by the crystal
: >filter? Couldn't this give you extra tones at 1, 1.5, 2, and 2.5
: >kHz (at the receiver)?

: Wait... I am completely confused by Zack's arguments.

: A DSB signal that has a 1 kc modulation consists of two "carriers"
: spaced 2 kc apart, not 1 kc, no? (Imagine AM with 1 kc modulation.
: Now take away the carrier.)

Right. If you assume Zack meant .5 kHz modulation, then it makes sense:
The two sidebands are carrier + and - .5 kHz and the third-order
IMD products are carrier + and - 1.5 kHz. So the recovered audio has
a third harmonic, but no second harmonic. So symmetrical clipping of
a DSB waveform is the same as symmetrical clipping of the baseband
audio in that it generates odd-order products, but not even-order.

AL N1AL

3544. [News] Electricity, Leukemia Studied

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 20:00:05 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CnJow6.H6B@news.Hawaii.Edu>
Source record: 269090

Thought this might be of interest to everyone. Note that the phrase `statistically significant' was used also by the EPA and FCC in their joint study concerning leukemia and high RF fields conducted here in Honolulu in regard to three bcst xmtrs located in a residential neighborhood.

Jeff NH6IL
****

USA TODAY Update
March 31, 1994

ELECTRICITY, LEUKEMIA STUDIED:
A new report finds an "association" between exposure to magnetic fields and leukemia. The study, in next month's American Journal of Epidemiology, looked at records of more than 223,000 electric utility workers. It found a "statistically significant" association, but no cause-and-effect relationship, between exposure to magnetic fields and acute nonlymphocytic leukemia.

3545. Re: How phasing SSB Exciters Work (Was: RF and AF speech pr

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 20:07:12 UTC
From: dave@llondel.demon.co.uk
Message-ID: <765169632snx@llondel.demon.co.uk>
Source record: 269092

Why not use a Weaver (Third Method) exciter? It is easy to generate a couple of 1800Hz carriers which are 90 degrees out of phase, and fairly easy to generate a couple of 10.7MHz carriers which are 90 degrees out of phase, and the rest is reasonably straightforward without any expensive bits. SBL1 mixers are cheap, so the fact that you need four shouldn't be prohibitive.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

3546. Re: Kill that intermod!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 20:08:29 UTC
From: alanb@sr.hp.com
Message-ID: <CnJpA6.6C@srgenprp.sr.hp.com>
Source record: 269094

Ken A. Nishimura (kennish@kabuki.EECS.Berkeley.EDU) wrote:
: In article <1994Mar30.183318.9204@arrl.org>,
: Ed Hare (KA1CV) <ehare@arrl.org> wrote:
: >The ARRL Laboratory wants to start testing the out-of-band intermod
: >performance of VHF FM rigs and publishing the results in our
: >QST Product Reviews. We are already measuring in-band third-order
: >IMD, so the test methods are established. What I would like is
: >some reports on specific out-of-band IMD problems that are being
: >experienced in metro areas, frequencies, locations, etc. Please send
: >the reports to ehare@arrl.org.

: Find the 3rd order and 5th order (if you wish) intercept
: point, and then publish the frequency response of the front
: end RF filter, and you're done. Given those two pieces of
: information, you will have a very good idea of what kind of
: intermod problem you get in that receiver.

I agree.

The only problem is that it might be hard to get at the output of the
radio's front-end filter for testing. Another method to obtain the
same information would be to plot the 3rd-order intercept point as a
function of tone spacing. Plot it with tone spacing (frequency)
on a logarithmic axis so you can get in-band and out-of-band info
on the same chart. That would actually be more useful information
than Ken's method.

: >Some of the "IMD" problems being reported are probably receiver
: >image problems, so we are also going to measure and report the
: >image rejection. If anyone has reports of image-response interference,
: >I would like to know about that, too.

: Barring the use of image supression mixers (which I haven't
: seen yet on VHF+ ham rigs), the front end response
: is all you need, plus the tuning function, if any.

I'm not sure what the block diagrams of these radios look like, but if
they are using a low-frequency first IF (10.7 or 21.4 MHz) without
image-reject mixers, then the image rejection will be 0 dB. How do
they get around the problem? Up-convert to a high first IF?

: There are WAY TOO MANY possible combinations of frequencies
: that will cause intermod under the right conditions. I think
: what people want is a figure of merit that makes comparison
: easy. 3rd order intercept point is about the best FOM
: there is.

Agreed.

AL N1AL

3547. Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 20:20:58 UTC
From: alanb@sr.hp.com
Message-ID: <CnJpuy.J5@srgenprp.sr.hp.com>
Source record: 269095

John Welch (jjw@seastar.org) wrote:

: So, the audio phase shift is the only 'interesting' part...
: How, pray tell, can one having only the usual ham test gear (scope,
: probably, dmm, maybe power supply) make the RF phase shift be 90
: degrees and the same amplitude at, say 12MHz?

Easy: Just feed in an audio tone to the mic input and adjust the
RF amplitude and phase until the unwanted sideband disappears.

: One other interesting thing re: phasing vs filtering: you'll
: need *some* additional filtering to do a transmitter anyway (for SSB
: at least).

Not really, unless you want to do RF clipping. And in that case, you
still have saved one of the two required crystal filters.

: This filter will cost you $$, and if you already have to
: spend the $$ why not use it for the receiver too? That rather neatly
: explains why darned few commercial ham rigs use phasing any more.

Or turn it the other way around: Since the receiver portion of a
transceiver already has a crystal filter, why not use it for the
transmitter as well? I think that's the reason you don't find
phasing-type SSB generators in commercial transceivers.

AL N1AL

3548. Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 20:25:32 UTC
From: rkarlqu@scd.hp.com
Message-ID: <2nfbjs$ilt@hpscit.sc.hp.com>
Source record: 269096

In article <CnI0t1.DJ@seastar.org>, John Welch <jjw@seastar.org> wrote:

> My dual-trace scope is not perfectly calibrated, so that's
>out. Generating 48MHz and using flip-flops to get 12MHz in quadrature
>doesn't work well in reality (theory is great, but unless your 48MHz
>signal is *exactly* 50% duty cycle it has a *strong*component at just
>under half of 48MHz, usually near 22MHz. Flip-flops, like all

No, you get a spur at exactly 24 MHz, the second harmonic. If you
drive the mixer differentially from Q and Qbar, I believe this
second harmonic will cancel out for all practical purposes.
Many popular mixers (SBL-1 etc) have floating LO windings that make
this easy to do.

Also, the propagation delay doesn't have to be zero, it only has to
be identical between the I and Q outputs, which if they are flip
flops on the same chip will be very close (easily under a nanosecond
for FACT logic, 100 psec. for ECLIPSE logic.)

The tough part isn't the audio 90 degree shift or the RF 90 degree shift,
it's getting amplitude and phase matched mixers.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

3549. Re: ATTN: ARRL Newington Staff

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 20:43:11 UTC
From: ehare@arrl.org
Message-ID: <1994Mar31.204311.1858@arrl.org>
Source record: 269097

Andrew M. Cohn (andy@clark.net) wrote:

: Hi Folks...

Hi, Andy. I am glad that I spotted this one, of course the
thread subject did get my attention.

: I will be in Newington on business during the last few days of this
: month, and I'm wondering about how far it might be from my hotel on
: Columbus Boulevard in New Britain to your HQ?

Well, the New Britain line is only a few miles from here, so you
will be within about 5 miles or so. If you contact tzimmer@arrl.org
and ask for a set of directions, she can get you from there to here.
We are open for visitor tours M-F, 8-5 eastern time. If you are
only going to be here on a weekend, the main building is closed, but
W1AW is open for visitors from 1 PM Saturday, and from 4 PM Sunday.
After 4, the bulletins are running, so guest operation ceases.
If you can only make it here on Sat or Sun, give me a call in advance.
Most weekends I can drive on in and give you a private tour of the HQ
main building. With many of the offices closed and locked, it is not quite
as fun as during the week, but I have a key to the Lab, so you will get
to see some of the highlights.

: Also, I would appreciate knowing if there any professional videography
: services that you could recommend in the Newington/New Britain area.
: Maybe in the past at HQ you may have retained a video production service
: that you could recommend to me?

I can't answer this one, but I think our Educational Activities
Department can offer some guidance. Contact rwhite@arrl.org.

I will point out that posting to rec.radio.amateur.misc is not the
best way to contact ARRL HQ staff. A list of HQ staff addresses
is available by ftp from our site at oak.oakland.edu or by email
from our server at info@arrl.org. I suggest to all that they
contact ARRL directly rather than rely on the correct staffer
seeing the right post.

73 from ARRL HQ, Ed
--
Ed Hare, KA1CV, ARRL Laboratory, 225 Main, Newington, CT 06111
203-666-1541 ehare@arrl.org
My electronic posts and email do not necessarily represent the policy
of the ARRL, but I can probably get in trouble for them anyway!

3550. Re: Rec.Radio.Amateur.Antennas activity??

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 20:50:12 UTC
From: garlau@eis.calstate.edu
Message-ID: <2nfd24$4v8@eis.calstate.edu>
Source record: 269098

00tlzivney@leo.bsuvc.bsu.edu writes:
>
> I have posted two items to a newsgroup, rec.radio.amateur.antennas,
> but have never ever seen any other activity on that newsgroup. I have
> been checking for two weeks. Does anyone out there ever look in on
> that newsgroup??????

Perhaps your newsfeed source isn't quite picking up
rec.radio.amateur.antenna (singular). My preferred news server is like
that (gets everything else A-OK except for the rec.radio.*
newsgroups...so I gotta use my other Internet account to play ham radio
Internet style)

--
Gary T. Lau
Internet: garlau@eis.calstate.edu or glau@ccmail.com
Amateur : N6MMM @ N0ARY.#NOCAL.USA.NOAM
--I don't know if the California State University or Lotus Development
Corp. wants me to speak for them!

3551. Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 20:51:38 UTC
From: alanb@sr.hp.com
Message-ID: <CnJrA3.1I3@srgenprp.sr.hp.com>
Source record: 269099
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: In article <CnG3Jt.Htw@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:

: >The audio phase shift network is the interesting (read difficult) part
: >of the system. It must maintain a 90 degree phase difference and
: >excellent amplitude matching between the two outputs over something like
: >a 10:1 frequency range (300 Hz - 3000 Hz). It generally does that by
: >causing each of the two outputs to have a constantly-rising phase shift
: >versus frequency characteristic, like thus:
: > / /
: >Phase Shift / /
: > / /
: > 720 deg / /
: > / /
: > / /
: > 540 deg / /
: > / /
: > / /
: > 360 deg / /
: > I / /
: > / / Q
: > 180 deg / /
: > / /
: > / /
: > 0 deg ___/_/
: > | | | | |
: > 300 600 1200 2400 4800 Hz
: > Frequency

: Now this chart illustrates the problem I've been talking about. As
: we can see, the difference in delay with frequency is quite marked.
: Sure the phase delay increases *smoothly* with frequency delta, but
: the magnitude of the error rapidly climbs with increasing frequency
: delta. This is our old friend click-boom. ...

Other people besided Gary may be confused by this, so I'll post an
explanation.

The graph above plots phase, not delay. A constant delay results in
a constantly-rising phase plot. For example, a 1 millisecond delay
is 36 degrees at 100 Hz, 360 degrees at 1000 Hz, 3600 degrees at
10,000 Hz, etc.

Constant delay does not cause the "click-boom" that Gary mentioned. Think about it: You could record a voice on a tape recorder and play it back DAYS later without any "click boom." It's only when the delay is different at different frequencies (that is, the phase versus frequency plot is not a straight line) that there is a potential problem.

While the plot above looks like a straight line, it really isn't because of the logarithmic x-axis. However, as the chart that Tom Bruhns posted of a typical phase-shift network shows, it really isn't too bad. His chart shows that between 400 and 2786 Hz, the maximum phase error from a straight line varies smoothly between +17.2 to -20.9 degrees, which is far better than you would get with a typical transceiver-type crystal filter.

I expect most of the delay variation would come from the audio filter (that comes before the phase-shift network). Such a filter can be much flatter than a typical crystal filter for the three reasons I mentioned in a previous posting: (1) Doesn't need as sharp a cutoff as a receiver-type filter, (2) Can use a filter type with inherently flatter delay (non-Chebyshev), and (3) Pole Q and placement are much easier to control at audio frequencies than at RF.

AL N1AL

3552. Why say 73ss?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 21:13:50 UTC
From: gdavis@griffin.emba.uvm.edu
Message-ID: <1994Mar31.211350.24679@emba.uvm.edu>
Source record: 269100

Why is it necessary to use 73s when addressing either a group or individual
when clearly 73 is already plural?

Would you say congratulationes to the bride and groom. Certainly Not, since
congratulations is already plural.
There appears to be much hear-say mouthing of jargon without the slightest
idea of what it means.

The latest idiocy seems to "destinated"... what ever that's supposed to
mean. " Well, Bill, we're destinated so 73ssssss"
and 73 thirds to ya.

--
******** Gary E. Davis***** WQ1F *****
The most common of all follies is to believe passionately in the
palpably not true. It is the chief occupation of mankind.-H.L.Mencken

3553. Re: How phasing SSB Exciters Work (Was: RF and AF speech processors)

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 21:17:22 UTC
From: tomb@lsid.hp.com
Message-ID: <CnJsGy.1Jo@hpcvsnz.cv.hp.com>
Source record: 269101
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Alan Bloom (alanb@sr.hp.com) wrote:
: In another thread, I claimed that phasing-type single-sideband generators
: sound better than filter-type generators because phasing exciters have
: flatter amplitude and delay response.

Yesterday, I posted results of a simulation of a quadrature audio network outlined in the ARRL Handbook. One thing to note is that the phase ramp is as Alan suggests in his posting. The "frequency" column is in 1/5 octave steps, and the delta phase between entries is practically the same across the band. So the phase looks like a straight line on a log-frequency scale.

But what if it was a design goal to come up with a quadrature phase network with flat frequency response and linear phase? Would that be possible? I think so, and I offer comments below in support of that idea. If I don't get to it, maybe someone else can check out the suggestion at the end to see if it really can work.

Soapbox: I'm treating this as a design problem, not something to wave my arms about. I start by summarizing some things that are likely to be relevant that could be tools to lead to a good solution. There is an assumption that flat response and linear phase will lead to something that people will think "sounds good." That may be wrong, but so far there seems to be good agreement about it. My purpose here is to simply explore ways to achieve this in a phasing system. This does NOT say that the same thing can't be done with filtering at carrier frequencies.

Observations:

0. The relative phase and amplitude response of a system can be completely determined by the positions of the poles and zeros representing the system; there is no need to commit to a particular physical implementation until the desired pole and zero positions are determined.

1. If a pole at -x+jy is balanced by a zero at +x+jy, the frequency response from that pair is exactly flat. The phase response, d(phi)/df, is exactly twice as much for such a pair as it is for the pole alone, at every frequency.

2. Techniques exist for putting poles at any interesting place on the left half of the s-plane, and for putting zeros at any interesting place on the s-plane. For example, for audio work, state-variable filter blocks can do this.

3. If one channel of a quadrature audio network has a phase ramp
vs frequency d(phi)/df = x, then the other channel must have
the same d(phi)/df over the band of interest to maintain a
constand phase difference between the channels. Since d(phi)/df
determines group delay, the two channels will have identical
group delays.

4. Linear phase is characterized by d(phi)/df invariant with frequency.

5. A strict delay has zero phase shift at zero frequency. Thus to
achieve quadrature phase, at least one channel will be characterized
by a phase shift in addition to any delay, even if d(phi)/df is
invariant over the band of interest.

6. None of the above precludes having a constant d(phi)/df in each
channel with a constant 90 degree phase difference between channels
and a flat frequency response in the band of interest. However, it
also doesn't tell you how to achieve this--it only provides some
hints.

7. A maximally-flat-delay (MFD) filter achieves a very constant d(phi)/df
over its passband.

8. A MFD _lowpass_ filter has nearly constant d(phi)/df through zero
frequency, and zero phase shift at zero frequency. It represents a
simple delay.

9. A MFD _bandpass_ filter has nearly constant d(phi)/df over its
passband, but not outside. The result can be a phase shift relative
to a MFD lowpass in the shared passband. THIS IS A KEY TO A POSSIBLE
ANSWER TO THE ORIGINAL QUESTION!

10. It _should_ be possible to find a pair of MFD filters with overlapped
passbands (either two bandpass filters or a lowpass and a bandpass)
which have equal d(phi)/df and a 90 (or 45--see paragraph 11) degree
phase difference between the channels in the shared passband.
Actually finding such a pair is the exercise remaining to be done!
Any volunteers?

11. MFD filters are notorious for non-flat amplitude response. This can
be taken care of by invoking paragraph 1: put a zero in for each pole,
which will double d(phi)/df and make the frequency response dead flat.
This is why we only need 45 degrees between the MFD filters used as
prototypes as suggested in paragraph 10.

12. Expect that it will take fairly high order filters to accomplish this
over the 300Hz-3kHz band. Tenth order wouldn't surprise me, to get
0.1 degree matching. The amplitude matching will depend only on
how accurately the implementation can place the poles and zeros at
the desired positions.

As a simple feasibility check, I asked a curvefitter to fit to a couple
linear phase ramps with constant amplitude, offset by 90 degrees, in the
range from 300Hz to 3.5kHz, and it didn't have any trouble getting

within a tenth dB and under a degree, with about 14 poles and 14 zeros
for each. None of the poles was particularly high Q: max about 8.

3554. HELP! The FCC will not issue me a ham license

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 21:22:23 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199403312129.NAA01582@ucsd.edu>
Source record: 269102

>On December 18, 1993, I took an ARRL test session and earned a Technician w/HF
>license. During the week of February 20th, other people that were at the
>December 18th test session were receiving their new licenses. Not me!
>After waiting a week, I called the ARRL to see what was going on.
>They had received my paper work and sent it on to the FCC on January 6th.
...
etc.

some ideas:

1) you didn't throw it out as junk mail? it's sent out in a pretty
bland envelope == possibility that someone tossed it accidentially?
(no - because then the FCC would have been able to tell you something)

2) you've got the right address in force? had a kid some time ago
that had moved the day after the test and the folks didn't leave a
forwarding address.

if you add about 2 weeks for christmas, you'd be due for delivery next week.
hang in there....

73, bill wb9ivr

3555. Re: Obscenity on ham bands

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 21:55:54 UTC
From: scott@lvld.hp.com
Message-ID: <2nfgta$3ni@hplvec.lvld.hp.com>
Source record: 269103

Jeffrey Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:
I wrote:
: >(PS - Does anybody in Hawaii ever work 75 phone? I'd love to get my
: >last state on the band, but I've never even heard a Hawaiin station, let
: >alone been able to contact one!)

: Scott: We don't have phones out here - the sharks kept eating the phone
: lines between here and you folks. We only have CW.

Good grief. Thanks for your help.

: You'll get the natives angry if you misspell `Hawaiian' - when they get
: mad they start eating white people... ;)

Sigh. As soon as I posted this one and reread it, I just knew someone
would be compelled to correct the spelling. Thanks Jeff. I'm very
sorry that my fingers were lagging somewhat behind my brain. I'll try
not to let that happen again.

BTW, I seriously doubt that the "natives" much care about the anglicized
spelling of one of their words.

BTW^2, I'm sure the original poster is reading Jeff's remarks with much
amusement.

Scott Turner N0VRF scott@hpisla.LVLD.HP.COM

3556. Re: Kill that intermod!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 21:59:11 UTC
From: kennish@kabuki.EECS.Berkeley.EDU
Message-ID: <2nfh3g$a8i@agate.berkeley.edu>
Source record: 269104

In article <CnJpA6.6C@srgenprp.sr.hp.com>, Alan Bloom <alanb@sr.hp.com> wrote:
>The only problem is that it might be hard to get at the output of the
>radio's front-end filter for testing. Another method to obtain the
>same information would be to plot the 3rd-order intercept point as a
>function of tone spacing. Plot it with tone spacing (frequency)
>on a logarithmic axis so you can get in-band and out-of-band info
>on the same chart. That would actually be more useful information
>than Ken's method.

How about just using the squelch break as an indicator. That's
the event that is annoying anyhow, and that's what the user
will see. The problem with the IP3 vs. tone spacing is that
you have lots of combinations. A 5 MHz spacing in band may
behave differently than 5 MHZ out of band since the overall
sensitivity is different. If you know what level of
signals cause the non-linearity, and know the transfer function,
you will be able to compute the intermod rejection the tone
pair of your choice -- I agree with Al that his method will
create a nice graph, and may be easier to interpret.

>I'm not sure what the block diagrams of these radios look like, but if
>they are using a low-frequency first IF (10.7 or 21.4 MHz) without
>image-reject mixers, then the image rejection will be 0 dB. How do
>they get around the problem? Up-convert to a high first IF?

No, use an adjustable image reject filter. My FT-530 has
a set of three varactor tuned IR filters in the front end.
Works for image rejection, horrible for intermod. That's how
an old analog AM radio works, though they use a set of auxiliary
caps in the main tuning capacitor instead of varactors.

The FT-530 uses a single BJT for a mixer for UHF, and a single
JFET for VHF -- yes CHEAP CHEAP CHEAP

The Yaesu uses a 15.25 MHz for VHF and 47.225 MHz for UHF.
I suppose it would have been better for them to use a high
IF for VHF also, but then you get IF interference when in
dual band receive. Gee, I wonder how ICOM is dealing with
these problems in their tri-bander.....

-Ken

3557. Icom 375 Wanted

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 22:02:06 UTC
From: perryb1237@aol.com
Message-ID: <2nfh8u$mhj@search01.news.aol.com>
Source record: 269105

I am interested in acquiring an Icom 375, 222 MHz all-mode rig.

If anyone is interested in selling one, please E-Mail me at
PerryB1237@AOL..COM.

Thanks,

Perry

3558. Re: HELP! The FCC will not is

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 22:53:40 UTC
From: tardis@atd.mke.ab.com
Message-ID: <2nfk9kINNf7h@scarecrow.mke.ab.com>
Source record: 269106

In article 0ND0488A@nitelog.com, mario.campos@nitelog.com (Mario Campos) writes:
>JWH>It will be 90 days on April 6th since the FCC has had my application. This
>JWH>my first ham license, I have _not_ had a ham license canceled by the FCC.
>
> Call your US Congressman's office - relate your saga to the "gopher" in
> his/her office. You should be able to get an answer within a short time!
>
ok let's quit sobbing and ask when the vec's and ve sent in the paperwork for your ticket. sometime it gets screwed up and takes longer to get sent to the fcc. i'd check with the ve that sponsored your group before you do a chicken little with your congressman. heck, for all we know you got it in the mail today. go through the correct channels before you nuke the fcc.

3559. Re: DSP filters

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 23:03:45 UTC
From: gene@uicsl.csl.uiuc.edu
Message-ID: <2nfkshINNsv5@roundup.crhc.uiuc.edu>
Source record: 269107

I also built the W9GR kit which I use most of the time. However, like
the post above, I am distracted by the unusual ringing-like sounds in
the so-called "optimum noise-reducing mode...program # 3 on mine". It
also seems to me that the high-frequency response is compromised. HOWEVER,
I still like it very much used in program #1, which still reduces the
white-noise enough to be quite helpful. Also if you get an occasional
bothersome heterodyne, flipping the toggle-switch to the opposite side
quickly takes it out. I leave my agc in the FAST mode all of the time..
(Icom-751) which seems to contol the audio level nicely to marginally
fill the DSP window with large differences in signal-strength.
Although I haven't used the other features much, they certainly do a
beautiful job of meeting their specifications.
--

UUCP: {att,iuvax,uunet}!uiucuxc!uicsl!gene
Internet, BITNET: gene@uicsl.csl.uiuc.edu

3560. IPS Daily Report - 31 March 94

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 23:20:41 UTC
From: rwc@flare.syd.ips.oz.au
Message-ID: <1994Mar31.232041.13136@ips.oz.au>
Source record: 269108
Cross-posted to: aus.radio,ips.solar.activity,rec.radio.amateur.misc,rec.radio.info

SUBJ: IPS DAILY SOLAR AND GEOPHYSICAL REPORT
ISSUED AT 31/2330Z MARCH 1994 BY IPS RADIO AND SPACE SERVICES
FROM THE REGIONAL WARNING CENTRE (RWC), SYDNEY.
SUMMARY FOR 31 MARCH AND FORECAST UP TO 3 APRIL

IPS Warning 10 was issued on 31 MAR and is current for 3-14 APR.

1A. SOLAR SUMMARY
Activity: very low

Flares: none.

Observed 10.7 cm flux/Equivalent Sunspot Number : 085/027

1B. SOLAR FORECAST
01 April 02 April 03 April
Activity Very low Very low Very low
Fadeouts None expected None expected None expected

Forecast 10.7 cm flux/Equivalent Sunspot Number : 085/027

1C. SOLAR COMMENT
None.

2A. MAGNETIC SUMMARY
Geomagnetic field at Learmonth: not availiable prior to 9UT then
quiet conditions were observed.

Estimated Indices : A K Observed A Index 30 March
Learmonth 04 ---2 2111
Fredericksburg 08 09
Planetary 10 12

Observed Kp for 30 March: 1114 3333

2B. MAGNETIC FORECAST
DATE Ap CONDITIONS
01 Apr 10 Quiet.
02 Apr 12 Quiet to unsettled.
03 Apr 22 Active.

2C. MAGNETIC COMMENT
Coronal hole induced geomagnetic field activity is expected to start
on 3 April, active to minor storm levels are expected.

3A. GLOBAL HF PROPAGATION SUMMARY
LATITUDE BAND
DATE LOW MIDDLE HIGH
31 Mar normal normal normal
PCA Event : None.
3B. GLOBAL HF PROPAGATION FORECAST
LATITUDE BAND
DATE LOW MIDDLE HIGH
01 Apr normal normal fair
02 Apr normal normal fair
03 Apr normal fair poor
3C. GLOBAL HF PROPAGATION COMMENT
NONE.

4A. AUSTRALIAN REGION IONOSPHERIC SUMMARY
MUFs at Sydney were 15 to 30% below predicted monthly values

Observed T index for 31 March: 10

Predicted Monthly T Index for March is 40.

4B. AUSTRALIAN REGION IONOSPHERIC FORECAST
DATE T-index MUFs
01 Apr 40 Near predicted monthly values.
02 Apr 40 Near predicted monthly values.
03 Apr 10 10 to 20% below predicted monthly values.

4C. AUSTRALIAN REGION COMMENT
None.
--
IPS Regional Warning Centre, Sydney |IPS Radio and Space Services
email: rwc@ips.oz.au fax: +61 2 4148331 |PO Box 5606
RWC Duty Forecaster tel: +61 2 4148329 |West Chatswood NSW 2057
Recorded Message tel: +61 2 4148330 |AUSTRALIA

3561. Hamming in Hong Kong

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 23:23:00 UTC
From: owens@stout.atd.ucar.edu
Message-ID: <2nfm0k$1el@ncar.ucar.edu>
Source record: 269109

Has anyone with a U.S. ham license had success getting
a permit to operate in Hong Kong?

I'm going there this summer and want to operate a ham
station. Any help or info would be greatly appreciated.

Chip Owens, NW0O, Boulder, Colorado

3562. Wanted: Plans for 6m transverter

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 23:24:19 UTC
From: irvse.EGert@dg-rtp.dg.com
Message-ID: <9403312324.AA18378@irvsde>
Source record: 269110

Anyone have any plans/schematics for a 6 meter tranverter? I have a
TS-830S to drive it.

Thanks,

Steve
==
Steve Egert Home:(714) 562-8583
Systems Engineer Work:(714) 724-3597
Data General Corporation - Irvine, CA
Internet: steve_egert@dgc.ceo.dg.com AX.25: KE0KD@WB6YMH
==

3563. RADIO HOBBY OVERVIEW - A proposal

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 23:25:24 UTC
From: karayan@blitzen.cc.bellcore.com
Message-ID: <2nfm54$6k4@blitzen.cc.bellcore.com>
Source record: 269111

This posting deals with an idea which I think is long overdue. I certainly don't need to mention to readers of this group how incredibly diverse the radio hobby is. This hobby has something for everyone! I just thought that we need some sort of a navigation map to take someone by the hand and show what is / can be done by a radio hobbyist. Such a thing would serve a newcomer in selecting some specific interest, but will also allow the seasoned radio hobbyist to move on to some new niche.

Before diving into such a project, I need to find out if anyone else has done something similar. I know of the intro articles posted here regularly, but I'm looking for something in a higher level of abstraction and all-inclusive. I started to build something. Here is a sample:

********** Begin sample **********

GUIDE TO RADIO HOBBY ACTIVITIES

This article attempts to provide a map of activities available to radio hobbyists based on the frequency spectrum. The intend for it is to serve as a navigation tool to anyone looking to enter the radio hobby, or anyone who wants to explore new horizons. The map contains a fair amount of detail, including some rather esoteric niche interests, but it does not pretend to be exhaustive. Special codes point to netnews groups where more info can be found. They are:
(SH)= rec.radio.shortwave; (SC)= rec.radio.scanner;
(HAM)= rec.radio.amateur.misc; (BC)= rec.radio.broadcasting;
Any additions/changes/corrections should be forwarded to George, N2OWO, at karayan@cc.bellcore.com .

FREQUENCY RANGE (MHz)	HOBBY ACTIVITIES	EQUIPMENT REQUIRED
0-0.03	Hunting for whistlers (natural radio) [SH] Listening to LORAN stations [SH]	Special receiver or converter + a longwave receiver
0.15-0.45	Hunting for distant marine and aero beacons [SH]	Receiver with longwave band
.18-.19	Low power transmitting (propagation studies, comms) LOWFERs: no license required [SH,HAM]	Homebuilt xmitter
.45-.5	Hunting for marine CW stations and emergency comms [SH]	Receiver with longwave band
.5-1.7	Casual broadcast listening [BC] Hunting for distant AM stations [BC,SH]	AM radio Better AM radio

```
| Low power xmitting - no license [SH,HAM] | Homebuilt xmitter
-----------|---------------------------------------------|--------------------
108-138 | Listening to airliner and airport comms [SC] | Scanner
-----------|---------------------------------------------|--------------------

******* End of sample ************
```

As you can see, it provides the reader with an overview of what is done in radio hobbyism and it's as inclusive as possible. All info is arranged by frequency, so that someone with a radio can figure out what a given set of freqs can do for them. There are also references (the [..] flags) to netnews groups where one can go and find out more.

Don't worry about the specifics listed in the sample above. Just let me know what you think about the idea. I can create the whole thing and then post it to various rec.radio.* groups for comment/corrections/etc. Then, the (ever-evolving, no doubt) article can be posted periodically in the rec.radio groups.

Any comments/suggestions/pointers/flames?

George Karayannopoulos N2OWO
karayan@cc.bellcore.com Bellcore, Red Bank, NJ
Disclaimer: The opinions expressed here are mine and not my employer's.

3564. Re: Supermorse under windows.?

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 23:31:56 UTC
From: pf8742@tcville.spl
Message-ID: <2nfmhc$qcq@hacgate2.hac.com>
Source record: 269112

In article 22353@ll.mit.edu, fcr@ll.mit.edu (Frank Robey) writes:
>
>I am in the process of trying to configure an IBM compatible PC for my
>parents to use. My folks are computer illiterate, so I am trying to make
>it as easy as possible for them. My dad, N0OWI, is a no-code tech and
>is trying to learn the code, so I put supermorse on the system. I
>would like for my dad to be able to call it up under windows, but
>no matter what I change in the PIF, I get stutters and missing characters.
>
I regularly use SuperMorse under windows, and it works fine. I belive the key parts
of my set up are:

1. In my sm.pif setup, I have supermorse having exclusive use of all computer
resources.
2. I never use it windowed, since windowing takes some of the computer resources.
3. I use the "loop" timer instead of the "timer" timer (in the options menu).
SuperMorse seems to like this.

Most of this comes from the SuperMorse documentation, so it appears that the author thinks
it works under windows, and it works for me. So give it another try. (:}

Ken Farnsworth
pf8742@tcville.eos.hac.com

3565. Re: NEED EXTRA CASH? READ THIS!

Newsgroup: rec.radio.amateur.misc
Date: 1994-03-31 23:37:53 UTC
From: mic@fc.hp.com
Message-ID: <CnJyz5.Dt7@fc.hp.com>
Source record: 269113
Cross-posted to: rec.photo,rec.radio.amateur.misc

01jabush@leo.bsuvc.bsu.edu wrote:

: If you're like most people I know, you could use some extra cash. I am
: providing to you the unique opportunity to do so at little cost and effort.
: By working 1-2 hours per week you can earn an unlimited income. E-mail me now
: for more detailed information on this once-in-a-lifetime opportunity. You get
: out of life, what you put into it!

Oh no, not another one of these. Get this clown off the Internet.

--

Marc Illsley Clarke, mic@hpfimic.fc.hp.com, Member of the Technical Staff
Post G-3, Mail Stop 72, Building 2-Upper
Integrated Circuit Business Division, Hewlett-Packard Company
3404 East Harmony Road, Fort Collins, Colorado 80525-9599 USA
HP-TELNET: 1-229-3376 AT&T: (303)-229-3376 FAX: (303)-229-6580